SUPREME COURT OF NOVA SCOTIA

Citation: *V.J. Rice Concrete v. John Ross and Sons*, 2024 NSSC 376

Date: 20241205
Docket: Hfx No. 502886
Registry: Halifax

Between:

V.J. Rice Concrete Limited

Plaintiff

v.

John Ross and Sons Limited

Defendant

D E C I S I O N

Judge:	The Honourable Justice James L. Chipman
Heard:	October 30, 31, November 4, 5, 6, 7 and 20, 2024 in Halifax, Nova Scotia
Written Decision:	December 05, 2024
Counsel:	William Ryan, K.C. and Graeme Hiebert, for the Plaintiff Richard Norman, Erin Mitchell and Katie O'Keefe, for the Defendant

By the Court:

BACKGROUND

[1] This claim arises out of a concrete pouring Project, in which roller compacted concrete (RCC) was supplied by the Plaintiff, V.J. Rice Concrete Limited (VJR) to the Defendant John Ross and Sons Limited (JRS) on a property located at 85 Glassey Avenue, Truro, PID 20329579 (the Property). VJR subcontracted the placement of the RCC to Atlantic Road Construction and Paving (ARCP). The subgrade preparation, required to be performed before paving, was mainly done by Dexter Construction (Dexter).

[2] The paving area on the Property was between 8 and 9 acres in size. VJR set up a portable concrete plant on an adjacent property to produce the RCC. The parties agreed on an average RCC thickness of approximately 8″.

[3] The terms of the contract were set out in a CCDC 4 Unit Price Contract dated July 31, 2019 (the Contract). The Contract set out the unit price for RCC at $89.00 per metric tonne. At the time the Contract was entered, it was anticipated the Project would require approximately 15,840 tonnes, so the estimated Contract price corresponded with the math at $1,409,769.00 (plus applicable taxes).

[4] The anticipated start date was September 23, 2019; however, this was contingent on completion of the subgrade preparation. The subgrade preparation was not completed until November, 2019 and certain issues were discovered with the subgrade preparation work at that time.

[5] In the result, work on the Project did not commence until on or about November 19, 2019. The work went for just over a week when it was paused and did not start up again until June, 2020.

[6] On or about June 19, 2020, VJR informed JRS that the initial estimate provided about the area of the Project (8 acres) was incorrect, and that the actual total area was somewhat more than that. The total coverage area has never been precisely determined. In any event, VJR recognized that the area would require more RCC to be placed, and revised their estimate to 18,000 tonnes. Placement of RCC on the Property was completed on or about July 20, 2020.

[7] During the course of the Project VJR submitted three invoices. JRS paid the first two invoices without issue, but only made a partial payment on the third, as set out in the table below:

Invoice No.	Date	Amount	Amount Paid
131398	November 27, 2019	$253,009.20	$253,009.20
136473	June 25, 2020	$685,284.42	$685,284.42
137886	July 20, 2020	$932,664.38	$771,585.95

[8] In the late summer or fall of 2020, VJR requested that JRS agree to participate in mediation; however, JRS declined to participate in mediation.

[9] On December 18, 2020, VJR filed a Notice of Action and Statement of Claim. On February 8, 2021, JRS filed a Notice of Defence and Counterclaim. On August 18, 2021, VJR filed a Defence to Counterclaim. On September 11, 2024, JRS filed an amended Counterclaim.

[10] During the trial 13 exhibits were entered by consent. VJR called principals Bryan Rice (Bryan) and his father Tim Rice (Tim) along with (rebuttal) expert Dr. Wib Langley. JRS called its president and owner Norman Ross, vice president of finance, Mark Monette and (recently retired) Jim Muise. JRS called Brian MacNeil as their expert and a number of witnesses from engineering consulting companies.

[11] Prior to the signing of the Contract Bryan, Tim and Mr. Ross had several interactions as discussed in the below section.

PRELIMINARY DISCUSSIONS

Bryan Rice

[12] Bryan testified that he had limited prior experience with Mr. Ross. He recalled that VJR had sold steel to JRS in the past. In 2009 JRS had their Goodwood yard paved and VJR sold concrete to the paving company, Dexter.

[13] Two days prior to executing the Contract Bryan, recalled meeting with his father and Mr. Ross to discuss the Project. They discussed concrete supply and placement. The concrete would make up the vast majority of the number with the

placement, “a minor figure within unit price…we explained the quote to him …then I put in 8-acre site and the minimum charge based on 8 acres, at least 8 acres …if it exceeded 8 acres, he would have to pay on tonnage basis, he would always have to pay on a unit basis, I’ve never quoted other than this”.

[14] Bryan recalled that Norman Ross did not care if the concrete was RCC or ready mix. He said that Mr. Ross’ concern was the strength; “…he wanted at least 35 MPa”. He added, “we also discussed the concrete thickness, he was hoping for 8″ …he knew it was impossible to get exactly 8″ …we settled on an average of 7.5″ to 8.5″.

[15] “Norman Ross showed us the Casey [Concrete Ltd.] quote and wanted me to match …we gave him a price”. Bryan added that the price was always going to be in metric tonnes; “that was communicated to Mr. Ross, he understood”.

[16] On cross-examination Bryan agreed that he was given the Casey quote on July 24, 2019, while at JRS’s Truro facility. He knew at the time that Mr. Ross was considering the thickness of the concrete to be placed. Bryan maintained that even though the Casey quote referenced 7” or 8″ thickness, his focus was on “unit price work”.

[17] Bryan reiterated that the price was always going to be on a unit basis and that he communicated this to Mr. Ross, “you will always be billed for what you receive …I was extremely clear we’re doing on a per cubic tonne basis … Norman had no questions regarding this”.

[18] Bryan was referred to his July 29, 2019 email to Mr. Ross. He said that he sent this after he and his father had met with Mr. Ross and “we explained to him unit pricing”. Bryan said that he referred to a “quantity estimate” based on RCC of 8″ over 8 acres; however, “nobody believed it would be exactly 8″ over 8 acres”.

[19] On cross-examination Bryan was questioned as to why he would provide a quote if the agreement was for unit price. He replied that he put in the amount “because the CCDC form had a space”. Challenged that he provided the quote prior to the CCDC being signed, he agreed that the number – based on 15,840 metric tonnes – was arrived at two days before the CCDC was signed. Bryan said he could not “recall exactly” how he came up with the number after “a lot of back and forth” with Mr. Ross. He agreed that the Casey quote was used as “part of the process”. He added that as of July 24, 2019 he had “the information really important to me; are

we doing at least 8 acres and arriving at a unit price". He disagreed that Mr. Ross wanted 8″ thick RCC; "it had to be a range. …a uniform 8″ is not possible".

[20] Bryan described the subgrade as the material beneath the concrete, noting that the subgrade is "critically important" on any job. He discussed with Mr. Ross what type of gravel would be used, "it seemed apparent it would be a subgrade one would expect to put concrete on top of". He added, "we had gone through in detail on July 29th so we understood". Bryan noted that the final subgrade was "drastically different from the understanding Mr. Ross and I had". He added that the poor quality of the subgrade made it "completely impossible to generate 8″ [of RCC] over 8 acres of the site".

[21] On cross-examination he said that he could not remember if he asked about type 1 or 2 gravel before preparing his quote. He added, "I'm quite sure that I knew from ARCP it would be type 1" and "I would expect it to be an appropriate subgrade". Bryan was shown further documents referencing 8″ and he maintained; "there was always going to be a tolerance, we knew we were targeting 8″".

Tim Rice

[22] Tim is Vice President of Operations with VJR. He first learned of the Project when Mr. Ross approached him at JRS's facility on Chainlake Drive in Halifax. This led to a late summer or early fall meeting at JRS's Truro office with Tim, Bryan, Mr. Ross and Jim Muise. They discussed the "general scope of what Mr. Ross wanted done" involving laying RCC at JRS's Truro property. Tim recalled telling Mr. Ross that VJR would want to quote. The company had past experience with RCC.

[23] Tim recalled that the RCC was to be laid over a large area and Mr. Ross "wanted us to get as close to 8″ [thickness] as we could but it was impossible to do …there was a tolerance". He added that there were several conversations with Mr. Ross about this and that Mr. Ross was "well aware, we discussed a half an inch so it would be 7.5″ to 8.5″.

[24] Tim said that he made it clear to Mr. Ross that this was not a lump sum Project and Tim felt that Mr. Ross understood this. Tim thought that he and Mr. Ross "got along very well. I enjoyed his company …we were both 'old school' in the way we approached business".

[25] On cross-examination he agreed that Norman Ross provided VJR with the Casey quote and knew what they had quoted adding "but we had talked to him [Norman Ross] a ton".

[26] Bryan negotiated with Mr. Ross on the Contract. Tim's understanding was that "we were to supply RCC on price per metric tonne and the placement of the RCC". He added, "we'd never quote any other way, that's what they asked for".

Norman Ross

[27] Mr. Ross is the president and owner of JRS. He is 81 years of age and has been part of JRS for 60 years. The business is involved in scrap metal and other endeavours, employing over 200 people with offices in Halifax, Dartmouth, Goodwood, Truro, New Glasgow, Charlottetown (two), Sussex, Fredericton and St. John's.

[28] On cross-examination Mr. Ross agreed that he was present in Court while all of the witnesses [except Dr. Langley] testified; however, he added "I didn't comprehend a lot to be honest". Later, he said that he has "problems with memory due to old age, it is affected".

[29] JRS had previous experience with RCC at their Goodwood location. VJR supplied the RCC on that job and Dexter was the main contractor and installer.

[30] Mr. Ross confirmed that he received a quote from Casey Concrete Ltd. to pave the Property but that it was for ready mix concrete rather than RCC.

[31] Mr. Ross said that "Tim showed up in the yard one day and started talking to me about RCC and he convinced me to go with it …I made the deal with Tim to go to 8 acres, 8″ thick at $1.4 Million …the next day he came in with a contract, not exactly what we talked about".

[32] Mr. Ross could not recall any discussion prompting Bryan's July 29, 2019 email. He added, "I don't remember that letter as such". Mr. Ross said, "the amount of concrete was not discussed until after Bryan came in the day after Tim and I shook hands on what the contract was".

[33] Mr. Ross did not remember receiving Bryan's July 29, 2019 email. As for the fourth para. of the email, "I don't remember but all of our discussions were 8″ over 8 acres, I remember Bryan said it could be anywhere from 7.5″ - 8.5″. I kind of expected there would be some tolerance over 8″, not totally level".

THE CONTRACT

Bryan

[34] Bryan enquired with ARCP and someone there provided him with the CCDC 4. He described the CCDC 4 unit price contract as "standard form". He said that he "entered some details into it".

