

From: Thomas Colle
Sent: Tuesday, 1 December 2020 10:08 am
To: [REDACTED]
Cc: Steve Chadwick; Geoff Williams; Jocelyn Mikaere; Brian Stirton
Subject: FW: Blue Baths revitalisation project
Attachments: BBELRLCBlueBathsTermSheet201120.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Categories: Executive Team

Good morning [REDACTED]

I understand Brian Stirton has been keeping you up to date on the progress of Geotech work being undertaken by Tonkin and Taylor, this will be used to complete a thorough Detail Seismic Assessment (DSA) of the Blue Baths building. The Geotech report was due last Friday, but has been delayed to allow Tonkin & Taylors internal review to be completed. We anticipate receiving the report in the next couple of days. Brian will be in touch and will provide a copy of the Geotech report as soon as it is available.

Once the comprehensive DSA is complete we will be in a position to discuss your proposal and any implications the DSA may have on your proposal. We anticipate the final DSA to be completed by late January 2021.

Regards Thomas

Thomas Collé Chief Financial Officer
P: 07 3484199 | E: thomas.colle@rotorualc.nz | W: rotorualakescouncil.nz

From: [REDACTED] bluebaths.co.nz
Date: 22 November 2020 at 11:23:38 AM NZDT
To: Steve Chadwick <Steve.Chadwick@rotorualc.nz>
Cc: jp.gaston@rotorualc.nz, [Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>](mailto:Jocelyn.Mikaere@rotorualc.nz), [Geoff Williams <Geoff.Williams@rotorualc.nz>](mailto:Geoff.Williams@rotorualc.nz)
Subject: Blue Baths revitalisation project

Kia ora Steve

I hope you are well.

As signalled at our recent discussions regarding the Blue Baths revitalisation & preservation plans, [REDACTED] & I have worked on a document in an effort to move things forward between the parties.

This is now attached for your review.

I look forward to RLC's response.

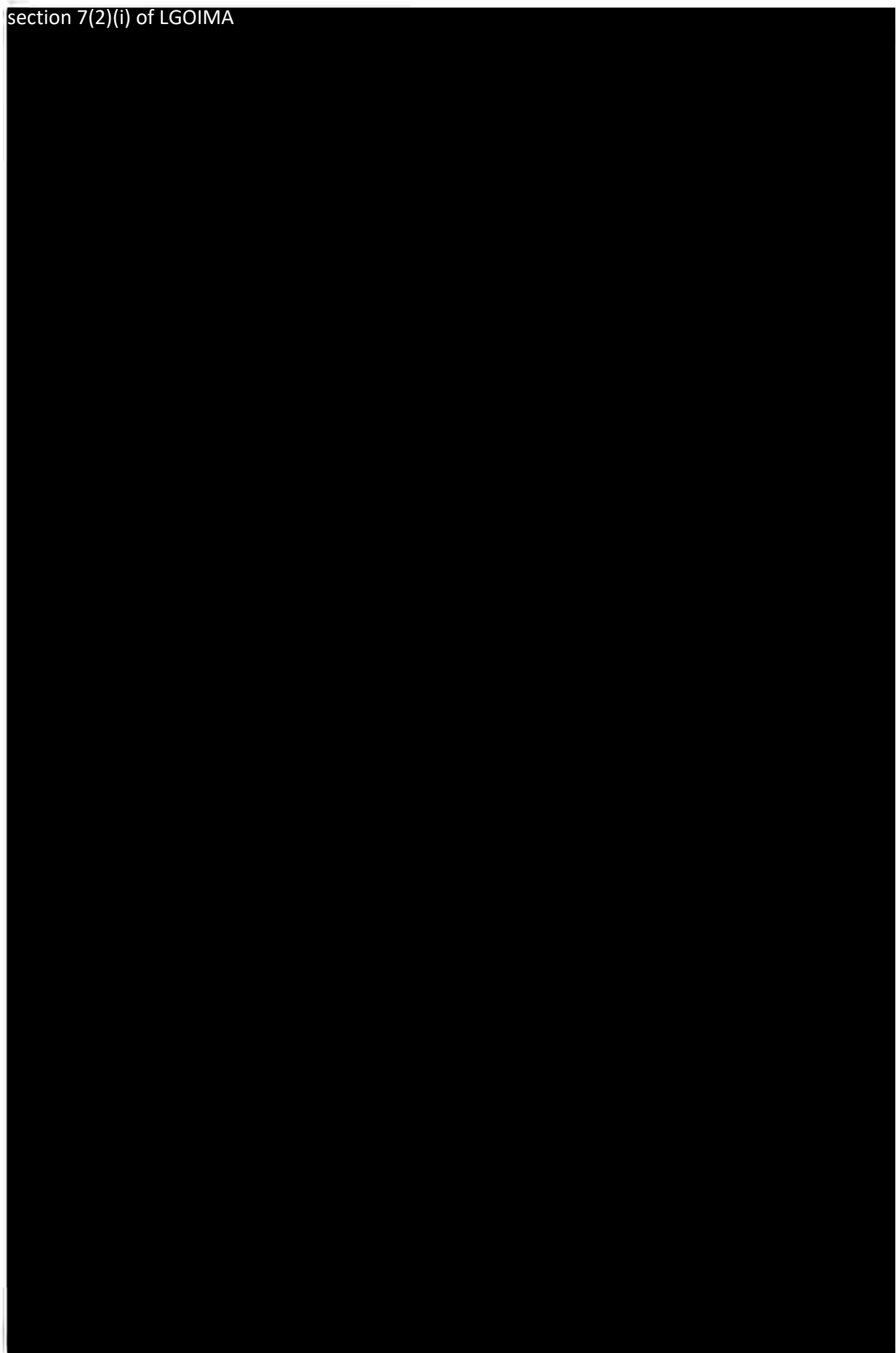
Nga mihi

[REDACTED]




Managing Director
The Blue Baths Establishment Ltd

section 7(2)(i) of LGOIMA



section 7(2)(i) of LGOIMA



From: Brian Stirton
Sent: Wednesday, 2 December 2020 8:38 am
To: [REDACTED]
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Hello [REDACTED]

That would be great.

Please give me a call when you are free tomorrow.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Sent: Wednesday, December 2, 2020 8:23 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Morning Brian,

I have a lakefront meeting at 10am tomorrow. Should be done by 12. Are you free for a debrief around midday?

[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Wednesday, 2 December 2020 7:54 AM
To: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Hello [REDACTED]

Thank you for the draft report.

I don't think I have anything to add or change, but then I am by no means a Geotech person.

I think we might need to have a debrief on what this actually means, as I can see that significant liquefaction may occur under certain situations, and as per our discussion, I am not sure how this compares to other areas of Rotorua or throughout the country.

Obviously I will share this report with the tenant of the site once finalised , and will be using it for a DSA, which I would like to “fast track” so we get an understanding of the NBS % asap.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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From: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>
Sent: Tuesday, December 1, 2020 4:45 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Hi Brian,

Please see the link below to download a copy of our draft report for your comment. I will re-issue as final upon your confirmation.

<https://transfer.tonkinandtaylorgroup.com/link/0ClYvzo6p9JY7Xb3uGLPKX>

Please do not hesitate to contact me should you have any queries.

Kind regards

[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, 30 November 2020 11:28 AM
To: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Hello [REDACTED]

I was wondering if you can provide a date we can expect to get your report. Just so I can update the Executive.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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From: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>
Sent: Friday, October 23, 2020 8:06 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Thanks Brian.
Cheers

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, 23 October 2020 8:05 AM
To: [REDACTED]@tonkintaylor.co.nz
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020

Hello [REDACTED]

We were just discussing this very thing.

Our CE has not responded to the email I sent him yesterday with your, and my, information. He is now away on leave, and has not spoken to me about it.

Given this, I will have to make the call, and as such, I think it is imperative that we understand the complete picture of the actual site.

As such, please see attached.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@tonkintaylor.co.nz
Sent: Friday, October 23, 2020 8:01 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: Drilling Blue Baths Rotorua - 27-30th October 2020
Importance: High

Hi Brian,
Sorry to pester you but Perry's are pressing for the signed engagement form. Can you send this through please?

Regards
[REDACTED]

From: [REDACTED]@perrygeotech.co.nz
Sent: Thursday, 22 October 2020 10:20 AM
To: [REDACTED]@tonkintaylor.co.nz
Cc: [REDACTED]@tonkintaylor.co.nz; [REDACTED]@tonkintaylor.co.nz
Subject: RE: Drilling Blue Baths Rotorua - 27-30th October 2020
Importance: High

Good Morning

Can I please have the 'Client Engagement' form returned as soon as possible(as per email below). Would really appreciate that, thank you.

Kind Regards



[REDACTED] | Perry Geotech Limited
37 Glenlyon Ave | PO Box 9376 | Greerton | Tauranga 3142

[REDACTED] | www.perrygeotech.co.nz

EXTRACTING THE PAST *shaping the future*

From: Office

Sent: 20 October 2020 12:06 PM

To: [REDACTED]@tonkintaylor.co.nz

Subject: Drilling Blue Baths Rotorua

Good Afternoon [REDACTED]

Can you please complete the attached 'Client Engagement' form for the above job we have booked in starting on Tuesday 27th October and return to me at your earliest convenience. Appreciate that, thank you.

Kind Regards



[REDACTED] | Perry Geotech Limited
37 Glenlyon Ave | PO Box 9376 | Greerton | Tauranga 3142

[REDACTED] | www.perrygeotech.co.nz

EXTRACTING THE PAST *shaping the future*

From: Brian Stirton
Sent: Thursday, 10 December 2020 12:15 pm
To: [REDACTED]
Subject: Heritage NZ information on the Blue Baths

Hello [REDACTED]

I'm not sure if you have seen this. State it is a reinforced concrete structure etc..

<https://www.heritage.org.nz/the-list/details/5394>

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
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From: Brian Stirton
Sent: Friday, 11 December 2020 4:03 pm
To: [REDACTED]
Subject: RE: RLC Blue Bath

Hello [REDACTED]

Thank you for that.

Have a great weekend.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



From: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Sent: Friday, December 11, 2020 4:00 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RLC Blue Bath

Good afternoon Brian,

Please see link below to download our final report for the Blue Baths site.
<https://transfer.tonkinandtaylorgroup.com/link/d5qhfQuqYaf6iJMKbEv7s1>

Regards

[REDACTED]

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, CMEngNZ
Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile



To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest pr

Please see our website for the latest update, or get in touch if there is anything we can do to :



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From: Brian Stirton
Sent: Tuesday, 15 December 2020 7:59 am
To: [REDACTED]
Subject: RE: Blue Baths - Geotechnical and Seismic assessment

Hello [REDACTED]

We have completed the Geotechnical review of the Blue Baths, and I have sent the first 8 pages of report to [REDACTED] yesterday (this is the written section, but no pictures or calculations) – due to the size of the report I will bring a full copy over on a memory stick..

I have also arranged for a non-intrusive structural engineer to attend site tomorrow with me at 11am. They will do a walkthrough of the building and carry out a visual inspection. Based on that we will probably need to carry out a Detailed Seismic Assessment next year, which may be a little more intrusive (building wise), but I will keep you informed if and when that would be done.

Hope the above is okay with you.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
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From: Brian Stirton
Sent: Wednesday, 16 December 2020 7:28 am
To: [REDACTED]
Subject: RE: Geotechnical review of Blue Baths site

Hello [REDACTED]

Yes I am fine with that – I can't speak for the engineers but will check with them when we meet at 11.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | **M:** 027 268 9707
E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Wednesday, December 16, 2020 7:27 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Geotechnical review of Blue Baths site

Morena Brian

[REDACTED] is happy to take teleconference around midday after your guys have had abit of a look around. It would be good if you were there for this too. He is an absolute expert in this field and his report has been peer reviewed accordingly. What is your availability timing wise with this?
[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Tuesday, 15 December 2020 9:08 am
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: Geotechnical review of Blue Baths site

Hello [REDACTED]

The engineer can't make it today so it is at 11am tomorrow.

Yes of course, more than happy for you to be there tomorrow, the more information the engineer can get the better.

I have the memory stick here so ill drop it over about 10:30 this morning if that suits.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Tuesday, December 15, 2020 9:03 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Geotechnical review of Blue Baths site

Hi Brian

I'd quite like to be there when the engineer visits today and join you tomorrow at 11, if that's ok?
Have you dropped off the USB at BB or can I collect from you today?

[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, 14 December 2020 4:09 pm
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Cc: Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: RE: Geotechnical review of Blue Baths site

Hello [REDACTED]

Sorry for the change I date, however, the engineers are now saying they would be on site at 11am on Wednesday this week.

Attending will be myself, a Tonkin & Taylor and EQSTRUC.

I will liaise with [REDACTED] to make sure we can gain access.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: Brian Stirton
Sent: Monday, December 14, 2020 12:32 PM
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Cc: Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: RE: Geotechnical review of Blue Baths site

Hello [REDACTED]

Please see attached the first 8 pages of the geotechnical report from Tonkin & Taylor.

As the complete report extremely large, due to all the photos and technical data, I will put it on a memory stick and bring it over to you.

As the findings are a different to the report you have provided, I have asked a structural engineer to attend site tomorrow to do a quick Initial Seismic Assessment of the building. This is a non-intrusive inspection of the site. This will ensure we meet our obligations for earthquake checks.

Once this is done I'll let you know the next steps, which will probably be a detailed seismic assessment to ascertain the % of NBS. We can schedule this around your functions etc.. so there would be little to no disruption to your business for this assessment.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton

Sent: Friday, December 4, 2020 2:43 PM

To: [REDACTED]@bluebaths.co.nz>

Subject: Geotechnical review of Blue Baths site

Hello [REDACTED]

Just to keep you in the loop.

I am awaiting the final report from Tonkin & Taylor.

They are reviewing internally within T&T and should have the finalised report to us Monday or Tuesday of next week. Apologies for the delay but by the sounds of it, it is a very thorough document.

Once I receive this I will send you a copy for your records.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL



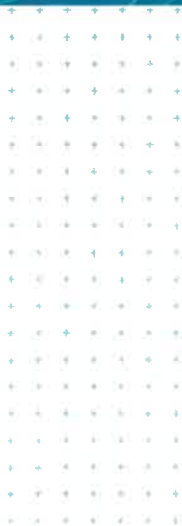
**Geotechnical investigations
and assessment - The Blue
Baths**

Prepared for
Rotorua District Council C/- Rotorua Lakes
Council

Prepared by
Tonkin & Taylor Ltd

Date
November 2020

Job Number
1015676.v1



Exceptional thinking together

www.tonkintaylor.co.nz

Document Control

Title: Geotechnical investigations and assessment - The Blue Baths					
Date	Version	Description	Prepared by:	Reviewed by:	Authorised by:
Dec 2020	1	Geotechnical investigation and assessment report	D Smith	M Jacka	G Nicholson

Distribution:

Rotorua District Council C/- Rotorua Lakes Council

1 PDF copy

Tonkin & Taylor Ltd (FILE)

1 PDF copy

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1 Introduction

1.1 General

Tonkin & Taylor Ltd (T+T) has been engaged by Rotorua District Council (RDC) C/- Rotorua Lakes Council (RLC) to provide geotechnical services to support a seismic assessment of the Blue Baths building in Rotorua, by others. The work has been undertaken in accordance with the scope outlined in our Offer of Service dated 13 October 2020¹, and included the following items:

- Undertake ground investigations:
 - 4 No. machine drilled rotary boreholes with Standard Penetration Tests (SPT) at 1.5 m intervals;
 - Supervision of ground investigations and preparation of borehole logs in general accordance with NZGS standards;
- Interpret ground investigation data and develop ground model for the site;
- Undertake liquefaction vulnerability assessment based on results of the borehole investigations;
- Presentation of findings in this report.

1.2 Previous work

This work follows previous work undertaken by others including:

- Cheal Consultants Ltd (April 2019) – Site Investigations and Geotechnical Assessment
- Resource Development Consultants Ltd (RDCL) November 2019. – Geophysics survey and liquefaction triggering assessment.
- A O’Sullivan & Associates Ltd (AOS) (February 2020) – Detailed Geotechnical Assessment.
- Grant Murray & Associates Ltd (February 2020) – Review of AOS assessment.
- Sigma Consultants (2012) – Detailed site assessment.

2 Background and site description

The Blue Baths are located between Hatupatu Drive and Joseph Ward Street in Rotorua. The site is located adjacent to an active geothermal area and ground temperatures are known to exceed 40°C at relatively shallow depth (<3 m below ground level). The general layout of the site and recent borehole locations is shown below in Figure 2.1.

¹ T+T (13 October 2020). Offer of Service. Geotechnical investigations and assessment to support seismic assessment of The Blue Baths.



Figure 2.1: Overview of the site with recent ground investigation locations

3 Ground conditions

3.1 Published geology

The published geology of the area² is shown below in Figure 3.1 and indicates that the site is underlain by Holocene river deposits, described as alluvial gravel, sand, silt, mud and clay with local peat and includes modern river beds.

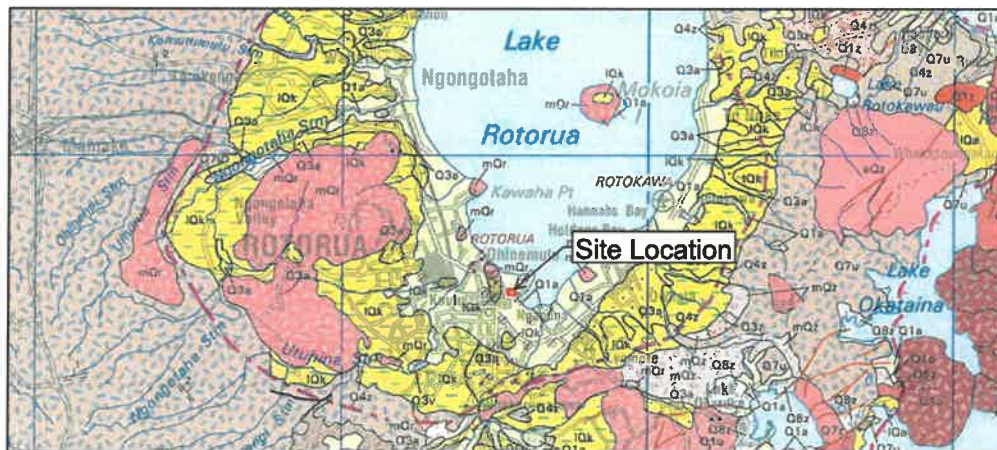


Figure 3.1: Published geological map of the area. Key: Q1a = Holocene river deposits.

² Leonard, G.S.; Begg, J.G.; Wilson, C.J.N. (compilers) 2010: Geology of the Rotorua area. Institute of Geological & Nuclear Sciences 1:250,000 geological map S. 1 sheet + 102 p. Lower Hutt, New Zealand. GNS Science.

3.2 Ground investigations

Site investigations for the required geotechnical seismic assessment would usually comprise cone penetration testing (CPT), however the temperature of the ground was expected to exceed the limits of operation for CPT equipment. On this basis, machine drilled rotary boreholes with standard penetration testing (SPT) have been undertaken to form the basis of interpretation for the assessment.

Ground investigations were undertaken between 27 and 29 October 2020 and comprised:

- 4 No. Machine boreholes to depths of between 6.90 to 10.95 mbgl with SPT at 1.5 m intervals

Boreholes were drilled by Perry Geotech Ltd and logged and supervised by a T+T Engineering Geologist. A specialist geothermal supervisor, from Rotorua Well Drillers, was also present at all times during drilling. Following the completion of site works, the core samples and logged descriptions were reviewed by a Senior Engineering Geologist from T+T.

Groundwater was estimated for each borehole based on observations during drilling. Due to geothermal conditions it was not possible to dip the groundwater within each borehole. However, groundwater was estimated to be between 1.5 to 2.5 m below ground level (mbgl) across the 4 boreholes. The groundwater levels were estimated by visually inspecting the moisture content on the recovered core samples. A summary of borehole information is presented below in Table 3.1. Borehole logs, investigation locations and core photographs are presented in Appendix A.

Table 3.1: Summary of ground investigations

Investigation ID	Total Depth (mbgl)	Estimated Groundwater Depth (mbgl)	Range of SPT N Values	Comment
BH1	6.90	1.50	0 – 9	Borehole terminated due to geothermal hazard
BH2	10.95	2.50	0 – 12	Target depth achieved
BH3	9.00	2.00	0 – 4	Borehole terminated due to geothermal hazard
BH4	10.95	2.30	0 – 32	Target depth achieved

3.3 Summary of subsoils encountered

The machine boreholes completed as part of this project encountered sediments that are characteristic of the geological units identified in the published geology for the area (i.e. Holocene river deposits comprising alluvial gravel, sand, silt, mud and clay sediments). The localised peat deposits as described in the literature were not encountered during drilling. It is likely that some of the sediments underlying the Blue Baths are lacustrine sediments associated with historic lake levels of Lake Rotorua.

The four machine boreholes extended to depths between 6.9 m and 10.95 m and all encountered variable ground conditions which were difficult to correlate between adjacent boreholes. The sediments encountered within the boreholes were predominantly non-cohesive silty and sandy materials. The gravel content of these layers was highly variable and was generally highly pumiceous. These sedimentary layers generally presented non-plastic and low plasticity behaviours. Some cohesive layers were encountered within the boreholes which were described as having a medium plasticity.

4 Seismic considerations

4.1 Seismic shaking hazard

The seismic shaking hazard for the site has been calculated in accordance with the guidance outlined in NZS1170.0 and the NZTA Bridge Manual. Based on the published geology and our understanding of the ground conditions, the site is considered to be Subsoil Class D: 'Deep or soft soil'.

For the derivation of seismic hazard parameters, we understand that a typical design life of 50 years and an Importance Level of IL3 applies for the structure. Seismic parameters for use in the liquefaction assessment are provided below in Table 4.1 below.

Table 4.1: Seismic parameters

Earthquake Return Period	Magnitude, Mw	Peak Ground Acceleration (PGA), g
1 in 25 Years (SLS)	6.0	0.075
1 in 100 Years	6.0	0.150
1 in 1000 Years (ULS)	6.0	0.390

4.2 Liquefaction vulnerability assessment

4.2.1 Overview

Liquefaction is a phenomenon that can occur in loose, saturated, non-plastic soils which are subjected to cyclic loads (e.g., shaking during large earthquakes). Liquefaction can result in a substantial loss of soil strength and can potentially cause significant damage to buildings, land and infrastructure.

The following aspects are considered in our evaluation of liquefaction vulnerability:

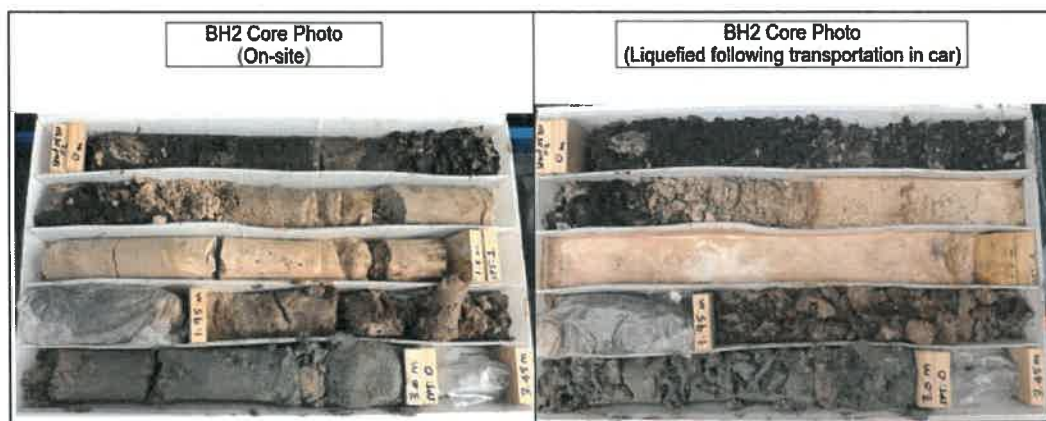
- Liquefaction susceptibility of the specific soil types encountered in the boreholes;
- Liquefaction triggering potential including triggering analyses using SPT data;
- Liquefaction consequences and discussion.

4.2.2 Liquefaction susceptibility

The soils encountered in the investigations comprised predominantly sandy and silty materials which were logged as either 'non-plastic' or 'low plasticity', interbedded with gravels and occasional clays. On the basis of these observations a significant portion of the materials encountered are considered to be potentially susceptible to liquefaction (with the exception of isolated moderate-plasticity silt and clay lenses).

Laboratory testing of collected soil samples (e.g., Atterberg limits) has not been undertaken at this stage but could be used to further investigate the susceptibility of specific soil layers. This is discussed further in Section 4.2.5. However, at the current time it is considered that laboratory testing is unlikely to significantly change the overall assessment of seismic ground performance at the site.

It is noted that some of the collected soil samples were observed to liquefy in the core-box following vehicle transportation from site. A before and after comparison from BH2 is provided below as Photograph 4.1. Whilst this does not provide conclusive evidence of whether soils are susceptible to earthquake-induced liquefaction, it does highlight the differences in behaviour between the various soil materials present.



Photograph 4.1: Photo of core samples before and after transportation.

4.2.3 Liquefaction triggering analyses

A series of liquefaction triggering analyses have been undertaken based on the recently obtained SPT results using the methodology of Boulanger and Idriss (B&I 2014)³. For the purposes of the assessment a groundwater level of 1.5 mbgl was selected for all of the boreholes.

The following steps were undertaken for each SPT result as part of the analyses:

- Review of logged borehole descriptions at SPT depth, and evaluation of the soil profile extent which is inferred to be applicable to the SPT;
- Determination of whether the material represented by the SPT is considered 'susceptible' or 'non-susceptible' to liquefaction based on the logged soil description core photographs (both on-site and following transportation);
- Estimation of fines content characterising the soil extent;
- Further defining of additional soil layers between SPT results as required (e.g., to represent non-liquefiable clay lenses);
- Undertake SPT triggering analyses based on B&I 2014 methodology to provide high level estimates of liquefaction triggering and 1-dimensional post-liquefaction volumetric consolidation settlement index values (S_{v1D}).

The output graphs of the SPT-based analyses are provided in Appendix B. A table summarising the results obtained is shown below as Table 4.2. Further comment regarding the conclusions and potential limitations of the SPT-based analyses is also provided in the following section.

Table 4.2: Summary of liquefaction analyses results

Earthquake Return Period	S_{v1D} Range (Calculated Over Full Length of Borehole)	Expected Ground Surface Damage
1 in 25 Years	0 – 5 mm	Negligible
1 in 100 Years	0 – 80 mm	Moderate
1 in 1000 Years	100 – 300 mm	Severe

³ Boulanger, R. W., & Idriss, I. M. (2014). CPT and SPT based liquefaction triggering procedures. Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California, Davis, CA. Report No. UCD/CGM-14/01.

From: Brian Stirton
Sent: Wednesday, 16 December 2020 1:21 pm
To: [REDACTED]
Subject: RE: Geotechnical review of Blue Baths site

Hello [REDACTED]

Thank you for your time today.

As agreed, I have contacted [REDACTED] from DHC, he will send the information to you, for forwarding to me.

I have also tried to ring [REDACTED] but as he doesn't take voice messages I have sent him a text asking if he can contact me when it suits him.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Wednesday, 16 December 2020 1:33 pm
To: [REDACTED]@aosullivan.co.nz'
Subject: Blue Baths Geo - T&T
Attachments: [REDACTED].copy.pdf

Hello [REDACTED]

Thanks for calling back.

Please see attached – please let me know if you require more and I might be able to break the file down into smaller portions.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL



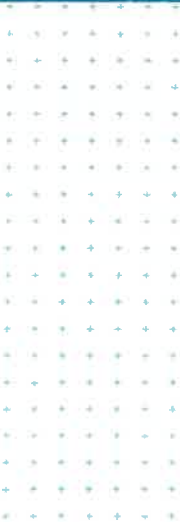
**Geotechnical investigations
and assessment - The Blue
Baths**

Prepared for
Rotorua District Council C/- Rotorua Lakes
Council

Prepared by
Tonkin & Taylor Ltd

Date
November 2020

Job Number
1015676.v1



Exceptional thinking together

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Document Control

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Date	Version	Description	Prepared by:	Reviewed by:	Authorised by:
Dec 2020	1	Geotechnical investigation and assessment report	D Smith	M Jacka	G Nicholson

Distribution:

Rotorua District Council C/- Rotorua Lakes Council

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1 Introduction

1.1 General

Tonkin & Taylor Ltd (T+T) has been engaged by Rotorua District Council (RDC) C/- Rotorua Lakes Council (RLC) to provide geotechnical services to support a seismic assessment of the Blue Baths building in Rotorua, by others. The work has been undertaken in accordance with the scope outlined in our Offer of Service dated 13 October 2020¹, and included the following items:

- Undertake ground investigations:
 - 4 No. machine drilled rotary boreholes with Standard Penetration Tests (SPT) at 1.5 m intervals;
 - Supervision of ground investigations and preparation of borehole logs in general accordance with NZGS standards;
- Interpret ground investigation data and develop ground model for the site;
- Undertake liquefaction vulnerability assessment based on results of the borehole investigations;
- Presentation of findings in this report.

1.2 Previous work

This work follows previous work undertaken by others including:

- Cheal Consultants Ltd (April 2019) – Site Investigations and Geotechnical Assessment
- Resource Development Consultants Ltd (RDCL) November 2019. – Geophysics survey and liquefaction triggering assessment.
- A O’Sullivan & Associates Ltd (AOS) (February 2020) – Detailed Geotechnical Assessment.
- Grant Murray & Associates Ltd (February 2020) – Review of AOS assessment.
- Sigma Consultants (2012) – Detailed site assessment.

2 Background and site description

The Blue Baths are located between Hatupatu Drive and Joseph Ward Street in Rotorua. The site is located adjacent to an active geothermal area and ground temperatures are known to exceed 40°C at relatively shallow depth (<3 m below ground level). The general layout of the site and recent borehole locations is shown below in Figure 2.1.

¹ T+T (13 October 2020). Offer of Service. Geotechnical investigations and assessment to support seismic assessment of The Blue Baths.



Figure 2.1: Overview of the site with recent ground investigation locations

3 Ground conditions

3.1 Published geology

The published geology of the area² is shown below in Figure 3.1 and indicates that the site is underlain by Holocene river deposits, described as alluvial gravel, sand, silt, mud and clay with local peat and includes modern river beds.

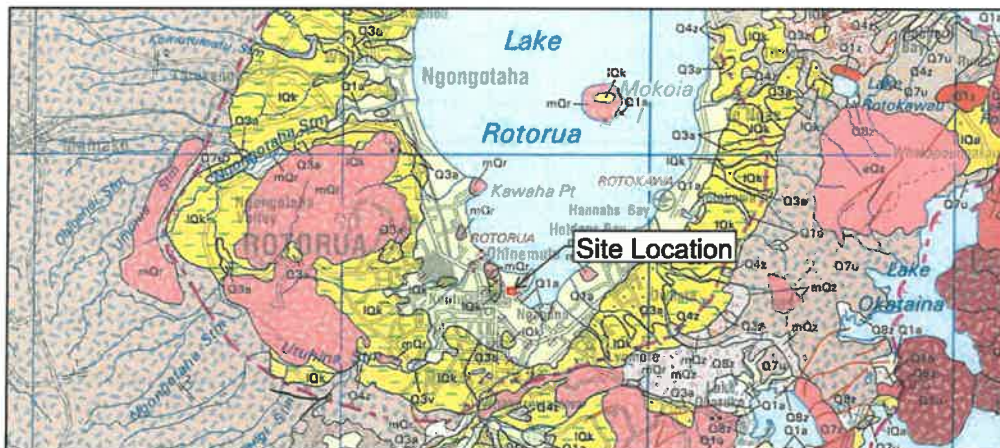


Figure 3.1: Published geological map of the area. Key: Q1a = Holocene river deposits.

² Leonard, G.S.; Begg, J.G.; Wilson, C.J.N. (compilers) 2010: Geology of the Rotorua area. Institute of Geological & Nuclear Sciences 1:250,000 geological map 5. 1 sheet + 102 p. Lower Hutt, New Zealand. GNS Science.

3.2 Ground investigations

Site investigations for the required geotechnical seismic assessment would usually comprise cone penetration testing (CPT), however the temperature of the ground was expected to exceed the limits of operation for CPT equipment. On this basis, machine drilled rotary boreholes with standard penetration testing (SPT) have been undertaken to form the basis of interpretation for the assessment.

Ground investigations were undertaken between 27 and 29 October 2020 and comprised:

- 4 No. Machine boreholes to depths of between 6.90 to 10.95 mbgl with SPT at 1.5 m intervals

Boreholes were drilled by Perry Geotech Ltd and logged and supervised by a T+T Engineering Geologist. A specialist geothermal supervisor, from Rotorua Well Drillers, was also present at all times during drilling. Following the completion of site works, the core samples and logged descriptions were reviewed by a Senior Engineering Geologist from T+T.