[35] The Contract was signed on July 31, 2019 at the JRS building. Bryan and Mr. Ross sat at Mr. Ross' desk and "he had someone in his office come over and he witnessed". He recalled that Mr. Ross had "no questions" regarding the Contract.

[36] With respect to clause 6.1, after the "Owner", JRS and "Contractor", VJR are inserted, there is provision for a "Consultant" and N/A is inserted. Bryan noted that "JRS were responsible for appointing [a Consultant] and they never did".

[37] On cross-examination he said that there was no discussion about the Consultant prior to the signing of the Contract. He agreed that Jim Muise was not the Consultant per the Contract.

[38] Pursuant to clause 1.3, Bryan said that they discussed the dates which called for work to commence by September 23, 2019 and "subject to adjustment" attain substantial performance by October 31, 2019. Bryan added, "Norman Ross felt it would take Dexter eight weeks work subgrading the property".

[39] Bryan was asked about clause 4.1 and the unit price of $89.00. He responded that $89.00 "was Mr. Ross' unit price, we had discussions with him, I wanted this to be clear and he acknowledged". Bryan added, "he had no concerns about the unit price".

[40] Bryan spoke about clause 5.3 noting that Mr. Ross, "did not object to the interest calculation". On cross-examination he agreed that the name of the bank is not filled in and that there was no discussion about that.

[41] Bryan was cross-examined on his July 31, 2019 email to Mr. Ross where he stated, in part:

> Norman,
>
> Thank you for the order for your Roller Compacted Concrete project at 85 Glassey Avenue, Truro. As promised, please find our formal quote attached.

> As discussed, we will be responsible for the production and placement of Roller Compacted Concrete on your Truro site, for a minimum coverage area of eight acres.
>
> Our understanding is that the sub-grade preparation will be completed by a third-party contractor in approximately eight weeks, and we are working diligently to be prepared to setup onsite to begin production at this time.
>
> It is important that you review the completed sub-grade prior to RCC placement to ensure uniformity and proper grading throughout, as our quantity estimate is based on a uniform laydown of 8″ thick over an area of exactly 8 acres. Any variance in sub-grade could impact the ultimate quantity of material required, as will any change in your desired coverage area above 8 acres.
>
> We have arranged to acquire additional production equipment for your project, and are now prepared to award the RCC placement sub-contract to meet your project need. If you could kindly send me a Purchase Order for this project, we will move forward expediently.

[42] Bryan responded, "I'm saying the subgrade impacts the quantity …I knew Mr. Ross knew there would be a variance in the 8″ target", albeit he agreed this was based on his discussions with Mr. Ross and not reflected in his email.

[43] Bryan confirmed that their progress billing ($253,009.20) dated November 27, 2019 was paid in full on December 17, 2019. VJR resumed laying RCC on June 9, 2020 and their progress billing ($685,284.42) dated June 25, 2020 was promptly paid in full.

Norman Ross

[44] Asked about the Contract, Mr. Ross said he remembered seeing it but could not recall discussing it. He said that they did not discuss a Consultant. Mr. Ross added, "after my meeting with Tim, Bryan was in the next day with the Contract. I thought I was dealing with Tim regarding the site and everything".

[45] On cross-examination he did not recall going through the Contract with Bryan. He said that he had "no understanding" of what is meant by a "unit price" contract. He then admitted to knowing the difference between a unit price and lump sum contract.

[46] Mr. Ross agreed that the Contract was signed by him and Bryan in his office in front of Shylo Harvie, a JRS employee. Asked whether as a prudent businessman if he would sign a contract without knowing the terms and conditions, he replied, "well, I did".

[47] On cross-examination Mr. Ross agreed that "in accord with the Contract you agreed to pay interest if payment was not in full" and that clause 5.3 was at a "certain percentage compounded".

[48] He acknowledged that he was not forced to sign the Contract and could have obtained legal advice before doing so. He agreed that he did not ask to change any of the terms and conditions but did later when he refused to supply VJR with water and electricity.

PROJECT STARTUP AND PAUSE

Bryan Rice

[49] When the Project was ultimately turned over to VJR in November, 2019, Bryan noted "they were still working on the subgrade".

[50] Bryan spoke to initial problems with VJR's portable plant producing RCC when they tried to get underway on November 13, 2019. Owing to equipment problems and weather delays, VJR began placing RCC on November 19, 2019 and continued until November 27, 2019 when they stopped owing to generally cold temperatures. In this regard, Mr. Muise asked them to stop and the decision was made to have VJR resume work in the spring.

[51] On cross-examination Bryan denied that the delay was exclusively due to equipment problems noting that the weather "was well below freezing" and not conducive to placing RCC.

[52] Bryan provided rebuttal evidence that during pre-production in November, 2019, a left auger hatch was left open for "a period of time which resulted in a bit of wastage". He explained that this "was done on purpose" as part of the initial mixing process.

Tim Rice

[53] Tim noted that VJR purchased equipment from Albuquerque, New Mexico as part of the RCC portable plant erected on Town of Truro land adjacent to JRS's Property. Although JRS was initially to supply power and water, Mr. Ross "took the position he wasn't responsible", so VJR made arrangements to set up and pay for these services.

[54] Tim acknowledged some problems with the initial set up. He had to "shore up" some structural elements and this took "a couple of days". He had to call down to New Mexico and a company representative flew up to assist. Overall, Tim testified that there were minimal delays due to the start-up issues. On cross-examination he denied that any problems with the plant wasted RCC. He added that it was the weather that precluded VJR from pouring.

[55] On cross-examination Tim said that he considered Dr. Langley "the best in North America" and that VJR "relied on him heavily" to come up with an appropriate RCC mix.

[56] The plan was to resume production earlier in the spring but remedial work on the subgrade took longer than anticipated. He recalled that JRS "took quite a bit of concrete out" around the pond area. Ultimately, VJR had to re-pour in this area.

Norman Ross

[57] Mr. Ross estimated that he attended the Project during the relevant period perhaps "half a dozen times". While he does "not remember a lot, I knew they were having problems, it delayed everything quite a bit".

[58] Mr. Ross testified that Jim Muise was JRS's manager on site; "if there were any issues or problems, he was there to deal with them, I spoke with him everyday". On cross-examination he agreed that he discussed with Mr. Muise the work on the Property. He also agreed that he could watch his monitors as there were cameras on the JRS building that allowed him to view portions of the Property. He agreed that through the entire Project no complaints were expressed by JRS to VJR.

Mickey Prieur

[59] Mr. Prieur, P.Eng. works out of Englobe Corporation's Kitchener, Ontario office. Englobe is a construction engineering firm. He was retained in November, 2019 to assist with the Project. He was supposed to be on site for two days; however, owing to bad weather he left and returned the following week. He recalled that "the owner [VJR] had power going out and plant issues". Based on his observations (primarily from watching from his truck), Mr. Prieur thought there was "a lot of wasted concrete".

[60] On November 13, 2019, his first day on site, Mr. Prieur observed a "hole in the silo [of the plant], a significant amount of cement was getting on the ground, a

cause for concern". When Mr. Prieur returned the next week he observed the RCC being placed. He was on site for a couple of days, departing on November 25th or 26th.

[61] On cross-examination Mr. Prieur acknowledged that his field notes did not provide much information. He said that this project was the only RCC project he had been involved with using a portable plant. He recalled that there were issues with the subgrade. With respect to 5″ ruts from a "truck test" he "wouldn't expect ruts if it was compacted properly". He agreed that if subgrade gravel is too large that it cannot be properly graded.

[62] On cross-examination Mr. Prieur admitted that he did not inspect the silo. Further, he agreed that the equipment would have an auger hatch but he could not remember seeing an auger hatch. On further questioning it emerged that he saw "powder coming out of a hole". He could not be more specific and later conceded, "I can't disagree", if the owners maintained the cement powder was coming out as planned through the auger hatch. Further, he could not say if the auger hatch was subsequently closed.

[63] He also said that he observed a pile of cement powder. Confronted with photos, Mr. Prieur insisted that he saw more cement powder than shown in the exhibits. When shown the "pig", a secondary area for storage, Mr. Prieur acknowledged that "high production plants" have these storage facilities.

[64] On cross-examination he agreed that what was to have been a two day site visit was extended to four and a half to five days over two weeks. He recalled damp, cold weather and that it was "not optimal" for RCC production. He agreed that pouring was impossible on a couple of the days due to sub-zero temperatures. He accepted that the temperature records demonstrate temperatures nowhere near the optimal temperature of 10°C from November 13 – 17, 2019. Although the plant was having issues, Mr. Prieur would not have expected them to pour RCC owing to the temperatures.

[65] When he returned November 24, 25 and 26, 2019, Mr. Prieur said, "I cannot recall that visit, I think we poured a trial slab, it got too cold and they said we're shutting down for the year". He concurred with this decision.

Jim Muise

[66] Mr. Muise said that there were “a few issues with the plant, it didn’t start right away, eventually Tim got it sorted out, it took a week or two”. Mr. Muise was shown photos and referring to the subgrade acknowledged, “we had concerns about soft spots, ruts were left by a tractor trailer”. In the spring of 2020 JRS brought in ARCP, Dexter and Johnny Webster to work on the subgrade.

Scott Simms

[67] Mr. Simms P.Eng., is a consulting engineer with Englobe. He attended at the Property when Mr. Prieur was there on November 13, 2019. He recalled that there was an “issue with the plant”. On cross-examination he agreed that he only heard this from Mr. Prieur and had no first-hand knowledge of the situation.

THE NOVEMBER 5, 2019 MEETING

Bryan Rice

[68] Bryan recalled that there was a November 5, 2019 meeting on the property attended by himself, his father, Norman Ross, Jim Muise, Robbie Fair, Greg MacDonald and Scott Simms. He estimated that the meeting lasted about one hour. At the time, Mr. Muise stood in the ruts on the subgrade of the property and photographs were taken demonstrating this.

[69] Given the state of the subgrade the question emerged at the meeting whether the strict 8″ RCC would be followed or whether the Project would have a “workable level surface”. Bryan testified that Mr. Ross wanted the latter with a relatively consistent thickness, with it levelled to drain down to a pond.

[70] Bryan was referred to clause 3.2.3 of the Contract regarding promptly reporting any concerns in writing to the Owner (or Contractor). He said that he expressed concerns about the subgrade during the November 5, 2019 meeting. Bryan added, “that’s when Norman directed that we deal with Jim Muise”. During this meeting Bryan recalled that a loaded tractor-trailer drove over the subgrade and left five inches or greater ruts in certain areas. With the aid of photos taken on the day, Bryan spoke about how the subgrade was rutted. He deduced that this was because type 2 rather than type 1 gravel was used on the surface of the subgrade. Bryan said that he and his father expressed concerns to Messrs. Ross and Muise and, “they understood, it was apparent to see it”.