Groundwater was estimated for each borehole based on observations during drilling. Due to geothermal conditions it was not possible to dip the groundwater within each borehole. However, groundwater was estimated to be between 1.5 to 2.5 m below ground level (mbgl) across the 4 boreholes. The groundwater levels were estimated by visually inspecting the moisture content on the recovered core samples. A summary of borehole information is presented below in Table 3.1. Borehole logs, investigation locations and core photographs are presented in Appendix A.

Table 3.1: Summary of ground investigations

Investigation ID	Total Depth (mbgl)	Estimated Groundwater Depth (mbgl)	Range of SPT N Values	Comment
BH1	6.90	1.50	0 – 9	Borehole terminated due to geothermal hazard
BH2	10.95	2.50	0 – 12	Target depth achieved
BH3	9.00	2.00	0 – 4	Borehole terminated due to geothermal hazard
BH4	10.95	2.30	0 – 32	Target depth achieved

3.3 Summary of subsoils encountered

The machine boreholes completed as part of this project encountered sediments that are characteristic of the geological units identified in the published geology for the area (i.e. Holocene river deposits comprising alluvial gravel, sand, silt, mud and clay sediments). The localised peat deposits as described in the literature were not encountered during drilling. It is likely that some of the sediments underlying the Blue Baths are lacustrine sediments associated with historic lake levels of Lake Rotorua.

The four machine boreholes extended to depths between 6.9 m and 10.95 m and all encountered variable ground conditions which were difficult to correlate between adjacent boreholes. The sediments encountered within the boreholes were predominantly non-cohesive silty and sandy materials. The gravel content of these layers was highly variable and was generally highly pumiceous. These sedimentary layers generally presented non-plastic and low plasticity behaviours. Some cohesive layers were encountered within the boreholes which were described as having a medium plasticity.

4 Seismic considerations

4.1 Seismic shaking hazard

The seismic shaking hazard for the site has been calculated in accordance with the guidance outlined in NZS1170.0 and the NZTA Bridge Manual. Based on the published geology and our understanding of the ground conditions, the site is considered to be Subsoil Class D: 'Deep or soft soil'.

For the derivation of seismic hazard parameters, we understand that a typical design life of 50 years and an Importance Level of IL3 applies for the structure. Seismic parameters for use in the liquefaction assessment are provided below in Table 4.1 below.

Table 4.1: Seismic parameters

Earthquake Return Period	Magnitude, Mw	Peak Ground Acceleration (PGA), g
1 in 25 Years (SLS)	6.0	0.075
1 in 100 Years	6.0	0.150
1 in 1000 Years (ULS)	6.0	0.390

4.2 Liquefaction vulnerability assessment

4.2.1 Overview

Liquefaction is a phenomenon that can occur in loose, saturated, non-plastic soils which are subjected to cyclic loads (e.g., shaking during large earthquakes). Liquefaction can result in a substantial loss of soil strength and can potentially cause significant damage to buildings, land and infrastructure.

The following aspects are considered in our evaluation of liquefaction vulnerability:

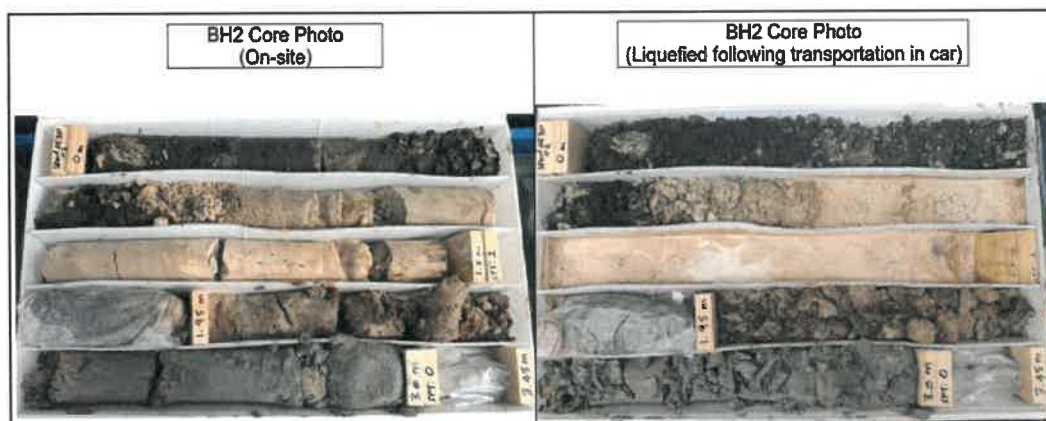
- Liquefaction susceptibility of the specific soil types encountered in the boreholes;
- Liquefaction triggering potential including triggering analyses using SPT data;
- Liquefaction consequences and discussion.

4.2.2 Liquefaction susceptibility

The soils encountered in the investigations comprised predominantly sandy and silty materials which were logged as either 'non-plastic' or 'low plasticity', interbedded with gravels and occasional clays. On the basis of these observations a significant portion of the materials encountered are considered to be potentially susceptible to liquefaction (with the exception of isolated moderate-plasticity silt and clay lenses).

Laboratory testing of collected soil samples (e.g., Atterberg limits) has not been undertaken at this stage but could be used to further investigate the susceptibility of specific soil layers. This is discussed further in Section 4.2.5. However, at the current time it is considered that laboratory testing is unlikely to significantly change the overall assessment of seismic ground performance at the site.

It is noted that some of the collected soil samples were observed to liquefy in the core-box following vehicle transportation from site. A before and after comparison from BH2 is provided below as Photograph 4.1. Whilst this does not provide conclusive evidence of whether soils are susceptible to earthquake-induced liquefaction, it does highlight the differences in behaviour between the various soil materials present.



Photograph 4.1: Photo of core samples before and after transportation.

4.2.3 Liquefaction triggering analyses

A series of liquefaction triggering analyses have been undertaken based on the recently obtained SPT results using the methodology of Boulanger and Idriss (B&I 2014)³. For the purposes of the assessment a groundwater level of 1.5 mbgl was selected for all of the boreholes.

The following steps were undertaken for each SPT result as part of the analyses:

- Review of logged borehole descriptions at SPT depth, and evaluation of the soil profile extent which is inferred to be applicable to the SPT;
- Determination of whether the material represented by the SPT is considered 'susceptible' or 'non-susceptible' to liquefaction based on the logged soil description core photographs (both on-site and following transportation);
- Estimation of fines content characterising the soil extent;
- Further defining of additional soil layers between SPT results as required (e.g., to represent non-liquefiable clay lenses);
- Undertake SPT triggering analyses based on B&I 2014 methodology to provide high level estimates of liquefaction triggering and 1-dimensional post-liquefaction volumetric consolidation settlement index values (S_{v1D}).

The output graphs of the SPT-based analyses are provided in Appendix B. A table summarising the results obtained is shown below as Table 4.2. Further comment regarding the conclusions and potential limitations of the SPT-based analyses is also provided in the following section.

Table 4.2: Summary of liquefaction analyses results

Earthquake Return Period	S_{v1D} Range (Calculated Over Full Length of Borehole)	Expected Ground Surface Damage
1 in 25 Years	0 – 5 mm	Negligible
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1 in 1000 Years	100 – 300 mm	Severe

³ Boulanger, R. W., & Idriss, I. M. (2014). CPT and SPT based liquefaction triggering procedures. Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California, Davis, CA. Report No. UCD/CGM-14/01.

4.2.4 Liquefaction consequences and discussion

The site-specific deep ground investigations indicate that the ground conditions are highly variable across the site and with depth. This brings some complexity to the assessment of seismic ground performance:

- The boreholes indicated the presence of loose, saturated, cohesionless Holocene deposits. Soils of this type are often susceptible to liquefaction.
- Some of the soils encountered appear to be clearly susceptible to liquefaction (e.g. sandy and non-plastic material).
- Some of the soils appear to be not susceptible to liquefaction (e.g. clayey material). However, these soils may still be susceptible to cyclic softening during earthquake shaking. Cyclic softening can result in similar foundation settlement as liquefaction, so this is included in our estimate of earthquake-induced settlement presented below.
- Some of the soils have special characteristics (such as being gravelly or pumiceous) which means there is considerable uncertainty whether they are susceptible to liquefaction or the level of shaking required to trigger liquefaction. This is an area of ongoing research, which suggests that the seismic performance of these soils is somewhat better than would be estimated using conventional liquefaction correlations, but that liquefaction can still be triggered at high levels of shaking. For our current assessment we have assumed that these soils will liquefy in the ULS design earthquake.

Taking these complexities into account, we recommend that seismic assessment of the existing Blue Baths buildings consider the consequences of total ground settlement of 300 mm for the ULS design earthquake, with a differential settlement of 200 mm over a horizontal distance of 20 m. For the SLS design earthquake ground settlements are expected to be small (less than 5 mm), however we note that substantial ground settlement (perhaps 50 - 80% of the expected ULS settlement) could be expected to occur in earthquakes with return periods greater than approximately 100 – 200 years.

There is potential for lateral spreading to occur in the vicinity of the site during strong earthquake shaking, due to the presence of a “free face” approximately 3 m high where the ground drops down to the Lake Rotorua shoreline. However, due to the distance away from the face (approximately 50 – 100 m), lateral ground stretch at the existing Blue Baths building is expected to be no more than moderate (200 mm stretch across a 20 m distance). With the highly variable ground conditions in the area, it is possible that more favourable ground may exist between the site and the shoreline, which could reduce the potential for lateral spreading to occur - however this remains uncertain based on the currently available information.

4.2.5 Potential options to refine the liquefaction assessment

As noted above, for some of the soils present at the site it is unclear from the existing information whether or not they are susceptible to liquefaction. If it was desired to better understand the behaviour of these soils, then additional testing could be considered:

- Plasticity testing may be useful where it is considered possible that the soils may be too plastic to liquefy.
- For pumiceous soils which are prone to crushing during SPT or CPT testing, geophysical testing may be useful to better understand the level of shaking required to trigger liquefaction. We note that geophysical testing has been undertaken previously on site, however this appeared to focus on measuring the deep soil profile rather than providing high resolution information on the near-surface soils. Geophysical testing for liquefaction assessment of pumiceous soils would typically use down-hole/cross-hole techniques, however this may suffer the same geothermal limitations which meant that CPT testing was not practical at this site.

- High quality sampling and laboratory cyclic testing may be useful to better understand susceptibility and triggering of pumiceous or more fine-grained soils. This kind of testing is typically only used in research or for high-value projects, as considerable time and cost is involved, and there can be considerable uncertainty in how the results should be applied in design.

The soils where further testing may help to refine the assessment are highlighted yellow in Figure 4.1. This indicates that even if liquefaction of these layers was ruled out, there would still be a significant thickness of liquefied soil at many locations. Because of this, testing might not significantly change the overall assessment of seismic ground performance at the site.

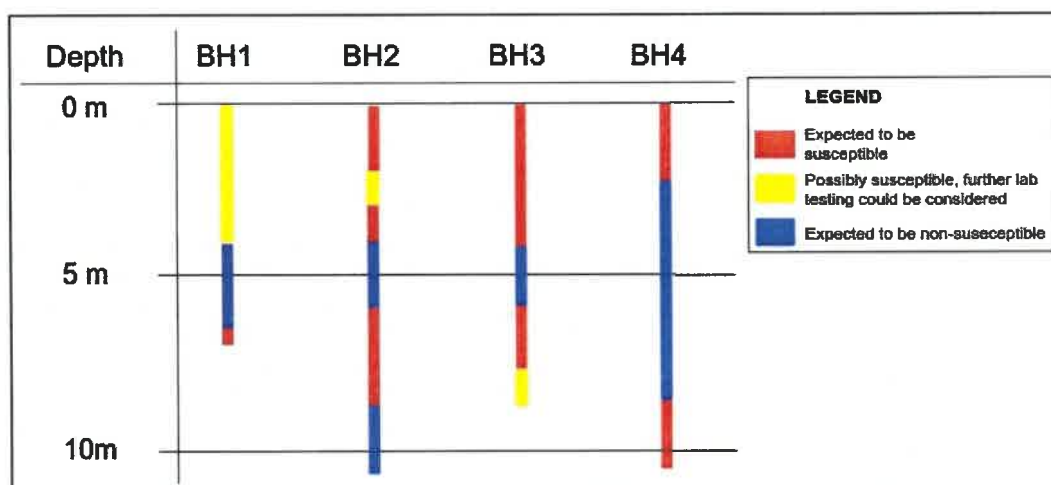


Figure 4.1: Inferred liquefaction susceptibility from recovered borehole materials.

5 Conclusions

T+T has undertaken a liquefaction vulnerability assessment for the Blue Baths site in Rotorua based on 4 No. recently drilled machine boreholes with in-situ SPT data. The following conclusions are provided:

- The materials encountered in the boreholes were consistent with the published geology for the area. Based on our interpretation of the borehole samples, we consider that a significant portion of the underlying soils beneath the site are potentially liquefiable in large earthquake events.
- Some of the material recovered is considered non-susceptible to liquefaction (i.e., cohesive clay or clayey silts). However, these deposits were not widespread across the investigations, and they may be prone to cyclic softening during earthquake shaking (which can have consequences similar to liquefaction).
- A liquefaction assessment has been undertaken based on the results of the borehole investigations, including a liquefaction triggering analyses using SPT results. This indicates that extensive liquefaction triggering could be expected in the ULS design earthquake.
- Seismic assessment of the existing Blue Baths buildings should consider total ground settlement of 300 mm for the ULS design earthquake, with a differential settlement of 200 mm over a horizontal distance of 20 m. For the SLS design earthquake ground settlements are expected to be small (less than 5 mm), however we note that substantial ground settlement could be expected to occur in earthquakes with return periods greater than approximately 100 – 200 years.

- There are options for further testing which may help to refine the assessment of liquefaction susceptibility and triggering for some of the soils encountered at the site. However, the presence of significant thickness of other material which is appears to be clearly liquefiable means that further testing might not significantly change the overall assessment of seismic ground performance at the site.

6 Applicability

This report has been prepared for the exclusive use of our client Rotorua District Council C/- Rotorua Lakes Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that this report will be used by Rotorua District Council in undertaking its regulatory functions in connection with the assessment.

Tonkin & Taylor Ltd

Report prepared by:



Dan Smith
Geotechnical Engineer

Authorised for Tonkin & Taylor Ltd by:



Glen Nicholson
Project Director

Technical Review undertaken by Mike Jacka, Technical Director.

dwds
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Appendix A: Ground Investigations



BOREHOLE LOG

BOREHOLE No.:

1

SHEET: 1 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 28/10/2020

CONTRACTOR: Perry Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774076.30 mN
 (NZTM2000) 1885506.06 mE

R.L. GROUND: 283.00m

R.L. COLLAR: 283.00m

DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

DATUM: NZVD2016

SURVEY: GIS\Web map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE		ROCK DEFECTS															
	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	Defect Log	Fracture Spacing (mm)	RQD (%)	Description & Additional Observations	Fluid Loss (%)	Water Level	Casing	Installation	Core Box No	
Fill	GRAVEL; dark grey. Moist, gap graded; gravel, coarse, subrounded to subangular, Pavement aggregate; Tightly packed.																	
	Sandy SILT, some gravel; blackish grey. Stiff, moist, non-plastic; gravel, fine to coarse, subangular, historic fill material.																	
Holocene Alluvial Deposits	Gravelly SAND, some silt; greyish white. Wet, well graded; sand, medium to coarse; gravel, fine to medium, subangular, pumice; loosely packed.		HQTT	113			0.5											
	SILT, trace sand; greyish white. Stiff, wet to saturated, non-plastic; sand, fine; Quick dilatancy.																	
	Gravelly SAND, some silt; greyish white. Wet, well graded; sand, fine to coarse; gravel, fine to medium, pumice; Loosely packed, silt content variable throughout unit.							1.0										
	Sandy GRAVEL; greyish white. Loose, wet to saturated, well graded; gravel, fine to coarse, subangular to angular, slightly weathered, pumice; sand, medium to coarse.		SPT	88	2/3 3/2 2/2 N=9		1.5											
	Core loss from 1.90 m to 1.95 m																	
	Sandy GRAVEL; greyish white. Loose, wet to saturated, well graded; gravel, fine to coarse, subangular to angular, slightly weathered, pumice; sand, medium to coarse.		HQTT	85			2.0											
	Core loss from 2.85 m to 3.0 m																	
	No core recovered from SPT. Very loose relative density.		SPT	0	0/0 0/0 0/0 N=0		3.0											
	Spoil from grouting and geothermal hazard mitigation works.																	
	SILT, minor gravel; greenish grey. Soft, moist to wet, low plasticity; gravel, fine, subangular, pumice.		HQTT	104			4.0											
SILT, some clay, trace sand; light greyish white. Firm to stiff, moist to wet, medium plasticity; sand, fine.																		
Core loss from 4.57 m to 4.95 m.		SPT	15	0/0 0/0 0/1 N=1		4.5												

2.70m: Hydrothermally altered horizon. Sulphur crystals observed, strong hydrogen sulphide odour.

2811 01/2020

114mm HW

Box 1: 0.0-3.5m

COMMENTS: Project note; Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth 8.9m

Scale 1:25

Rev.: A



BOREHOLE LOG

BOREHOLE No.:

1

SHEET: 2 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 28/10/2020

CONTRACTOR: Pery Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774076.30 mN
 (NZTM2000) 1885506.06 mE

DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

R.L. GROUND: 283.00m
 R.L. COLLAR: 283.00m
 DATUM: NZVD2016
 SURVEY: GISWeb map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	Defect Log	Fracture Spacing (mm)	ROD (%)	ROCK DEFECTS				
													Description & Additional Observations	Fluid Loss (%)	Water Level	Casing	Installation
Holocene Alluvial Deposits	<p>SILT, some clay, trace sand; light greyish white. Firm to stiff, moist to wet, medium plasticity; sand, fine.</p> <p>5.50m: Becomes stiff, Colour change to greenish grey. Trace fine pumice gravel.</p>			HQTT	100		277	5.5	[Yellow with black dots]								
	<p>Core loss from 6.40 m to 6.45 m.</p> <p>Silty SAND, trace gravel; greenish grey. Moist, poorly graded; gravel, fine; Tightly packed. Base of unit very dense with laminations..</p>			SPT	88	0/1 1/1 1/1 N=4	277	6.0	[Yellow with black dots]								
	<p>6.90m: Drill rig struggling to push through dense layer. Driller and Rotorua Well Drillers aborted hole due to geothermal hazard.</p>			HQTT	100		276	7.0	[Yellow with black dots]								
							275	8.0	[Yellow with black dots]								
							274	9.0	[Yellow with black dots]								
								9.5	[Yellow with black dots]								

COMMENTS: Project note; Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

General Log - 5/11/2020 3:44:19 PM - Produced with Core-GS by GeRec

Hole Depth
6.8m

Scale 1:25

Rev: A



BOREHOLE LOG

BOREHOLE No.:

2

SHEET: 1 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 28/10/2020

CONTRACTOR: Perry Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774043.17 mN
 (NZTM2000) 1885558.63 mE

R.L. GROUND: 283.00m

R.L. COLLAR: 283.00m

DIRECTION: 0°

DATUM: NZVD2016

ANGLE FROM HORIZ.: -90°

SURVEY: GIS\Web map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK DEFECTS			Fluid Loss (%)	Water Level	Casing	Installation	Core Box No
										Defect Log	Fracture Spacing (mm)	RQD (%)					
Fill	Sandy SILT, some gravel; dark brown. Soft to stiff; sand, medium; gravel, fine to coarse; rootlets present. Some terracotta gravel fragments, re-worked ground (FILL).			HQTT	113												
	Sandy GRAVEL; pinkish white. Moist, well graded; gravel, fine to coarse, pumice; Loosely packed.																
Holocene Alluvial Deposits	SILT, trace sand; greyish white. Very loose, moist to wet, dilatant; sand, fine to medium.			SPT	122	0/0 0/0 0/1 N=1	282	1									
	SILT, minor sand, trace gravel; dark grey. Very soft to soft, wet, non-plastic; sand, medium; gravel, fine, pumice.																
	SILT, some sand; reddish brown. Firm to stiff, moist, non-plastic; sand, fine.			HQTT	85		281	2									
	SILT; grey. Soft to stiff, wet to saturated, low plasticity.																
	Core loss from 2.85 m to 3.44 m.			SPT	13	0/0 0/0 0/0 N=0	280	3									
	SILT; grey. Soft to firm, moist to wet, low plasticity. Silty SAND, minor gravel; dark grey. Very loose, wet, well graded; sand, medium; gravel, fine, pumice.																
	Sandy SILT, trace gravel; grey. Soft to firm, wet, low plasticity; gravel, fine to coarse, andesite.			HQTT	81		279	4									
	Core loss from 4.31 m to 4.50 m.																
	Clayey SILT, minor gravel; light grey. Stiff, moist, medium plasticity; gravel, coarse, angular, ignimbrite.			SPT	22	1/0 1/0 1/0 N=2											
	Core loss from 4.60 m to 4.95 m.																
Clayey SILT, minor gravel; light grey. Stiff, moist, medium plasticity; gravel, coarse, angular, ignimbrite.			HQTT	90		278	5										

COMMENTS: Project note: Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth
10.95m
Scale 1:30

Rev: A



BOREHOLE LOG

BOREHOLE No.:

2

SHEET: 2 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 28/10/2020

CONTRACTOR: Pery Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774043.17 mN
 (NZTM2000) 1885558.63 mE

DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

R.L. GROUND: 283.00m
 R.L. COLLAR: 283.00m
 DATUM: NZVD2016
 SURVEY: GISWeb map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	ROCK DEFECTS																	
		Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	Defect Log	Fracture Spacing (mm)	RQD (%)	Description & Additional Observations	Fluid Loss (%)	Water Level	Casing	Installation	Core Box No	
Holocene Alluvial Deposits	Core loss from 5.90 m to 6.00 m. Sandy SILT, some gravel; dark greenish grey. Very loose, moist to wet, non-plastic; sand, medium; gravel, fine to medium; grey SILT horizons throughout unit <100 mm thick.			SPT	100	1/1 2/1 1/1 N=5													
	Sandy SILT, some clay, trace gravel; greyish green. Firm to stiff, moist to wet, low plasticity; sand, fine to medium; gravel, medium to coarse, subangular, andesite/dacite.			HQTT	123		276	7											
	Core loss from 7.88 m to 7.95 m. Sandy SILT, some clay, trace gravel; greyish green. Firm to stiff, moist to wet, low plasticity; sand, fine to medium; gravel, medium to coarse, subangular, andesite/dacite.			SPT	84	1/1 1/1 1/1 N=4													
				HQTT	109		275	8											
	Core loss from 9.40 m to 9.45 m. Clayey SILT, minor gravel; grey. Stiff, moist to wet, medium plasticity; gravel, coarse, andesite.			SPT	88	0/0 1/2 1/1 N=5													
				HQTT	90		273	10											
	Core loss from 10.40 m to 10.50 m. Clayey SILT, minor gravel; grey. Stiff, moist to wet, medium plasticity; gravel, coarse, andesite.			SPT	88	1/2 3/3 3/3 N=12													
Core loss from 10.90 m to 10.95 m. 10.95m: End of borehole, target depth achieved.							272	11											

General Log - 5/11/2020 3:44:18 PM - Produced with Core-QS by GeRec

COMMENTS: Project note: Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth: 10.95m

Scale: 1:30

Rev.: A



BOREHOLE LOG

BOREHOLE No.:

3

SHEET: 1 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 29/10/2020

CONTRACTOR: Perry Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774016.28 mN
 (NZTM2000) 1885503.18 mE

R.L. GROUND: 283.00m
 R.L. COLLAR: 283.00m
 DATUM: NZVD2016
 SURVEY: GIS\Web map viewer

DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

GEOLOGICAL UNIT	DESCRIPTION OF CORE	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	Defect Log	Fracture Spacing (mm)	RQD (%)	ROCK DEFECTS						
													Description & Additional Observations		Fluid Loss (%)	Water Level	Casing	Installation	
Fill	SILT, some sand, trace gravel; dark brown. Firm to stiff, moist, low plasticity; sand, fine to medium; gravel, fine; rootlets present, pumicous gravel.																		
	SILT, some sand; greyish white. Firm, moist to wet, non-plastic; sand, fine. Silty SAND, minor gravel; light grey. Moist; sand, fine to medium; gravel, medium; Loosely packed. Sandy SILT; brown. Soft to firm, moist to wet, dilatant; sand, medium.			HQTT	113			0.5											
Holocene Alluvial Deposits	SAND, some silt and gravel; whitish grey. Loose, wet, well graded; sand, fine to coarse; gravel, fine to medium.						1.0												
	Core loss 1.50 m to 1.95 m.			SPT	0	0/0 0/0 N=0	1.5												
	Sandy SILT, some gravel; brownish white. Very loose, wet to saturated, dilatant; sand, fine to medium; gravel, medium to coarse, subangular, unweathered, pumice.			HQTT	100		2.0												
	Silty sandy GRAVEL; brown. Very loose, wet to saturated, well graded; gravel, medium to coarse, subangular; sand, fine to coarse.						2.5												
	SILT, some sand, trace gravel; brown. Firm, moist to wet, non-plastic; sand, fine; gravel, fine to medium, subangular.			SPT	77	0/0 0/0 N=0	3.0												
	Core loss from 3.35 m to 3.45 m. Core loss from 3.45 m to 4.30 m. Due to Rotorua Well Drillers grouting works.						3.5												
Holocene Alluvial Deposits	SILT, some clay and sand; dark grey. Soft, wet, low plasticity; sand, coarse.			HQTT	19		4.0												
	5.20m: Change to light grey.			SPT	88	1/2 1/0 0/1 N=2	4.5												
	Core loss from 4.90 m to 4.95 m.																		

COMMENTS: Project note: Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Note Depth 9m

Scale 1:25

Rev.: A

General Log - 5/11/2020 3:44:18 PM - Produced with Core-OS by GeRoc

11.4mm HW

Box 1, 0.0-3.5m

29/10/2020



BOREHOLE LOG

BOREHOLE No.:

3

SHEET: 2 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 29/10/2020

CONTRACTOR: Perry Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5774016.28 mN
 (NZTM2000) 1885503.18 mE
 DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

R.L. GROUND: 283.00m
 R.L. COLLAR: 283.00m
 DATUM: NZVD2016
 SURVEY: GISWeb map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	ROCK DEFECTS																
		Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	Defect Log	Fracture Spacing (mm)	ROD (%)	Description & Additional Observations	Fluid Loss (%)	Water Level	Casing	Installation	Core Box No
Holocene Alluvial Deposits	Clayey SILT, trace sand and gravel; light grey. Stiff, wet, medium plasticity; sand, coarse, gravel, medium to coarse; Soil swelling in borehole, over recovery.			HQTT	180		5.5											
	5.60m: Changes to light bluish grey.																	
	Sandy SILT, some clay, trace gravel; greyish green. Firm, moist to wet, non-plastic; sand, fine to coarse; gravel, fine, angular, unweathered; Some silty SAND horizons (< 100 mm thick). H2S odour very strong, gas content triggering alarms, drill rods stained black from Sulphur.			SPT	100	0/0 0/0 0/1 0/1 N=1	6.0											
	Core loss from 7.90 m to 7.95 m.																	
Holocene Alluvial Deposits	Sandy SILT, some clay, trace gravel; greyish green. Firm, moist to wet, non-plastic; sand, fine to coarse; gravel, fine, angular, unweathered; Some silty SAND horizons (< 100 mm thick). H2S odour very strong, gas content triggering alarms, drill rods stained black from Sulphur.			HQTT	95		7.0											
	8.50m: Clay content increasing, clayey sandy SILT, sulphur present.			SPT	83	0/0 1/1 1/1 N=4	7.5											
Holocene Alluvial Deposits	Sandy SILT, some clay, trace gravel; greyish green. Firm, moist to wet, non-plastic; sand, fine to coarse; gravel, fine, angular, unweathered; Some silty SAND horizons (< 100 mm thick). H2S odour very strong, gas content triggering alarms, drill rods stained black from Sulphur.			HQTT	104		8.0											
	9.00m: Borehole terminated at instruction from Rotorua Well Drillers (Geothermal temperature and H2S emissions).						9.0											

General Log - 5/11/2020 3:44:18 PM - Produced with Core-GIS by GeRec

COMMENTS: Project note; Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth 9m

Scale 1:25

Rev: A



BOREHOLE LOG

BOREHOLE No.:

4

SHEET: 1 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 29/10/2020

CONTRACTOR: Perry Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5773988.99 mN
 (NZTM2000) 1885519.29 mE

R.L. GROUND: 283.00m

R.L. COLLAR: 283.00m

DIRECTION: 0°

DATUM: NZVD2016

ANGLE FROM HORIZ.: -90°

SURVEY: GIS\Web map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK DEFECTS				Fluid Loss (%)	Water Level	Casing	Installation	Core Box No
										Defect Log	Fracture Spacing (mm)	RQD (%)	Description & Additional Observations					
Holocene Alluvial Deposits	Sandy SILT, some gravel; dark brown. Stiff, moist, non-plastic; sand, medium; gravel, fine to medium, pumice; rootlets present, topsoil has been removed prior to borehole commencing.																	
	Sandy GRAVEL; pinkish white. Moist, well graded, gravel, medium to coarse, subangular, pumice; sand, fine to medium; loosely packed.			HQTT	110													
	SILT, some sand; pinkish white. Firm to stiff, moist, non-plastic; sand, medium; Quick dilatancy.							282	1									
	Sandy SILT, some gravel; grey. Firm to stiff, moist to wet, non-plastic; sand, fine to medium; gravel, fine, subangular.			SPT	100	3/3 4/7 10/11 N=32		281	2									
	SILT; pinkish white. Medium dense, moist to wet, non-plastic; Rapid dilatancy.																	
	Silty SAND; light grey. Medium dense, moist, poorly graded.																	
	Clayey SILT; blackish brown. Stiff, wet to saturated, medium plasticity.			HQTT	114													
				SPT	66	0/0 0/0 0/0 N=0		280	3									
	Core loss from 3.45 m to 4.95 m.																	
				HQTT	4			279	4									
	4.95m: Poor recovery in SPT, Grout from geothermal casing was stuck within SPT tip, might have pushed out soft SILT.			SPT	22	1/1 1/2 1/1 N=5												
	Clayey SILT, trace gravel; greyish white. Stiff, moist, medium plasticity; gravel, fine to medium, angular.																	
	5.40m: Dark grey horizon, some gravel, angular, andesite, fine to coarse.			HQTT	176			278	5									
	Clayey SILT, some gravel, minor sand; greenish grey. Stiff, wet, medium plasticity; gravel, fine to coarse, subrounded to subangular; sand, coarse.																	

COMMENTS: Project note; Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth 10.85m

Scale 1:30

Rev: A



BOREHOLE LOG

BOREHOLE No.:

4

SHEET: 2 OF 2

DRILLED BY: TB

LOGGED BY: JMB

CHECKED: RWOT

START DATE: 27/10/2020

FINISH DATE: 29/10/2020

CONTRACTOR: Pery Geotech Ltd

PROJECT: RLC Blue Baths
 JOB No.: 1015676.0000
 LOCATION: Government Gardens

CO-ORDINATES: 5773988.99 mN
 (NZTM2000) 1885519.29 mE

DIRECTION: 0°
 ANGLE FROM HORIZ.: -90°

R.L. GROUND: 283.00m
 R.L. COLLAR: 283.00m
 DATUM: NZVD2016
 SURVEY: GISWeb map viewer

GEOLOGICAL UNIT	DESCRIPTION OF CORE	Rock Weathering	Rock Strength	Sampling Method	Core Recovery (%)	Testing	RL (m)	Depth (m)	Graphic Log	ROCK DEFECTS						
										Description & Additional Observations	Fluid Loss (%)	Water Level	Casing	Installation	Cone Box No	
Holocene Alluvial Deposits	SOIL: Classification, colour, consistency / density, moisture, plasticity ROCK: Weathering, colour, fabric, name, strength, cementation															
	Core loss from 6.40 m to 6.45 m. Clayey SILT, some gravel, minor sand; greenish grey. Stiff, wet, medium plasticity; gravel, fine to coarse, subrounded to subangular; sand, coarse.			SPT	88	1/0 1/0 1/1 N=3										
	7.00m: Large andesite/dacite gravel (60 mm long), gravel horizon roughly 200 mm thick.			HQTT	76		276	7								
	Core loss from 7.25 m to 7.50 m.			SPT	88	0/1 0/1 1/1 N=3										
	Clayey SILT, some sand, minor gravel; dark grey. Stiff, moist to wet; sand, fine to medium; gravel, fine to medium, subangular, unweathered.															
	Core loss from 7.90 m to 7.95 m. Clayey SILT, some sand, minor gravel; dark grey. Stiff, moist to wet; sand, medium; gravel, fine to medium, subangular, unweathered.															
	8.00m: Soil swelling in borehole.			HQTT	157		275	8								
	Silty CLAY, minor sand; light grey. Stiff, moist, medium plasticity; sand, coarse.															
	Sandy SILT, minor gravel; greyish green. Very loose, moist to wet, non-plastic; sand, fine to medium; gravel, fine, subangular, unweathered, Andsite; Thin dilatant SILT layers throughout unit, SPT samples liquefy once bagged.			SPT	93	0/0 1/0 1/1 N=3		274	8							
	Core loss from 10.15 m to 10.50 m.			HQTT	66		273	10								
Sandy SILT, minor gravel; greyish green. Very loose, moist to wet, non-plastic; sand, fine to medium; gravel, fine, subangular, unweathered, Andsite; Thin dilatant SILT layers throughout unit, SPT samples liquefy once bagged.			SPT	44	0/0 0/0 0/0 N=0											
Core loss from 10.70 m to 10.95 m. 10.95m: Target depth, end of borehole.							272	11								

General Log - 5/11/2020 3:44:18 PM - Produced with Core-GS by GeRec

COMMENTS: Project note; Completed borehole could not be left open due to geothermal hazard. As a result, the borehole could not be dipped and water table identified. Water table estimated from borehole observations. Borehole was backfilled with grout once complete.

Hole Depth 10.85m

Scale 1:30

114mm RW

Box 2, 3, 0-7.5m

Box 3, 7.5-11.0m

Rev: A

From: Brian Stirton
Sent: Thursday, 17 December 2020 10:36 am
To: [REDACTED]
Subject: FW: 5457 - Blue Baths Structural Summary - urgent
Attachments: 5457 - Bluebaths Structural Summary.pdf

Hello [REDACTED]

Please see below and attached.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Thursday, December 17, 2020 8:02 AM
To: [REDACTED]@tonkintaylor.co.nz>
Subject: FW: 5457 - Blue Baths Structural Summary - urgent

Hello [REDACTED]

Please see attached and the link below.

There is quite a bit of information in the drop box, most of it I can't open because we don't have the correct software.

Can you pass this on to the engineers, and please feel free to take a look as well.

Happy to discuss.

I also had a very quick call with [REDACTED] yesterday afternoon – very interesting.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@dhc.nz>
Sent: Wednesday, December 16, 2020 4:51 PM

To: [redacted]@bluebaths.co.nz>; Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: 5457 - Blue Baths Structural Summary

Hi [redacted] Brian,

Please find attached summary of the current structural assessment including; our current position, the additional investigations required, the analysis we intend to undertake, and the peer review.

Brian, I have also included a profile of DHC and our experience for your information. It would be good to setup a teams or zoom meeting later this week or early next week to discuss further and make sure I have covered off all the scope you are expecting.

I have uploaded all the documentation here. The laser scan is 12GB so will take a while to down load if you want to.

<https://www.dropbox.com/sh/0zdp34ja9z62c9i/AAAlkYLrkbKL4KsrRW58SuFta?dl=0>

The dropbox includes;

1. Original drawing scans
2. Laser scan of structure
3. 3D model of structure built from the scan for drawings
4. Geotechnical Assessments
 - a. Cheal
 - b. AoS, including peer review
 - c. T&T
5. Original structural assessment provided by Rotorua Lakes Council
6. Concept architectural drawings and renders
7. Initial discussions with structural peer reviewer

I haven't included;

1. Architectural drawing model (concept)
2. Structural analysis model (partially complete)
3. Structural drawing model (partially complete)
4. X-ray scanning
 - a. We only did a spot check when we were on site to confirm that the drawings accurately represented the as built condition, which they seemed to match in the areas we were able to scan.
 - b. Our plan was to identify any areas that weren't covered in the drawings, the areas that were identified as structurally critical in the DSA process, the areas that we were altering as part of the new scheme, and do a comprehensive scan of these areas to ensure that what we had analysed was accurate.

Kind Regards,

[redacted]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

[redacted]
Visit us at www.dhc.nz





DHC Consulting Ltd

26 Patey St,
Epsom,
Auckland 1052



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*DHC Consulting Ltd
PO Box 9848,
Newmarket
Auckland 1051
26 Patey St,
Epsom
New Zealand*



*P: ++64 9 520 0355
E: info@dhc.nz*

16th December 2020

Rotorua Lakes Council
1061 Haupapa St,
Private Bag 3029,
Rotorua Mail Centre,
Rotorua 3046,
New Zealand

Attn: Brian Stirton

Re: BLUE BATHS RENOVATIONS – STRUCTURAL SUMMARY

Dear Brian,

As per our phone discussion on 16.12.2020, DHC has prepared the following summary to outline the current position of the Blue Baths renovations structural analysis. We have broken this down to four sections which we believe need to run concurrently to achieve the best result for the project. These are desktop study and site investigations, structural analysis undertaken by DHC, geotechnical analysis undertaken by Andy O'Sullivan and Associates (AOS) with some input from recent Tonkin and Taylor (T&T) investigations, and the structural peer review. These are further discussed and outlined below.

The scope of structural works has varied over the course of the project. The original intent was to assess the existing structure as part of the new scheme of renovations and provide at a minimum, like for like or an improvement to the structural capacity of the building to current building standards. Originally there was no requirement for DHC to undertake a DSA based on probabilistic strengths of the current structure, as the intent was to produce the new scheme to current building code with current, more conservative safety factors.

Our expectation was that any new structure added would meet 100% of new building standards and any existing structure supporting the new structure would be strengthened to meet 100% of new building standards. Any renovation made to the existing structure, such as new door openings or concrete wall removals would be replaced like for like or strengthened to the same level or improve on the current capacity.

This analysis was stopped prior to it being completed at instruction of our client due to concerns over consenting and funding for the project.

Rotorua Lakes Council (RLC) have requested that for the resource consent to be released and the project to proceed, a DSA needs to be completed so that RLC, as the owner of the building, has confidence that the building meets minimum requirements, a percentage of current building standard and that there are no major risks to the occupants or wider community.

DHC would suggest progressing the DSA on behalf of RLC and producing a report outlining the key elements and any critical structural risks and calculate a percentage new building standard (%NBS). To complete this further site investigations would need to be completed, to confirm assumptions, the geotechnical risks and design parameters would need to be agreed and a peer review would need to be completed. We have had initial discussions with our peer reviewer, AMX Structures, regarding the overall design philosophy for the new structural scheme, however they have not been engaged to undertake a peer review of the DSA. We would recommend extending their scope to cover this as well.

Upon the completion of the DSA and agreeance with RLC on further renovations to the building, DHC would develop the analysis model used for the DSA to include the new structural scheme and use this to design and produce documentation for building consent and construction of the new Blue Baths structure.

Below is an outline of the current works undertaken by the various consultants and the expected works to be completed.

Desktop study and site investigations

DHC have undertaken the following desktop study and site investigations;

1. A desktop study of the available original documentation to identify;
 - a. The design philosophy of the original structure
 - b. Any critical structural weaknesses
 - c. Any missing information warranting further investigations
2. A site visit of the existing Blue Baths building
 - a. to confirm construction and if any subsequent renovations have been undertaken
 - b. to confirm the structural implications of the new structural scheme, including new roof and columns
3. Preliminary x-ray scan of accessible structure to identify reinforcing and confirm accuracy of drawings reviewed in desktop study
 - a. This showed that the walls had a considerable amount of reinforcing in them for a building of its era and that it seemed to be in accordance with the existing as built drawings.

DHC expect the following investigations to be completed:

1. Further x-ray scanning of structure to confirm reinforcing assumptions. We would expect a comprehensive scan of the structure to be undertaken once the following steps have been completed and scope of scanning has been determined;
 - a. Where any information is missing from the drawings
 - b. Once the DSA has been completed, scan the critical structural areas that have been identified
 - c. Once the scheme for the new renovations has been developed and areas of alteration have been confirmed, scan any critical connections between new and old structures and any locations where the forces are expected to significant change in the existing structure
2. Testing of existing concrete and reinforcing to confirm assumptions of material properties. This can be done in the areas that are being removed as part of the renovations to limit the repair works required on the structure.

Structural Analysis

DHC have undertaken the following analysis

1. High level review of structure
 - a. Identified requirements for importance level 3 due to new occupancy of building once renovations completed
 - b. Calculated seismic co-efficient based on geotechnical design parameters provided by AOS
 - c. Calculated wind loading on existing structure and proposed new roof
 - d. High level outline of design philosophy for existing structure

- e. High level review of expected seismic loads against the expected structural capacity of the original concrete shear walls
2. Begun 3D ETABS model of existing structure for assessment of existing structure based on proposed renovations
3. Completed 3D model of new roof structure using Spacegass to assess the different concept options
4. Specific calculations for concept options of new roof design for the proposed renovation scheme
5. Specific calculations relating to where new structural scheme is connecting to the existing structure
6. High level assessment of existing structural supports to new structure and potential strengthening requirements

DHC expect the following structural design, analysis and inspections to be completed

1. Complete a 3D ETABS model of the existing structure (without any of the proposed renovations) to establish the design loads on the structural elements. This would be used to inform the DSA.
2. Complete the DSA and provide a report outlining the findings including critical structural weakness and %NBS of the existing structure prior to any renovations being undertaken
3. Agree with RLC the minimum %NBS the structure is required to achieve
4. Further the concept roof and renovation scheme through developed and detailed design phases incorporating any strengthening required to achieve the agreed %NBS
5. Develop the DSA Etabs model to represent the new renovation scheme with the additional roof loads and changes to the concrete walls. Compare the analysis results of the new scheme with the previous DSA and strengthen the structural elements as required to meet new building standard or provide like for like capacity as outlined above.
6. Provide a PS1 and produce a set of building consent and construction documentation
7. Liaise with the peer reviewer to obtain a PS2
8. Undertake site observations during construction and provide a PS4

Geotechnical analysis

The following analysis have been undertaken

1. Multi-Array Surface Wave (MASW) and Microtremor Array Measurements (MAMs) undertaken by RDCL
2. Interpretation of MASW and MAMs results by Dr Liam Wotherspoon (University of Auckland, UoA) and Andy O'Sullivan (AOS)
3. Peer review of MASW and MAMs interpretation by Grant Murray & Associates (GMA)
4. 4 machine boreholes with SPT and interpretation by Tonkin and Taylor (T&T)
 - a. Full report not yet provided

DHC expect the following analysis to be completed

1. Agreeance on design parameters between geotechnical engineers and council to inform the structural analysis and design. The AOS analysis has been completed and peer reviewed by both UoA and GMA, we would suggest proceeding on this basis. Unless there is any other data that has become available that would suggest progressing otherwise.

DHC Consulting Ltd
PO Box 9848,
Newmarket
Auckland 1051
26 Patey St,
Epsom
New Zealand



P: ++64 9 520 0355
E: info@dhc.nz

Structural peer review

The following peer review has been undertaken

1. Initial discussions with AMX Structures of design philosophy for existing structure, new renovations and how the new and old structures will be tied together.
2. Initial discussions with AMX Structures regarding analysis techniques to be used, seeking agreement prior to implementation to streamline the peer review process.

DHC expect the following peer review to be completed

1. Structural peer review of DSA to be completed by AMX Structures or another structural consultant
2. Structural peer review of new roof and renovations to building to be completed by AMX Structures or another structural consultant

DHC has extensive experience in the field of structural and civil engineering, successfully delivering projects in excess of \$500 million throughout New Zealand. Our 35 strong team deliver a wide range of projects, across multiple sectors including residential, commercial and industrial buildings, infrastructure such as bridges and water reservoirs, from new buildings, alterations, and renovations, to seismic strengthening and assessments. We have experience in the region and have recently completed projects in Rotorua including the Rotorua Forest Haulage workshop renovations and redevelopment and the reinstatement of the Forest Road Bridges. We have appended a company profile to the correspondence for your information.

Please do not hesitate to contact the undersigned for any further clarification.

Yours faithfully

[Redacted signature]

[Redacted signature]

B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC

Senior Structural Engineer

[Redacted signature]

From: Brian Stirton
Sent: Thursday, 7 January 2021 12:03 pm
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Blue Baths ISA Report and Consultant Advice Letter

Hello [REDACTED]

Thank you for the report etc..

Please accept this email as acceptance of you quote for the full DSA, and as such I will forward you a PO number shortly

Given the nature of the ISA findings I would request that this DSA be carried out asap.

Please give me a call to discuss, as I will need to inform the tenant of the initial findings and provide dates etc. for the DSA works.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Sent: Tuesday, December 22, 2020 4:31 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>; [REDACTED] <[REDACTED]@eqstruc.co.nz>
Subject: Blue Baths ISA Report and Consultant Advice Letter

Hi Brian,

Please find attached, the above reports from EQStruc. We can catch-up in the New Year once you have had an opportunity to digest the findings.

Please do not hesitate to contact me should you have any queries in the meantime.

Kind regards

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, CMEngNZ
Tonkin + Taylor - Exceptional thinking together
Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

To send me large files you can use my [file drop](#)

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22 December 2020

To: Tonkin + Taylor

Subject: Initial Seismic Assessment of an existing building

Building address: Queens Drive, Government Gardens, Rotorua

Executive Summary

The Initial Seismic Assessment (ISA) of the building at Queens Drive, Government Gardens, Rotorua, was undertaken using the Initial Evaluation Procedure (IEP) as described in Part B of the guideline document, 'The Seismic Assessment of Existing Buildings - Technical Guidelines for Engineering Assessments', dated July 2017.

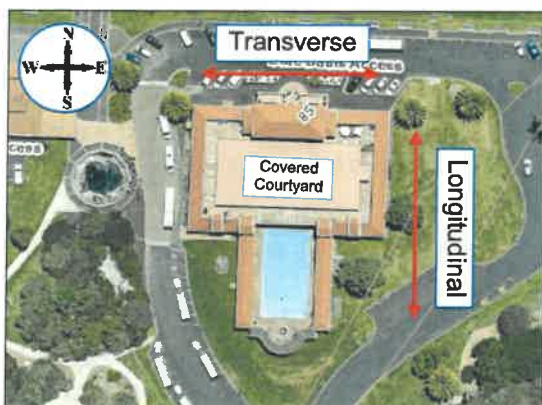
The minimum required seismic rating under the earthquake-prone provisions of the Building Act is 34% New Building Standard (%NBS). An IEP was conducted, and it was found that the rating of the building is **15% NBS (IL2), Grade E**. Therefore, the subject building is Potentially Earthquake Prone and in accordance with the current legislation, further action is required regarding the earthquake rating of these buildings.

The seismic rating is limited by the age of the building and inherent earthquake vulnerabilities of buildings from that era. It is expected that new structural systems will be needed at discrete locations to improve the seismic performance of the building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.

1 Introduction

In December 2020, EQ Struc Limited was engaged by Tonkin + Taylor to undertake an ISA for the Blue Baths, the building is owned by Rotorua Lakes Council located at situated at Queens Drive, Government Gardens, Rotorua (see **Figure 1**). We understand and agree that this report will be used by Rotorua Lakes Council, as the Building Owners, in undertaking its regulatory functions in connection with use and occupation of the Blue Baths.

The objective of the ISA is to establish the earthquake rating of the building in terms of %NBS using the Initial Evaluation Procedure (IEP) as described in Part A and B of the guidelines document 'The Seismic Assessment of Existing Buildings – Technical Guidelines for Engineering Assessments' dated July 2017. The assessment was undertaken by conducting a review of the relevant plans and building information within the property file and a visual internal and external inspection on 17th December 2020.



(a) Aerial view



(b) North western elevation

Figure 1 - Aerial and elevation view of the subject building

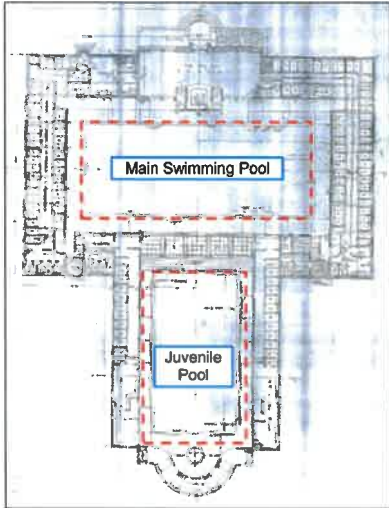
2 Locality and Building Description

Table 1 presents a brief description of the key structural features of the subject building that may influence the response of the building when subjected an earthquake. The descriptions are based on the review of the relevant information within the property file and site observations.

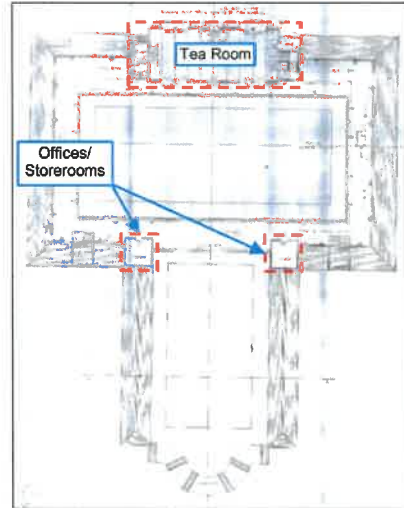
Table 1 - Brief Building Description

General			
Territorial Authority	Rotorua Lakes Council		
Year of Design	Building: 1932 Roof structure addition over courtyard: 2005		
NZ Standards Designed to	Unknown, no seismic provisions for concrete and steel standards Roof structure addition over courtyard: NZS 1170.5: 2004, NZS3101: 2006, NZS3404: 1997		
Heritage Status	Yes		
Building Description			
No. of Storeys	Swimming pool area: One-storey Courtyard area: Two-storey	Area of Typical Floor	~ 2000 m ²
General Building Geometry (see Figure 2, 2a – 2h)	<ul style="list-style-type: none"> The building was designed originally in 1932 and since then has gone through multiple modifications: <ol style="list-style-type: none"> In 1999, the main swimming pool was converted to an open courtyard. In 2005, a roof structure was added to the courtyard. The subject building is one-storey at the pool area and two-storey at courtyard area with an approximate height to roof level of 8.5m and is a T-shaped in plan. There is a terrace (flat roof) where the courtyard is and there is reinforced concrete (RC) balustrades all around, where the roof structure was added. There is parapet along the covered courtyard. The Rachel Spring Whangapipiro is situated on the west side of the building. 		
Lateral Load Resisting System (see Figure 2i & 2j)	<ul style="list-style-type: none"> The lateral resisting system of the building in both directions are RC frames. The perimeter walls are RC shear walls also contribute to the lateral resisting system. 		
Gravity Structural System (see Figure 2i – 2l)	<ul style="list-style-type: none"> The entire lateral resisting system is part of the gravity structural system. The roof system is supported by external walls. 		

	<ul style="list-style-type: none"> • The first floor is supported by regularly spaced concrete frames.
Roof System (see Figure 2k – 2n)	<ul style="list-style-type: none"> • The original roof system is timber rafters. The roof supports terracotta clay tiles. • The new roof (over the courtyard) is bow-shaped and supported by RC balustrade and additional SHS posts. The trusses are connected to the RC balustrades using 2-M12 on each end. • The steel truss has triangular configuration and comprised of circular hollow sections (CHS). • The new roof supports DHS purlins and lightweight metallic cladding.
Floor System (see Figure 2o & 2p)	<ul style="list-style-type: none"> • Both ground and first floors are the in-situ RC slabs.
Foundation System (see Figure 2q – 2s)	<ul style="list-style-type: none"> • The foundation is a historic float type system, where the RC ground beams sits on a possible layer of tar and engineering back fills. • The pool area appears to be only slab a grade.
Structural Elements Shared with Adjacent Titles	<ul style="list-style-type: none"> • N/A – Standalone building
Ground Profile and Identified Geohazards	<ul style="list-style-type: none"> • Levelled ground profile.
Previous Strengthening and/or Significant Alteration	<ul style="list-style-type: none"> • In 1999, the main swimming pool was converted to open courtyard. • In 2005, a roof structure was added to the courtyard.
Other Relevant Information (see Figure 2t – 2y)	<ul style="list-style-type: none"> • Spalling was observed only in few beams. There was one beam with major rusted reinforcements. • Cracks were observed in RC beams, walls, and parapets all around the building. • Short column phenomenon was observed between openings in the walls.



(a) 1932 – Plan view of Ground floor



(b) 1932 – Plan view of First floor



(c) Addition of roof structure to the courtyard which previously was the main pool



(d) Courtyard roof structure view from first floor



(e) The terrace and the parapet on the first floor



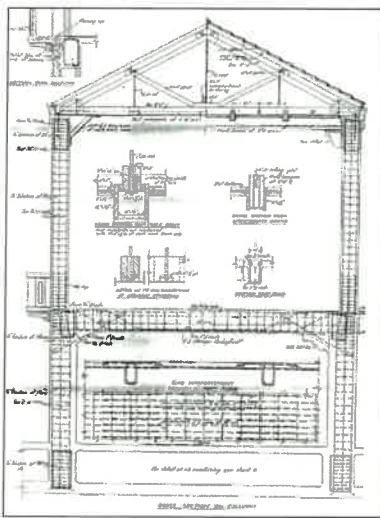
(f) Overview of the courtyard with offices, tea room and parapet



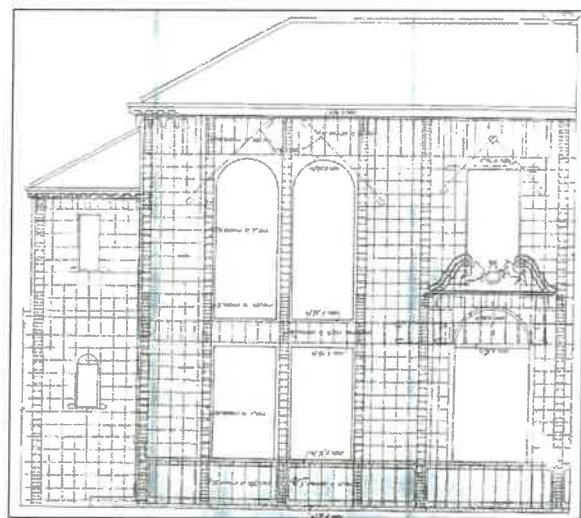
(g) Veranda at the southern side of the pool



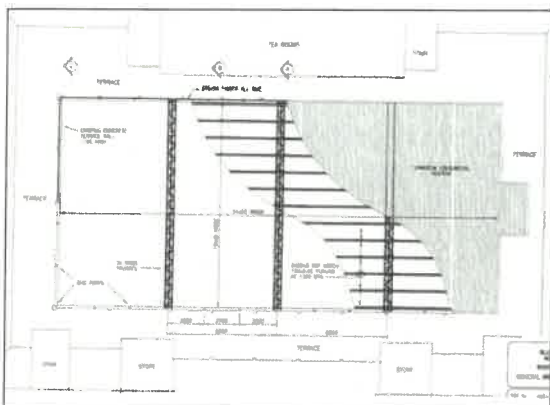
(h) Rachel Spring Whangapipiro on the west side of the building



(i) Section view of RC frames



(j) Elevation view of RC shear perimeter walls



(k) Plan view of the new roof structure over courtyard



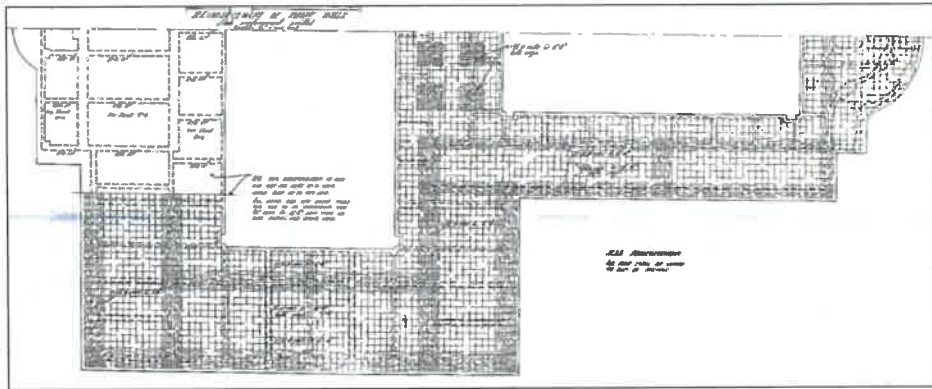
(l) New CHS steel truss



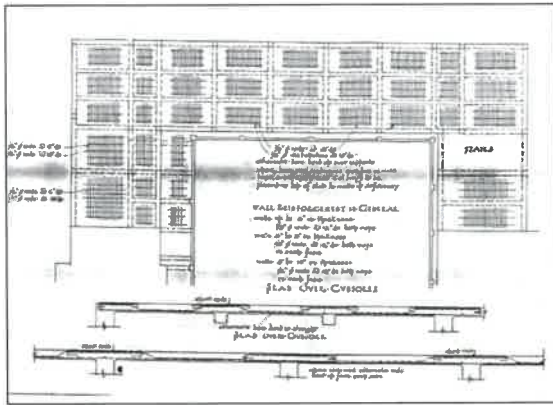
(m) Steel truss connection



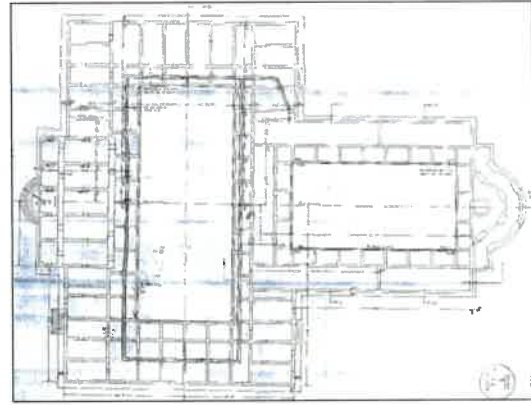
(n) Steel truss connected to RC balustrades by 2-M12



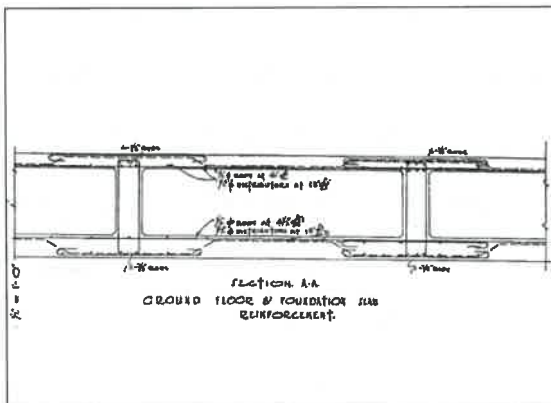
(o) Plan view of the slab reinforcement and foundation



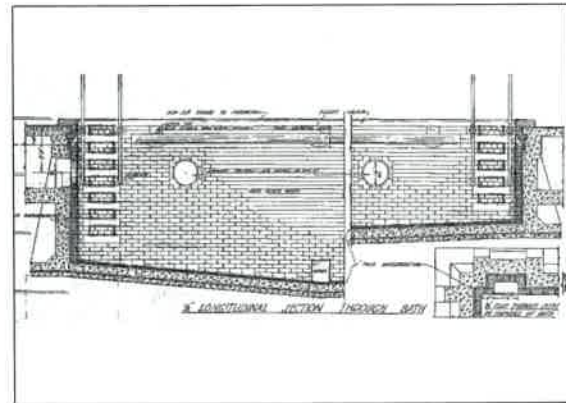
(p) Plan and section view of slab reinforcement



(q) Plan view of foundation



(r) Section view of the ground beam



(s) Section view of the pool



(t) Spalling of a RC beam with rusted reinforcements



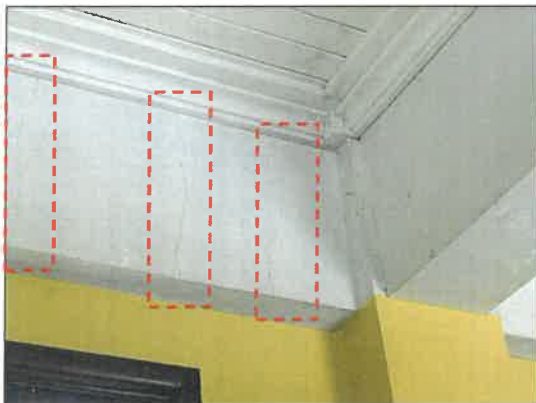
(u) Cracks across the parapet facing the pool



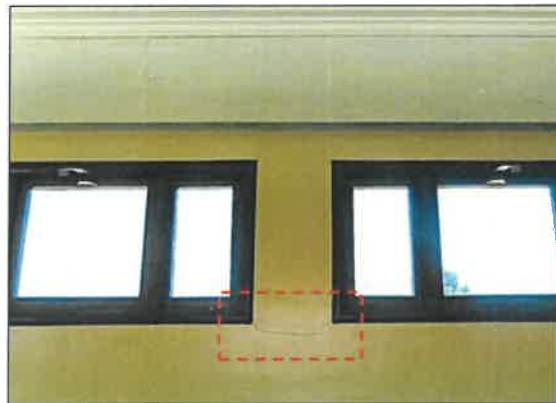
(v) Same parapet showing cracks from first floor terrace



(w) Cracks along and across outside wall at southern wing



(x) Flexural cracks along the beam supporting roof structure



(y) Cracks between opening – Short column phenomenon

Figure 2 - Key structural features of the subject building

3 Assessment Information

Table 1 presents a brief description of the information used to perform the seismic assessment of the subject building.

Table 1 - Assessment Information

Approving Engineer	Name: [REDACTED] CPEng number: 186730 Experience: Undertaken multiple seismic assessments of buildings throughout New Zealand.
Documentation Reviewed	1932: Structural plans 2005: New roof structural plans
Geotechnical Report	Tonkin + Taylor Geotechnical investigations and assessment
Date building inspected and extent of inspection	17 th December 2020, exterior and interior inspected.
Description of any structural testing undertaken and results summary	N/A
Previous assessment reports	2012 – Earthquake assessment by Sigma Consultants Ltd. 2020 – Partial (ongoing) Detailed Seismic Assessment (DSA) of the building by DHS Consulting Ltd.
Other relevant information	N/A

4 Initial Evaluation Procedure (IEP)

The seismic capacity of the subject building was assessed in accordance with the IEP. It must be noted that the IEP assessment is designed as a high-level review of the building's potential earthquake risks – not as a tool for accurate prediction of building response when subjected to earthquake induced shaking. The basis of the IEP is the comparison of the building codes between different eras, the locality of the building and allowances for the building geometry. During the IEP assessment it was assumed that the subject building was designed and built in accordance with the building standard and good practice current at the time of design and construction. **Table 2** provides a summary of key structural considerations that were made in the IEP calculations.

Table 2 - Key Assessment Factors and Assumptions

Occupancy Type and Importance Level	Leisure centre (event venue and pool), Importance Level 2 (IL2)
Site Subsoil Class	D (Deep or Soft soil), assumption based Geotech report.
Assumed Ductility, Sp Factor	$\mu = 1.25$, $S_p = 0.925$
Considerations in the IEP calculations	<ul style="list-style-type: none"> • No significant pounding risk. • No significant vertical and horizontal geometric irregularities. • There is probability of liquefaction and there is a geothermal activity on site. <p><i>Refer to Appendix A, pages 4a and 5a</i></p>
F Factor	0.7 – There are multiple cracks in different beams, columns, and walls.

5 Assessment Outcomes

Table 3 is taken from Part A of the Technical Guidelines referred to earlier and provides the basis of a proposed grading system and one way of interpreting the %NBS earthquake rating of existing buildings. Occupants in Potentially *Earthquake Prone* buildings (less than 34% NBS) are exposed to more than 10 times the risk that they would be in a similar new building. For buildings that are Potentially *Earthquake Risk* (less than 67% NBS), but not Potentially *Earthquake Prone*, the risk is at least 5 times greater than that of an equivalent new building. Broad descriptions of the life-safety risk can be assigned to the building grades as shown in **Table 3**. **Table 4** presents a summary of the assessment outcomes for the subject building based on the ISA.