[71] On cross-examination he could not be sure if he had received a report from JRS's expert, Bruce MacNeil prior to the meeting. He added that at that point "no one knew how many tonnes would be required…it was going to take what it was going to take". Although Bryan could not say that he used those exact words, he maintained that it was made clear that the Project would require at least 15,840 metric tonnes of RCC. Later on cross-examination he recalled that in his conversations with Jim Muise, Mr. Muise always maintained "it takes what it takes". He agreed that Mr. Muise never said what he thought the total tonnage should be; however, "he had daily totals".

Tim Rice

[72] Tim said that the subgrade was of poor quality and he was aware that JRS had a quote from Dexter to bring in more fill. He recalled a "proof test" taking place during the November 5, 2019 meeting.

[73] He recalled that a tractor trailer drove "8 patterns" and that it was "digging down, bogged down into the subgrade …I immediately asked Norman if he wanted to go ahead and do it on that, because there was no way we were going to be able to lay at 8″ …not a suitable subgrade". Tim said Mr. Ross "did not have a lot to say, he wanted to get it paved". Tim put it to Mr. Ross that there was no class 1 gravel; however, Mr. Ross did not respond.

[74] Tim testified that he was "probably more vocal than anyone on site" regarding the poor condition of the subgrade. He recalled that Mr. Ross was emphatic that he wanted "no puddles, we want smooth [RCC] and to all drain down to one area".

Norman Ross

[75] Mr. Ross recalled an early November 2019 meeting on the Property. He did not remember the proof test or meeting Scott Simms but thought that "we couldn't keep going because it was getting too cold". He could not recall who beyond himself and Mr. Muise attended the meeting but he said the result was "we had to bring someone in to fix the problem" with the subgrade. Mr. Ross recalled Dexter and Johnny Webster doing remedial work. Mr. Ross noted that further work was performed on the subgrade in the spring before VJR returned to place RCC.

[76] Mr. Ross could not recall discussing slab strength with Tim or Bryan adding, "it was not an important discussion for me because I already was told about the total

tonnage". Mr. Ross could not recall discussing with Bryan or Tim increasing the tonnage.

Jim Muise

[77] Mr. Muise testified that he considered himself "an observer" at the meeting with Tim, Bryan and Norman Ross. He thought the meeting was less than an hour and that "Norman and Tim did most of the talking". He acknowledged that water pooled in places on the subgrade before the RCC was started.

Scott Simms

[78] Mr. Simms has been with Englobe for 20 years. He is familiar with the Property as he carried out testing there for ARCP. Mr. Simms was present on November 5, 2019 during the loaded tractor trailer proof test. He recalled that "most areas were in very good condition except for one central area where there was significant rutting". He marked this area with spray paint. It was his understanding that the subgrade problems would be fixed before the RCC was placed.

[79] On cross-examination he agreed that he had no knowledge of what the subgrade was comprised of. Further, he had no details concerning how long Dexter had worked on the subgrade. He could not recall how many runs that the tractor trailer made or the scope of the proof test. He agreed that the ruts stood out and that he had "serious concerns regarding compaction". He does not know if this was remediated. Shown photos of the subgrade, Mr. Simms agreed that the subgrade could include "type 3 materials". Mr. Simms was shown more photos and acknowledged that there could have been more water ponding.

[80] Mr. Simms acknowledged that at the time he did not have much experience with RCC.

QUANTITY OF RCC PLACED ON THE PROPERTY

Bryan Rice

[81] In terms of the size of the Project, Bryan said that it turned out to be over 8 acres, "slightly below 9".

[82] Throughout the duration of the Project Bryan dealt with Mr. Ross' "primary person", Jim Muise. He considered Mr. Muise to be JRS's site foreman, recalling

that Mr. Muise was on the site every day. Bryan had daily conversations with Mr. Muise, whom he described as “friendly, enjoyable” to work with. He said that Mr. Muise was “happy throughout” and voiced no complaints. He reported “the amount of [RCC] tonnage we produced each day” to Mr. Muise.

[83] Although not the designated Consultant, Bryan said that Mr. Muise “gave us direction on what he wanted done”. Although Mr. Ross was not often on site, Bryan formed the impression that he constantly observed the Project from his office in Halifax through monitors connected to an extensive camera system on site. In this regard, he said that Mr. Ross often called him or that he (Bryan) was there when Mr. Muise received calls from Mr. Ross inquiring about things he observed.

[84] Asked if Mr. Ross voiced any complaints, Bryan replied, “no the opposite, he expressed that he was happy, he marvelled at the hours my dad was putting in on site”.

[85] Bryan testified that VJR calculated the amount of RCC through their computerized batching program, noting that he entered the mix into the computer. He went over the “Load Summary Report” and how it reflected the amount of batched RCC. Bryan characterized the records as “accurate statements”. He added that in 2019 he also generated printed slips “to have available to Mr. Ross”. He recalled that Mr. Ross declined to take the slips, advising Bryan that he did not need them. In the result, Bryan said that he did not print off slips for the RCC placed in 2020.

[86] Bryan also referred to handwritten notes, stating that in addition to the computer records that “hand tallies” were kept which also recorded the amount of batched RCC. On cross-examination Bryan was not moved off of his calculation and the computer records stating, “I have complete confidence in that billing”.

[87] Bryan testified that he witnessed Norman Ross on site speaking with Mr. Muise and an ARCP representative to direct them to cut off end portions of the RCC. He witnessed ARCP employees sawing off the RCC ends and observed some being trucked away. Bryan explained to Mr. Muise that this process resulted in “a huge amount of wasted concrete”. He characterized this as an “aesthetic thing” and although it was later somewhat altered, he still recalled four to five-foot lengths of concrete being cut off.

[88] With the aid of photos, Bryan gave evidence concerning areas of the Project that caused the RCC to be laid thicker than 8″. For example, the areas butting up to

the truck scales, concrete sidewalk around the (partial) perimeter of the JRS building and the driveway area.

[89] Prior to VJR recommencing work, JRS had remedial work done to the subgrade. As well, JRS ripped up some of the RCC that had been placed around the drainage pond. Despite this work, Bryan said that there remained issues with the subgrade. As well, he said that it was apparent to all that the total paved area would exceed 8 acres with surveys showing 8.43 – 8.75 acres.

[90] Once Bryan learned that the total area would be in excess of 8 acres, he called Mr. Ross. He said that Mr. Ross initially joked that because of all the work he was giving VJR that they could do the extra for free. Later, Bryan met with Mr. Ross and his grandson, Alex Ross and "I provided him with an 18,000 [cubic] tonne estimate …he said we were good on the figure". Bryan noted that VJR's second invoice followed this meeting and that he wrote a June 26, 2020 email attaching the invoice which read:

> Norman,
>
> Please see an invoice attached for the RCC completed so far this year in Truro.
>
> I was speaking with Wib, and the core we extracted from the slab had a strength of 45 MPa and a density of 2,485 kg/m3.We are very pleased with this result, which far exceeds the 35 MPa strength specification discussed last year.
>
> Based on the revised, increased coverage area in Truro, we estimate the total tonnage required from your Project to be approximately 18,000 tonnes. I will continue to update Jim and Jason regularly as we work our way across the property, and will keep you informed as we progress towards the end of the Project.

[91] He did not receive a reply to the email; however, the invoice was thereafter paid in full.

[92] On cross-examination Bryan agreed that he could not say how he got to the 18,000 number. When it was put to him that it was derived from 8.89 acres, Bryan replied, "it helped to inform my analysis but I'm not sure if I was using that".

[93] Bryan confirmed that VJR completed pouring the RCC in late July and issued an invoice ($932,664.38) dated July 20, 2019. On September 16, 2020, $771,585.95 was paid toward this invoice leaving a balance of $161,078.43. Bryan did not receive an explanation for the shortfall. Further, Mr. Ross said nothing about a counterclaim.

[94] Asked about Mick Prieur's at trial testimony that there was concrete dumped on the Property in November, 2019, Bryan said that there was no dumping area. He acknowledged that through "a minor amount of testing" that cement or other material was placed to the right of the sandpile as shown in photos.

Tim Rice

[95] Tim gave evidence consistent with Bryan regarding the computerized and hand-tally records of the amount of RCC poured at the Project. He added that if there were discrepancies, "we'd always go with the lower value, we wouldn't want to charge them for more than they receive". On cross-examination he added, "what we put out, we know those raw materials went into the slab".

[96] Tim testified that every day VJR poured RCC that he was on site. He would typically begin work at 4:00 a.m. and conclude at 8:30 or 9 p.m. Tim usually stayed at a nearby hotel. Mr. Muise was regularly on site and told Tim that Mr. Ross had "a whole bunch of cameras" monitoring the site. Tim was never questioned by Mr. Ross or Mr. Muise about the quantity or quality of RCC poured on the site.

[97] Tim said that Mr. Muise approached him in late November asking him to meet with Mr. Ross. They met and it was agreed that the pouring of RCC would stop on account of the cold weather. At this point, Tim recalled how pleased Mr. Ross was with the work done by VJR.

[98] On cross-examination he agreed that Mr. Muise did not appear to have any special knowledge of RCC.

[99] Tim was shown photos of the cut-offs and he noted, "it was directed by JRS by where we finish, to cut in the morning or late that night". He added, "Norman wanted it [RCC] cut off, he didn't like the slope, they'd try to cut to make all straight, a lot of concrete". He said that VJR was presented with a July 31, 2020 invoice from JRS's company, Colchester Containers for $3,691.50 representing trucking fees for moving cut offs away from the site. He observed that, "this struck me as a reaction …we weren't going to pay it".

[100] On cross-examination he said that he saw the cut offs and regarded the RCC waste as "substantial" He said that VJR did not pay the Colchester Containers invoice because "we didn't order" the work to be done.

[101] By the end of June the job came to an end and VJR took the plant down and cleaned the site. Tim noted that the subgrade was still not optimal in June; for example, there was a lot of water ponding. Indeed, Mr. Muise directed Tim to continue pouring the RCC over standing water – "we did not recommend, Jim said 'keep her going'."

[102] Tim noted that certain areas required thicker concrete; i.e. around the building, the transitions, around the roadways and at the site entrance.

Norman Ross

[103] Mr. Ross described the Property which he initially arranged to have levelled in 2017. With reference to a July 4, 2019 Dexter quotation, he noted that JRS paid the company $1,224,00.00 plus HST to prepare the subgrade. Mr. Ross explained that he contracted Dexter to do extra work on the property in the fall of 2019 prior to the Project. On cross-examination he agreed that the Dexter quote does not refer to class 1 gravel.

[104] Asked about cut offs, Mr. Ross said he visited the Property "one day with my grandson and asked Jim Muise, why this? I was told to start the next run, it was done to have a smooth surface, I wondered why they were doing it, I didn't tell them not to do it". He only remembered seeing the "one pile" of cut offs. On cross-examination he acknowledged that "it would have been the right thing to do" by first calling VJR before presenting them with the trucking bill.

[105] Mr. Ross did not ask for the "sidewalk work" around the building and said that JRS did not pay separately for this. He asked VJR to make the pad "a bit thicker" in the driveway area where there was heavy truck traffic. Mr. Ross said that he never received anything from VJR regarding the RCC thickness.

Lee Thomson

[106] Mr. Thomson is a technician with Englobe. He "vaguely" remembered his time on the Property dating back over four years. He recalled being tasked to take core samples in various locations of the "parking lot area". Mr. Thomson was taken to his Field Inspection Report dated August 25, 2020. With the aid of his sketched map, he specified the areas where he took samples. The sample areas were chosen by ARCP and he remembered that "the client required no coring near the entry of the building".

[107] On cross-examination Mr. Thomson could not provide any insight regarding the core results and why they are all exact numbers. He agreed that he is not in a position to say if the measurements are accurate. He was not involved in the lab work, which included measuring the core samples. Mr. Thomson could not recall who specified where the cores should be taken. He agreed that he was told not to take core samples from the area in front of the building.

Jim Muise

[108] Mr. Muise worked for JRS for 21 years until his recent retirement. Mr. Muise was branch manager of the JRS facility in Truro at the material time. In this position he oversaw operations and dealt with employees. He directly reported to Norman Ross. He was there "all the time" for the Project in 2019 and 2020. He agreed on cross-examination that he was "Norman Ross' eyes and ears on site".

[109] Mr. Muise recalled that by times Mr. Ross would "just show up" at the Property. He estimated that in November, 2019 that they talked "every other day" and that Mr. Ross attended at the Property two to three times.

[110] On cross-examination Mr. Muise agreed that there were cameras set up around the JRS building. He knew that Mr. Ross watched what was going on through monitors at Mr. Ross' other site. Mr. Muise agreed that in 2019 Mr. Ross never complained about VJR's work. He acknowledged that he had a "harmonious" relationship with Bryan and Tim throughout the Project.

[111] On cross-examination Mr. Muise spoke of a "drinking problem …probably since 2018 …it has somewhat affected my memory". Mr. Muise recalled the state of the land when JRS acquired the Property. He knew that the Town of Truro had used the area as a dumping ground; over the years gravel, concrete, brick and asphalt were placed there. He described the area as "lowlands" and additional fill was brought in. He thought Dexter later compacted the area over a period of 2 – 3 months; however, he did not know if compaction tests were done.

[112] Mr. Muise said that the goal for concrete thickness was 8″. He recalled a meeting where it was discussed as a range from half an inch under to half an inch over the 8″.

[113] Mr. Muise dealt with both Tim and Bryan on a regular basis. He saw Tim more and has no recollection of Bryan providing him with documents or slips. He said that there were periodic conversations where Tim or Bryan would refer to the

amount of tonnes poured on a given day. Mr. Muise did not have an estimate of how much RCC was required. He denied providing VJR any direction regarding the placement of concrete. He said that by late November, 2019, "we had to shut down because it was too cold".

[114] On cross-examination Mr. Muise admitted that Bryan and Tim would let him know about tonnage each day and "I sometimes relayed to Mr. Ross that day or the next day".

[115] Mr. Muise said that a drainage pond was necessary and that the Property had to be graded to drain. He recalled that some concrete was removed around the pond. On cross-examination he agreed in the beginning that there were two settlement ponds on the Property. Ultimately, one was filled in and a corner of the other pond had to be chipped out by ARCP. VJR then had to repour RCC in this area.

[116] Asked about "cut offs" Mr. Muise recalled that they were "all different shapes and weights". He explained the process occurred at the end of the day to "square up". On cross-examination he said it was possible that he spoke to Mr. Ross about cut offs. He thought that "we hauled the cut offs to the Colchester Containers site".

[117] Mr. Muise thought that ARCP cut the cut offs and agreed that "maybe I did bill them [VJR]" for the transport off of the Property.

[118] Referred to an April 30, 2020 email, Mr. Muise agreed that ARCP's Robbie Fair noted that the subgrade was high in some areas and low in others. He agreed that over the winter that the subgrade had settled.

[119] On cross-examination Mr. Muise said that he measured some cores with his tape measure. He did this because "some of the cores seemed a little uneven". He said they were "gravelly and not flat on the bottom".

Scott Simms

[120] In early June, 2020 ARCP again contacted Englobe's Scott Simms. Englobe was retained to do compaction testing and Field Density Reports were prepared by Englobe technician Jamie Abraham.

[121] Later in the summer on August 18, 2020 ARCP again retained Englobe, this time to take core samples. They were directed by ARCP to core eight locations and

the results were submitted by Englobe on August 28, 2020. Mr. Simms's letter of that date notes that the core thickness averaged 7.4″.

[122] On cross-examination Mr. Simms agreed that some of the tested cores were not intact, as by the time they reached the lab they had been broken into sections. He agreed that he did not know how the technicians carried out the coring or how the samples were handled. He agreed that if Canadian Standards Association (CSA) standards were not followed for a property of this acreage that "well over 300" cores would be called for.

Justin Merritt

[123] Mr. Merritt has worked for over 13 years as director of projects with EnviroBate. In October, 2021, JRS retained EnviroBate to obtain core samples on the Property. Mr. Merritt had no personal involvement with taking the cores or examining them.

POST PROJECT

Tim Rice

[124] Following completion of the Project Tim met in September, 2020 with Mr. Ross. Mark Monette was also present; this was the first time Tim met him. Tim attended Mr. Ross' office as he thought he was going to obtain the cheque for the July 20, 2020 invoice. Once there, however, Tim felt "something was up" at this "very memorable meeting". Mr. Ross told him that he was "not paying your whole invoice". He added that he was only prepared to pay the amount ($771,585.95) to equate with the balance left owing on the Contract number; i.e., $1,409,760.00. Tim recalled that Mr. Ross said something to the effect, "this is what I said I'd pay you for the job". Tim countered that their Contract was never for a lump sum to which Mr. Ross replied, "I don't care about that". Tim persisted, mentioning the Contract Mr. Ross signed with Bryan, to which Norman responded, "I'm not talking to Bryan anymore, he's too smart".

[125] In response to Tim's resistance, while in Tim's presence Mr. Ross called Mr. Muise. Tim discerned that while on the phone, Mr. Ross "was not getting the answers that he wanted" from Mr. Muise. Mr. Ross said that he would make out a cheque for $771,585.95 and that "it would be up to you if you take it or not". At this point Mr. Monette left the room and Mr. Ross told Tim, "I hate this part of the job". Tim responded with, "just pay what you owe me", whereupon he thought Mr. Ross'

"demeanor changed …he wouldn't look at me". Tim then took the cheque but made it clear that he did not consider it to be full payment.

[126] Two to three weeks following the above meeting, Tim showed up at Mr. Ross' office and asked to see him. He was directed to a small room and Mr. Ross entered. Tim asked him about participating in a mediation and Mr. Ross declined. Tim then offered to "split the difference" on the outstanding balance but Mr. Ross refused his offer.

[127] A couple of weeks later , Tim met with Mr. Muise. Tim expressed the opinion that he might have put Mr. Muise "in a spot"; however, Mr. Muise said that they "were good" and that he did not understand what Mr. Ross was doing.

Mark Monette

[128] Mr. Monette has been employed with JRS for seven and a half years as vice president, finance. He is responsible for processing and paying invoices. He described the process; "we would receive the invoice, obtain approval from Norman Ross (the person responsible) and process payment". This process occurred on the Project for the first two invoices. On the final invoice, "Norman did not give approval because there are issues". Mr. Monette explained that JRS authorized the increase from 8 to 8.44 acres; however, the final invoice exceeded this amount and "should have been based on the original agreement".

[129] Mr. Monette said that when the final invoice was received, "Norman asked for copies of the other invoices, we looked at the total amount and compared with the price we were given to do the work at the outset …exceeded $1.4 Million considerably…".

[130] Mr. Monette prepared a summary of what JRS paid VJR. The summary shows an "amount overpaid" of $130,138.47 and reads:

> This factors in that the 8 inch specification was not met and only 7.3 inches (Bruce MacNeil report) of concrete were installed.

[131] Mr. Monette continued, "…it turned out that the work didn't meet the spec per the average core of 7.3″ or less, we paid on the assumption of 8″ thick …".

[132] On cross-examination it was put to Mr. Monette that the original Counterclaim sought "total costs …as a result of VJR's delay …estimated in excess of $175,000.00". Following a Demand and Answer for Particulars, the Counterclaim

was amended to mirror the number in the above summary; i.e. $130,138.47. On cross-examination Mr. Monette said that JRS did not want to pursue the delay claim "because it would require our firm to reveal information to the public and it is a privately held company".

[133] Mr. Monette was unaware that Dexter did not complete their work until the fall of 2019. He was generally unaware of the Project details. He acknowledged that the three invoices provided the RCC quantities; however, he said, "we did not believe they were accurate", adding that he did not require daily slips. He stated that 27 core samples were analysed showing that the invoices exceeded the actual amount of RCC.

[134] Mr. Monette was unaware of cut offs or the cutting out of RCC around the pond area.

[135] He added that there would be no way to verify hand tallies. He did not know if these had been offered to Mr. Muise or Mr. Ross. Later he said, "its our position that something is wrong because the math doesn't add up".

[136] Mr. Monette was present when Tim met with Mr. Ross over the third invoice. He thought that Mr. Ross initiated the meeting. In advance of the meeting Mr. Monette prepared (with Norman's input) the summary. Mr. Monette said that Tim disagreed with this, taking the position that JRS agreed to pay on a per unit price.

[137] Mr. Monette did not prepare any meeting notes or memos; however, he has "a very good memory of the subject matter of the meeting …I know we talked about cores". He said there were "two issues …the price we had been overbilled and we made note of deficiencies …". When Mr. Monette was reminded of his September 5, 2023 discovery evidence he agreed that at the time of the meeting they did not raise the lack of 8″ issue. Mr. Monette then said that the problem "boils down to the contract price". Mr. Monette maintained that they had "some core samples" at the time of the meeting.

Norman Ross

[138] Mr. Ross was asked about the final invoice. He did not recall how JRS received it but then added, "Tim showed up and presented it. I said I'm not paying it, I'm paying what the contract said". Mr. Ross did not deny that his demeanor changed; "I guess it did, I didn't know about, didn't ask for it". He later made inquiries about the work; "I'd sent EnviroBate up to see why [I'm being asked] to

pay extra". He said that if JRS received what it was charged for, "I would have paid the bill". Mr. Ross added that the cores were "way below what they should have been". He was "shocked and upset" about the core results.