Table 3 - Building Grades and Relative Seismic Risk

Percentage of New Building Standard (%NBS)	Building Grade	Approximate Risk Relative to a New Building	Life-safety Risk Description
>100	A+	Less than or comparable to	Low risk
80 to 100	A	1-2 times greater	Low risk
67 to 79	B	2-5 times greater	Low or Medium risk
34 to 66	C	5-10 times greater	Medium risk
20 to <34	D	10-25 times greater	High risk
<20	E	25 times greater	Very high risk

Table 4 - Summary of Assessment Outcomes

Assessed %NBS Rating	Longitudinal: 15% NBS (IL2) Transverse: 15% NBS (IL2)
Seismic Grade and Relative Risk	Grade E – Very high risk.
Potential Critical Structural Weaknesses (CSWs)	<p>Prior to 1935, there was no seismic provisions, therefore the structure was mainly designed for gravity design actions.</p> <p>The main concern is lack of sufficient bending capacity of the RC frames when it is subjected to lateral forces due to an Earthquake, which could result in brittle failure. This is critical especially for the areas that are two-storey i.e., storerooms and tearoom.</p> <p>Another concern is the covered courtyard, where a new roof structure added. The new roof structure is connected to the existing RC balustrades, and it is uncertain if the RC balustrades can withstand the additional shear force due to the roof actions and lateral loads in an event of Earthquake.</p>
Is More Information / Analysis Required?	<p>Yes - A Detailed Seismic Assessment (DSA) is recommended for the subject building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.</p> <p>We also recommend to conduct chloride and carbonation tests on parts of the reinforced concrete structure to determine the levels of chloride and carbonation. Based on these results, we can then determine a scheme to mitigate further expansive corrosion.</p>

6 Seismic Restraint of Non-Structural Items

An IEP does not consider the seismic performance of non-structural items such as ceiling, plant, services or glazing. During an earthquake, the safety of building occupants can be put at risk due to such non-structural elements falling on them. These items should be adequately seismically restrained, where possible, to the NZS 4219:2009 "The Seismic Performance of Engineering Systems in Buildings".

An assessment of the following elements has not been performed - bracing of the ceilings, in-ceiling ducting, services and plant. It was also not checked whether tall or heavy furniture and building fit-out has been seismically restrained or not. These issues are outside the scope of this initial seismic assessment but could be the subject of another investigation.

7 Conclusion and Recommendation

The Initial Seismic Assessment (ISA) of the building at Queens Drive, Government Gardens, Rotorua, was undertaken using the Initial Evaluation Procedure (IEP) as described in Part B of the guideline document. The minimum required seismic rating under the earthquake-prone provisions of the Building Act is 34% New Building Standard (%NBS). An IEP was conducted, and it was found that the rating of the building is **15% NBS (IL2), Grade E**. Therefore, the subject building is Potentially Earthquake Prone and in accordance with the current legislation, further action is required regarding the earthquake rating of these buildings.

The seismic rating is limited by the age of the building and inherent earthquake vulnerabilities of buildings from that era. It is expected that new structural systems will be needed at discrete locations to improve the seismic performance of the building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.

8 Limitations

This document is issued for the party which commissioned it as well as Rotorua Lakes Council and for specific purpose connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. EQ Struc Limited accepts no responsibility for the consequences of this document being relied upon by any other party or being used for any other purpose or containing any error or omission which is due to an error or omission in the data supplied to us.

The document is prepared based on a high-level walk-through inspection of the subject building and a review of incomplete structural drawing set. The initial structural assessment was made based on observations relating to the general behaviour of a structure in a seismic event. This assessment does not constitute a complete and accurate assessment of the building as the review has been limited in its scope, time and fee.

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Auckland
78-96 New North Road
Eden Terrace, 1021
Auckland, New Zealand
T: (0)9 929 4633

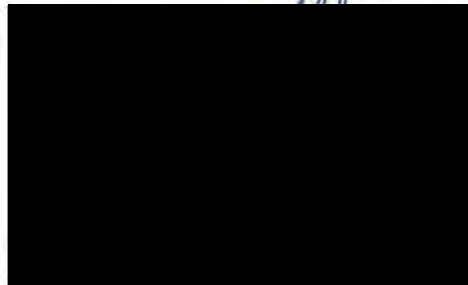
Wellington
Level 1, 14 Lombard St
Te Aro, 6011
Wellington, New Zealand
T: (0)4 499 5366

Author:



Structural Engineer

Reviewed and approved:



Director, Principal Engineer

Revision Schedule

Rev. No.	Author	Reviewed and Approved for Issue	Date
-	[Redacted]	[Redacted]	22/12/2020

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Appendix A

Initial Evaluation Procedure

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor **Page 1**

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in the "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-1 Initial Evaluation Procedure Step 1

Step 1 - General Information

1.1 Photos (attach sufficient to describe building)



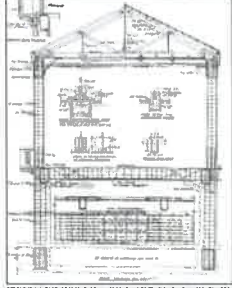
(a) Aerial view of the subject building



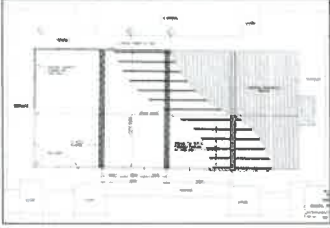
(b) North western elevation of the subject building

NOTE: THERE ARE MORE PHOTOS ON PAGE 1a ATTACHED

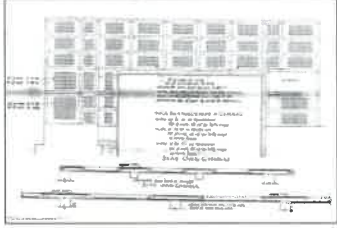
1.2 Sketches (plans etc, show items of interest)



(c) Section view of RC frames



(d) Plan view of the new roof structure over courtyard



(e) Plan and section view of slab reinforcement

NOTE: THERE ARE MORE SKETCHES ON PAGE 1a ATTACHED

1.3 List relevant features (Note: only 10 lines of text will print in this box. If further text required use Page 1a)

1.4 Note information sources

Tick as appropriate

Visual Inspection of Exterior
 Visual Inspection of Interior
 Drawings (note type)

<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	

Specifications
 Geotechnical Reports
 Other (list)

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

1932: Structural plans
 2005: New roof structural plans

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-2 Initial Evaluation Procedure Step 2

Step 2 - Determination of (%NBS)_b

(Baseline (%NBS) for particular building - refer Section B5)

2.1 Determine nominal (%NBS) = (%NBS)_{nom}

	Longitudinal	Transverse
a) Building Strengthening Data		
Tick if building is known to have been strengthened in this direction	<input type="checkbox"/>	<input type="checkbox"/>
If strengthened, enter percentage of code the building has been strengthened to	N/A	N/A
b) Year of Design/Strengthening, Building Type and Seismic Zone		
	Pre 1935 <input checked="" type="radio"/>	Pre 1935 <input checked="" type="radio"/>
	1935-1965 <input type="radio"/>	1935-1965 <input type="radio"/>
	1965-1976 <input type="radio"/>	1965-1976 <input type="radio"/>
	1976-1984 <input type="radio"/>	1976-1984 <input type="radio"/>
	1984-1992 <input type="radio"/>	1984-1992 <input type="radio"/>
	1992-2004 <input type="radio"/>	1992-2004 <input type="radio"/>
	2004-2011 <input type="radio"/>	2004-2011 <input type="radio"/>
	Post Aug 2011 <input type="radio"/>	Post Aug 2011 <input type="radio"/>
Building Type:	Others	Others
Seismic Zone:	Not applicable	Not applicable
c) Soil Type		
From NZS1170.5:2004, CI 3.1.3 :	D Soft Soil	D Soft Soil
From NZS4203:1992, CI 4.6.2.2 : (for 1992 to 2004 and only if known)	Not applicable	Not applicable
d) Estimate Period, T		
Comment:		
	h _n = 8.5	8.5 m
	A _c = 1.00	1.00 m ²
Moment Resisting Concrete Frames:	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Moment Resisting Steel Frames:	<input type="radio"/>	<input type="radio"/>
Eccentrically Braced Steel Frames:	<input type="radio"/>	<input type="radio"/>
All Other Frame Structures:	<input type="radio"/>	<input type="radio"/>
Concrete Shear Walls:	<input type="radio"/>	<input type="radio"/>
Masonry Shear Walls:	<input type="radio"/>	<input type="radio"/>
User Defined (input Period):	<input type="radio"/>	<input type="radio"/>
<small>Where h_n = height in metres from the base of the structure to the uppermost seismic weight or mass.</small>	T: 0.45	0.45
e) Factor A: Strengthening factor determined using result from (a) above (set to 1.0 if not strengthened)	Factor A: 1.00	1.00
f) Factor B: Determined from NZSEE Guidelines Figure 3A.1 using results (a) to (e) above	Factor B: 0.03	0.03
g) Factor C: For reinforced concrete buildings designed between 1978-84 Factor C = 1.2, otherwise take as 1.0.	Factor C: 1.00	1.00
h) Factor D: For buildings designed prior to 1935 Factor D = 0.8 except for Wellington and Napier (1931-1935) where Factor D may be taken as 1.0, otherwise take as 1.0.	Factor D: 0.80	0.80
(%NBS)_{nom} = AxBxCxD	(%NBS)_{nom} = 2%	2%

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor Page 3

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-2 Initial Evaluation Procedure Step 2 continued

2.2 Near Fault Scaling Factor, Factor E

If $T \leq 1.5\text{sec}$, Factor E = 1

	Longitudinal	Transverse
a) Near Fault Factor, $N(T,D)$ <small>(from NZS1170.5:2004, Cl 3.1.6)</small>	N(T,D): <input type="text" value="1"/>	<input type="text" value="1"/>
b) Factor E = $1/N(T,D)$	Factor E: <input type="text" value="1.00"/>	<input type="text" value="1.00"/>

2.3 Hazard Scaling Factor, Factor F

a) Hazard Factor, Z, for site

Location: Refer right for user-defined locations

Z =	<input type="text" value="0.24"/>	<small>(from NZS1170.5:2004, Table 3.3)</small>
Z ₁₉₉₂ =	<input type="text" value="1"/>	<small>(NZS4203:1992 Zone Factor from accompanying Figure 3.5(b))</small>
Z ₂₀₀₄ =	<input type="text" value="0.24"/>	<small>(from NZS1170.5:2004, Table 3.3)</small>

b) Factor F		
For pre 1992	=	1/Z
For 1992-2011	=	Z ₁₉₉₂ /Z
For post 2011	=	Z ₂₀₀₄ /Z
	Factor F:	<input type="text" value="4.17"/>

2.4 Return Period Scaling Factor, Factor G

a) Design Importance Level, I

(Set to 1 if not known. For buildings designed prior to 1995 and known to be designed as a public building set to 1.25. For buildings designed 1995-1976 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.)

I =

b) Design Risk Factor, R_d

(set to 1.0 if other than 1976-2004, or not known)

R_d =

c) Return Period Factor, R

(from NZS1170.0:2004 Building Importance Level)

Choose Importance Level 1 2 3 4

R =

d) Factor G = IR_d/R

Factor G:

2.5 Ductility Scaling Factor, Factor H

a) Available Displacement Ductility Within Existing Structure

Comment:

μ =

b) Factor H

For pre 1976 (maximum of 2)
For 1976 onwards

= k_{μ}
=
=
Factor H:

(where k_{μ} is NZS1170.5:2004 Inelastic Spectrum Scaling Factor, from accompanying Table 3.3)

2.6 Structural Performance Scaling Factor, Factor I

a) Structural Performance Factor, S_p

(from accompanying Figure 3.4)

Tick if light timber-framed construction in this direction

S_p =

b) Structural Performance Scaling Factor = 1/S_p

Note Factor B values for 1992 to 2004 have been multiplied by 0.87 to account for S_p in this period

Factor I:

2.7 Baseline %NBS for Building, (%NBS)_b
(equals (%NBS)_{nom} x E x F x G x H x I)

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Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-3 Initial Evaluation Procedure Step 3

Step 3 - Assessment of Performance Achievement Ratio (PAR)

(Refer Appendix B - Section B3.2)

a) Longitudinal Direction

potential CSWs	Effect on Structural Performance (Choose a value - Do not interpolate)	Factors
3.1 Plan Irregularity Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant		Factor A <input type="text" value="1.0"/>
3.2 Vertical Irregularity Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant		Factor B <input type="text" value="1.0"/>
3.3 Short Columns Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant		Factor C <input type="text" value="0.7"/>

3.4 Pounding Potential

(Estimate D1 and D2 and set D = the lower of the two, or 1.0 if no potential for pounding, or consequences are considered to be minimal)

a) Factor D1: - Pounding Effect

Note:
Values given assume the building has a frame structure. For stiff buildings (eg shear walls), the effect of pounding may be reduced by taking the coefficient to the right of the value applicable to frame buildings.

Factor D1 For Longitudinal Direction: <input type="text" value="1.0"/>			
Table for Selection of Factor D1	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Alignment of Floors within 20% of Storey Height	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8

b) Factor D2: - Height Difference Effect

Factor D2 For Longitudinal Direction: <input type="text" value="1.0"/>			
Table for Selection of Factor D2	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1
Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1
Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1

Factor D

3.5 Site Characteristics - Stability, landslide threat, liquefaction etc as it affects the structural performance from a life-safety perspective

Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant	Factor E <input type="text" value="0.7"/>
There is a potential liquefaction (based on Geotech report)	

3.6 Other Factors - for allowance of all other relevant characteristics of the building

For ≤ 3 storeys - Maximum value 2.5
otherwise - Maximum value 1.5.
No minimum.

Factor F

Record rationale for choice of Factor F:
There are multiple cracks in different beams, columns and walls.

3.7 Performance Achievement Ratio (PAR)
(equals A x B x C x D x E x F)

PAR
Longitudinal

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Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor
Page 5

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
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Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-3 Initial Evaluation Procedure Step 3

Step 3 - Assessment of Performance Achievement Ratio (PAR)
(Refer Appendix B - Section B3.2)

b) Transverse Direction

potential CSWs	Effect on Structural Performance (Choose a value - Do not Interpolate)	Factors
3.1 Plan Irregularity <i>Effect on Structural Performance</i> <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	Factor A	1.0
3.2 Vertical Irregularity <i>Effect on Structural Performance</i> <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	Factor B	1.0
3.3 Short Columns <i>Effect on Structural Performance</i> <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant	Factor C	0.7
3.4 Pounding Potential <i>(Estimate D1 and D2 and set D = the lower of the two, or 1.0 if no potential for pounding, or consequences are considered to be minimal)</i>		

a) Factor D1: - Pounding Effect

Note:
Values given assume the building has a frame structure. For stiff buildings (eg shear walls), the effect of pounding may be reduced by taking the coefficient to the right of the value applicable to frame buildings.

Factor D1 For Transverse Direction:			
Table for Selection of Factor D1	Severe 0<Sep<.005H	Significant .005<Sep<.01H	Insignificant Sep>.01H
<i>Alignment of Floors within 20% of Storey Height</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
<i>Alignment of Floors not within 20% of Storey Height</i>	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8

b) Factor D2: - Height Difference Effect

Factor D2 For Transverse Direction:			
Table for Selection of Factor D2	Severe 0<Sep<.005H	Significant .005<Sep<.01H	Insignificant Sep>.01H
<i>Height Difference > 4 Storeys</i>	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1
<i>Height Difference 2 to 4 Storeys</i>	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1
<i>Height Difference < 2 Storeys</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1

Factor D 1.0

3.5 Site Characteristics - Stability, landslide threat, liquefaction etc as it affects the structural performance from a life-safety perspective

Effect on Structural Performance Severe Significant Insignificant

There is a potential liquefaction (based on Geotech report)

Factor E 0.7

3.6 Other Factors - for allowance of all other relevant characteristics of the building

Record rationale for choice of Factor F:
There are multiple cracks in different beams, columns and walls.

Factor F 0.70

PAR

3.7 Performance Achievement Ratio (PAR)
(equals A x B x C x D x E x F)

Transverse 0.34

WARNING!! This Initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedures set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgments based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-4 Initial Evaluation Procedure Steps 4, 5, 6 and 7

Step 4 - Percentage of New Building Standard (%NBS)

	Longitudinal	Transverse
4.1 Assessed Baseline %NBS (%NBS) _b (from Table IEP - 1)	12%	12%
4.2 Performance Achievement Ratio (PAR) (from Table IEP - 2)	0.34	0.34
4.3 PAR x Baseline (%NBS) _b	15%	15%
4.4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3)		15%

Step 5 - Is %NBS < 34?

YES

Step 6 - Potentially Earthquake Risk (is %NBS < 67)?

YES

Step 7 - Provisional Grading for Seismic Risk based on IEP

Seismic Grade E

Additional Comments (items of note affecting IEP based seismic rating)

Relationship between Grade and %NBS :

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Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

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Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
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Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-5 Initial Evaluation Procedure Step 8

Step 8 - Identification of potential Severe Structural Weaknesses (SSWs) that could result in significant risk to a significant number of occupants

- 8.1 Number of storeys above ground level 2
- 8.2 Presence of heavy concrete floors and/or concrete roof? (Y/N) Y

Potential Severe Structural Weaknesses (SSWs):

Note: Options that are greyed out are not applicable and need not be considered.

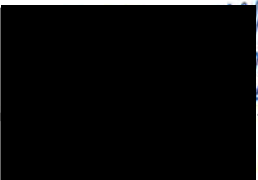
Occupancy not considered to be significant - no further consideration required

Risk not considered to be significant - no further consideration required

The following potential Severe Structural Weaknesses (SSWs) have been identified in the building that could result in significant risk to a significant number of occupants:

1. None identified
2. Weak or soft storey (except top storey)
3. Brittle columns and/or beam-column joints the deformations of which are not constrained by other structural elements
4. Flat slab buildings with lateral capacity reliant on low ductility slab-to-column connections
5. No identifiable connection between primary structure and diaphragms
6. Ledge and gap stairs

IEP Assessment Confirmed by



Signature

Name

186730

CPEng. No

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Page 1a

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-1a Additional Photos and Sketches

Add any additional photographs, notes or sketches required below:

Note: print this page separately



(f) Parapet showing cracks from first floor terrace



(g) Cracks along and across outside wall at southern wing



(h) Flexural cracks along the beam supporting roof structure



(i) Cracks between opening – Short column phenomenon



(j) Spalling of a RC beam with rusted reinforcements

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

22nd December 2020



██████████
Tonkin + Taylor
Level 1
Mid City Centre
1 Devonport Road
Tauranga

RE: Blue Baths - Queens Drive, Government Gardens, Rotorua

Dear ██████████

In December 2020, EQ Struc Limited was engaged by Tonkin + Taylor to provide Consultant Advice on the structural elements that may deem the Blue Baths building 'Dangerous' or 'Unsafe to occupy'. The building is owned by Rotorua Lakes Council and is located at Queens Drive, Government Gardens, Rotorua (see Figure 1). We understand and agree that this report will be used by Rotorua Lakes Council, as the Building Owners, in undertaking its regulatory functions in connection with use and occupation of the Blue Baths.

A visual internal and external inspection was conducted on 17th December 2020 with Craig Davanna, a representative from Tonkin +Taylor and Brian Stirton, a representative from Rotorua Lake Council.



(a) Aerial view



(b) North elevation

Figure 1: Aerial and elevation views of the subject building

Regardless of structural weaknesses (structural or non-structural elements that do not meet the current requirements of clause B1 of the NZBC with respect to ultimate limit state seismic actions), there were no observed structural weaknesses that result in the building being unsafe to occupy. With reference to the Health and Safety at Work Act (2015) and the New Zealand Building Act (The Building Act), structural weaknesses under seismic actions do not necessarily mean a building is unsafe to occupy.

The Building Act provides a period of several years for strengthening or demolition work to be undertaken. While the risk of harm to people in or around a building featuring structural weaknesses is greater than an equivalent compliant new building, this does not typically require

EQ STRUC Limited
info@eqstruc.co.nz
eqstruc.co.nz
0800 377 8782

Auckland
78-96 New North Road,
Eden Terrace 1021
P (0)9 929 4633

Wellington
Level 1, 14 Lombard Street,
Te Aro 6012
P (0)4 499 5366



short-term action. It is expected that building owners will fulfil their duties under the Building Act when addressing the seismic risk. In brief, Earthquake Prone buildings are not 'Dangerous' buildings by default under the Building Act. Therefore, the decision to close the building based on the earthquake rating is at the building owner's discretion.

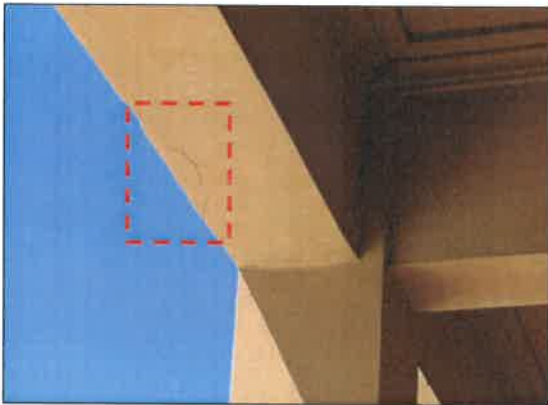
During the site inspection, a few defects, such as cracks within reinforced concrete (RC) beams and walls were observed throughout the building. Many of cracks were covered by plasters and hence, the depth of cracks was unclear. There were a few beams with spalling and corrosion of the reinforcement. A few examples are shown in Figure 2. The Rachel Spring Whangapipiro is situated on the western side of the building.



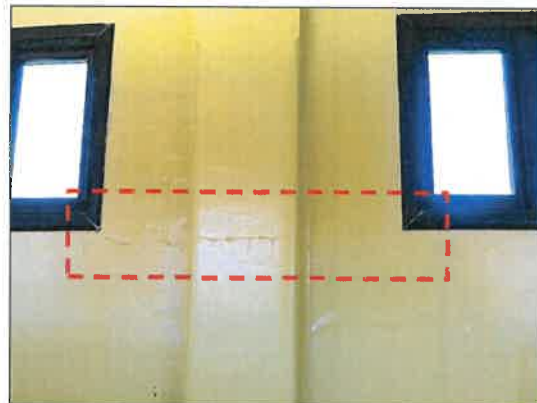
(a) Walkway next to the pool – Cracks across the parapet



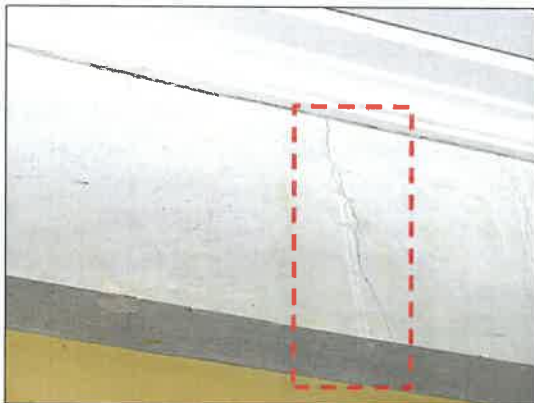
(b) Underneath the first-floor terrace – Spalling of the beam



(c) Ladies side pool – Cracks at the bottom of the beam



(d) Ladies bathroom – Cracks covered by plasters



(e) Ladies bathroom – Cracks across the beam



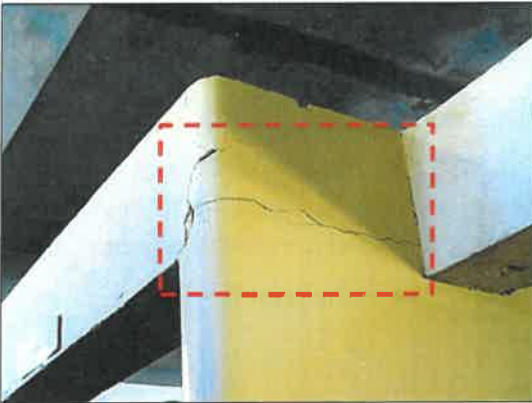
(f) Men bathroom – Cracks across the beam



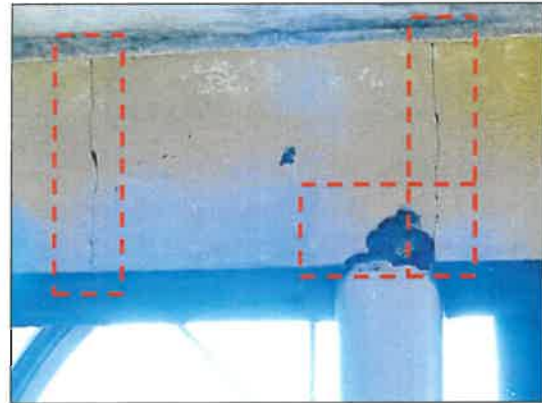
(g) Storage room on the right-hand side of the pool – Cracks across the wall



(h) Men bathroom – Cracks across the beam



(i) Storage room on the left-hand side of the pool – Cracks across the stall walls



(j) Storage room on the left-hand side of the pool – Cracks across the beam and deteriorated connection between the column and the beam



(k) First floor terrace – Cracks across the parapet



(l) Office on the first floor – Deteriorated connection at the office roof corner



(m) Room within a courtyard area - Spalling of a RC beam with rusted reinforcements



(n) Rachel Spring Whangapipiro on the west side of the building

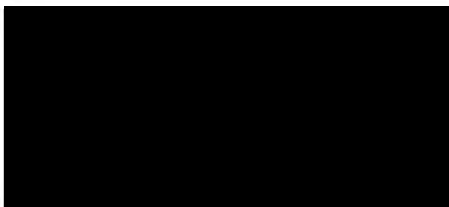
Figure 2: Site inspection photos

These defects are unlikely to result in structural failure in the normal use of the building and there are no short-term remedial actions required. Therefore, the building is not considered as a Life Safety threat.

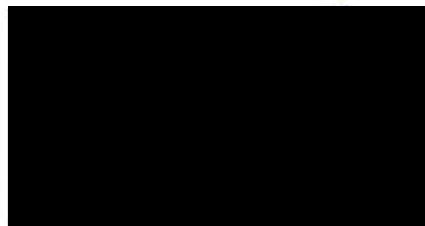
However, it is still an Earthquake Prone building with a rating of **15% NBS (IL2), Grade E**.

In addition to a Detailed Seismic Assessment (DSA), EQ Struc Ltd recommends carrying out chloride and carbonation testing on parts of the reinforced concrete structure to determine the levels of chloride, carbonation, and a scheme to mitigate further expansive corrosion.

If you have any queries, please do not hesitate to contact the undersigned.



Structural Engineer
BE(Hons), MEngNZ



Director, Principal Structural Engineer
BE, NZCE, CPEng, IntPE, MIPENZ, MIEAust, CPEng

Limitations

This document is issued for the party which commissioned it as well as Rotorua Lakes Council, and for specific purpose connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. EQ Struc Limited accepts no responsibility for the consequences of this document being relied upon by any other party or being used for any other purpose or containing any error or omission which is due to an error or omission in the data supplied to us.

The document is prepared based on a high-level walk-through inspection of the subject building and a review of incomplete structural drawing set. The initial structural assessment was made based on observations relating to the general behaviour of a structure in a seismic event. This assessment does not constitute a complete and accurate assessment of the building as the review has been limited in its scope, time and fee.

From: Brian Stirton
Sent: Friday, 8 January 2021 7:42 am
To: Kaa Dhanjee
Subject: New PO's please

Morena Kaa,

Can you please raise the following PO's and let me know the numbers.

Tonkin and Taylor - \$40,000 plus gst – Detailed Seismic Assessment for Blue Baths. Please charge code 10.111.000.0.2535

section 17(a) of LGOIMA - not related to Blue Baths

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: FSS Compliance <compliance@firesecurity.co.nz>
Sent: Monday, 11 January 2021 11:05 am
To: Brian Stirton
Subject: RE: Rotorua Blue Baths - CS872 - BWOF + 12A's - Due Date: 24/12/20

Good morning Brian & Happy New Year

No, we have not issued the BWOF renewal for Blue Baths as neither Vertrans or GB Teat have provided their 12A certificates as yet.

██████████ Compliance Administrator
FIRE SECURITY SERVICES

██████████
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
www.firesecurity.co.nz
0800 11 46 11



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From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, 8 January 2021 8:49 AM
To: FSS Compliance <compliance@firesecurity.co.nz>
Cc: Kaa Dhanjee <Kaa.Dhanjee@rotorualc.nz>
Subject: RE: Rotorua Blue Baths - CS872 - BWOF + 12A's - Due Date: 24/12/20

Hello ██████████

Happy new year.

I was wondering if you have completed the BWOF documentation and have the 12A's for the Blue Baths, as the BWOF was due 24/12/2020.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

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From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Monday, 11 January 2021 3:58 pm
To: Brian Stirton
Subject: Re: Meter replacement. The Blue Baths, ICP: 0001255823UN54B - Issue due to shared main switch

Hi Brian

Tomorrow afternoon would work well.

Otherwise early next week - Monday or Tuesday afternoon would work too.

If it's only for a short time, we can look at other days too.

Thanks

[REDACTED]
[REDACTED]
General Manager
BLUE BATHS & TERRACE KITCHEN
[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, January 11, 2021 1:31:48 PM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: FW: Meter replacement. The Blue Baths, ICP: 0001255823UN54B - Issue due to shared main switch

Hello [REDACTED]

Please see below.

Can you please advise me when this might be possible for your business to be "powered off", so they can change the metre.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: Kerry Starling <Kerry.Starling@rotorualc.nz>
Sent: Tuesday, 5 January 2021 9:45 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>; Murray Evans <Murray.Evans@rotorualc.nz>

Cc: [REDACTED]mercury.co.nz>

Subject: FW: Meter replacement. The Blue Baths, ICP: 0001255823UN54B - Issue due to shared main switch

Hi Brian and Murray

Would one of your team please coordinate with [REDACTED] as per [REDACTED] message below?

Cheers
Kerry

Kerry Starling Procurement Lead

P: 07 351 8450 | E: kerry.starling@rotorualc.nz | W: rotorualakescouncil.nz

From: [REDACTED]mercury.co.nz>

Sent: Wednesday, 23 December 2020 12:04 PM

To: Kerry Starling <Kerry.Starling@rotorualc.nz>

Subject: Meter replacement. The Blue Baths, ICP: 0001255823UN54B - Issue due to shared main switch

Hi Kerry,

The meter for ICP: 0001255823UN54B, which is for the Blue Baths at Hinemaru Street is due to be replaced, however, the meter owner found an issue when they went to site to complete this work. They have advised:

The issue with this site is that there is only 1 main switch, that supplies two different ICPs with two different meter owners and traders. Being 3 phase the site will need to be isolated. Arrangements need to be made with the other customer as their site will also be turned off.

Please can you provide me with a site contact who can liaise with the other customer sharing the main switch, as they will need to be advised when the meter replacement is taking place, as their power shall need to be turned off too. Many thanks

Wishing you a wonderful Christmas and New Year!

Regards

[REDACTED]
Business Development Manager – Large Commercial

MERCURY.CO.NZ

[REDACTED]
[REDACTED]
The Mercury Building, 33 Broadway, Newmarket, Auckland
Private Bag 92008, Auckland 1142, New Zealand



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From: [REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, 14 January 2021 10:43 am
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 54946 - The Blue Baths Geotechnical Investigation - RLP019743
Attachments: Invoice Project 1015676.0000R 000000054946_20210114104043.pdf

Good morning,

Please find attached our December 2020 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand

[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

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Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

14 January 2021

Invoice No: 54946

Your reference: RLP019743

Project Manager: XXXXXXXXXX

Project 1015676.0000R Geotechnical investigations and assessment to support seismic assessment of The Blue Baths

Invoice for December 2020:

- Issue final report.

Phase 01 SI and Seismic Assessment_GEO

Professional Fees			3,255.01
		Subtotal excluding GST	3,255.01
		15% GST	488.25
		Total this Invoice	<u><u>\$3,743.26</u></u>

Due Date: 21 January 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**

From: FSS Compliance [REDACTED]@firesecurity.co.nz>
Sent: Thursday, 21 January 2021 11:21 am
To: [REDACTED]@vertrans.co.nz
Cc: Brian Stirton
Subject: RE: V7361 RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - URGENT

Importance: High

Good morning

Please advise regarding this SS8/1 12A request – this is urgent as the BWOFF expired on the 24th of December

[REDACTED] Compliance Administrator
FIRE SECURITY SERVICES

[REDACTED]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
www.firesecurity.co.nz
0800 11 46 11



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From: FSS Compliance
Sent: Wednesday, 16 December 2020 10:30 AM
To: Office [REDACTED]@vertrans.co.nz>
Subject: RE: V7361 RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - Follow Up

Thank you 😊 Let me know how you get on

[REDACTED] Compliance Administrator
FIRE SECURITY SERVICES

[REDACTED]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257



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From: Office [REDACTED] <[REDACTED]@vertrans.co.nz>

Sent: Wednesday, 16 December 2020 10:29 AM

To: FSS Compliance [REDACTED] <[REDACTED]@firesecurity.co.nz>

Subject: RE: V7361 RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - Follow Up

Hi,

I am emailing our inspector today for an update.