[139] On cross-examination Mr. Ross agreed that JRS did not dispute and promptly paid VJR's first two invoices. With respect to the final invoice, he said that he disputed it because, "I had a commitment, the contract is an estimate, the agreement with Tim was 8″ for 8 acres for $1.4 million". Asked if he was aware that the concrete amount far exceeded 15,840 cubic tonnes, he replied "that's the slips they gave us …the reason I did core samples, I didn't want to be taken advantage of …". He added that he could have had Casey do ready mix concrete for $1.4 million. He added that he thought that the 15,840 "would be the total that he used". He stated, "I had no idea how much, I'm in the scrap metal business, not concrete". Mr. Ross went on to say that his "verbal agreement was for 8 over 8 for $1.4 M".

[140] Mr. Ross prepared the counterclaim because he was annoyed about being sued. On cross-examination he agreed that had he not been sued that he would not have made a claim against VJR. He denied that the initial counterclaim was based solely on delay. Further, he denied initially refusing to pay Tim for the full amount based on delay; however, he later admitted that when he met with Tim and Mr. Monette that the lack of 8″ did not come up. On re-direct examination Mr. Ross was referred to para. 6 of JRS's original Defence which alleges that VJR "failed to meet the necessary specifications for the work and this was in breach of the Contract".

THE EXPERTS

Bruce MacNeil

[141] Mr. MacNeil was qualified as an expert in the field of geotechnical engineering capable of giving an opinion on the testing of concrete. In Mr. MacNeil's February 2, 2024 report he opines as follows:

> Based on our review of the information provided, site visits in 2022, and core densities measured, we conclude the following:
>
> 1. The final area for the roller-compacted concrete was 8.4 acres. This was surveyed and is considered to be an accurate value for the area where roller-compacted concrete was placed by VJ Rice Concrete Limited. The area estimated prior to the work was 8 acres, but it is well-documented that John Ross & Sons Ltd. requested additional area to be completed. The area of 8.4 acres matches this expectation.

2. Based on the core results provided, from Englobe and Envirobate, the average thickness was 7.3 inches. The core thicknesses varied from 6.0 inches to 9.0 inches. The higher thicknesses are generally at main entrances and near the building where thicker roller-compacted concreate of 7.3 inches would be a reasonable value to use for the overall site.
3. To determine the quantity (in tonnes) of roller-compacted concrete placed over the site, we would use:
    a. The site area of 8.4 acres, as note above,
    b. The average thickness of roller-compacted concrete of 7.3 inches, as noted above,
    c. And the density of the roller-compacted concrete
4. The density of the roller-compacted concrete was determined based on the cores that we collected in November 2022. The average density of the cores was 154 pounds per cubic foot (pcf). This compares very closely with the estimate from the measurements taken by VJ Rice Concrete Limited during the time of construction. The density was reported to be 155 pcf. This also matches closely with an estimated density of 150 pcf that appears to have been used prior to the construction. The se of the average value of 154 pcf from the cores that we collected in November 2022 would be reasonable.
5. Therefore, we have the area, thickness, and density, as required to determine the quantity (in tonnes) for the roller-compacted concrete placed at the site.
    a. The site area of 8.4 acres is converted to 365,904 square feet
    b. The average thickness of roller-compacted concrete of 7.3 inches is converted to 0.61 feet
    c. The density of the roller-compacted concrete of 154 pcf is used as is
    d. The area of 365,904 square feet multiplied by the thickness of 0.61 feet results in a volume of 223,201 cubic feet
    e. This volume of 223,201 cubic feet multiplied be [sic, by] the density of 154 pcf results in a quantity of 34,373,021 pounds
    f. Converting this quantity of 34,373,021 pounds to tonnes (1 pound equals 0.000454 tonnes) results in 15,605 tonnes.

In summary, based on our review, the quantity placed over 8.4 acres is 15,605 tonnes. For general comparison, the quantity in the contract for 8 acres and 8-inch thickness is 15,840 tonnes. So, the actual quantity is less than the original contract quality [sic, quantity].

[142] Mr. MacNeil was cross-examined on his report. He acknowledged making no inquiries about the Property subgrade. He admitted to having limited experience with RCC. He agreed that VJR has a solid reputation in the industry. He has worked with

Dr. Langley and considers him to be “well known in the [concrete] industry”. In the past Mr. MacNeil consulted with Dr. Langley when he required questions answered or a second opinion. Mr. MacNeil agrees that Dr. Langley has more concrete experience than he does.

[143] Mr. MacNeil is familiar with the Canadian Counsel of Industrial Laboratories (CCIL) as he was certified with the organization. That said, he acknowledged that his current lab is not CCIL certified. Mr. MacNeil agreed that he received complaints when he was a CCIL member.

[144] Mr. MacNeil supervises technicians within his lab. Their work does not include concentrated mix design for concrete. In the result, he cannot comment on the VJR mix design.

[145] Mr. MacNeil agreed that he only used the core results for his thickness results. He did not account for “deflections or variations”. He also did not account for the settling of the subgrade between 2019 and 2020.

[146] Mr. MacNeil would expect a proper subgrade to be composed of type 2 gravel covered with type 1 gravel. He agreed that on the Project he observed type 2 but not type 1. Mr. MacNeil agreed that when dealing with cores that it is important that they be preserved and not cracked or broken. He added that when this happens, “it’s impossible to get a measurement”.

[147] Mr. MacNeil agreed that if there were 5″ ruts in a subgrade, “that should be fixed” prior to laying RCC. As to whether it is physically possible to have a uniform 8″ of RCC over 8 acres, Mr. MacNeil ultimately conceded, “there would be some variance”.

[148] Mr. MacNeil relied on core tests performed by others and is of the view that “this is proper within the industry”. He did not see the cores tested by Englobe. He did, however, measure the cores taken by EnviroBate. He also measured on November 13, 2022 cores taken by one of his employees two days earlier. He conceded that these cores were not wrapped; he did not determine if they had been damaged. Mr. MacNeil noted Englobe’s core results were around 8″ with EnviroBate’s at 7″ and his testing also 7″.

[149] Mr. MacNeil was asked about CSA standards and the stipulation (given that the Property is in excess of 8 acres) for 340 locations of core samples. He said that

he thought 340 “to be a crazy number, ridiculous”. He added his view that this CSA section is “obscure”. He was not aware of the CSA when he prepared his report.

[150] Mr. MacNeil did not follow the CSA requirements for calculations for test age or reporting. He noted that the standards pertain to “cast in place concrete”, not RCC. He said that CSA does not stipulate a procedure for RCC. In any case, he did not dry the cores as “I was just looking for current wet density of cores”.

[151] Based on his review, Mr. MacNeil considered the compressive strength of the RCC to be “relatively high”. Mr. MacNeil had never heard of daily coring of RCC but conceded that it could be done. Asked whether after the fact cores of RCC are “the exception, not the norm”, he could not say. As for cut offs, they were not his “focus” or “an important factor” in providing his opinion. Concerning the areas around the building and other places possibly having thicker RCC, he did not take this into consideration. He was also unaware of how much RCC had to be re-laid around the drainage pond.

[152] Mr. MacNeil never inquired of VJR as to their daily tallies. He did not consider the Englobe soil report.

[153] As part of his opinion Mr. MacNeil visited the Property. He thought that the RCC, “looked as expected, I think everyone was happy, it performed well, nobody complained about the quality. I think it was good”.

W.S. Langley

[154] Dr. W.S. (Wib) Langley, P.Eng. was qualified as an expert for the purpose of speaking to his May 31, 2024 report and RCC. He is 87 years old and has practiced in the field since obtaining a P.Eng. followed by a Master’s Degree in soil mechanics and foundations in 1969. In his report he opines as follows:

> **8.0 Summary**
>
> In my professional career, I have not encountered a project of this nature that was constructed without more guidance from an engineering standpoint. In my review of documentation (emails, deposition, etc.) there appeared to be no one in charge of the overall project. Standards, specifications, drawings, design, construction, inspection and testing for the most part appear to be non-existent. These are all critical to the performance of RCC pavements and service life expectations. Minimal density tests on cores were conducted near the completion of the project.
>
> It is my understanding that the RCC was a unit price contract and based on the price per tonne of concrete produced on site solely for the project. The RCC concrete

production was the responsibility of V.J. Rice Concrete Limited and the placement of the concrete was sub contracted to Atlantic Road Construction and Paving Limited. On-site testing was not included in either the RCC contract or the placement sub contract.

The production records for the RCC tonnage batched and supplied to the construction site was calculated on a daily basis and tallied occasionally for billing purposes. The records for cement, fly ash, sand and gravel purchases were also available from V.J. Rice Concrete. This appears to be the only valid record of RCC and materials used on site.

Wet density based on the Modified Proctor Density is the most widely used method of measurement and reporting of RCC density and should be the primary control standard used in RCC construction. Dry density also based on Modified Proctor Density, used in standard geotechnical construction practice, provides useful information on preparing structural fills and base courses. However, in RCC practice, one typically tries to achieve the fewest practical air voids that will occur at higher water content that the maximum dry density, which is the objective used in typical geotechnical engineering practice. The difference between concrete practice and geotechnical practice generally follows from the fact that as RCC hardens, its in-place density is reflective of the wet density of the material, not the dry density.

The wet density of RCC is not an inherent property of the concrete, unlike a normal structural concrete. Normal concrete is based on fixed water content for a given strength, workability and density. RCC on the other hand, may change frequently with respect to water content based on environmental conditions and changes in material supplies such as gradation, moisture content, compactibility and base course stability.

The only soils report that I am aware of which pertains to the site was by Englobe in 2016. I have no knowledge as to whether this was shared with others on site. The report referenced a relatively high ground water table in four test pits; on-site soils of recent fills consisting of silt, clay, sand and gravel, and some organics. It was suggested that some material may be salvaged as part of structural fill. This would require the presence of personnel well versed in geotechnical work to supervise the work. The Englobe report also noted that the structural fill be compacted to 98% Proctor Density in accordance with ASTM D698 Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12400 ft-lbs/ft^3 (600 kN-m/m^3)) (Appendix 5). This requirement should have been 98% Modified Proctor Density for fills on which RCC is to be placed.