Thanks

Please contact me between the following hours:- 8am – 3pm

Best regards,

[REDACTED] | Accounts

Vertrans Associates (NZ) Ltd

Building 3, 1 William Pickering Drive, Rosedale, Auckland 0632

POST: PO Box 300-302, Albany 0752, Auckland, New Zealand

PHONE: 09 480 5510 or 0800 837872

FAX: 09 480 5515



Our office will be closed from 1pm 22nd December and will re-open 11th January 2021

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From: FSS Compliance [REDACTED]@firesecurity.co.nz>

Sent: Wednesday, 16 December 2020 10:25 am

To: Office [REDACTED]@vertrans.co.nz>

Subject: RE: V7361 BWOFF 24/11/2020 RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - Follow Up

Good morning [REDACTED]

Has there been any progress on this one?

[REDACTED] | Compliance Administrator
FIRE SECURITY SERVICES

[REDACTED]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
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From: Office [REDACTED]@vertrans.co.nz>

Sent: Wednesday, 2 December 2020 9:44 AM

To: FSS Compliance [REDACTED]@firesecurity.co.nz>

Subject: RE: V7361 BWOFF 24/11/2020 RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - Follow Up

Hi,

This site is out for inspection and once completed, we will forward documentation.

Thanks

Please contact me between the following hours:- 8am – 3pm

Best regards,

[REDACTED] | Accounts

Vertrans Associates (NZ) Ltd
Building 3, 1 William Pickering Drive, Rosedale, Auckland 0632
POST: PO Box 300-302, Albany 0752, Auckland, New Zealand
PHONE: 09 480 5510 or 0800 837872
FAX: 09 480 5515



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From: FSS Compliance [redacted]firesecurity.co.nz>
Sent: Tuesday, 1 December 2020 1:51 pm
To: Office [redacted]vertrans.co.nz>
Subject: FW: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request - Follow Up

Good afternoon

Just following up on this 12A request please?

[redacted] Compliance Administrator
FIRE SECURITY SERVICES

[redacted]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
www.firesecurity.co.nz
0800 11 46 11



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From: FSS Compliance
Sent: Thursday, 12 November 2020 2:12 PM
To: 'office@vertrans.co.nz' [redacted]vertrans.co.nz>
Subject: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS8/1 12A Request

Good afternoon

Can you please provide your SS8/1 12A for RDC Blue Baths (CS872)?

The BWOF is due for renewal on the 24th of December.

Copy of CS872 attached for your reference.

██████████ | Compliance Administrator
FIRE SECURITY SERVICES

██████████
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
www.firesecurity.co.nz
0800 11 46 11



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From: FSS Compliance [REDACTED]@firesecurity.co.nz>
Sent: Thursday, 21 January 2021 11:24 am
To: [REDACTED]@gbteat.co.nz
Cc: Brian Stirton
Subject: FW: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS9 12A Request - URGENT
Attachments: CS 872 - Blue Baths.PDF

Importance: High

Good morning

Please advise regarding this SS9 12A request – this is urgent as the BWOF expired on the 24th of December!

[REDACTED] | Compliance Administrator
FIRE SECURITY SERVICES

[REDACTED]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
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From: FSS Compliance
Sent: Wednesday, 16 December 2020 10:27 AM
To: [REDACTED]@gbteat.co.nz
Subject: FW: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS9 12A Request - Follow Up

Morning

Just following up again for this 12A please

[REDACTED] | Compliance Administrator
FIRE SECURITY SERVICES

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From: FSS Compliance

Sent: Tuesday, 1 December 2020 1:52 PM

To: [REDACTED]@bteat.co.nz

Subject: FW: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS9 12A Request - Follow Up

Good afternoon

Just following up on this 12A please?

[REDACTED] | Compliance Administrator
FIRE SECURITY SERVICES

11-19 Ken Browne Drive, Hamilton
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From: FSS Compliance

Sent: Thursday, 12 November 2020 2:13 PM

To: [REDACTED]@gbteat.co.nz

Subject: RDC - Blue Baths, Queens Drive, Rotorua - CS872 - SS9 12A Request

Good afternoon

Can you please provide your SS9 12A for RDC Blue Baths (CS872)?

The BWOFF is due for renewal on the 24th of December.

Copy of CS872 attached for your reference.

[REDACTED] Compliance Administrator
FIRE SECURITY SERVICES

[REDACTED]
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
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From: [REDACTED]@bluebaths.co.nz>
Sent: Friday, 22 January 2021 10:32 am
To: Brian Stirton
Subject: Fwd: 5457 - Blue Baths Structural Summary

Hi Brian

I would appreciate it if we could take up the opportunity to meet with [REDACTED] on Monday afternoon at the BB. Are you agreeable/available to do this please?

Thanks

[Get Outlook for iOS](#)

From: [REDACTED]@dhc.nz>
Sent: Friday, January 22, 2021 10:00 AM
To: [REDACTED] Brian Stirton'
Subject: RE: 5457 - Blue Baths Structural Summary

Hi Brian,

Happy new year, hope you managed to have a good holiday.

Just following up on my email below and the voice message I have left you. Just wondering whether there was anything else you needed or if you would like to discuss this further.

I am going to be down in Rotorua on Monday if you wanted me to pop in in the afternoon to discuss anything regarding the Blue Baths project.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

Visit us at www.dhc.nz



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26 Patey St,
Epsom,
Auckland 1052



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From: [REDACTED]
Sent: Wednesday, 16 December 2020 4:51 PM
To: [REDACTED]@bluebaths.co.nz>; Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: 5457 - Blue Baths Structural Summary

Hi [REDACTED] Brian,

Please find attached summary of the current structural assessment including; our current position, the additional investigations required, the analysis we intend to undertake, and the peer review.

Brian, I have also included a profile of DHC and our experience for your information. It would be good to setup a teams or zoom meeting later this week or early next week to discuss further and make sure I have covered off all the scope you are expecting.

I have uploaded all the documentation here. The laser scan is 12GB so will take a while to download if you want to.

<https://www.dropbox.com/sh/Ozdp34ja9z62c9i/AAAlkYLrkbKL4KsrRW58SuFta?dl=0>

The dropbox includes;

1. Original drawing scans
2. Laser scan of structure
3. 3D model of structure built from the scan for drawings
4. Geotechnical Assessments
 1. Cheal
 2. AoS, including peer review
 3. T&T
5. Original structural assessment provided by Rotorua Lakes Council
6. Concept architectural drawings and renders
7. Initial discussions with structural peer reviewer

I haven't included;

1. Architectural drawing model (concept)
2. Structural analysis model (partially complete)
3. Structural drawing model (partially complete)
4. X-ray scanning
 1. We only did a spot check when we were on site to confirm that the drawings accurately represented the as built condition, which they seemed to match in the areas we were able to scan.
 2. Our plan was to identify any areas that weren't covered in the drawings, the areas that were identified as structurally critical in the DSA process, the areas that we were altering as part of the new scheme, and do a comprehensive scan of these areas to ensure that what we had analysed was accurate.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

Visit us at www.dhc.nz



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Unless you advise by return to the contrary, you acquiescence with these terms will be presumed.

From: Brian Stirton
Sent: Friday, 22 January 2021 11:32 am
To: Geoff Williams; Thomas Colle
Subject: FW: Blue Baths ISA Report and Consultant Advice Letter

Hello Geoff and Thomas,

As per below, the DSA work is currently booked and will be completed by the end of February 2021.

Given the nature of the building, the attached reports and the potential risk, I feel it may be prudent to share the attached with [REDACTED].

This may provide [REDACTED] with information not previously know (DHC has verbally informed [REDACTED] that the building is above 50% NBS, which is not what we are seeing at the moment).

Obviously there is a risk to council in the interim, with the low NBS %, however, our engineers feel the building is not necessarily unsafe to occupy. Having said that, council does have the ability to close the site should we deem the risk unacceptable.

Once the full DSA is provided, Council, and [REDACTED] will be in a much better position to make decisions on the possible ways forward.

I do feel though that any "upgrade" works, currently being carried out by [REDACTED] should be put on hold until a full DSA and Council decision has been made. The decision would be made depending on what that final DSA report, and subsequent peer review, inform. I would not like to see [REDACTED] continue to incur costs for resource or building consent, architectural fees and possible engineering costs until this is known. By providing [REDACTED] with this report may initiate those discussions with [REDACTED] consultants etc.. based on independent engineering advise rather than advise from council directly.

I propose to send the attached to [REDACTED] and meet with [REDACTED] engineers on site on Monday or Tuesday of next week.

Are you both happy with this approach – happy to discuss.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Thursday, January 7, 2021 11:59 AM
To: Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: FW: Blue Baths ISA Report and Consultant Advice Letter

Hello Thomas,

Please see attached.

The ISA figure is 15% of NBS, however, we are in the process of obtaining a full DSA, as per the procurement plan.

I have noted that as per the report,

“Regardless of structural weaknesses (structural or non-structural elements that do not meet the current requirements of clause B1 of the NZBC with respect to ultimate limit state seismic actions), there were no observed structural weaknesses that result in the building being unsafe to occupy. With reference to the Health and Safety at Work Act (2015) and the New Zealand Building Act (The Building Act), structural weaknesses under seismic actions do not necessarily mean a building is unsafe to occupy.”

As such I took the view that the building is not considered unsafe to occupy at this stage, however, urgency in obtaining a full DSA is required.

Given this I have not provided a copy to [REDACTED] and will await the full DSA so Council can make the most informed decision going forward.

Having said the above, I had spoken to [REDACTED] prior to Christmas and informed [REDACTED] verbally that the building may only be 15% of NBS, but this may not mean it is not safe to occupy and a full DSA would be required before a decision is made. I also discussed this with [REDACTED] from DHC last year – to gauge DHC’s thoughts on the building. [REDACTED] provided information that was used in the ISA and will also be used in the DSA.

As such we have engaged T&T to carry out a full DSA and provide their findings asap.

Happy to discuss.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>
Sent: Tuesday, December 22, 2020 4:31 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>; [REDACTED] <[\[REDACTED\]@eqstruc.co.nz](mailto:[REDACTED]@eqstruc.co.nz)>
Subject: Blue Baths ISA Report and Consultant Advice Letter

Hi Brian,
Please find attached, the above repots from EQStruc. We can catch-up in the New Year once you have had an opportunity to digest the findings.
Please do not hesitate to contact me should you have any queries in the meantime.
Kind regards
[REDACTED]

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, CMEngNZ
Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand

www.tonkintaylor.co.nz  T+T profile



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22 December 2020

To: Tonkin + Taylor

Subject: Initial Seismic Assessment of an existing building

Building address: Queens Drive, Government Gardens, Rotorua

Executive Summary

The Initial Seismic Assessment (ISA) of the building at Queens Drive, Government Gardens, Rotorua, was undertaken using the Initial Evaluation Procedure (IEP) as described in Part B of the guideline document, 'The Seismic Assessment of Existing Buildings - Technical Guidelines for Engineering Assessments', dated July 2017.

The minimum required seismic rating under the earthquake-prone provisions of the Building Act is 34% New Building Standard (%NBS). An IEP was conducted, and it was found that the rating of the building is **15% NBS (IL2), Grade E**. Therefore, the subject building is Potentially Earthquake Prone and in accordance with the current legislation, further action is required regarding the earthquake rating of these buildings.

The seismic rating is limited by the age of the building and inherent earthquake vulnerabilities of buildings from that era. It is expected that new structural systems will be needed at discrete locations to improve the seismic performance of the building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.

1 Introduction

In December 2020, EQ Struc Limited was engaged by Tonkin + Taylor to undertake an ISA for the Blue Baths, the building is owned by Rotorua Lakes Council located at situated at Queens Drive, Government Gardens, Rotorua (see **Figure 1**). We understand and agree that this report will be used by Rotorua Lakes Council, as the Building Owners, in undertaking its regulatory functions in connection with use and occupation of the Blue Baths.

The objective of the ISA is to establish the earthquake rating of the building in terms of %NBS using the Initial Evaluation Procedure (IEP) as described in Part A and B of the guidelines document 'The Seismic Assessment of Existing Buildings – Technical Guidelines for Engineering Assessments' dated July 2017. The assessment was undertaken by conducting a review of the relevant plans and building information within the property file and a visual internal and external inspection on 17th December 2020.



(a) Aerial view

(b) North western elevation

Figure 1 - Aerial and elevation view of the subject building

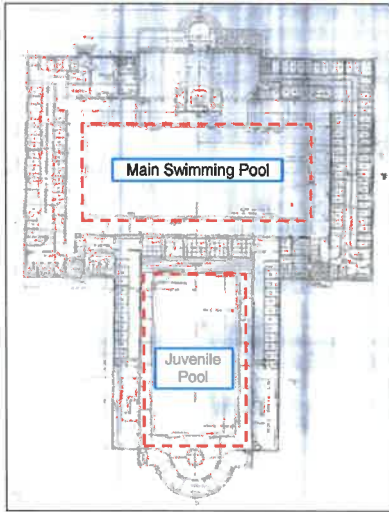
2 Locality and Building Description

Table 1 presents a brief description of the key structural features of the subject building that may influence the response of the building when subjected an earthquake. The descriptions are based on the review of the relevant information within the property file and site observations.

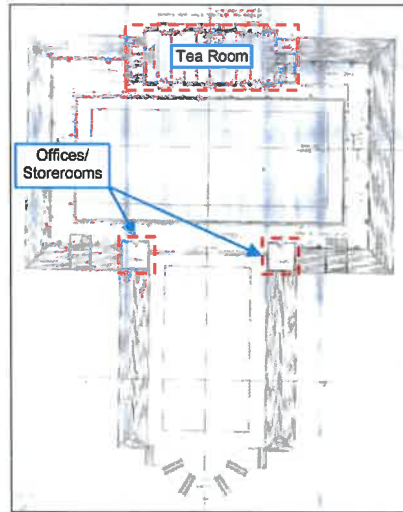
Table 1 - Brief Building Description

General			
Territorial Authority	Rotorua Lakes Council		
Year of Design	Building: 1932 Roof structure addition over courtyard: 2005		
NZ Standards Designed to	Unknown, no seismic provisions for concrete and steel standards Roof structure addition over courtyard: NZS 1170.5: 2004, NZS3101: 2006, NZS3404: 1997		
Heritage Status	Yes		
Building Description			
No. of Storeys	Swimming pool area: One-storey Courtyard area: Two-storey	Area of Typical Floor	~ 2000 m ²
General Building Geometry (see Figure 2, 2a – 2h)	<ul style="list-style-type: none"> • The building was designed originally in 1932 and since then has gone through multiple modifications: <ol style="list-style-type: none"> 1. In 1999, the main swimming pool was converted to an open courtyard. 2. In 2005, a roof structure was added to the courtyard. • The subject building is one-storey at the pool area and two-storey at courtyard area with an approximate height to roof level of 8.5m and is a T-shaped in plan. • There is a terrace (flat roof) where the courtyard is and there is reinforced concrete (RC) balustrades all around, where the roof structure was added. • There is parapet along the covered courtyard. • The Rachel Spring Whangapipiro is situated on the west side of the building. 		
Lateral Load Resisting System (see Figure 2i & 2j)	<ul style="list-style-type: none"> • The lateral resisting system of the building in both directions are RC frames. • The perimeter walls are RC shear walls also contribute to the lateral resisting system. 		
Gravity Structural System (see Figure 2i – 2l)	<ul style="list-style-type: none"> • The entire lateral resisting system is part of the gravity structural system. • The roof system is supported by external walls. 		

	<ul style="list-style-type: none"> • The first floor is supported by regularly spaced concrete frames.
Roof System (see Figure 2k – 2n)	<ul style="list-style-type: none"> • The original roof system is timber rafters. The roof supports terracotta clay tiles. • The new roof (over the courtyard) is bow-shaped and supported by RC balustrade and additional SHS posts. The trusses are connected to the RC balustrades using 2-M12 on each end. • The steel truss has triangular configuration and comprised of circular hollow sections (CHS). • The new roof supports DHS purlins and lightweight metallic cladding.
Floor System (see Figure 2o & 2p)	<ul style="list-style-type: none"> • Both ground and first floors are the in-situ RC slabs.
Foundation System (see Figure 2q – 2s)	<ul style="list-style-type: none"> • The foundation is a historic float type system, where the RC ground beams sits on a possible layer of tar and engineering back fills. • The pool area appears to be only slab a grade.
Structural Elements Shared with Adjacent Titles	<ul style="list-style-type: none"> • N/A – Standalone building
Ground Profile and Identified Geohazards	<ul style="list-style-type: none"> • Levelled ground profile.
Previous Strengthening and/or Significant Alteration	<ul style="list-style-type: none"> • In 1999, the main swimming pool was converted to open courtyard. • In 2005, a roof structure was added to the courtyard.
Other Relevant Information (see Figure 2t – 2y)	<ul style="list-style-type: none"> • Spalling was observed only in few beams. There was one beam with major rusted reinforcements. • Cracks were observed in RC beams, walls, and parapets all around the building. • Short column phenomenon was observed between openings in the walls.



(a) 1932 – Plan view of Ground floor



(b) 1932 – Plan view of First floor



(c) Addition of roof structure to the courtyard which previously was the main pool



(d) Courtyard roof structure view from first floor



(e) The terrace and the parapet on the first floor



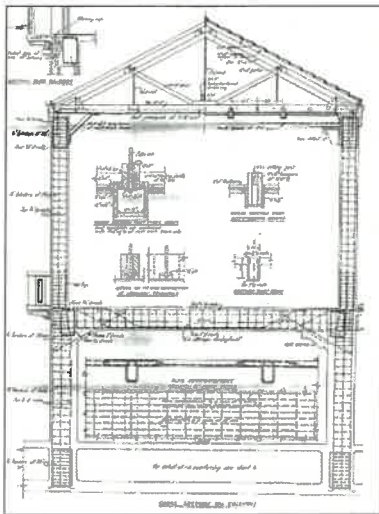
(f) Overview of the courtyard with offices, tea room and parapet



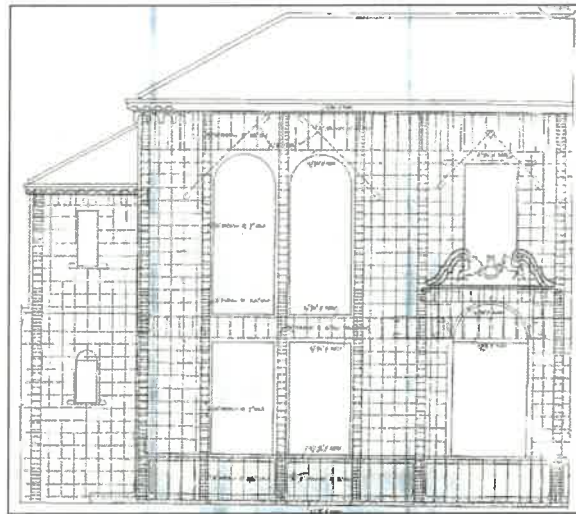
(g) Veranda at the southern side of the pool



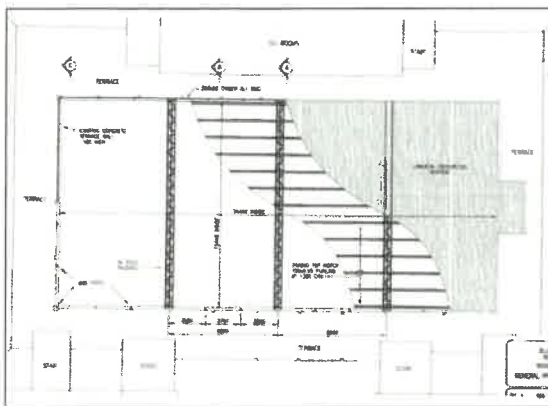
(h) Rachel Spring Whangapipiro on the west side of the building



(i) Section view of RC frames



(j) Elevation view of RC shear perimeter walls



(k) Plan view of the new roof structure over courtyard



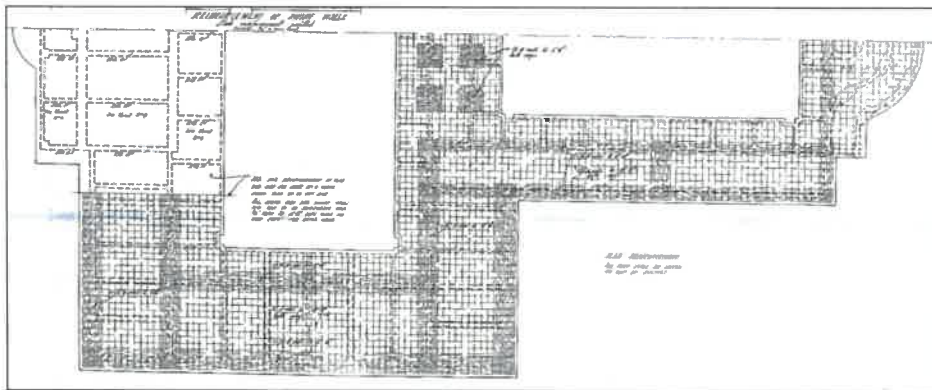
(l) New CHS steel truss



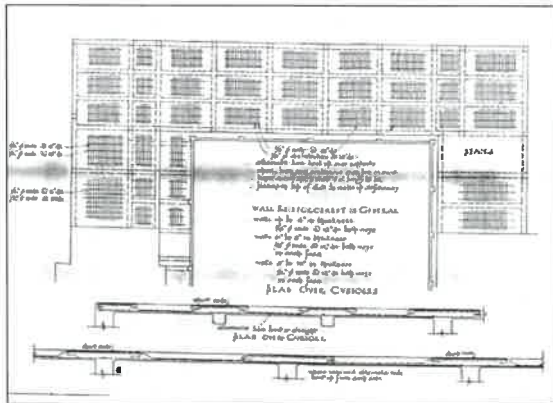
(m) Steel truss connection



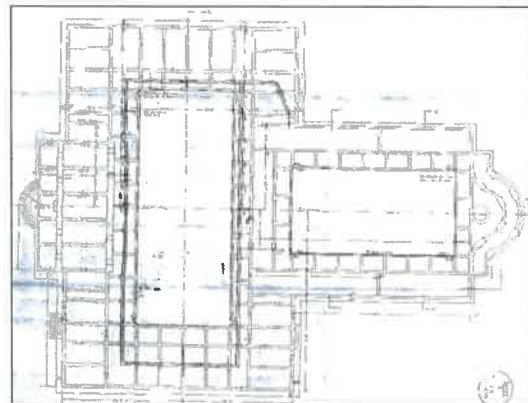
(n) Steel truss connected to RC balustrades by 2-M12



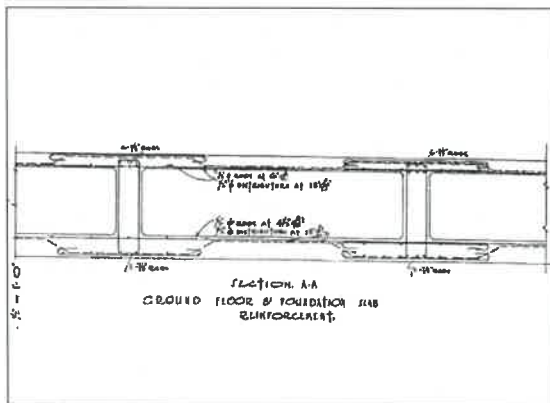
(o) Plan view of the slab reinforcement and foundation



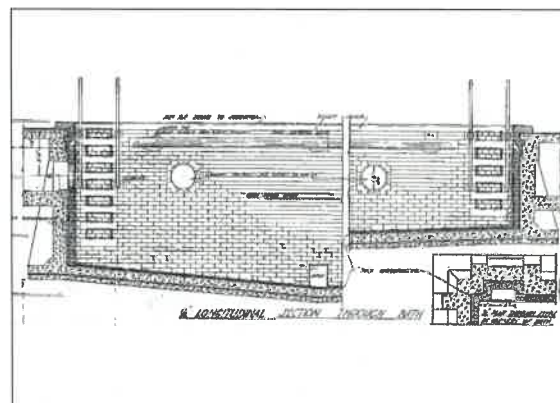
(p) Plan and section view of slab reinforcement



(q) Plan view of foundation



(r) Section view of the ground beam



(s) Section view of the pool



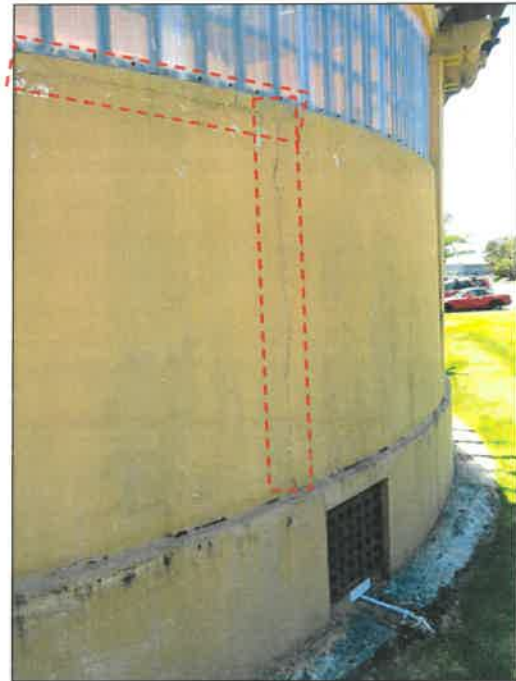
(t) Spalling of a RC beam with rusted reinforcements



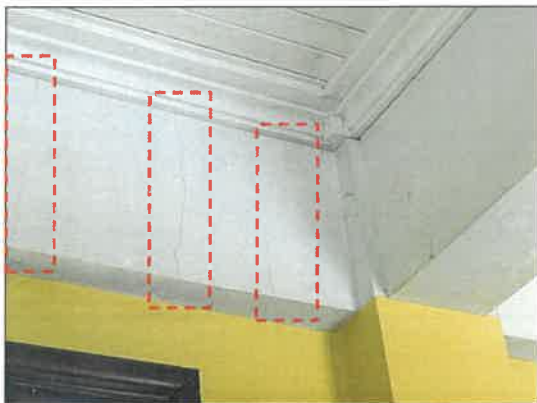
(u) Cracks across the parapet facing the pool



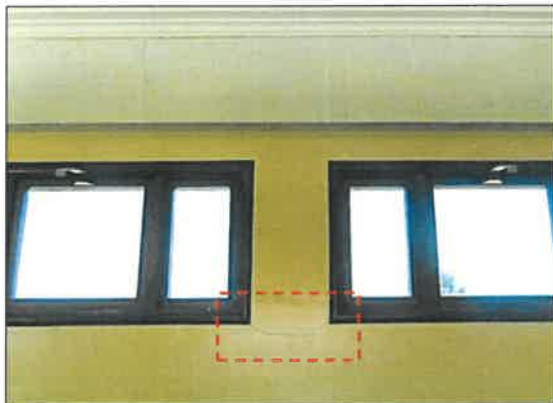
(v) Same parapet showing cracks from first floor terrace



(w) Cracks along and across outside wall at southern wing



(x) Flexural cracks along the beam supporting roof structure



(y) Cracks between opening – Short column phenomenon

Figure 2 - Key structural features of the subject building

3 Assessment Information

Table 1 presents a brief description of the information used to perform the seismic assessment of the subject building.

Table 1 - Assessment Information

Approving Engineer	<div style="background-color: black; width: 150px; height: 15px; margin-bottom: 5px;"></div> CPEng number: 186730 Experience: Undertaken multiple seismic assessments of buildings throughout New Zealand.
Documentation Reviewed	1932: Structural plans 2005: New roof structural plans
Geotechnical Report	Tonkin + Taylor Geotechnical investigations and assessment
Date building inspected and extent of inspection	17 th December 2020, exterior and interior inspected.
Description of any structural testing undertaken and results summary	N/A
Previous assessment reports	2012 – Earthquake assessment by Sigma Consultants Ltd. 2020 – Partial (ongoing) Detailed Seismic Assessment (DSA) of the building by DHS Consulting Ltd.
Other relevant information	N/A

4 Initial Evaluation Procedure (IEP)

The seismic capacity of the subject building was assessed in accordance with the IEP. It must be noted that the IEP assessment is designed as a high-level review of the building’s potential earthquake risks – not as a tool for accurate prediction of building response when subjected to earthquake induced shaking. The basis of the IEP is the comparison of the building codes between different eras, the locality of the building and allowances for the building geometry. During the IEP assessment it was assumed that the subject building was designed and built in accordance with the building standard and good practice current at the time of design and construction. **Table 2** provides a summary of key structural considerations that were made in the IEP calculations.

Table 2 - Key Assessment Factors and Assumptions

Occupancy Type and Importance Level	Leisure centre (event venue and pool), Importance Level 2 (IL2)
Site Subsoil Class	D (Deep or Soft soil), assumption based Geotech report.
Assumed Ductility, Sp Factor	$\mu = 1.25$, $S_p = 0.925$
Considerations in the IEP calculations	<ul style="list-style-type: none"> • No significant pounding risk. • No significant vertical and horizontal geometric irregularities. • There is probability of liquefaction and there is a geothermal activity on site. <p><i>Refer to Appendix A, pages 4a and 5a</i></p>
F Factor	0.7 – There are multiple cracks in different beams, columns, and walls.

5 Assessment Outcomes

Table 3 is taken from Part A of the Technical Guidelines referred to earlier and provides the basis of a proposed grading system and one way of interpreting the %NBS earthquake rating of existing buildings. Occupants in Potentially *Earthquake Prone* buildings (less than 34% NBS) are exposed to more than 10 times the risk that they would be in a similar new building. For buildings that are Potentially *Earthquake Risk* (less than 67% NBS), but not Potentially *Earthquake Prone*, the risk is at least 5 times greater than that of an equivalent new building. Broad descriptions of the life-safety risk can be assigned to the building grades as shown in **Table 3**. **Table 4** presents a summary of the assessment outcomes for the subject building based on the ISA.

Table 3 - Building Grades and Relative Seismic Risk

Percentage of New Building Standard (%NBS)	Building Grade	Approximate Risk Relative to a New Building	Life-safety Risk Description
>100	A+	Less than or comparable to	Low risk
80 to 100	A	1-2 times greater	Low risk
67 to 79	B	2-5 times greater	Low or Medium risk
34 to 66	C	5-10 times greater	Medium risk
20 to <34	D	10-25 times greater	High risk
<20	E	25 times greater	Very high risk

Table 4 - Summary of Assessment Outcomes

Assessed %NBS Rating	Longitudinal: 15% NBS (IL2) Transverse: 15% NBS (IL2)
Seismic Grade and Relative Risk	Grade E – Very high risk.
Potential Critical Structural Weaknesses (CSWs)	<p>Prior to 1935, there was no seismic provisions, therefore the structure was mainly designed for gravity design actions.</p> <p>The main concern is lack of sufficient bending capacity of the RC frames when it is subjected to lateral forces due to an Earthquake, which could result in brittle failure. This is critical especially for the areas that are two-storey i.e., storerooms and tearoom.</p> <p>Another concern is the covered courtyard, where a new roof structure added. The new roof structure is connected to the existing RC balustrades, and it is uncertain if the RC balustrades can withstand the additional shear force due to the roof actions and lateral loads in an event of Earthquake.</p>
Is More Information / Analysis Required?	<p>Yes - A Detailed Seismic Assessment (DSA) is recommended for the subject building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.</p> <p>We also recommend to conduct chloride and carbonation tests on parts of the reinforced concrete structure to determine the levels of chloride and carbonation. Based on these results, we can then determine a scheme to mitigate further expansive corrosion.</p>

6 Seismic Restraint of Non-Structural Items

An IEP does not consider the seismic performance of non-structural items such as ceiling, plant, services or glazing. During an earthquake, the safety of building occupants can be put at risk due to such non-structural elements falling on them. These items should be adequately seismically restrained, where possible, to the NZS 4219:2009 "The Seismic Performance of Engineering Systems in Buildings".

An assessment of the following elements has not been performed - bracing of the ceilings, in-ceiling ducting, services and plant. It was also not checked whether tall or heavy furniture and building fit-out has been seismically restrained or not. These issues are outside the scope of this initial seismic assessment but could be the subject of another investigation.

7 Conclusion and Recommendation

The Initial Seismic Assessment (ISA) of the building at Queens Drive, Government Gardens, Rotorua, was undertaken using the Initial Evaluation Procedure (IEP) as described in Part B of the guideline document. The minimum required seismic rating under the earthquake-prone provisions of the Building Act is 34% New Building Standard (%NBS). An IEP was conducted, and it was found that the rating of the building is **15% NBS (IL2), Grade E**. Therefore, the subject building is Potentially Earthquake Prone and in accordance with the current legislation, further action is required regarding the earthquake rating of these buildings.

The seismic rating is limited by the age of the building and inherent earthquake vulnerabilities of buildings from that era. It is expected that new structural systems will be needed at discrete locations to improve the seismic performance of the building. Further investigation and seismic assessment will improve the understanding of the seismic performance of the building and help in the development of the seismic retrofit scheme.

8 Limitations

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The document is prepared based on a high-level walk-through inspection of the subject building and a review of incomplete structural drawing set. The initial structural assessment was made based on observations relating to the general behaviour of a structure in a seismic event. This assessment does not constitute a complete and accurate assessment of the building as the review has been limited in its scope, time and fee.

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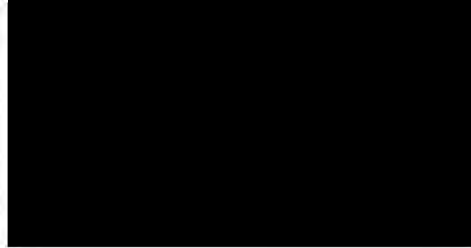
Auckland

78-96 New North Road
Eden Terrace, 1021
Auckland, New Zealand
T: (0)9 929 4633

Wellington

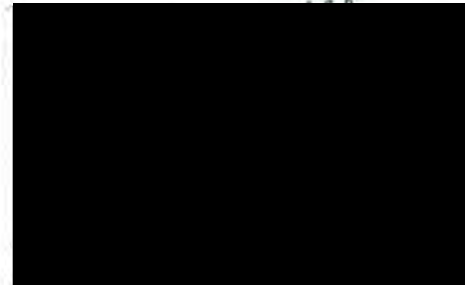
Level 1, 14 Lombard St
Te Aro, 6011
Wellington, New Zealand
T: (0)4 499 5366

Author:





Structural Engineer

Reviewed and approved:



Director, Principal Engineer

Revision Schedule

Rev. No.	Author	Reviewed and Approved for Issue	Date
-			22/12/2020

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Appendix A

Initial Evaluation Procedure

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor **Page 1**

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in the "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-1 Initial Evaluation Procedure Step 1

Step 1 - General Information

1.1 Photos (attach sufficient to describe building)



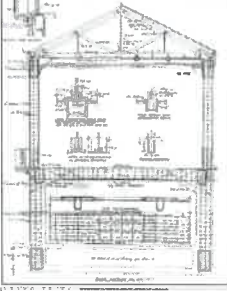
(a) Aerial view of the subject building



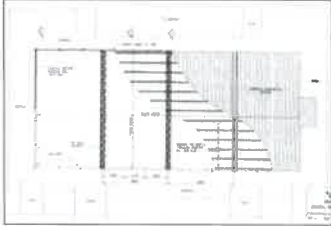
(b) North western elevation of the subject building

NOTE: THERE ARE MORE PHOTOS ON PAGE 1a ATTACHED

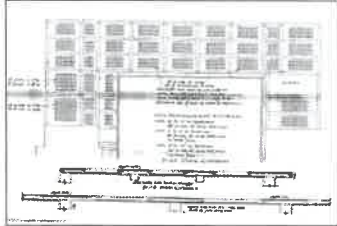
1.2 Sketches (plans etc, show items of interest)



(c) Section view of RC frames



(d) Plan view of the new roof structure over courtyard



(e) Plan and section view of slab reinforcement

NOTE: THERE ARE MORE SKETCHES ON PAGE 1a ATTACHED

1.3 List relevant features (Note: only 10 lines of text will print in this box. If further text required use Page 1a)

1.4 Note Information sources

Tick as appropriate

Visual Inspection of Exterior
Visual Inspection of Interior
Drawings (note type)

<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	
<input checked="" type="checkbox"/>	

Specifications
Geotechnical Reports
Other (list)

<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

1932: Structural plans
2005: New roof structural plans

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor		Page 2
Street Number & Name:	Queens Drive, Government Gardens	Job No.: 31854
AKA:	Blue Baths	By: AA
Name of building:		Date: 21/12/2020
City:	Rotorua	Revision No.:

Table IEP-2 Initial Evaluation Procedure Step 2

Step 2 - Determination of (%NBS)_b
 (Baseline (%NBS) for particular building - refer Section B5)

2.1 Determine nominal (%NBS) = (%NBS)_{nom}

	Longitudinal	Transverse
a) Building Strengthening Data		
Tick if building is known to have been strengthened in this direction	<input type="checkbox"/>	<input type="checkbox"/>
If strengthened, enter percentage of code the building has been strengthened to	N/A	N/A
b) Year of Design/Strengthening, Building Type and Seismic Zone		
	Pre 1935 <input checked="" type="radio"/>	Pre 1935 <input checked="" type="radio"/>
	1935-1965 <input type="radio"/>	1935-1965 <input type="radio"/>
	1965-1976 <input type="radio"/>	1965-1976 <input type="radio"/>
	1976-1984 <input type="radio"/>	1976-1984 <input type="radio"/>
	1984-1992 <input type="radio"/>	1984-1992 <input type="radio"/>
	1992-2004 <input type="radio"/>	1992-2004 <input type="radio"/>
	2004-2011 <input type="radio"/>	2004-2011 <input type="radio"/>
	Post Aug 2011 <input type="radio"/>	Post Aug 2011 <input type="radio"/>
Building Type:	Others	Others
Seismic Zone:	Not applicable	Not applicable
c) Soil Type		
From NZS1170.5:2004, CI 3.1.3 :	D Soft Soil	D Soft Soil
From NZS4203:1992, CI 4.6.2.2 : (for 1992 to 2004 and only if known)	Not applicable	Not applicable
d) Estimate Period, T		
Comment:	h _n = 8.5	8.5 m
	A _c = 1.00	1.00 m ²
Moment Resisting Concrete Frames:	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Moment Resisting Steel Frames:	<input type="radio"/>	<input type="radio"/>
Eccentrically Braced Steel Frames:	<input type="radio"/>	<input type="radio"/>
All Other Frame Structures:	<input type="radio"/>	<input type="radio"/>
Concrete Shear Walls:	<input type="radio"/>	<input type="radio"/>
Masonry Shear Walls:	<input type="radio"/>	<input type="radio"/>
User Defined (input Period):	<input type="radio"/>	<input type="radio"/>
Where h _n = height in metres from the base of the structure to the uppermost seismic weight or mass.	T: 0.45	0.45
e) Factor A: Strengthening factor determined using result from (a) above (set to 1.0 if not strengthened)	Factor A: 1.00	1.00
f) Factor B: Determined from NZSEE Guidelines Figure 3A.1 using results (a) to (e) above	Factor B: 0.03	0.03
g) Factor C: For reinforced concrete buildings designed between 1976-84 Factor C = 1.2, otherwise take as 1.0.	Factor C: 1.00	1.00
h) Factor D: For buildings designed prior to 1935 Factor D = 0.8 except for Wellington and Napier (1931-1935) where Factor D may be taken as 1.0, otherwise take as 1.0.	Factor D: 0.80	0.80
(%NBS)_{nom} = AxBxCxD	(%NBS) _{nom} 2%	2%

WARNING!! This Initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor Page 3

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-2 Initial Evaluation Procedure Step 2 continued

2.2 Near Fault Scaling Factor, Factor E
If $T \leq 1.5\text{sec}$, Factor E = 1

	<u>Longitudinal</u>	<u>Transverse</u>
a) Near Fault Factor, $N(T,D)$ <small>(from NZS1170.5:2004, Cl 3.1.0)</small>	N(T,D): <input type="text" value="1"/>	<input type="text" value="1"/>
b) Factor E = $1/N(T,D)$	Factor E: <input type="text" value="1.00"/>	<input type="text" value="1.00"/>

2.3 Hazard Scaling Factor, Factor F
a) Hazard Factor, Z, for site

Location: Refer right for user-defined locations

Z =	<input type="text" value="0.24"/>	<small>(from NZS1170.5:2004, Table 3.3)</small>
Z ₁₉₉₂ =	<input type="text" value="1"/>	<small>(NZS4203:1992 Zone Factor from accompanying Figure 3.5(b))</small>
Z ₂₀₀₄ =	<input type="text" value="0.24"/>	<small>(from NZS1170.5:2004, Table 3.3)</small>

b) Factor F

For pre 1992	=	1/Z	Factor F: <input type="text" value="4.17"/>	<input type="text" value="4.17"/>
For 1992-2011	=	Z ₁₉₉₂ /Z		
For post 2011	=	Z ₂₀₀₄ /Z		

2.4 Return Period Scaling Factor, Factor G

a) Design Importance Level, I
(Set to 1 if not known. For buildings designed prior to 1985 and known to be designed as a public building set to 1.25. For buildings designed 1985-1976 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.)

I =

b) Design Risk Factor, R_d
(set to 1.0 if other than 1976-2004, or not known)

R_d =

c) Return Period Factor, R
(from NZS1170.0:2004 Building Importance Level) Choose Importance Level

R = 1 2 3 4 1 2 3 4

d) Factor G = IR_d/R

Factor G:

2.5 Ductility Scaling Factor, Factor H

a) Available Displacement Ductility Within Existing Structure
Comment:

μ =

b) Factor H

For pre 1976 (maximum of 2)	=	k_{μ}	Factor H: <input type="text" value="1.16"/>	<input type="text" value="1.16"/>
For 1976 onwards	=	1		

(where k_{μ} is NZS1170.5:2004 Inelastic Spectrum Scaling Factor, from accompanying Table 3.3)

2.6 Structural Performance Scaling Factor, Factor I

a) Structural Performance Factor, S_p
(from accompanying Figure 3.4)
Tick if light timber-framed construction in this direction

S_p =

b) Structural Performance Scaling Factor = $1/S_p$

Factor I:

Note Factor B values for 1992 to 2004 have been multiplied by 0.67 to account for S_p in this period

2.7 Baseline %NBS for Building, (%NBS)_b
(equals (%NBS)_{nom} x E x F x G x H x I)

<input type="text" value="12%"/>	<input type="text" value="12%"/>
----------------------------------	----------------------------------

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgments based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor			Page 4																
Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854																
AKA:	Blue Baths	By:	AA																
Name of building:		Date:	21/12/2020																
City:	Rotorua	Revision No.:																	
Table IEP-3 Initial Evaluation Procedure Step 3																			
Step 3 - Assessment of Performance Achievement Ratio (PAR) <i>(Refer Appendix B - Section B3.2)</i>																			
a) Longitudinal Direction																			
potential CSWs	Effect on Structural Performance <small>(Choose a value - Do not interpolate)</small>	Factors																	
3.1 Plan Irregularity	Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	Factor A	<input style="width: 40px;" type="text" value="1.0"/>																
3.2 Vertical Irregularity	Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	Factor B	<input style="width: 40px;" type="text" value="1.0"/>																
3.3 Short Columns	Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant	Factor C	<input style="width: 40px;" type="text" value="0.7"/>																
3.4 Pounding Potential <i>(Estimate D1 and D2 and set D = the lower of the two, or 1.0 if no potential for pounding, or consequences are considered to be minimal)</i>																			
a) Factor D1: - Pounding Effect																			
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Note: Values given assume the building has a frame structure. For stiff buildings (eg shear walls), the effect of pounding may be reduced by taking the coefficient to the right of the value applicable to frame buildings.</p> </div>																			
Factor D1 For Longitudinal Direction:			<input style="width: 40px;" type="text" value="1.0"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Table for Selection of Factor D1</th> <th style="text-align: center;">Severe <small>0<Sep<.005H</small></th> <th style="text-align: center;">Significant <small>.005<Sep<.01H</small></th> <th style="text-align: center;">Insignificant <small>Sep>.01H</small></th> </tr> </thead> <tbody> <tr> <td style="text-align: left;"><i>Alignment of Floors within 20% of Storey Height</i></td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> <tr> <td style="text-align: left;"><i>Alignment of Floors not within 20% of Storey Height</i></td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.8</td> </tr> </tbody> </table>				Table for Selection of Factor D1	Severe <small>0<Sep<.005H</small>	Significant <small>.005<Sep<.01H</small>	Insignificant <small>Sep>.01H</small>	<i>Alignment of Floors within 20% of Storey Height</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1	<i>Alignment of Floors not within 20% of Storey Height</i>	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8				
Table for Selection of Factor D1	Severe <small>0<Sep<.005H</small>	Significant <small>.005<Sep<.01H</small>	Insignificant <small>Sep>.01H</small>																
<i>Alignment of Floors within 20% of Storey Height</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1																
<i>Alignment of Floors not within 20% of Storey Height</i>	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8																
b) Factor D2: - Height Difference Effect																			
Factor D2 For Longitudinal Direction:			<input style="width: 40px;" type="text" value="1.0"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Table for Selection of Factor D2</th> <th style="text-align: center;">Severe <small>0<Sep<.005H</small></th> <th style="text-align: center;">Significant <small>.005<Sep<.01H</small></th> <th style="text-align: center;">Insignificant <small>Sep>.01H</small></th> </tr> </thead> <tbody> <tr> <td style="text-align: left;"><i>Height Difference > 4 Storeys</i></td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: left;"><i>Height Difference 2 to 4 Storeys</i></td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.9</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: left;"><i>Height Difference < 2 Storeys</i></td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> </tbody> </table>				Table for Selection of Factor D2	Severe <small>0<Sep<.005H</small>	Significant <small>.005<Sep<.01H</small>	Insignificant <small>Sep>.01H</small>	<i>Height Difference > 4 Storeys</i>	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1	<i>Height Difference 2 to 4 Storeys</i>	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1	<i>Height Difference < 2 Storeys</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
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<i>Height Difference < 2 Storeys</i>	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1																
			Factor D <input style="width: 40px;" type="text" value="1.0"/>																
3.5 Site Characteristics - Stability, landslide threat, liquefaction etc as it affects the structural performance from a life-safety perspective																			
Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant			Factor E <input style="width: 40px;" type="text" value="0.7"/>																
There is a potential liquefaction (based on Geotech report)																			
3.6 Other Factors - for allowance of all other relevant characteristics of the building																			
Record rationale for choice of Factor F: There are multiple cracks in different beams, columns and walls.			Factor F <input style="width: 40px;" type="text" value="0.7"/>																
			For ≤ 3 storeys - Maximum value 2.5 otherwise - Maximum value 1.5. No minimum.																
3.7 Performance Achievement Ratio (PAR) <small>(equals A x B x C x D x E x F)</small>			PAR Longitudinal <input style="width: 40px;" type="text" value="0.34"/>																
<div style="border: 1px solid black; padding: 5px;"> <p>WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgments based on them, have not been undertaken, and these may lead to a different result or seismic grade.</p> </div>																			

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor **Page 5**

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-3 Initial Evaluation Procedure Step 3

Step 3 - Assessment of Performance Achievement Ratio (PAR)

(Refer Appendix B - Section B3.2)

b) Transverse Direction

potential CSWs	Effect on Structural Performance (Choose a value - Do not interpolate)	Factors
3.1 Plan Irregularity Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant		Factor A 1.0
3.2 Vertical Irregularity Effect on Structural Performance <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant		Factor B 1.0
3.3 Short Columns Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant		Factor C 0.7
3.4 Pounding Potential (Estimate D1 and D2 and set D = the lower of the two, or 1.0 if no potential for pounding, or consequences are considered to be minimal)		

a) Factor D1: - Pounding Effect

Note:
Values given assume the building has a frame structure. For stiff buildings (eg shear walls), the effect of pounding may be reduced by taking the coefficient to the right of the value applicable to frame buildings.

Factor D1 For Transverse Direction: 1.0

Table for Selection of Factor D1	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Alignment of Floors within 20% of Storey Height	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8

b) Factor D2: - Height Difference Effect

Factor D2 For Transverse Direction: 1.0

Table for Selection of Factor D2	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1
Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1
Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1

Factor D 1.0

3.5 Site Characteristics - Stability, landslide threat, liquefaction etc as it affects the structural performance from a life-safety perspective

Effect on Structural Performance <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant	Factor E 0.7
There is a potential liquefaction (based on Geotech report)	

3.6 Other Factors - for allowance of all other relevant characteristics of the building

For ≤ 3 storeys - Maximum value 2.5
otherwise - Maximum value 1.5.
No minimum.

Factor F 0.70

Record rationale for choice of Factor F:

There are multiple cracks in different beams, columns and walls

3.7 Performance Achievement Ratio (PAR)
(equals A x B x C x D x E x F)

PAR
Transverse 0.34

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor **Page 6**

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-4 Initial Evaluation Procedure Steps 4, 5, 6 and 7

Step 4 - Percentage of New Building Standard (%NBS)

	Longitudinal	Transverse
4.1 Assessed Baseline %NBS (%NBS) _b (from Table IEP - 1)	<input type="text" value="12%"/>	<input type="text" value="12%"/>
4.2 Performance Achievement Ratio (PAR) (from Table IEP - 2)	<input type="text" value="0.34"/>	<input type="text" value="0.34"/>
4.3 PAR x Baseline (%NBS) _b	<input type="text" value="15%"/>	<input type="text" value="15%"/>
4.4 Percentage New Building Standard (%NBS) - Seismic Rating (Use lower of two values from Step 4.3)		<input type="text" value="15%"/>

Step 5 - Is %NBS < 34?

Step 6 - Potentially Earthquake Risk (is %NBS < 67)?

Step 7 - Provisional Grading for Seismic Risk based on IEP
Seismic Grade

Additional Comments (items of note affecting IEP based seismic rating)

Relationship between Grade and %NBS :

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Page 7

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-5 Initial Evaluation Procedure Step 8

Step 8 - Identification of potential Severe Structural Weaknesses (SSWs) that could result in significant risk to a significant number of occupants

- 8.1 Number of storeys above ground level 2
- 8.2 Presence of heavy concrete floors and/or concrete roof? (Y/N) Y

Potential Severe Structural Weaknesses (SSWs):

Note: Options that are greyed out are not applicable and need not be considered.

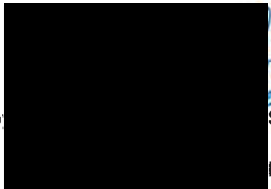
Occupancy not considered to be significant - no further consideration required

Risk not considered to be significant - no further consideration required

The following potential Severe Structural Weaknesses (SSWs) have been identified in the building that could result in significant risk to a significant number of occupants:

1. None identified
2. Weak or soft storey (except top storey)
3. Brittle columns and/or beam-column joints the determinations of which are not constrained by other structural elements
4. Flat slab buildings with lateral capacity reliant on low ductility slab-to-column connections
5. No identifiable connection between primary structure and diaphragms
6. Edge end gap stairs

IEP Assessment Confirmed by



Signature

Name

186730 CPEng. No

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

Initial Evaluation Procedure (IEP) Assessment - Completed for Tonkin + Taylor

Street Number & Name:	Queens Drive, Government Gardens	Job No.:	31854
AKA:	Blue Baths	By:	AA
Name of building:		Date:	21/12/2020
City:	Rotorua	Revision No.:	

Table IEP-1a Additional Photos and Sketches

Add any additional photographs, notes or sketches required below:

Note: print this page separately



(f) Parapet showing cracks from first floor terrace



(g) Cracks along and across outside wall at southern wing



(h) Flexural cracks along the beam supporting roof structure



(i) Cracks between opening – Short column phenomenon



(j) Spalling of a RC beam with rusted reinforcements

WARNING!! This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out "The Seismic Assessment of Existing Buildings" Technical Guidelines for Engineering Assessments, July 2017. This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.

22nd December 2020



██████████
Tonkin + Taylor
Level 1
Mid City Centre
1 Devonport Road
Tauranga

RE: Blue Baths - Queens Drive, Government Gardens, Rotorua

Dear ██████████

In December 2020, EQ Struc Limited was engaged by Tonkin + Taylor to provide Consultant Advice on the structural elements that may deem the Blue Baths building 'Dangerous' or 'Unsafe to occupy'. The building is owned by Rotorua Lakes Council and is located at Queens Drive, Government Gardens, Rotorua (see Figure 1). We understand and agree that this report will be used by Rotorua Lakes Council, as the Building Owners, in undertaking its regulatory functions in connection with use and occupation of the Blue Baths.

A visual internal and external inspection was conducted on 17th December 2020 with ██████████ a representative from Tonkin + Taylor and Brian Stirton, a representative from Rotorua Lake Council.



(a) Aerial view



(b) North elevation

Figure 1: Aerial and elevation views of the subject building

Regardless of structural weaknesses (structural or non-structural elements that do not meet the current requirements of clause B1 of the NZBC with respect to ultimate limit state seismic actions), there were no observed structural weaknesses that result in the building being unsafe to occupy. With reference to the Health and Safety at Work Act (2015) and the New Zealand Building Act (The Building Act), structural weaknesses under seismic actions do not necessarily mean a building is unsafe to occupy.

The Building Act provides a period of several years for strengthening or demolition work to be undertaken. While the risk of harm to people in or around a building featuring structural weaknesses is greater than an equivalent compliant new building, this does not typically require

EQ STRUC Limited
info@eqstruc.co.nz
eqstruc.co.nz
0800 377 8782

Auckland
78-96 New North Road,
Eden Terrace 1021
P (0)9 929 4633

Wellington
Level 1, 14 Lombard Street,
Te Aro 6012
P (0)4 499 5366



short-term action. It is expected that building owners will fulfil their duties under the Building Act when addressing the seismic risk. In brief, Earthquake Prone buildings are not 'Dangerous' buildings by default under the Building Act. Therefore, the decision to close the building based on the earthquake rating is at the building owner's discretion.

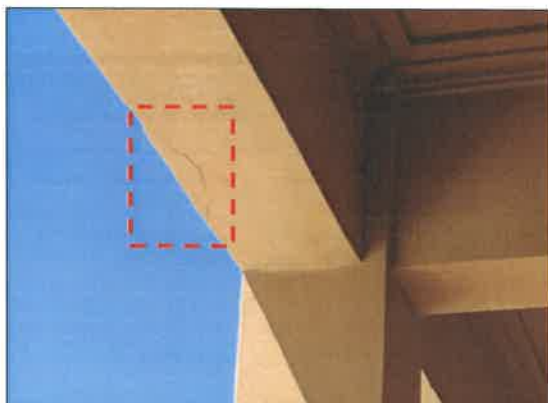
During the site inspection, a few defects, such as cracks within reinforced concrete (RC) beams and walls were observed throughout the building. Many of cracks were covered by plasters and hence, the depth of cracks was unclear. There were a few beams with spalling and corrosion of the reinforcement. A few examples are shown in Figure 2. The Rachel Spring Whangapiro is situated on the western side of the building.



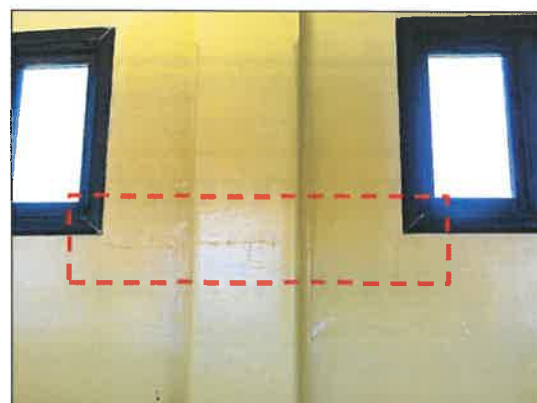
(a) Walkway next to the pool – Cracks across the parapet



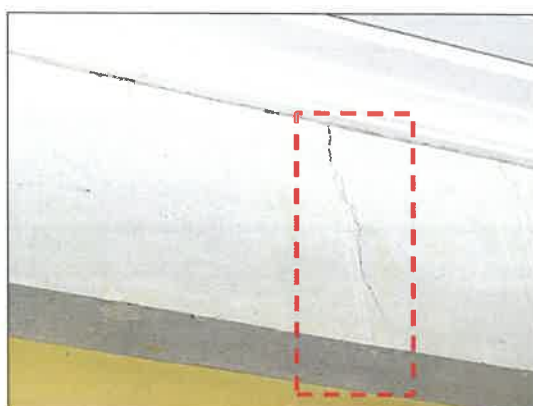
(b) Underneath the first-floor terrace – Spalling of the beam



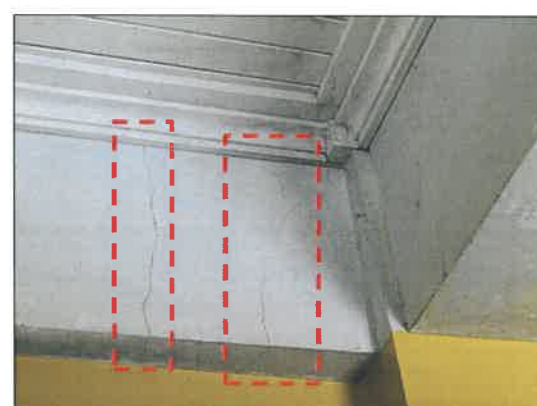
(c) Ladies side pool – Cracks at the bottom of the beam



(d) Ladies bathroom – Cracks covered by plasters



(e) Ladies bathroom – Cracks across the beam



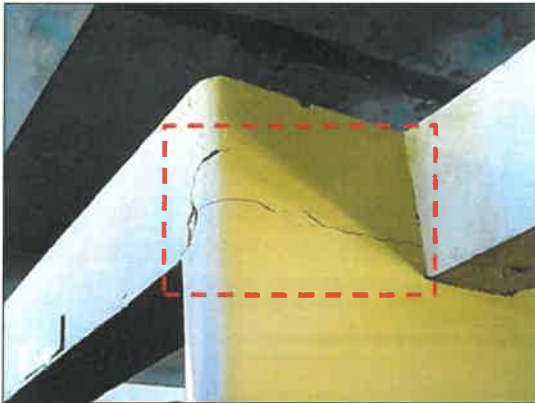
(f) Men bathroom – Cracks across the beam



(g) Storage room on the right-hand side of the pool – Cracks across the wall



(h) Men bathroom – Cracks across the beam



(i) Storage room on the left-hand side of the pool – Cracks across the stall walls



(j) Storage room on the left-hand side of the pool – Cracks across the beam and deteriorated connection between the column and the beam



(k) First floor terrace – Cracks across the parapet



(l) Office on the first floor – Deteriorated connection at the office roof corner



(m) Room within a courtyard area - Spalling of a RC beam with rusted reinforcements



(n) Rachel Spring Whangapipiro on the west side of the building

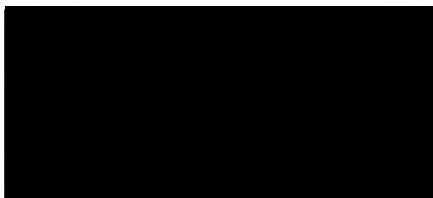
Figure 2: Site inspection photos

These defects are unlikely to result in structural failure in the normal use of the building and there are no short-term remedial actions required. Therefore, the building is not considered as a Life Safety threat.

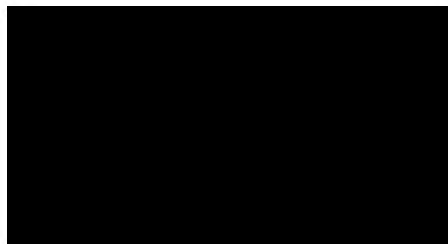
However, it is still an Earthquake Prone building with a rating of **15% NBS (IL2), Grade E**.

In addition to a Detailed Seismic Assessment (DSA), EQ Struc Ltd recommends carrying out chloride and carbonation testing on parts of the reinforced concrete structure to determine the levels of chloride, carbonation, and a scheme to mitigate further expansive corrosion.

If you have any queries, please do not hesitate to contact the undersigned.



Structural Engineer
BE(Hons), MEngNZ



Director, Principal Structural Engineer
BE, NZCE, CPEng, IntPE, MIPENZ, MIEAust, CPEng

Limitations

This document is issued for the party which commissioned it as well as Rotorua Lakes Council, and for specific purpose connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose. EQ Struc Limited accepts no responsibility for the consequences of this document being relied upon by any other party or being used for any other purpose or containing any error or omission which is due to an error or omission in the data supplied to us.

The document is prepared based on a high-level walk-through inspection of the subject building and a review of incomplete structural drawing set. The initial structural assessment was made based on observations relating to the general behaviour of a structure in a seismic event. This assessment does not constitute a complete and accurate assessment of the building as the review has been limited in its scope, time and fee.

From: Brian Stirton
Sent: Friday, 22 January 2021 1:56 pm
To: [REDACTED]
Subject: RE: 5457 - Blue Baths Structural Summary

Hello [REDACTED]

1pm suit me. See you then.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@dhc.nz>
Sent: Friday, January 22, 2021 1:57 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: 5457 - Blue Baths Structural Summary

Hi Brian,

I can do any time from around 10.30-2pm. Whatever would suit you, just let me know. Otherwise I will go to my other site first and give you a call around 1pm.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

Visit us at www.dhc.nz



DHC Consulting Ltd
26 Patey St,
Epsom,
Auckland 1052



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From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, 22 January 2021 1:53 PM
To: [REDACTED]@dhc.nz>
Subject: RE: 5457 - Blue Baths Structural Summary

Hello [REDACTED]

Give me a call when you are close to arriving at the BB and I will meet you there. (I have another meeting at 3pm, so I can't make it after that).

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED]@dhc.nz>
Sent: Friday, January 22, 2021 10:00 AM
To: [REDACTED]@bluebaths.co.nz>; Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: 5457 - Blue Baths Structural Summary

Hi Brian,

Happy new year, hope you managed to have a good holiday.

Just following up on my email below and the voice message I have left you. Just wondering whether there was anything else you needed or if you would like to discuss this further.

I am going to be down in Rotorua on Monday if you wanted me to pop in in the afternoon to discuss anything regarding the Blue Baths project.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

[REDACTED]
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From: [REDACTED]
Sent: Wednesday, 16 December 2020 4:51 PM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>; Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: 5457 - Blue Baths Structural Summary

Hi [REDACTED] Brian,

Please find attached summary of the current structural assessment including; our current position, the additional investigations required, the analysis we intend to undertake, and the peer review.

Brian, I have also included a profile of DHC and our experience for your information. It would be good to setup a teams or zoom meeting later this week or early next week to discuss further and make sure I have covered off all the scope you are expecting.

I have uploaded all the documentation here. The laser scan is 12GB so will take a while to down load if you want to.

<https://www.dropbox.com/sh/0zdp34ia9z62c9i/AAAIkYLrkbKL4KsrRW58SuFta?dl=0>

The dropbox includes;

1. Original drawing scans
2. Laser scan of structure
3. 3D model of structure built from the scan for drawings
4. Geotechnical Assessments
 - a. Cheal
 - b. AoS, including peer review
 - c. T&T
5. Original structural assessment provided by Rotorua Lakes Council
6. Concept architectural drawings and renders
7. Initial discussions with structural peer reviewer

I haven't included;

1. Architectural drawing model (concept)
2. Structural analysis model (partially complete)
3. Structural drawing model (partially complete)
4. X-ray scanning
 - a. We only did a spot check when we were on site to confirm that the drawings accurately represented the as built condition, which they seemed to match in the areas we were able to scan.

- b. Our plan was to identify any areas that weren't covered in the drawings, the areas that were identified as structurally critical in the DSA process, the areas that we were altering as part of the new scheme, and do a comprehensive scan of these areas to ensure that what we had analysed was accurate.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

Visit us at www.dhc.nz



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Unless you advise by return to the contrary, you acquiescence with these terms will be presumed.

From: Brian Stirton
Sent: Friday, 22 January 2021 3:46 pm
To: [REDACTED]
Subject: RE: 5457 - Blue Baths Structural Summary

Hello [REDACTED]

Yes 1pm at the Blue Baths

Regards

Brian

Sent from my Samsung Galaxy smartphone.

----- Original message -----

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Date: 22/01/21 3:28 PM (GMT+12:00)
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: 5457 - Blue Baths Structural Summary

Hi Brian is there a meeting time sorted for Monday yet pls? I would like to attend if so.

[REDACTED]
[Get Outlook for iOS](#)

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, January 22, 2021 11:37:14 AM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: 5457 - Blue Baths Structural Summary

Hello [REDACTED]

Yes that is fine.

I'll give [REDACTED] a call and sort out a meeting.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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From: [REDACTED]@bluebaths.co.nz>
Sent: Friday, January 22, 2021 10:32 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Fwd: 5457 - Blue Baths Structural Summary

Hi Brian

I would appreciate it if we could take up the opportunity to meet with [REDACTED] on Monday afternoon at the BB. Are you agreeable/available to do this please?

Thanks

[REDACTED]

[Get Outlook for iOS](#)

From: [REDACTED]@dhc.nz>
Sent: Friday, January 22, 2021 10:00 AM
To: [REDACTED] 'Brian Stirton'
Subject: RE: 5457 - Blue Baths Structural Summary

Hi Brian,

Happy new year, hope you managed to have a good holiday.

Just following up on my email below and the voice message I have left you. Just wondering whether there was anything else you needed or if you would like to discuss this further.

I am going to be down in Rotorua on Monday if you wanted me to pop in in the afternoon to discuss anything regarding the Blue Baths project.