If the fills and base course are not uniformly fully compacted or contains soft spots, the compaction of the RCC will compact the underlying material and increase RCC volume. The rutting of the base course and ponding of water is indication of deficiencies in the structural fill placement. Any deficiencies should have been corrected as part of a QA/QC program. It would have been prudent to have the

> structural design of the complete ‘as constructed’ pavement reviewed by the original designer to determine suitability of the works.
>
> The shortcoming and effect on the RCC properties (strength, density, thickness, etc.) are related to the overall construction activities.
>
> Due to the absence of specifications (earthworks, structural fill, base courses construction, daily records, testing requirements and test results) it is not possible for me to independently infer concrete volumes used on site from the limited data reviewed. I am of the opinion that of several significant parameters contributing to claims for concrete overrun and re-compaction of the finished grade relate to failure to consider concrete ‘wet’ tonnage rather than hardened dry concrete and poorly constructed structural fill and base course respectively.
>
> The wet tonnage, on which the RCC was based, was recorded daily and the records are available from the concrete producer.
>
> …

[155] On cross-examination Dr. Langley confirmed that he was initially retained by VJR to work on mix design for the Project. He noted the properties of RCC and how they differ from ready mix concrete. Dr. Langley visited the Property in November, 2019; however, he did not do any concrete density testing. He has no knowledge of any work done on the subgrade after November, 2019. He noted his understanding that the subgrade was a clay and gravel mix and that there had been 5″ sinking from a truck.

[156] Dr. Langley was taken to Bryan’s June 26, 2020 email and the reference to the Project core strength of 45 MPa and a density of 2,485 kg/m^3. He concurred with this observation, albeit agreeing that the latter figure is very close to 2,500; “a half of one percent”. Dr. Langley agreed that he did not perform wet density testing on the Property. He acknowledged that his strength measurement was “probably not greatly different than Mr. MacNeil’s”. He noted that a higher MPa meant for “higher, more abrasion resistant concrete with a stronger load capacity”.

[157] Dr. Langley was referred to this para. of his report:

> Concrete suppliers in Canada are required to comply with the Standards Council of Canada and more specifically with Canadian Standards CSA A23.1 and A23.2, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete. I further understand that concrete testing was not included in the V.J. Rice Concrete contract or in the placement contract by Atlantic Road Construction and Paving Limited (ARCP).

[158] He confirmed his opinion, adding "I have no information that there are exceptions". He was referred to his November 14, 2019 letter to VJR and agreed that with this Project he saw "very few documents or specifications referencing CSA standards".

[159] Dr. Langley was asked about the below para. in his report:

> It is my opinion that a significant number of cores should have been taken spread over the entire site if one considered cores on hardened concrete to be acceptable for RCC and statistically significant. The cores should be taken randomly, with the exception of any areas of known deficiencies. The locations of coring should have agreement with the onsite QA/QC personnel, specifications and the contractor. The dry density of the cores would be required to be converted to wet density to comply with the basis upon which the concrete was purchased.

[160] He opined that ASTM prescribed specific equipment, other than a tape measure, is needed to correctly measure cores. That said, he opined that when placing RCC a tape measure can be used to effectively measure thickness. He allowed that as the RCC dries "thickness will shrink a little".

[161] Dr. Langley confirmed that he did not have access to daily records for RCC density, thickness, temperatures or surface quality. Dr. Langley was asked about Scott Simms and he described him as "a very competent geotechnical engineer".

[162] On redirect examination Dr. Langley explained that RCC requires high density and a modified proctor testing is required to do proper testing. He was critical of Mr. MacNeil and Englobe for performing standard proctor testing and he assumed this was on account of their inexperience with RCC.

[163] Dr. Langley testified that the amount of core samples carried out were "very small". He explained how cores are optimally measured by taking nine equidistant points around the circumference. The average is then taken to provide the depth, resulting in a more accurate measurement.

[164] Dr. Langley was adamant that CSA standards are applicable to RCC and should be followed.

ISSUES

[165] JRS submits the issue to be determined is whether VJR overbilled them. As for VJR, they submit that there are three issues:

(i) What were VJR obligations under the Contract, and did they satisfy those obligations?

(ii) Assuming VJR has satisfied its obligations under the Contract, what amount is still owing to VJR under the Contract?

(iii) Is there any merit to JRS's Counterclaim?

POSITIONS OF THE PARTIES

John Ross and Sons

[166] JRS says that two days after Norman Ross and Tim made their "handshake agreement" that the Contract was signed and "nobody ever looked at it again". They add that much of the Contract requires a Consultant for it to be "workable". JRS points to a number of clauses that were ignored and argues that the Court must examine all of the surrounding circumstances.

[167] JRS submits that the Contract should be disregarded in favour of the agreement that they say was struck on July 29, 2019. In any event, their position is that they were overbilled as the deal was for 15,840 cubic metres of RCC at $89.00 for a total of $1,409,760 plus 15 percent VAT. JRS points to the earlier Casey quote which was provided to VJR and submits that price was always the key for Mr. Ross.

[168] Concerning alleged changes as a result of the November 5, 2019 meeting, JRS points to the lack of documentation supporting this. They further submit that Bryan's November 12, 2019 email is evidence to the contrary:

> I was speaking with Norman this morning and understand that work is close to being completed to improve the identified areas of deficient subgrade support. We have not reviewed this work.
>
> With regards to overall QA/QC, I have advised Norman that it is his decision whether he has independent quality control employed on this project.
>
> On the concrete production side, we have retained W.S. Langley to assist.
>
> To clarify with regard to placement workmanship, this is the responsibility of ARCP. Our expectation is that ARCP place the concrete 8″ thick, with 98% compaction of the maximum density. Englobe is currently completing testing to give us the maximum density value. I will provide this to you when received. I understand from Englobe that ARCP will have somebody from Englobe onsite for initial pours to do compaction testing.

> Each day, we will provide ARCP and John Ross &Sons total tonnage supplied for billing purposes as this work will be completed and billed on a per-tonne basis.
>
> In our meeting, ARCP mentioned that you could get us expected total RCC coverage area based on shots your surveyors took. Is this something we could please get before starting placement?
>
> From our meeting, it was understood by all parties that the sub-grade may present some placement variables. My father (Tim) or I should be onsite throughout the job and I understand from this meeting that an owner's representative will be available throughout so that all parties can review site variables that may occur and have placement impacts as these items are encountered.
>
> I will touch base with Greg later today as we get a better handle on the impact of today's weather and go-forward forecast to confirm starting placement.

[169] For all of the evidence about the deficient subgrade, JRS points out that there was no mention of this issue when he wrote his June 26, 2020 email.

[170] In the alternative, JRS submits that VJR has the burden to show that it met all of the Contract specifications, and it falls short. They submit that VJR has no records to show that they met "the requirement that the RCC was to be 8″ thick". JRS adds that the 8″ should be considered an absolute figure with no tolerance.

[171] In any event, JRS says that it was overbilled $130,138.47 as per the summary provided to Tim by Mr. Monette.

V.J. Rice Concrete Limited

[172] VJR submits that this is a straightforward claim for breach of contract. They say that JRS entered into a unit price contract for RCC to be placed on the Property at a unit price of $89.00 per tonne. VJR says that they provided at least 18,280 metric tonnes of RCC, and are entitled to payment, plus applicable interest.

[173] VJR says that the Contract provided an estimate of the total price, based in part on an assumed area of exactly 8 acres. They submit that the Contract was varied several times, most importantly when it was discovered that the total coverage area exceeded 8 acres. Based on that information they argue that an updated estimate of 18,000 metric tonnes was then provided. Ultimately, VJR submits that between 18,280 tonnes and 18,373 tonnes of RCC were placed on the Property.

[174] In all of the circumstances VJR submits that it is entitled to the balance owing on the Contract of $161,078.43 together with interest calculated at the Contract rate. They further submit that the Counterclaim is meritless and should be dismissed.

[175] Before determining the outcome of this case I must address both the credibility and reliability of the key witnesses as outlined below.

CREDIBILITY AND RELIABILITY FINDINGS

[176] In assessing credibility and reliability I am mindful of our Court of Appeal's direction as recently re-stated in *R. v. W.B.G.*, 2024 NSCA 24. At para. 60, Justice Bourgeois set out the legal principles with reference to Justice Derrick's decision in *R. v. Stanton*, albeit in the context of an appeal of a criminal matter:

> 60 In *R. v. Stanton*, 2021 NSCA 57 at para. 67, Justice Derrick set out the legal principles relevant to appeals where credibility is a pivotal consideration:
>
> - The focus in appellate review "must always be on whether there is reversible error in the trial judge's credibility findings". Error can be framed as "insufficiency of reasons, misapprehension of evidence, reversing the burden of proof, palpable and overriding error, or unreasonable verdict" (*R. v. G.F.*, 2021 SCC 20, para. 100).
> - Where the Crown's case is wholly dependent on the testimony of the complainant it is essential the credibility and reliability of the complainant's evidence be tested in the context of all the rest of the evidence (*R. v. R.W.B.*, [1993] B.C.J. No. 758, para. 28 (C.A.)).
> - Assessments of credibility are questions of fact requiring an appellate court to re-examine and to some extent reweigh and consider the effects of the evidence. An appellate court cannot interfere with an assessment of credibility unless it is established that it cannot be supported on any reasonable review of the evidence (*R. v. Delmas*, 2020 ABCA 152, para. 5; upheld 2020 SCC 39).
> - "Credibility findings are the province of the trial judge and attract significant deference on appeal" (*G.F.*, para. 99). Appellate intervention will be rare (*R. v. Dinardo*, 2008 SCC 24, para. 26).
> - Credibility is a factual determination. A trial judge's findings on credibility are entitled to deference unless palpable and overriding error can be shown (*R. v. Gagnon*, 2006 SCC 17, paras. 10-11).
> - Once the complainant asserts that she did not consent to the sexual activity, the question becomes one of credibility. In assessing whether the complainant consented, a trial judge "must take into account the totality of the evidence, including any ambiguous or contradictory conduct by the complainant..." (*R. v. Ewanchuk*, [1999] 1 S.C.R. 330, para. 61)3.
> - "Assessing credibility is not a science. It is very difficult for a trial judge to articulate with precision the complex intermingling of impressions that

emerge after watching and listening to witnesses and attempting to reconcile the various versions of events..." (*Gagnon*, para. 20).

- The exercise of articulating the reasons "for believing a witness and disbelieving another in general or on a particular point...may not be purely intellectual and may involve factors that are difficult to verbalize...In short, assessing credibility is a difficult and delicate matter that does not always lend itself to precise and complete verbalization" (*R. v. R.E.M.*, 2008 SCC 51, para. 49).
- A trial judge does not need to describe every consideration leading to a finding of credibility, or to the conclusion of guilt or innocence (*R.E.M.*, at para. 56).
- "A trial judge is not required to comment specifically on every inconsistency during his or her analysis". It is enough for the trial judge to consider the inconsistencies and determine if they "affected reliability in any substantial way" (*R. v. Kishayinew*, 2019 SKCA 127, at para. 76, Tholl, J.A. in dissent; upheld 2020 SCC 34, para. 1).
- A trial judge should address and explain how they have resolved major inconsistencies in the evidence of material witnesses (*R. v. A.M.*, 2014 ONCA 769, para. 14).