Kind Regards,

[REDACTED]
B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

[REDACTED]

Visit us at www.dhc.nz



DHC Consulting Ltd
26 Patey St,
Epsom,
Auckland 1052



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From: [REDACTED]
Sent: Wednesday, 16 December 2020 4:51 PM
To: [REDACTED]@bluebaths.co.nz>; Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: 5457 - Blue Baths Structural Summary

Hi [REDACTED] Brian,

Please find attached summary of the current structural assessment including; our current position, the additional investigations required, the analysis we intend to undertake, and the peer review.

Brian, I have also included a profile of DHC and our experience for your information. It would be good to setup a teams or zoom meeting later this week or early next week to discuss further and make sure I have covered off all the scope you are expecting.

I have uploaded all the documentation here. The laser scan is 12GB so will take a while to download if you want to.

<https://www.dropbox.com/sh/0zdp34ja9z62c9i/AAAIkYLrkbKL4KsrRW58SuFta?dl=0>

The dropbox includes;

1. Original drawing scans
2. Laser scan of structure
3. 3D model of structure built from the scan for drawings
4. Geotechnical Assessments
 1. Cheal
 2. AoS, including peer review
 3. T&T
5. Original structural assessment provided by Rotorua Lakes Council
6. Concept architectural drawings and renders
7. Initial discussions with structural peer reviewer

I haven't included;

1. Architectural drawing model (concept)
2. Structural analysis model (partially complete)
3. Structural drawing model (partially complete)
4. X-ray scanning
 1. We only did a spot check when we were on site to confirm that the drawings accurately represented the as built condition, which they seemed to match in the areas we were able to scan.
 2. Our plan was to identify any areas that weren't covered in the drawings, the areas that were identified as structurally critical in the DSA process, the areas that we were altering as part of the new scheme, and do a comprehensive scan of these areas to ensure that what we had analysed was accurate.

Kind Regards,
[REDACTED]

B.E. (Civil), CPeng, CMEngNZ, IntPE(NZ), APEC
Senior Structural Engineer

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Unless you advise by return to the contrary, you acquiescence with these terms will be presumed.

From: Samantha Rowley
Sent: Tuesday, 26 January 2021 8:23 am
To: Brian Stirton
Subject: Asbestos - Blue Baths
Attachments: Asbestos Management Plan_Blue Baths.pdf; G-00116 - Central Blue Baths Building - Management.pdf

Hi Brian

Here are the asbestos management plan and asbestos survey for Blue Baths.

Contractor carrying out work will need to complete Appendix 2 of the asbestos management plan and send us a signed copy.

Sam

Samantha Rowley, MFMANZ Kaitohu Pūtea - Business Partner, Business Performance Team, Finance
P: 07 351 8188 | E: samantha.rowley@rotorualc.nz | W: rotorualakescouncil.nz



Asbestos Management Plan

Site: Blue Baths, Government Gardens, Rotorua

Date	25 January 2021
Prepared by	Samantha Rowley
Reviewed By	Brian Stirton
Next Review Date	January 2022



Version Control

Version Number	Commentary	Date Issued	Released by (Name)	Approved by (Name)
1	Original Version	25/01/2021	Samantha Rowley	Brian Stirton
2				

Related Documentation

Document Name	Author
Asbestos Materials Survey Report: G-00116, Date: 13/04/18	Asbestos Surveying Solutions
Management and Removal of Asbestos ACOP (Nov 2016)	WorkSafe NZ
Health and Safety at Work (Asbestos) Regulations 2016	MBIE - NZ Government

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1. Asbestos Management Policy Statement

This Asbestos Management Plan (AMP) sets out how Rotorua Lakes Council (the council) will manage asbestos or Asbestos Containing Materials (ACM) at the named site in this Asbestos Management Plan, including:

- The identification and location of asbestos and ACM
- Decisions, and reasons for the decisions, about how the asbestos risks are managed
- Procedures for recording incidents or emergencies involving asbestos in the workplace
- Information about workers carrying out work involving asbestos, including
 - Information and training that has been or will be provided
 - Their roles and responsibilities
 - Any health monitoring that has been or will be conducted.

This AMP is in accordance with New Zealand's Health and Safety at Work (2015) Act, New Zealand's Health and Safety at Work (Asbestos) Regulations 2016, Approved Code of Practice: Management and Removal of Asbestos (Nov 2016) and WorkSafe's Guideline: Conducting Asbestos Surveys (Oct 2016) and company policy.

The plan is developed in consultation with business management, the company health and safety team and approved by the Property Manager.

2. Asbestos Management Overview

To ensure council employees, contractors and visitors to the building do not disturb ACMs and are safe from potential exposure, the following asbestos management procedures are in place:

- There is a designated person responsible for the management of asbestos on the buildings (referred to as the Responsible Person); including the updating of existing records;
- A system to ensure ACMs are identifiable through appropriate labelling and/ or colour coding;
- To ensure all relevant employees and third parties are aware of asbestos as deemed necessary (including the keeping of appropriate training records);
- Periodically inspect ACMs on a regular basis as specified within the Asbestos Management Plan (AMP);
- To periodically review this Asbestos Management Plan;
- Provide access to the Asbestos Management Plan and relevant documentation to workers carrying out maintenance and/or construction works (this includes IT contractors) prior to the commencement of works;
- Ensure that, where deemed necessary, a refurbishment or demolition survey is undertaken when the company undertakes any construction works;
- Seek advice and guidance from suitably qualified and experienced competent persons on any asbestos related work activities that are to be undertaken (this may include, but is not limited to: re-inspections, asbestos removal works, environmental cleans, encapsulation works & air-monitoring);
- Record and advise any instances of suspected exposure to ACMs so that the council can provide professional assistance and guidance (refer emergency procedures);

A copy of this plan, the buildings asbestos surveys and register, and any other relevant information as detailed in the council's guidance, will be held in a central folder which can be found at reception

or digitally. This central folder will be made readily available to all those who need access to the asbestos documentation.

3. General Asbestos Management Information

3.1 Duty Holder

The council has appointed the Chief Executive as the legally designated Officer (unless an alternative person has been identified and appointed by the council).

3.2 Responsible Persons

The following member of staff has been nominated to be responsible for managing asbestos on the council's buildings. This person shall be known as the Asbestos Coordinator:

Name	Title	Phone Number
Samantha Rowley	Property Compliance Officer	027 213 8752

The member of staff detailed above has attended a suitable and recent asbestos awareness training course. Details of these records can be found in their training records. All contractors conducting asbestos related work or who may come into contact with asbestos and/or ACM must undergo asbestos awareness training prior to working on this site.

The council is responsible for ensuring that other employees are suitably trained to undertake the duties of the Asbestos Coordinator so there is adequate back up support if the Asbestos Coordinator is unavailable. Regular meetings shall be held with the delegated personnel to ensure that current issues are addressed, and proactive measures are in place to deal with the management of identified and presumed asbestos and ACM. These personnel are:

Name	Title	Phone Number

The Asbestos Coordinator is the main contact point for all asbestos-related matters and assumed responsibility for the safe management of asbestos in the workplace.

The Asbestos Coordinator shall:

- Know the presence and location of identified or presumed asbestos and ACM within the workplace;
- Be aware of the risks associated with the presence of asbestos;
- Be aware of the measures in place to control those risks including the contents of this AMP;
- Ensure that matters related to asbestos risk management are communicated to workers, whether they be employees, contractors or visitors;
- Ensure that employees are given appropriate training and that these records are kept;
- Undertake inductions of contractors prior to the commencement of works at the site;
- Ensure that all contractors and their workers are suitably trained and competent to undertake asbestos related and/or asbestos removal works;
- Ensure that actions required to control the risk associated with the presence of asbestos are implemented;

- Conduct routine visual inspections of workplace facilities and document this in the Asbestos Register;
- Consult with the Health and Safety Representative (HSR) regarding the above, including conducting inspections, maintaining the workplace’s Asbestos Register and all proposed refurbishments, demolitions and minor works involving asbestos and/or ACM;
- Report on all asbestos-related concerns that have been discussed in employee meetings and/or through other forums; and
- Maintain and update the Asbestos Management Plans and record any asbestos-related hazards and incidents into the in-house Incident Management System.

3.3 Employee Awareness

All employees within the council will be provided with relevant information on:

- Types and location of ACMs (via the Asbestos Register and this AMP);
- The visual means of identifying ACMs (labels/colour coding);
- How to avoid risks from asbestos (e.g. not disturbing); and
- How to report damage to ACMs, or concerns about ACMs (e.g. to the Duty Holder)

New and temporary employees will be inducted onto site as part of their general work-start induction carried out by an approved and competent person.

Any periodic updates on any asbestos related works will be communicated to employees via email and staff notice boards.

4. Identification and Management of Asbestos on site

4.1 Asbestos Survey and Register

The Asbestos Survey Report provides accurate information on the location, extent and condition of ACMs. The information in the survey report will be used to form the asbestos register which is a key component of the management plan for the council.

The council will ensure that an up-to-date copy of the asbestos survey/register and this Asbestos Management Plan will be available at the building. These documents shall be available to all workers, including contractors and visitors.

Building Address	Location of documents
Government Gardens, Rotorua	Reception

All contractors must report to the above location upon arrival to the site. Contractors must complete a contractor induction prior to commencing any works; this will include a full review of this Asbestos Management Plan and Appendix 3. The induction must be completed by the Asbestos Coordinator or other delegated person as listed in Section 3.2 of this Plan.

4.2 Identification of Asbestos Containing Materials.


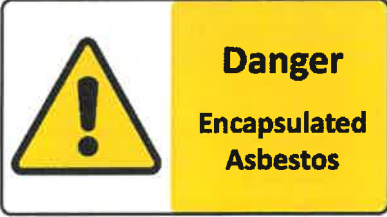
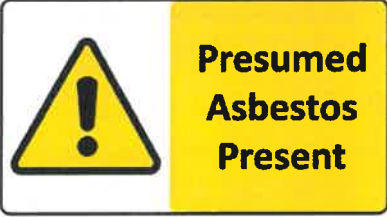
The areas of the site which have asbestos containing materials (ACMs) that require management will be listed in the asbestos register within the asbestos survey report. Controls and ongoing management plans


for areas identified and/or presumed to contain asbestos are included later in this plan in Appendix 3: Asbestos Register.

Where areas are identified as inaccessible or as having limited access during the Asbestos Management Survey, it is assumed that ACM are present within these areas. These areas will be treated as though they contain ACM unless determined otherwise through surveying and sampling.

Where ACMs have been identified, the Asbestos Coordinator will ensure that the materials are capable of being identified visually by all employees and contractors using the following:

- Asbestos containing materials in rooms, corridors and other areas accessible to all employees and contractors will be identified by a label/ sticker similar to those contained within the table below; and
- Asbestos containing materials in other areas will be labelled using labels commensurate with legislative requirements i.e. a 'tombstone' label (see table below).

Examples of acceptable asbestos stickers/ labels to be used	
<p>Asbestos 'tombstone' sticker Normal industry standard label used.</p> <p>The following examples of labels/ stickers are suitable for use within the company premises as part of the management control procedures outlined within this Asbestos Management Plan.</p> <p>These examples are not exhaustive and other appropriate stickers/ labels may be used.</p>	
<p>Encapsulated asbestos sticker Used when ACMs have been encapsulated</p>	
<p>Presumed asbestos sticker Used when similar materials have been proven to contain asbestos</p>	

<p>Warning sticker</p> <p>Can be used in communal areas where ACMs are present; may be used in place of other types specified above which may cause unnecessary concern</p>	
--	--

4.3 Monitoring and Inspections

The council will ensure formal visual inspections of all known ACMs are carried out as stipulated within Appendix 3: Asbestos Management Register by the Asbestos Coordinator. These will be recorded.

Any damaged or deteriorated materials found will be reported according to the procedures detailed later in this plan at Section 7.0 (Incidents/Emergencies Involving Asbestos).

The AMP must be reviewed every five years by a Competent Person.

4.4 Control and Management Measures

Effective control and management are necessary to protect the inhabitants of buildings and structures containing ACM. When deciding how to manage asbestos in premises a number of factors should be considered including the method of control and the management options. The following list provides recommended control/management options available to address ACM.

Management actions

The following is a list of some common management actions:

- **Isolate / restrict access;**
 - Implement restricted zones with controlled entry.
 - Develop a Permit to work system.
- **Inform and train;**
 - Suitable and sufficient labels / warning signs.
 - Provide Asbestos Awareness training, induction and refresher training.
- **Monitor - the condition of asbestos containing materials;**
 - Conduct periodic inspections using a competent assessor / surveyor
- **Safe System of Work - for reporting damage / deterioration**
 - Maintain and update the asbestos register when any changes occur or a control action has been implemented.

Control actions

The following is a list of some common management actions:

- **Repair - damaged asbestos containing materials;**
 - Use appropriate fillers and coatings
- **Encapsulate - (using a substance that penetrates to the substrate of the ACM) to prevent release of airborne fibres;**
 - Alkali resistant paint for cement products.
 - High solids emulsion paint for insulating boards.
 - Proprietary bituminous or semi-flexible polymeric coatings.

- **Enclose / protect;**
 - Provide or erect physical barriers or covering panels.
- **Remove;**
 - Use licensed asbestos removal companies who apply appropriate control measures during the removal process.

5. Worker Protocols (Asbestos Related Work)

5.1 Workers

Everyone attending the site to carry out any works is required to access and review the asbestos survey, register and AMP before undertaking any work. These documents will be provided by the person/s responsible for managing asbestos or other relevant member of staff within the company.

All contractors undertaking any work at the site will be required to sign that they have reviewed the documents using Appendix 1 of this AMP.

Where there are ACMs that are to be worked on or nearby, no work will take place until an appropriate method statement of work is produced, and the Permit-to-Work procedures detailed in Appendix 2 have been authorised and implemented.

5.2 Emergency Services

Emergency Services personnel attending site must be given access to the asbestos survey, register and plan on arrival.

5.3 Maintenance and Servicing (Asbestos Related Works)

Only competent personal shall be allowed to undertake asbestos related works.

The Asbestos Coordinator shall:

- Ensure only competent persons undertake asbestos related maintenance and servicing works;
- Ensure all people undertaking the asbestos-related work are aware of the presence of asbestos. Prevent any work activity that might expose them or others nearby to airborne asbestos;
- Ensure appropriate decontamination facilities are available and used properly;
- Ensure anything within the asbestos work area is decontaminated or safely contained before it is removed from the work area;
- Ensure asbestos waste is disposed of safely and regularly in line with regulatory requirements;
- Ensure the asbestos work area is separated from the rest of the workplace and the work area is sign-posted and barriers put in place to ensure other workers and people do not enter the area;
- Identify any asbestos that workers may encounter when doing asbestos-related work; if it is not possible to positively identify the presence of asbestos, assume asbestos containing materials are present;
- Ensure, if there is uncertainty about whether the airborne contamination standard for asbestos might be exceeded, air monitoring is undertaken;
- Ensure only WorkSafe approved methods for asbestos-related work are used;
- Keep up-to-date records for all Asbestos related works.

6. Asbestos Related and Removal Works

6.1 Refurbishment or Demolition Works

Where the council commissions any construction works involving an upgrade, refurbishment or demolition work, a refurbishment or demolition survey must be undertaken to locate and describe, as far as is reasonably practicable, all ACMs in the area where the work will take place.

This will be undertaken in accordance with the requirements of the:

- Health and Safety at Work (Asbestos) Regulations 2016.
- Code of Practice: Management and Removal of Asbestos (WorkSafe, 2016)
- Good Practice Guidelines Conducting Asbestos Surveys October 2016
- HSG264 – Asbestos: The survey guide
- Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres (Department of Labour, 1994)
- Building Act 2004

Where necessary, the company will seek further advice and guidance from a competent person.

6.2 Asbestos Works and Removals

The council will ensure that any works undertaken involving ACMs will be carried out within the requirements of Health and Safety at Work (Asbestos) Regulations 2016. Guidance from WorkSafe New Zealand can be found at: <http://construction.worksafe.govt.nz/guides/acop-management-and-removal-of-asbestos/#26-duties-for-licensed-asbestos-removal-work>

Only appropriately licensed asbestos removal contractors should be selected to undertake asbestos removal works. Where less than 10m² of non-friable material is being removed, no license is required however the contractor must be competent to undertake the removal work.

WorkSafe must be notified of planned removal works 5 days prior to work commencing; excluding where under 10m² of non-friable material is being removed.

Control measures will be detailed in the method statement/Asbestos Removal Control Plan (ARCP) provided by the contractor. This document will be prepared by the asbestos removal contractor in consultation with the client, the PCBU with management or control of the workplace and workers and their representatives. The nominated supervisor is responsible for ensuring that each individual worker is aware of their responsibilities to follow risk control measures as detailed in the ARCP.

Where ACMs are to be removed, or encapsulated etc., a competent person/Licensed Asbestos Assessor will be contacted (consultant) prior to any such works taking place. The consultant will be provided with a copy of the contractor's method statement or ARCP; the consultant will review this document and confirm that the control measures and removal method/s are appropriate for the works to proceed.

The company asbestos register/AMP will be updated accordingly following completion of the asbestos related and/or removal works.

Where the company requires further guidance in relation to the Health and Safety at Work (Asbestos) Regulations 2016, the support of the consultant will be sought.

6.3 Maintaining Documentation

The Asbestos Coordinator shall maintain records of all completed Safe Work Method Statements, Asbestos Removal Control Plans, Air Monitoring Reports and Clearance Certificates.

6.4 Air Monitoring and Clearance Inspections

As per the Health and Safety at Work (Asbestos) Regulations 2016 a clearance inspection must be undertaken by a Competent Person for Class B Clearance work and a Licensed Asbestos Assessor is required to undertake Class A Clearance work. Guidance from WorkSafe New Zealand can be found at: <http://construction.worksafe.govt.nz/guides/acop-management-and-removal-of-asbestos/#28-clearance-inspections>

A visual clearance inspection is required following the removal of 10m² or more of non-friable (Class B) asbestos or ACM. The Asbestos Assessor will undertake air monitoring and/or surface sampling if deemed necessary.

The removal of contaminated soil will require soil sampling for validation in line with the *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia*, May 2009.

During the removal of friable (Class A) asbestos there are more stringent control measures:

- Air monitoring for respirable fibres during the removal process to demonstrate that fibres are not being released from the removal enclosure;
- Four Stage Clearance Inspection – to be completed by a Licenced Asbestos Assessor
 - Stage 1 – preliminary check of site condition and job completeness
 - Stage 2 – thorough visual inspection inside the enclosure / work area
 - Stage 3 – surface sampling and air monitoring for respirable fibres
 - Stage 4 – final assessment post enclosure / work area dismantling

In the event of friable removals air monitoring is conducted during the removal work and as part of the clearance inspection. Results of air monitoring should be compared with the recommended control levels outlined in Section 30.3.1 of the Health and Safety at Work Act, Approved Code of Practice – Management and Removal of Asbestos.

The recommended control levels, as listed below, provide an indication of the occupational exposure levels relevant to quality control and re-occupancy of an area.

Exposure level

< 0.01 fibres/mL – trace level (controls are acceptable and in the event of a clearance the area can be re-occupied)

> 0.01 fibres/mL but < 0.02 fibres/mL – above recommended control levels, review and enhance controls

> 0.02 fibres/mL – stop work immediately, review controls and implement more stringent control measures. Do not proceed with work until subsequent air monitoring results are < 0.01 fibres/mL

Note: Air monitoring concentration of 0.02 fibres/ml or greater must be notified to WorkSafe as a notifiable event.

6.5 Re-occupying an Area Following Asbestos Removals

Where works have involved the removal of asbestos and/or ACM, the Asbestos Coordinator shall ensure that no one reoccupies an area where the removal works have occurred until:

- Air monitoring, if required, has been undertaken during and after removal of asbestos and associated reports show no evidence of airborne fibres once asbestos removal work has been completed; and
- A Clearance Certificate has been issued confirming that the works have been completed and the area is safe to occupy.

7. Incidents/ Emergencies Involving Asbestos

7.1 Disturbance/ Damage to Non-Friable ACM

Where non-friable asbestos containing materials (ACMs) have been damaged, or damaged materials and deterioration are identified during the routine inspection processes, the council will instigate the emergency procedure below.

The Responsible Person (Asbestos Co-Ordinator) shall:

- Secure the area affected ensuring no access is permitted (signage should be displayed, and barriers erected where appropriate);
- Review the impact to the council's operational procedures i.e. if a work area is affected, alternative work arrangements would need to be implemented as the contaminated area cannot be used;
- Contact: Inform the Council Health and Safety Manager and notify them of the damage;
- The council's Safety Manager/responsible person will then provide advice and guidance as necessary. This may include, but is not limited to, inspecting the damage reported, arranging an air monitoring test and arranging and managing any associated remedial works required;
- Maintain controlled access to the area, until such time as a formal clearance inspection has been undertaken. Clearance guidance is outlined in section 28 of the Approved Code of Practice: Management and Removal of Asbestos 2016; and
- Maintain good communication with council staff and relevant other parties, providing updates as necessary to ensure the access arrangements are not breached.

7.2 Disturbance/ Damage to Friable ACM

Where friable ACMs have been disturbed, knocked, damaged or there is significant deterioration identified, Rotorua Lakes Council will immediately engage a suitably trained person to seal the area and implement control measures to eliminate/minimise the risk of respirable fibre release from the area.

The areas adjoining should be vacated until air monitoring has been completed and returned results under the workplace exposure standard of 0.1 fibres/mL averaged over an 8-hour period as stipulated in the WorkSafe approved Workplace Exposure Standards and Biological Exposure Indices, 8th Edition.

As soon as reasonably practicable, the area should be enclosed as a Class A removal enclosure and both removal and decontamination works should take place. Sections 3.11 and 3.12 of this Plan detail the requirements for this work to take place.

7.3 Incapacitated Person in an Asbestos Hazard Area

Where a person becomes incapacitated in an asbestos hazard area, immediately assess the risk of moving the person to a 'safer area'. *DO NOT TOUCH OR MOVE THE PERSON IF YOU SUSPECT ELECTROCUTION!* Isolate power source before proceeding. If they can be moved to a less hazardous area, then do so.

If they cannot be moved, then call 111 and request the fire service's HAZMAT Rescue team. Ambulance staff do not have the equipment or training to enter into an asbestos hazard area.

Where the incapacitated person requires CPR, it is an individual's choice as to whether they remove their mask within the hazardous environment to administer CPR to the incapacitated person or wait for the emergency services.

Emergency services will require a competent person to assist them with decontamination of the incapacitated person.

Appendix 1: Contractor Review of Asbestos Register/ Survey

This sheet should be signed by all those carrying out repair/maintenance work on the premises (including voluntary workers or employees) that will involve disturbing the fabric of the premises.

Persons signing this sheet are signing to say that they have seen the Asbestos Register/Survey Report and Management Plan and checked whether there is any known or presumed asbestos in the area in which they are working.

Where an asbestos containing material is suspected, no work should be carried out until all relevant procedures have been carried out as detailed in this plan.

Date	Company	Details of Work	Print Name	Signature

Date	Company	Details of Work	Print Name	Signature

Appendix 2: Asbestos Permit to Work Proforma

Permit to Work Issuing Instructions - to be used when any work on/near asbestos containing materials is to take place:

Date(s) for works/ Activity:	Times:
Section 1: Location and description of Work:	
Section 2: Asbestos Register/ Survey	
2.1 Has the Asbestos Register/ Survey been reviewed by the employee/ contractor?	Yes/ No
2.2 Will the work disturb any asbestos containing material?	Yes/ No
<i>If the answer to 2.2 is YES – proceed to Section 3; if NO – proceed to Section 4</i>	Yes/ No
Section 3: Work ON asbestos containing materials	
3.1 Contractors competency to work on ACM's been confirmed?	Yes/ No
3.2 Work planned in accordance with the requirements of the health and safety at work (Asbestos) Regulations 2016	Yes/ No
3.3 The PCBUs have been informed and given approval?	Yes/ No
<i>Work can commence once the above have been confirmed</i>	
Section 4: Activity/ Work NEAR asbestos containing materials	
4.1 Has a method statement been prepared for the work?	Yes/ No
<i>The activity/ works can commence once the above is confirmed but must stop immediately if any suspicious materials are discovered</i>	
Section 5: Client Approval	
Signature:	Date:
Print Name: (Responsible Person)	
Section 6: Employee/ Contractor Confirmation	
In confirm that the activity/ work will be undertaken in accordance with the requirements of This permit and company asbestos management plan.	
Signature:	Date:
Print Name:	
Company Name:	

Appendix 3: Asbestos Management Register

This section outlines all known and presumed asbestos / ACM in the building.

Area/space	Asbestos Present? (Y/N)	Reported/ Survey Date	Surveyed by	Material/ Suspect Material Product Type	Approx Extent/M ²	Asbestos Type	Risk Priority (1-3)	Condition	Recommended action
Ground Floor, Reception 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Fuse Box - Resinous Board - Asbestos reinforced composites	0.5M ²	Presumed Asbestos	P2 (07-09) - regarded as having medium potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
Disabled Toilet 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	3 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
Ground Floor, Reception 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	5 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
Ground Floor, Kitchen 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	20 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.

Ground Floor, Dishes Room 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	5 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
1st Floor Conference Room Kitchen 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	5 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
1st Floor Conference Room Toilet 01	Y	8/02/2018	Asbestos Surveying Solutions Ltd	Floor - Vinyl Sheet (Beige) - Asbestos reinforced composites	3 m ²	Presumed Asbestos	P3 (01-06) - regarded as having low potential to release fibres if disturbed	Bonded stable	Manage & re-inspect annually. If asbestos material is disturbed it should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.

ASBESTOS MATERIALS SURVEY REPORT



Central Blue Baths Building
Queens Drive
Government Gardens
Rotorua

Attention: Bruce Erasmus

Report: G-00116

Date: 13/04/2018

Asbestos Surveying Solutions
12 Seaview Road, Whakatane 3120
Mobile: 021 222 7125
Email: michael@asbestosnz.co.nz

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1. Executive Summary

The following table lists the asbestos containing materials that have been identified, presumed or strongly presumed. The recommended actions required to manage the asbestos containing materials are summarised.

For a detailed explanation of the recommended action required to manage your asbestos containing materials please refer to the "Section 7. Risk Rating & Priority Actions" of this report.

Client: Rotorua Council
Rotorua Lakes Council
1051 Haupapa Street
Rotorua

Site: Central Blue Baths Building
Queens Drive
Government Gardens
Rotorua, 3010

Date of Survey: 8/02/2018

Surveyor: Winslow Headifen and Cody Marr




Reviewed By: Michael Parker



1.1 ACMs Identified or Presumed:

Risk Rating P1 Materials – (High potential to release fibres if disturbed)

- The following Category P1 materials were identified.

Material Description	Location	Sample ID	Material score	Extent	Asbestos Type
No high-risk asbestos containing materials found					

Risk Rating P2 Materials – (Medium potential to release fibres if disturbed)

- The following Category P2 materials were identified.

Material Description	Location	Sample ID	Material score	Extent	Asbestos Type
Fuse Box - Resinous Board	Reception 01	P	7 - P2	0.5 m ²	Presumed Asbestos

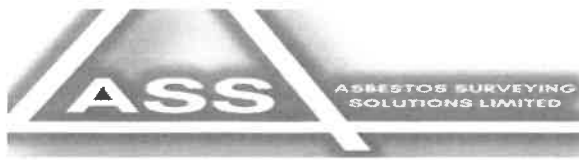
Risk Rating P3 Materials – (Low potential to release fibres if disturbed)

- The following Category P3 materials were identified:

Material Description	Location	Sample ID	Material score	Extent	Asbestos Type
Floor - Vinyl Products	Disabled Toilet 01	P	3 - P3	3 m ²	Presumed Asbestos
Floor - Vinyl Products	Reception 01	P	3 - P3	5 m ²	Presumed Asbestos
Floor - Vinyl Products	Kitchen 01	P	3 - P3	20 m ²	Presumed Asbestos
Floor - Vinyl Tiled	Dishes Room 01	P	4 - P3	5 m ²	Presumed Asbestos
Floor - Vinyl Tiled	1st Floor Conference Room Kitchen 01	P	4 - P3	5 m ²	Presumed Asbestos
Floor - Vinyl Tiled	1st Floor Conference Room Toilet 01	P	4 - P3	3 m ²	Presumed Asbestos

HSG264 Material Risk Assessment categories:

- Risk Rating P1 (10 - 12) – regarded as having a High potential to release fibres if disturbed
- Risk Rating P2 (07 - 09) – regarded as having Medium potential to release fibres if disturbed
- Risk Rating P3 (01 - 06) – regarded as having Low potential to release fibres if disturbed



2. Introduction.

Asbestos Surveying Solutions was commissioned by Bruce Erasmus of Rotorua Council, to undertake an asbestos survey of Central Blue Baths Building, Queens Drive, Government Gardens, Rotorua, 3010. This survey program has been undertaken as a Management survey.

The reason for selecting this survey is to enable the client to manage the risks from retained asbestos in their premises.

A management survey is the standard survey carried out to support the workplace PCBU in identifying asbestos in the workplace. Its purpose is to identify, so far as is reasonably practicable, the presence and location of any asbestos or assumed ACM in a building which could give rise to a risk of exposure to respirable asbestos fibres. This includes ACM that could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation.

Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties. It may depend on factors such as the type of building, the nature of construction, accessibility etc.

For workplace PCBUs, identifying asbestos or ACM in the workplace is the first step for managing asbestos exposure risks.

The survey report can be used as a basis to start developing a management plan and prioritise actions but does not constitute a management plan.

The asbestos management process is listed below. The first step is 'identify asbestos and ACMs and identify ways to control them.

1. Identify asbestos and ACMs
2. Assess risks from asbestos and ACMs and identify ways to control them
3. Develop an asbestos management plan
4. Processes for accidents, incidents, emergencies
5. Review asbestos management plan's effectiveness

Identifying asbestos will help those people in the workplace who do not need to work in asbestos-containing areas to avoid exposure to asbestos. People working in these areas will know what to expect and what precautions to take to keep safe.

3. Scope of the Report.

The survey was conducted on the following date; 8/02/2018 in normal working hours by Winslow Headifen and Cody Marr in accordance with the following regulations and guidelines:

- Health and Safety at Work Act 2015
- Health and Safety at Work (Asbestos) Regulations 2016
- Code of Practice: Management and Removal of Asbestos (WorkSafe, 2016)
- Good Practice Guidelines Conducting Asbestos Surveys October 2016
- HSG264 – Asbestos: The survey guide
- Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres (Department of Labour, 1994)
- Building Act 2004;

The Survey Plan should reflect the requirements of your business / organization in accordance with Good Practice Guidelines Conducting Asbestos Surveys October 2016 and HSE guidance document HSG264 Asbestos: The survey guide.

The scope of the asbestos audit is restricted to identification of hazardous materials in the form of;

- Asbestos containing materials
- Synthetic Material Fibre (SMF)

Note: The management survey was undertaken by using visual identification of the materials both inside and outside of the building, ceiling tiles were lifted to see inside the ceiling cavity and the floor voids were reviewed. No Samples were taken.

- A management survey can be completed using a combination of sampling ACMs and presuming ACMs or, indeed, just presuming.
- Any materials presumed to contain asbestos must also have their condition assessed (i.e. a material assessment).

Our professional judgement and experience was utilised in the identification and location of materials suspected of containing asbestos (ACM) in accessible areas. Note that it is not possible to guarantee that all asbestos materials have been located and identified without total removal of materials and demolition of building structures / components. Therefore, care should be taken when alterations are being made to areas not previously inspected. Should any employee / contractor or subcontractor reveal any suspected asbestos materials due to refurbishment / demolition works, work should cease immediately in the affected area until these materials have been identified.

4. Recommendations & Conclusions

During the asbestos survey of Central Blue Baths Building, no samples were submitted for identification, 7 areas were presumed to contain asbestos.

Site specific recommendations in respect to the location and condition of asbestos materials identified during the course of this inspection are detailed in the Asbestos register. In considering the management of asbestos materials identified to date, these recommendations should be taken into consideration.