[177] I have borne in mind from the above, these principles for application in this case:

- It is essential that the credibility and reliability of the evidence of the witnesses be tested in context with the rest of the evidence.
- I must undertake a reasonable review of all of the evidence.
- I must articulate my impressions after watching and listening to the witnesses.
- I must consider any inconsistencies and determine if they affect reliability in a substantial way.
- I must address and explain how I have resolved major inconsistencies in the *viva voce* evidence and exhibits.

[178] Having considered the evidence of the principals of the parties I find that Bryan and Tim were both credible and reliable witnesses, whereas Norman Ross was not. In this regard, both Bryan and Tim gave straight forward accounts which were generally backed up by the exhibited photos and documents. For example, the emails reflect the changed estimate from approximately 15,840 to 18,000 metric

tonnes of RCC. As well, the photos provided support for the subpar subgrade and lack of cement wasted at the portable plant.

[179] Although Bryan's emails did not initially explicitly reference the changes that were discussed at the November 5, 2019 meeting, I do not consider this to be fatal. Of course any such changes ideally ought to have been set forth in a written change order. Nevertheless, in the context of the overall dealings between the parties, I have determined that Mr. Ross agreed with the changes that necessitated approximately 2,500 more metric tonnes of RCC than originally estimated.

[180] With regard to my finding that Mr. Ross lacked reliability, I point to his own evidence acknowledging that he has experienced problems with his memory with his advancing age. Through both direct and cross-examination it was obvious that he did not recall specific events relating to the Contract and Project. In this regard, countless questions were met with "I don't recall".

[181] As for credibility, I have difficulty reconciling the fact that Mr. Ross, a seasoned businessman, would have signed the Contract if he felt that his (two days earlier) handshake with Tim sealed the agreement. This is particularly so if – as Mr. Ross alleges – the substance of the Contract differed from what he says he and Tim shook hands over.

[182] I would add that my credibility concerns extend to Mr. Ross' evidence on his post Project meetings with Tim. When pressed on cross-examination it became apparent that his stated reasons for not paying the full amount were not justifiable. My credibility determination of Mr. Ross in this area is amplified when I consider Mr. Monette's evidence.

[183] Based on the entirety of the documentation and *viva voce* evidence I found Mr. Monette's evidence to be less than truthful. When he attempted to justify his summary, it became clear that Mr. Monette did not have a proper grasp of the Project. For example, he knew no details regarding the subgrade or amount of RCC poured, yet he was adamant that JRS was overbilled. Given the timing of the meeting (in the late summer of 2020), I cannot accept Mr. Monette's testimony to the effect that JRS was concerned about core results and the thickness of the concrete. Afterall, this information came to the fore with the opinion of Mr. MacNeil, which I find came to the attention of Messrs. Monette and Ross much later in the chronology. Notwithstanding the "catch all" para. 6 of JRS's original Defence, I am of the overwhelming view that JRS did not raise the alleged lack of concrete thickness until much closer to the time that their Counterclaim was amended on September 11,

2024. Accordingly, I have determined that the justification Messrs. Monette and Ross gave to Tim for not paying VJR's full bill related solely to being "overcharged". For reasons that I will more fully discuss, I do not find merit in JRS's position.

LAW, ANALYSIS AND DISPOSITION

[184] This Court's review of the Contract must be informed by the Supreme Court of Canada's guidance on contractual interpretation as established in *Sattva Capital Corporation v. Creston Moly Corp*, 2014 SCC 53. In particular, the Supreme Court of Canada directs at para. 47:

> 47 Regarding the first development, the interpretation of contracts has evolved towards a practical, common-sense approach not dominated by technical rules of construction. The overriding concern is to determine "the intent of the parties and the scope of their understanding" (*Jesuit Fathers of Upper Canada v. Guardian Insurance Co. of Canada*, 2006 SCC 21, [2006] 1 S.C.R. 744, at para. 27, per LeBel J.; see also *Tercon Contractors Ltd. v. British Columbia (Transportation and Highways)*, 2010 SCC 4, [2010] 1 S.C.R. 69, at paras. 64-65, per Cromwell J.). 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:
>
> > No contracts are made in a vacuum: there is always a setting in which they have to be placed... . In a commercial contract it is certainly right that the court should know the commercial purpose of the contract and this in turn presupposes knowledge of the genesis of the transaction, the background, the context, the market in which the parties are operating.
>
> (*Reardon Smith Line*, at p. 574, per Lord Wilberforce)

[185] Once again, the Contract is a standard-form CCDC Unit Price Contract entered into on July 31, 2019. The obligations of VJR under the Contract were to perform the work as required by the Contract documents. The Contract documents contain:

(i) Agreement between Owner and Contractor

(ii) Definitions

(iii) The General Conditions of the Unit Price Contract

(iv) "RCC John Ross & Sons, Truro, NS" Quote; and

(v) "RCC" email dated July 29, 2019, 3:52 p.m.

[186] Additional terms, which form part of the Contract documents, are as follows:

- Note anticipated start date of September 23, 2019, is contingent on preparation of subgrade completion and acceptance by the owner. This work is presently being completed by a third-party and is not the responsibility of the Contractor. Any change in start date could impact the end date.

- Contract is based on a minimum coverage area of eight acres. Minimum charge for 15,840 tonnes (eight acres coverage) unless a lower tonnage supplied is the result of Contractor's actions.

[187] The Contract establishes the unit price of RCC as $89.00 per tonne. This is reiterated in the Contract document titled "RCC John Ross & Sons, Truro, NS" Quote.

[188] The Contract document titled "RCC" Email dated July 29, 2019, 3:52 p.m. states that: "[O]ur quantity estimate is based on a uniform laydown if 8″ thick over an area of exactly 8 acres. Any variance in subgrade could impact the ultimate quantity of material required, as will any change in your desired coverage area above 8 acres".

[189] Article 4.1 of the Contract states clearly that "Quantities for Unit Price items in the Schedule of Prices are estimated." The Contract also clearly states that the quantity estimate was subject to change if the desired coverage area exceeded 8 acres. In the result, I emphatically find that the Contract was a unit price contract, not a lump sum contract.

[190] The Contract states that it may be amended only as provided in the Contract documents. None of the Contract documents contemplate "amendments" as such; however, part 6 of the General Conditions sets out the applicable process for Change Orders and Change Directives.

[191] In my view, precise compliance with part 6 was impossible, since it relies heavily on the role of the "Consultant", and JRS did not appoint a Consultant. The definition of "Consultant" contained within the Contract Definitions clearly states that the Consultant is to be engaged by the Owner, JRS.

[192] Given the evidence I find that important changes were agreed to by the parties early on at the November 5, 2019 meeting attended by the principals and others. More generally, there were further discussions occurring over the course of the Project and the parties agreed on how to best proceed. The Project, and therefore the Contract, was varied as a result. The critical variations were as follows:

i) Pouring the RCC in a way that would compensate for improper subgrade preparation and still result in a level pad, which necessarily required significant fluctuations in concrete depth, as opposed to the uniform 8″ depth originally contemplated.

ii) Ceasing the pouring of RCC in November, 2019, due to the onset of cold weather, faced as a result of the delayed start date caused by improper subgrade preparation.

iii) Increasing the estimate of RCC from 15,840 metric tonnes to 18,000 metric tonnes, reflecting an increase in the total coverage area.

[193] In *Gillis v. New Glasgow (Town)*, 2009 NSCA 66, our Court of Appeal endorsed the chambers judge's reliance on G.L. Fridman's *The Law of Contract in Canada*, as accurately setting out the applicable test for variation of a contract. Justice Roscoe noted at para. 9:

> 9 … The chambers judge relied on the explanation of the doctrine of variation by G.L. Fridman, and cited the authority in the following passages:
>
> > [25] G.L. Fridman in *The Law of Contract in Canada*, 5th ed. describes "variation" as a method of "changing the original duty to perform created by a contract ...". He describes the effect of variation as follows:
> >
> > > In cases of variation what happens is that, by mutual agreement, for the benefit or convenience of both parties, there is a later alteration of an original agreement. Hence, a unilateral variation, even if permitted by the original contract, must be accepted by the other party with full knowledge and consent, and must be made for valid consideration, if it is to be valid ....
> >
> > [26] Variation, like the companion doctrine of waiver, requires a later express agreement between the parties that affects the earlier transaction. In addition, writes Fridman,
> >
> > > where the original agreement has been varied by the later one, then, to the extent to which such variation is operative, the first agreement

> must now be considered to have been completely changed in respect of the variation in question.
>
> ...
>
> A contract which varies an earlier agreement will be valid to the extent to which it is itself an enforceable agreement .... The question in each instance is what was the intention of the parties when they made their second agreement. If variation was their ultimate intention, they must follow the same rules as to form as applied to the original contract.

[194] Accordingly, variation requires an intention by both parties to vary the agreement, and consideration must pass between the parties.

[195] With respect to the first variation the benefit / convenience obtained by JRS was for a level paved area despite the presence of an improperly prepared subgrade. The corresponding benefit for VJR was necessarily some measure of relief from their 8″ target depth originally set out in the Contract.

[196] With regard to the second variation, the benefit/convenience obtained by JRS was for properly cured and durable final product, despite the delay in Project commencement resulting from improper subgrade preparation. The corresponding benefit for VJR was a measure of relief from their date to attain substantial performance of the work.

[197] Given the evidence, I find that on November 27, 2019, the parties agreed to stop placement of RCC due to cold weather, which made placement and curing of the RCC impracticable. VJR relied on the advice of Dr. Langley, who indicated that pouring RCC at the temperatures forecast would have repercussions for proper curing, strength, and long-term serviceability of the slab surface.

[198] With respect to the third variation, the benefit/convenience obtained by JRS was for a larger-sized concrete pad than originally contracted for. The corresponding benefit for VJR was the opportunity to provide more units of RCC under the Contract, which necessarily resulted in an increase to the Contract price.

[199] This variation was also clearly contemplated in the Contract. In this regard, VJR's estimate of the amount of material required was expressly subject to change if there was an increase in the desired coverage.

[200] The exhibited evidence confirms and I find that on July 2, 2020, ACRP conducted a survey of the Property which indicated that the paving area exceeded

the 8 acres originally contemplated. The July ACRP survey showed the area as being 35,348.7 m^2, or 8.73 acres.

[201] The evidence confirms that later surveys conducted after the Project was complete showed the paving area as being 34,131.4 m^2 (8.43 acres) and 34,137.0 m^2 (8.44 acres).

[202] Placement of the RCC at the Project resumed in June 2020. Prior to placement resuming, due to the subgrade settling over the winter JRS retained contractors to carry out further subgrading on the property. JRS also arranged to have some RCC removed around a water retention pond to accommodate unrelated construction. RCC was subsequently re-poured in this area.

[203] From the evidence, I find that the parties met on June 23, 2020 to discuss the change. VJR provided a new quantity estimate of 18,000 tonnes. This discussion was summarized in a note attached to invoice sent June 26, 2020, in which VJR stated that "Based on the revised, increased coverage area in Truro, we estimate the total tonnage required from your Project to be approximately 18,000 tonnes". JRS paid this invoice in full.

[204] The supply and placement of RCC was completed on July 20, 2020. VJR issued their final invoice totalling $932,664.38 on July 20, 2020, for 9,112.5 tonnes of RCC supplied and placed between July 6 and 20, 2020. JRS made a payment of $771,585.95 on September 16, 2020, leaving a balance owing of $161,078.43.

[205] JRS submitted that Justice Boudreau's treatment of the law in *Atlantic Canada Log Homes Inc. v. Buergi*, 2023 NSSC 91 concerning estimates is of application to this case. I find that the case is distinguishable from the situation here. While *Atlantic* provides a helpful and accurate review of the law, it is in the context of a number of estimates that were exchanged. I note that Justice Boudreau characterized "…this lack of clarity and detail" in the estimates (para. 33). She continued at para. 35 stating that, "the documents are of precious little help in resolving this dispute". It was in this context that Boudreau, J. drew on British Columbia Supreme Court authority at para. 80 of her decision:

> 80 I note *Dunn v. Vicars*, 2007 BCSC 1598:
>
> Law concerning Estimates
>
> …

> 86 Dorgan J. In *Strait Construction Ltd v. Odar*, 2006 BCSC 690, mentioned a number of factors that the Court could usefully consider in determining whether an estimate was intended to have contractual effect.
>
> > [18] I have reviewed the cases on this issue and have extracted the following factors which have been considered by the courts in determining the nature of the building contract:
> >
> > 1. Did the agreement provide for a percentage of the project cost is a fee to the contractor? ...
> > 2. Was price of overriding importance for the owner and was that communicated to the contractor?...
> > 3. Was an estimate provided and did the owner rely on the estimate?...
> > 4. Did the owner require the contractor to design a project at a specified cost or seek assurances as to what the project would cost?...
> > 5. Did the contractor pay for the materials and labour and then Bill the owner on a regular basis for the work done?...
> > 6. Did the contractor make it clear that it was not assuming any of the risk that the final price would exceed the estimate?...
> > 7. Did the contractor provide the owner with information regarding rates for labour and equipment rental etc.?

[206] In the context of the case before her, Justice Boudreau found some of the above factors helpful. Once again, I do not regard the within case to be analogous to what was before Justice Boudreau. Rather, I find that I must consider the variations in the context of the Contract which was clearly a unit price contract. In this regard, I adopt the comments of Justice Goodfellow in *Halifax (Regional Municipality) v. England Paving & Contracting Limited*, 2009 NSSC 224 at para. 24:

> This is a unit price contract as opposed to a fixed price contract and, as such, payment to the contractor is determined based on the number of units of material supplied or price per unit of material. The initial volumes are merely estimated.
>
> [Emphasis added]

[207] Given the oral and documentary evidence I find that JRS clearly agreed to all components of the pricing structure which resulted in the total amount invoiced by VJR. The paving depth was originally to be 8″ but there was agreed upon deviation from this. The unit price was always to be $89.00 per metric tonne. The paving area,

originally estimated to be 8 acres, turned out to be more in the neighbourhood of 8.44 acres.

[208] The total amount invoiced by VJR was $1,870,958.00 which is approximately $70,000.00 greater than the below figures (derived from the evidence):

(i) Paving area (34,155.47m^2) x Paving depth (0.2032m) = 6,940.39 m^3

(ii) 6,940.39 m^3 x 2.535 tonnes = 17,593.89 tonnes

(iii) 17,593.89 tonnes x $89.00 per tonne = $1,565,856.43

(iv) $1,536,918.75 + 15% VAT = $1,800,724.89

[209] The $70,000.00 equates with less five percent of the total RCC placed on the Property. In my view this is a reasonable variation given the evidence with respect to:

(i) subgrade variance

(ii) thickened areas

(iii) removal of poured RCC

(iv) cut offs

[210] In addition to the core samples taken by his lab, Mr. MacNeil references two other sets of core samples taken from the Project. The Englobe cores are eight core samples taken from the Project. The average length of these core samples, according to Mr. MacNeil's report is 7.4″. The EnviroBate cores are seven core samples taken from the Project. The average length of these core samples, according to Mr. MacNeil, is 7.2″.

[211] The evidence confirms that Mr. MacNeil relied on a small number of core samples in order to estimate the average thickness of a pad the size of approximately 8.44 acres. As noted by Dr. Langley, this number of cores was not a statistical representation for confirmation of thickness for the Project. While I am not prepared to adopt the CSA standard as an absolute requirement, I am prepared to state, given the totality of the expert evidence, that the sample size was woefully low.

[212] I would add that I prefer Dr. Langley's accepted methodology for measuring the length (depth) of concrete cores. Mr. MacNeil made findings regarding the length of the cores, and therefore the depth of the poured RCC, without clearly setting out the methodology by which that length was determined. There were other problems identified including the retrieval and storage of the cores thus impeding the overall reliability of what Mr. MacNeil reviewed.

[213] I am also drawn to Dr. Langley's evidence that the RCC was purchased by JRS on the basis of "wet" concrete at a particular unit price per tonne. Mr. MacNeil relied on the "dry" density of RCC. The wet density of RCC is undoubtedly higher than the dry density of RCC. The density of a material will naturally have an effect on the tonnage per square metre.

[214] Based on the opinion contained within the Dr. Langley's report and given the *viva voce* expert testimony, I find that the tonnage estimate arrived at by Mr. MacNeil was low given that it was arrived at using the lower "dry" density.

[215] JRS alleges at para. 6 of its Defence that VJR breached the Contract by failing to meet the necessary specifications for the work. This claim is reiterated in the Counterclaim. Specifically, JRS claims that VJR failed to perform to Contract specifications, delivering a pad thickness of less than 8″.

[216] Once again, the overall thickness of the pad has never been accurately determined. I reiterate that the coring method relied upon by Mr. MacNeil was insufficient, as it did not accurately capture the significant deviations present in the subgrade, which would necessarily have affected the thickness of the RCC, and as a result the provided metric tonnes of RCC.

[217] The evidence demonstrates that the most accurate measure of RCC delivered to the Property was through the computerized and hand-written batch reports. These records were not seriously challenged by JRS. Indeed, I find that the statistics were offered by VJR to JRS; however, both Mr. Ross and Mr. Muise declined to take VJR up on their offer. To my mind, this speaks to the trust that JRS placed in VJR. Given the evidence I am of the opinion that the trust was well-placed as I find the unchallenged VJR records to be an accurate reflection of the amount of RCC poured on the Property. The batch reports show that 18,373 units of RCC was placed on the Property. The invoices delivered by VJR to JRS indicate a total of 18,280 units of RCC.

[218] In conclusion, I find that the Contract was indeed a unit price contract. The initial amount of RCC was a reasonable estimate at the time the Contract was signed on July 31, 2019. Just over three months later it became apparent to both parties, mainly on account of the poor quality subgrade, that the Contract would have to be varied. Ultimately, the deficient subgrade and increased Project area resulted in the original estimate of RCC growing by approximately 2,500 metric tonnes. Given that VJR delivered the amount of RCC that was required and agreed to under the Contract, they are entitled to their claim for the outstanding amount of $161,078.43.

[219] Given all of the evidence, I have determined that there is no basis in law or fact for JRS's Counterclaim.

[220] With respect to interest, the Contract reads:

> 5.3 Interest
>
> .1 Should either party fail to make payments as they become due under the terms of the *Contract* or in any award by arbitration or court, interest at the following rates on such unpaid amounts shall also become due and payable until payment:
>
> (1) 2% per annum above the prime rate for the first 60 days.
>
> (2) 4% per annum above the prime rate after the first 60 days.
>
> Such interest shall be compounded on a monthly basis. The prime rate shall be rate of interest quoted by *(Insert name of chartered lending institution whose prime rate is to be used)*
>
> for prime business loans as it may change from time to time.
>
> .2 Interest shall apply at the rate and in the manner prescribed by paragraph 5.3.1 of this Article on the settlement amount of any claim in dispute that is resolved either pursuant to Part 8 of the General Conditions – DISPUTE RESOLUTION or otherwise, from the date the amount would have been due and payable under the *Contract*, had it not been in dispute, until the date it is paid.

[221] In *Grafton Developments Inc. v. Allterrain Contracting Inc.*, 2022 NSCA 47, Justice Bryson had cause to review the trial judge's treatment of an interest award noting at para. 52:

> 52 The court has a discretion to award pre-judgment interest under the *Judicature Act*, R.S.N.S. 1989, c. 240, s. 41. That discretion normally yields to a contractually agreed rate of interest (*Wilson v. K.W. Robb & Associates Ltd.*, 1998 NSCA 117). …

[222] The difficulty here is that on the evidence I cannot conclude that there was a contractually agreed rate of interest when the parties did not turn their minds to the chartered lending institution as the space where the name of the bank should be inserted is left blank. In all of the circumstances I find this omission renders article 5.3 of the Contract meaningless. In the result, I hereby exercise my discretion to award interest at five percent.

[223] The start date of the pre-judgment interest is the date the cause of action was discovered, pursuant to s. 41(i) of the *Judicature Act*, R.S.N.S. 1989, c. 240:

> (i) in any proceeding for the recovery of any debt or damages, the Court shall include in the sum for which judgment is to be given interest thereon at such rate as it thinks fit for the period between the date when the cause of action arose and the date of judgment after trial or after any subsequent appeal;

[224] I turn to *Pickering Square Inc. v. Trillium College Inc.*, 2016 ONCA 179 for guidance in my determination of which date the cause of action arose for JRS's breach of the Contract:

> [23] Breaches of contract commonly involve a failure to perform a single obligation due at a specific time. This sort of breach is sometimes called a "once-and-for-all" breach: it occurs once and ordinarily gives rise to a claim from the date of the breach – the date performance of the obligation was due.

[225] I find that the date of the failure to perform the obligation due – for JRS to pay VJR the final invoice in full – occurred on September 16, 2020. On this date, JRS provided the cheque in the amount of $771,585.95, leaving a balance owing of $161,078.43 on the final invoice.

[226] In conclusion, I find that September 16, 2020 was the date in which the cause of action arose and consequently the start date from which (the five percent) pre-judgment interest should be calculated on the $161,078.43 owing by JRS to VJR.

[227] As the successful party, VJR is also entitled to costs. Should the parties be unable to agree on costs, I will receive written submissions on or before January 17, 2025.

Chipman, J.