Recommendations:

- The graded P2 was in a bonded stable condition and these areas shall be review and monitor for damage annually. Appropriate asbestos removal measures should be taken as soon as practicable if damage occurs. All graded P2 items if damage occurs shall be sealed off/removed and the wearing of correct PPE/RPE shall be worn until remedial works take place.
- The asbestos materials found at are graded P3 was in a stable condition and these areas shall be reviewed and monitored for damage annually, but the material could be broken if disturb and if this happens the asbestos material should be removed under controlled conditions by an appropriately certified asbestos contractor as soon as practicable.
- All identified/presumed/strongly presumed asbestos to be appropriately identified and subject to risk assessment, management, and re-inspection.
- The Asbestos Containing Material that is graded bonded and, in a poor/unstable condition; minimising disturbance and the removal of the material or encapsulation may be appropriate control of the risk of exposure to personnel.
- For bonded Asbestos Containing Material's in a good/fair and stable condition, encapsulation, on-going maintenance and periodic inspection should be appropriate controls for the management plan.
- All un-seal asbestos materials or presumed materials are showing signs of age and should be encapsulated with applying a protective mixture of chemical treatment and paint/membrane coatings. This will help with the bonded material being left in place long term and not having to be removed the material which would be very costly.
- No signs are to be attached to asbestos containing materials with fasteners that are to be inserted after drilling through the fibre cement. The general warning below recommends avoidance of this practice.

- Care must be taken to avoid drilling holes in any identified, strongly presumed or presumed asbestos containing materials, as to do so, may release asbestos airborne fibres contaminating the surrounding area(s) and putting personnel at risk.
- Do not sand or water blast any identified, strongly presumed or presumed asbestos containing materials, as to do so, will release asbestos airborne fibres contaminating the surrounding area(s) and putting personnel at risk.
- Labelling may be required to clearly identify and provide warning of the presence of asbestos and hazardous materials have been identified labels should be erect at the access points to warn personnel of the risk or affixed on the material. Regardless of the labelling system chosen within the facility, all visitors who are about to undertake works on-site are to view the site-specific asbestos register.
- Where Asbestos / Presumed Materials are to remain in-situ, the site PCBU should ensure these are maintained in good condition, labelled and regularly (at least annually or every 5 yearly as a minimum) re-inspected in accordance with the Health and Safety at Work (Asbestos) Regulations 2016 and the Code of Practice: Management and Removal of Asbestos (WorkSafe, 2016).
- Implement an Asbestos Management Plan and review process in compliance with the Regulation. Instigate regular inspections, to record and update details of presumed asbestos containing materials. Review the arrangement under the management plan at least annually.

Conclusions:

All identified presumed asbestos is to be appropriately identified and subject to risk assessment under the legislation in the form of a refurbishment / demolition survey before any works begins on site and the PCBU is to provide a copy of the register to all parties leasing premises and to any sub-contractors before they begin work.

All identified ACMs that are to be disturbed during the scheduled works must be removed prior to demolition works commencing by an appropriately licensed contractor and in accordance with the Health and Safety at Work (Asbestos) Regulations 2016.

Hazardous materials identified on site should be noted within the refurbishment / demolition works Asbestos Removal Control Plan (ARCP) & Safe Work Method Statement (SWMS) and any safe systems of work put into place if required.

Contractors should use appropriate Personal Protective Equipment (PPE) including skin, eye and respiratory protection (RPE).

It is imperative that demolition or refurbishment works cease pending further sampling if materials suspected of containing asbestos or hazardous materials are encountered.

The removal of the Synthetic Mineral Fibre should be left in a static state and only removed when needed and the removal method should follow the Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres.

When removing SMF of pipes the contractor should be aware of any asbestos residue / traces that has been left on the pipes.

Engage an independent asbestos consultant and a licensed electrician to confirm the presence / absence of asbestos within presumed items such as electrical backing boards and electrical wire wrapping prior to any demolition works.

Since it is difficult to use engineering controls to control airborne dust levels for some dust removal work situations (e.g. enclosed ceiling spaces & wall cavities), there is a greater reliance on personal respiratory protection to provide a safe working environment for the workers carrying out this task. Hence, any workers undertaking such tasks should have adequate training in correct work procedures, including the selection, use and maintenance of personal protective equipment and good personal hygiene practices. Prompt asbestos removal / clean-up of the asbestos hazards are recommended.



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The findings of the survey are brought to the attention of those persons who are likely to come in contact with asbestos; or any tradespeople carrying out alterations or maintenance to the affected areas should be made aware of the products in the building before they begin working in the areas marked as hazardous in this report.

Prior to any removal taking place, a scope of work incorporating safe work systems should be prepared to ensure the removal is carried out in accordance with the applicable Legislation. Legislation controlling asbestos work includes the:

- Health and Safety at Work Act 2015
- Health and Safety at Work (Asbestos) Regulations 2016
- Code of Practice: Management and Removal of Asbestos (WorkSafe, 2016)
- Good Practice Guidelines Conducting Asbestos Surveys October 2016
- HSG264 – Asbestos: The survey guide
- Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres (Department of Labour, 1994)
- Building Act 2004

In addition to the above, it is recommended that in accordance with the applicable legislation, that the asbestos register shall be given to the contractors that are performing any works / refurbishment / demolition works on Central Blue Baths Building.

The findings of this report should not be solely relied upon in obtaining costs for proposed asbestos work. Any proposed removal of the asbestos / SMF should be undertaken against a detailed scope of works or specification.



5. Limitations.

The inspection of the building was undertaken using minor destructive methods and is limited to the areas outlined in this report. The following area was not audited or needs further investigation;

- Ground Floor Storage Room 01 – Locked No Access

To the extent permitted by law, Asbestos Surveying Solutions will not be responsible in tort, contract or otherwise for any loss, damage, including for any personal injuries or death, or any consequential loss, loss of markets and pure economic loss, suffered by the customer, whether or not the loss or damage occurs in the course of performance by Asbestos Surveying Solutions of this contract or in events which are in the contemplation of Asbestos Surveying Solutions and / or the customer or in events which are foreseeable by Asbestos Surveying Solutions and / or the customer.

To the extent that liability has not been effectively excluded by the proceeding clause, then Asbestos Surveying Solutions limits its liability to:

- The supply of service again, but the taking of further samples is at the clients cost; or
- No other warranty, expressed or implied, is made.

6. Inspection Report Scope.

The scope of works for this project was as follows:

- Inspect representative and accessible areas of the building structures on site to identify the following materials Asbestos & SMF materials.
- Identify the types of hazardous materials and their condition.
- Assess the risks posed by the materials.
- Compile a hazardous material register for the site in line with any future proposed refurbishment / demolition works (for removal purposes only).
- Take photographs of suspected hazardous materials.
- Recommend removal methods and necessary actions of the identified / presumed hazardous materials.

6:1 Central Blue Baths Building Asbestos Register

Identification Number (S / P / S P)	Location	Hazardous Material	Estimated quantity	Friability	Product Type	Condition of Material	Surface Treatment	Asbestos Type	Material Assessment Score	Priority Assessment Score	Total Risk Assessment Score	Risk Rating	Accessibility	Comment
P	Ground Floor Disabled Toilet Floor - Vinyl Products	Presumed Asbestos	3m ²	Bonded		0	0	3	3	5	8	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	Ground Floor Dishes Room Floor - Vinyl Tiled	Presumed Asbestos	5m ²	Bonded	1	0	0	3	4	6	10	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	Ground Floor Kitchen Floor - Vinyl Products	Presumed Asbestos	20m ²	Bonded		0	0	3	3	6	9	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	Ground Floor Reception Fuse Box - Resinous Board	Presumed Asbestos	0.5m ²	Bonded	1	0	3	3	7	7	14	P - 2	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	Ground Floor Reception Floor - Vinyl Products	Presumed Asbestos	5m ²	Bonded		0	0	3	3	6	9	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	1st Floor Conference Room Kitchen Floor - Vinyl Tiled	Presumed Asbestos	5m ²	Bonded	1	0	0	3	4	6	10	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually
P	1st Floor Conference Room Toilet Floor - Vinyl Tiled	Presumed Asbestos	3m ²	Bonded	1	0	0	3	4	6	10	P - 3	Unlikely to be disturbed	Manage & Re-Inspect - Re-Inspect Annually

NAD – No Asbestos Detected; CHR – Chrysotile; AMO – Amosite; CROC – Crocidolite; SMF – Synthetic Mineral Fibre - * Actinolite series; ORF – Organic fibre

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6:2 Summary Central Blue Baths Building Asbestos Register:

During the course of the asbestos survey; no samples were taken; 7 areas were presumed to contain asbestos.

Materials found to contain asbestos have been assessed according to the potential health risk that they pose to building occupants during normal operations of the building; this is based upon their likelihood to release fibres in the air. The health risk categories are as following;

- The following areas where containing Asbestos Materials – Blue Baths Building Ground 1st Floor Conference Room Kitchen, Blue Baths 1st Floor Conference Room Toilet, Blue Baths Ground Floor Disabled Toilet, Blue Baths Ground Floor Dishes Room, Blue Baths Ground Floor Kitchen, Blue Baths Ground Floor Reception
 - High Risk – 0 situations were identified
 - Moderate Risk – 1 situations were identified
 - Low Risk – 0 situation were identified
 - Negligible – 6 situations were identified
- The following area was presumed to contained Synthetic Mineral Fibres (SMF) – N/A
- The following samples had no asbestos detected (NAD) – All other areas of the building not mentioned above.

6:2.1 Findings from summary of Central Blue Baths Building;

- ❖ **Asbestos containing materials were found in the following areas from the asbestos surveys as stated below;**
 - Floor - Vinyl Products
 - Floor - Vinyl Tiled
 - Fuse Box - Resinous Board
- ❖ **SMF was found in 0 locations and care should be taken when removing & working in these areas stated below;**
 - No SMF materials found

NAD – No Asbestos Detected; CHR – Chrysotile; AMO – Amosite; CROC – Crocidolite; SMF – Synthetic Mineral Fibre - *Actinolite series; ORF – Organic fibre

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6:2.2 Material Assessment Algorithm Guide:

Product Type	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement.	1	AIB, Millboard, other low density insulating boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.	2	Thermal insulation (e.g. pipe and boiler lagging) sprayed asbestos, loose asbestos, asbestos mattresses and packing.	3	
Damage or Deterioration	Good condition: No visible damage.	0	Low damage: a few scratches or surface marks; broken edges on boards, tiles etc.	1	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.	2	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface Treatment	Composite materials containing asbestos: reinforced plastics, resins, and vinyl tiles.	0	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated), asbestos cement sheets etc.	1	Unsealed AIB, or encapsulated lagging and sprays.	2	Unsealed lagging and sprays.
Asbestos Type	Chrysotile	1	Amphibole asbestos excluding Crocidolite.	2	Crocidolite.	3	

NAD – No Asbestos Detected; CHR – Chrysotile; AMO – Amosite; CROC – Crocidolite; SMF – Synthetic Mineral Fibre - *Actinolite series; ORF – Organic fibre

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7. Risk Rating & Priority Actions.

Priority 1 (P1) – (10 – 12)

Action: Restrict Access to Area & Organise Asbestos Removal Works as soon as practicable

Area has Asbestos Materials, which are either damaged or are being exposed via continual disturbance. Due to these conditions, there is an increased potential for exposure and/or transfer of the material to other locations with continued unrestricted use of the area. Representative asbestos fibre monitoring should be conducted in the area during normal building operation where recommended. Prompt abatement of the asbestos hazard is recommended.

As an interim, restrict access.

Priority 2 (P2) – (7 – 9)

Action: Organise Asbestos Removal Works as soon as practicable

Area has Asbestos Materials with a potential for disturbance due to the following conditions:

- Material has been disturbed or damaged and its current condition, while not posing an immediate hazard, is unstable.
- The material is accessible and when disturbed, can present a short-term exposure risk.
- Demolition, renovation, refurbishment, maintenance, modification or new installations, involving air-handling systems, ceilings, lighting, fire safety systems or floor layout.

Appropriate asbestos removal measures should be taken as soon as practicable. A negligible exposure risk exists if materials remain under the control of an Asbestos Management Plan (AMP).

Priority 3 (P3) – (1 – 6)

Action: No Short-Term Remedial Works Required & Review periodically

Area has Asbestos Materials, where:

- The condition of friable Asbestos Materials is currently stable and has low potential of being disturbed.
- The Asbestos Material is currently in a non-friable form, may have slight damage, but does not present an exposure risk unless cut, drilled, sanded or otherwise abraded.

This presents a low risk of exposure where the materials are left undisturbed under the control of an Asbestos Management Plan (AMP). Defer any major action unless materials are to be disturbed as a result of maintenance, refurbishment or demolition operations.

7:1 Material Condition

The assessment factors for material condition include:

- The evidence of physical deterioration and / or water / weather damage.
- The degree of friability of the Asbestos Material.
- The surface treatment, lining or coating (if present).
- The likelihood to sustain damage or deterioration in its current location and state.

7:2 Physical Condition and Damage

The condition of the Asbestos Material is rated as either being good, fair or poor. Good refers to a material that has not been damaged or has not deteriorated. Fair refers to a material having suffered minor cracking or de-surfacing. Poor describes a material which has been damaged or its condition has deteriorated over time.

• Good – Green

• Fair – Yellow

• Poor - Red



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7:3 Friability and Surface Treatment

The degree of friability of Asbestos Materials describes the ease of which the material can be crumbled, and hence to release fibres, and takes into account surface treatment.

- Friable asbestos (e.g. sprayed asbestos beam insulation (limpet), pipe lagging) can be easily crumbled and is more hazardous than non-friable asbestos products.
- Non-friable asbestos also referred to as bonded asbestos, typically comprises asbestos fibres tightly bound in a stable non-asbestos matrix or impregnated with a coating. Examples of non-friable asbestos products include asbestos cement materials (sheeting, pipes etc), asbestos containing vinyl floor tiles, compressed gaskets and electrical backing boards.

8. Photos of Suspect Asbestos

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	Ground Floor
Location	01	Location Description	Dishes Room
Sample Number	Presumed	Extent	5 m ²
Item	Floor	Material	Vinyl Tiled

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	1	Material Score
Extent of Damage	Good	0	4
Surface Treatment	Self-Sealed	0	Risk
Asbestos Type	Presumed Asbestos	3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	Ground Floor
Location	01	Location Description	Reception
Sample Number	Presumed	Extent	0.5 m ²
Item	Fuse Box	Material	Resinous Board

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	1	Material Score
Extent of Damage	Good	0	7
Surface Treatment	Unsealed	3	Risk
Asbestos Type	Presumed Asbestos	3	Medium

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	Ground Floor
Location	01	Location Description	Kitchen
Sample Number	Presumed	Extent	20 m ²
Item	Floor	Material	Vinyl Products

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	Material Score
Extent of Damage	Good 0	3
Surface Treatment	Self-Sealed 0	Risk
Asbestos Type	Presumed Asbestos 3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: The same material was present throughout the Kitchen floor area.

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	Ground Floor
Location	01	Location Description	Reception
Sample Number	Presumed	Extent	5 m ²
Item	Floor	Material	Vinyl Products

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.		Material Score
Extent of Damage	Good	0	3
Surface Treatment	Self-Sealed	0	Risk
Asbestos Type	Presumed Asbestos	3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	Ground Floor
Location	01	Location Description	Disabled Toilet
Sample Number	Presumed	Extent	3 m ²
Item	Floor	Material	Vinyl Products

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	Material Score
Extent of Damage	Good 0	3
Surface Treatment	Self-Sealed 0	Risk
Asbestos Type	Presumed Asbestos 3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	1st Floor
Location	01	Location Description	Conference Room Toilet
Sample Number	Presumed	Extent	3 m ²
Item	Floor	Material	Vinyl Tiled

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	1	Material Score
Extent of Damage	Good	0	4
Surface Treatment	Self-Sealed	0	Risk
Asbestos Type	Presumed Asbestos	3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

SURVEY RESULT SHEETS

Area	Blue Baths	Floor	1st Floor
Location	01	Location Description	Conference Room Kitchen
Sample Number	Presumed	Extent	5 m ²
Item	Floor	Material	Vinyl Tiled

MATERIAL ASSESSMENT

Product Type	Asbestos Reinforced Composites etc.	1	Material Score
Extent of Damage	Good	0	4
Surface Treatment	Self-Sealed	0	Risk
Asbestos Type	Presumed Asbestos	3	Low

Main Photo



Close-Up Photo



Recommendation: Manage & Re-Inspect

Comments: Good Condition

9. Photos where No Asbestos Identified

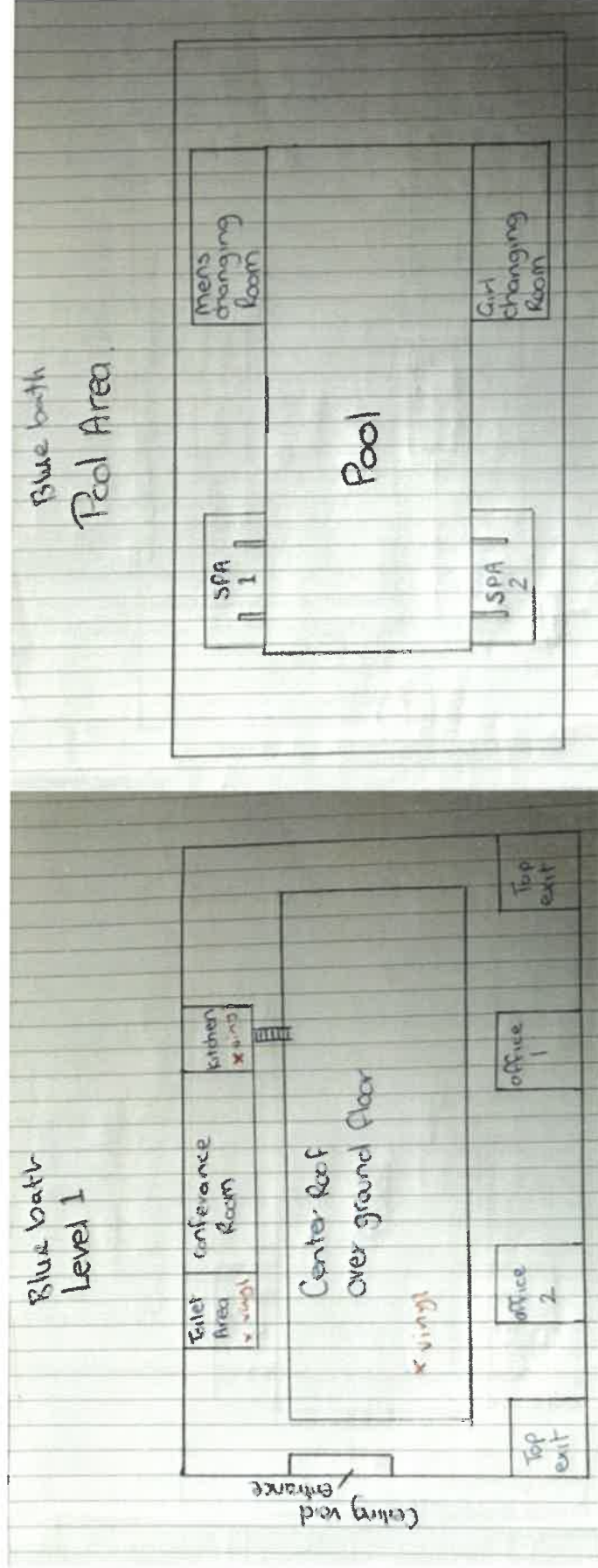
External Exterior 01



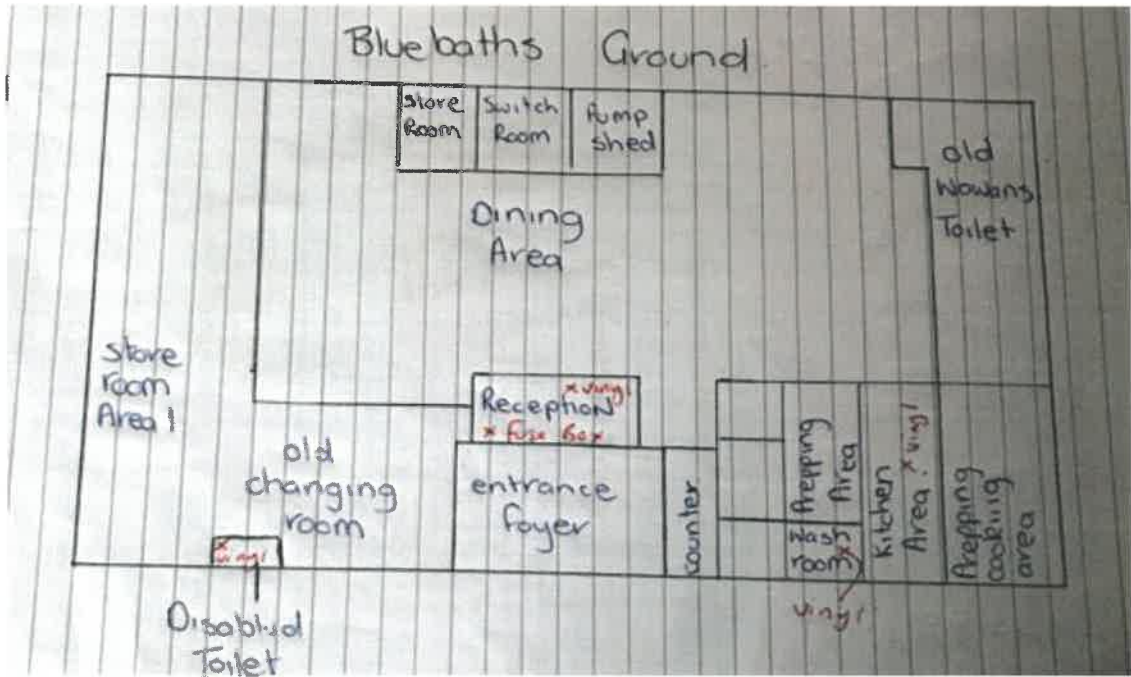
External Exterior 01



10. Plan of Central Blue Baths Building Sample Area:



11. Bulk Sample Identification Central Blue Baths Building:



12. Asbestos Survey Results Central Blue Baths Building

Client: Rotorua Council		Surveyor(s): Minslow Headfield and Cody Marr		Survey date: 8/02/2018		Job Ref: G-001116												
Property: Blue Baths Queens Drive, Government Gardens, Rotorua		Survey type: Management		Analysis date:														
Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority	
01	Ground Floor	Boys Toilets/Changing Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels														
01	Ground Floor	Dining Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels														
01	Ground Floor	Disabled Toilet	Floor	Vinyl Products Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels	3m ²	P			0	0	Bonded	Presumed Asbestos	3 - Very Low	Low	5	-9	3	
01	Ground Floor	Disabled Toilet																

NSMS = no suspected material seen
 AMS = associated with sample
 P = presumed
 SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
 3 or < = Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High

Total Risk Risk Priority
 11 or < = Low 3
 12-17 = Medium 2
 18 or > = High 1

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Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	Ground Floor	Dishes Room	Floor	Vinyl Tiled Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled	5m ²	P		1	0	0	Bonded	Presumed Asbestos	4 - Very Low	Low	6	10	3
01	Ground Floor	Dishes Room		Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Entrance Foyer		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled													
01	Ground Floor	Entrance Foyer		Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Girls Toilets/Changing Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled													
01	Ground Floor	Girls Toilets/Changing Room		Floor: Ceramic tiled brick block / concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Kitchen	Floor	Vinyl Products	20m ²	P			0	0	Bonded	Presumed Asbestos	3 - Very Low	Low	6	9	3

NSMS = no suspect material seen
 AWS = associated with sample
 P = presumed
 SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
 3 or < = Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High

Total Risk
 11 or < = Low
 12-17 = Medium
 18 or > = High

Risk Priority
 3
 2
 1

Report: G-00116

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	Ground Floor	Kitchen		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Old Men's Changing		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Old Men's Changing 2		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Old Men's Toilet		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													

NSMS = no suspect material seen
 AWS = associated with sample
 P = presumed
 SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
 3 or < = Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High

Total Risk
 11 or < = Low
 12-17 = Medium
 18 or > = High

Risk Priority
 3
 2
 1

‘Safely Leading the Industry in Asbestos Solutions’

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	Ground Floor	Old Women's Changing		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Old Women's Toilet		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Pool Area		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Pump Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													

NSMS = no suspect material seen
AWS = associated with sample
P = presumed
SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
3 or < = Very Low
4-6 = Low
7-9 = Medium
10 or > = High

Total Risk
11 or < = Low
12-17 = Medium
18 or > = High

Risk Priority
3
2
1

Report: G-00116

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	Ground Floor	Reception	Floor Box	Resinous Board	0.5m²	P		1	0	3	Bonded	Presumed Asbestos	7 - Medium	Low	7	14	2
01	Ground Floor	Reception	Floor	Vinyl Products	5m²	P			0	0	Bonded	Presumed Asbestos	3 - Vary Low	Low	6	9	3
01	Ground Floor	Reception		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Stairway		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Storage Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													

NSMS = no suspect material seen
 AWS = associated with sample
 P = presumed
 SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
 3 or < = Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High

Total Risk
 11 or < = Low
 12-17 = Medium
 18 or > = High

Risk Priority
 3
 2
 1

‘Safely Leading the Industry in Asbestos Solutions’

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	Ground Floor	Storeroom 1		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic tiled brick / block / concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	Ground Floor	Switch Room		Ceiling: Ceiling Tiles Ceiling: Concrete Ceiling: Plaster Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceramic Tiled Brick / Block / Concrete Floor: Concrete Floor: Timber Wall: Concrete Wall: Wall Panels													
01	1st Floor	Ceiling Void		Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete													
01	1st Floor	Conference Room		Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete													

NSMS = no suspect material seen
AWS = associated with sample
P = presumed
SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
3 or < = Very Low
4-6 = Low
7-9 = Medium
10 or > = High

Total Risk
11 or < = Low
12-17 = Medium
18 or > = High

Risk Priority
3
2
1

‘Safety Leading the Industry in Asbestos Solutions’

Report: G-00116

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority
01	1st Floor	Conference Room Kitchen	Floor	Vinyl Tiled Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete	5m ²	P		1	0	0	Bonded	Presumed Asbestos	4 - Very Low	Low	6	10	3
01	1st Floor	Conference Room Kitchen															
01	1st Floor	Conference Room Toilet	Floor	Vinyl Tiled Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete	3m ²	P		1	0	0	Bonded	Presumed Asbestos	4 - Very Low	Low	6	10	3
01	1st Floor	Conference Room Toilet															
01	1st Floor	External		Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete													

NSMS = no suspect material seen
 AWS = associated with sample
 P = presumed
 SP = strongly presumed
 Risk Assessments to HSG264 & HSG227
 Material Risk
 3 or < = Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High
 Total Risk
 11 or < = Low
 12-17 = Medium
 18 or > = High
 Risk Priority
 3
 2
 1

‘Safely Leading the Industry in Asbestos Solutions’



Report: G-00116

Loc ID	Floor	Location Description	Surface	Material Description	Size	Sample Ref	Same as Ref	Condition	Surface Treatment	Friability	Product Type	Analysis Result	Material Risk	Accessibility	Priority Risk	Total Risk	Risk Priority	
01	1st Floor	Office 1		Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete														
01	1st Floor	Office 2		Ceiling: Plaster Ceiling: Terracotta tile Ceiling: Timber Floor: Carpeted / Carpet Tiled Floor: Ceiling Tiles Floor: Concrete Floor: Timber Roof: Metal Roof: Terracotta tile Wall: Concrete														
01	External	Exterior		Roof: Terracotta tile Wall: Concrete														

NSMS = no suspect material seen
 AWS = associated with sample
 P = presumed
 SP = strongly presumed

Risk Assessments to HSG264 & HSG227

Material Risk
 3 or <= Very Low
 4-6 = Low
 7-9 = Medium
 10 or > = High

Total Risk
 11 or < = Low
 12-17 = Medium
 18 or > = High

Risk Priority
 3
 2
 1

‘Safety Leading the Industry in Asbestos Solutions’

13. Legislation.

13.1 Legislation controlling asbestos work includes the:

- Health and Safety at Work Act 2015
- Health and Safety at Work (Asbestos) Regulations 2016
- Code of Practice: Management and Removal of Asbestos (WorkSafe, 2016)
- Good Practice Guidelines Conducting Asbestos Surveys October 2016
- HSG264 – Asbestos: The survey guide
- Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres (Department of Labour, 1994)
- Building Act 2004; and

13.2 Summary of the Health & Safety at Work Act 2015

The principal object of the Health and Safety at Work Act 2015 (H&S Act) is to prevent harm to employees at work. To do this, it imposes duties on employers, employees, principals and others, and promotes excellent health and safety management by employers.

The Act also provides for the making of Regulations and Approved Codes of Practice.

13.3 Duties of Persons in Control of a Place of Work

Section 16 of the H&S Act requires persons in control of a place of work (PCBU) take all practicable steps to ensure that no hazard that is or arises in the place of work:

- People in the vicinity of the place of work;
- People who are lawfully in the place of work (employees/contractors etc.)
- People who have paid to be in the place of work
- People who are in the place of work to undertake activities such as purchasing or inspecting goods for purchase.

13.4 The Building Act 2004

Section 3 of the Building Act 2004 lists the purpose of the Act as to provide for the regulation of building work, the establishment of a licensing regime or building practitioners, and the setting of performance standards for buildings, to ensure that:

- People who use buildings can do so safely and without endangering their health;
- Buildings have attributes that contribute appropriately to the health, physical independence, and well-being of the people who use them;
- People who use a building can escape from the building if it is on fire; and buildings are designed, constructed, and able to be used in ways that promote sustainable development.

Building work is defined as work for, or in connection with, the construction, alteration, demolition, or removal of a building.

13.5 Clause F2 - Hazardous Building Materials

Clause F2.1 of the Building Code is to safeguard people from injury and illness caused by exposure to hazardous building materials (including asbestos).

Clause F2.2 requires building materials that are potentially hazardous, be used in ways that avoid undue risk to people.

Clause F2.3.2 requires transparent panels located in areas, such as roofs, capable of being mistaken for an unimpeded path of travel must be marked to make them visible - this does not apply to housing.

Clause F2.3.3 requires that glass or other brittle materials that people are likely to come into contact must:

- If broken on impact, break in a way which is unlikely to cause injury, or
- Resist a reasonable foreseeable impact without breaking,

13.6 General Responsibilities

Where asbestos products are present (or thought to be present) in a building or any other structure, consultation and information-sharing should occur between employers and employees through established consultative processes.

The need to identify and assess asbestos in buildings does not imply that the only option is removal. Where the assessment shows that the asbestos product is in a stable condition.

13.7 Property Owners

Property owners, with the exception of owner-occupied private homes should:

- To take all practicable steps to identify asbestos products within their properties and record its location and condition in accordance with these guidelines;
- Inform tenants of the presence of asbestos and of any action relating to it that may become necessary;
- Ensure that all contractors required to do work are informed of the presence of asbestos and are shown this report; and
- Maintain a record of any works carried out in the area of the asbestos material.

New regulations in New Zealand state that every workplace in New Zealand must have an asbestos register if the building is pre-2000 and the building may have asbestos materials. A management audit will be carried out on the building to identify which internal and external areas and materials that may contain asbestos and other hazardous materials. The auditor will simply advise the property owner which materials may contain asbestos/hazardous materials, and which do not in the form of a report with a live asbestos register. Every area must be inspected and noted with at least one sample, noted as may contain asbestos or listed as no asbestos present. Any time works are being done to the building, contractors will then reference the register to see whether or not the works will be affecting any possible asbestos containing materials. If any may be affected a follow up audit will take place where the auditor will take the necessary samples and inform the client of any asbestos containing materials with an updated report and asbestos register. This register needs to be checked annually or as required when work is carried out in that area that has been identify in the report. The report needs to be placed at the main entry point where contractors sign in/out of the building.

13.8 Asbestos Surveys

Asbestos fibres are microscopic and therefore unidentifiable to the naked eye. Asbestos auditors can determine which building materials could potentially contain asbestos. Once these materials have been identified it is imperative that specific methodology is followed to sample the item for testing. When identifying asbestos-contaminated materials, the inspector should undertake a risk management approach, utilising the control hierarchy outlined in the H&S Act (eliminate, isolate and minimise. Depending on factors such as location and friability, some asbestos-contaminated materials may not require removal. Not only do the samples need to be taken in a certain way to ensure asbestos fibres are not released into the air but they also need to be carefully bagged and transported to the accredited laboratory.

If analysis of samples confirms the presence of asbestos, the potential exposure of persons entering the property should be evaluated by suitably competent people. The composition and condition of all asbestos-contaminated materials in the buildings should be assessed for its potential to release fibres into the air. The period between each assessment will be determined by the condition and location of the asbestos-contaminated materials.



13.9 Types of Survey

These guidelines describe three different surveys:

- Management Surveys
- Refurbishment Surveys
- Demolition surveys.

The type of survey required will vary during the premises' lifespan, and several may be needed over time.

A management survey is recommended during normal occupation and use of the building to make sure the existing asbestos and ACM is being managed.

A refurbishment or demolition survey may be necessary when the building (or part of it) is going to be refurbished or demolished.

13.10 Management Survey

The purpose of the asbestos management survey is to help the workplace PCBU to systematically identify and manage all asbestos in their workplace. The survey has to provide sufficient information for the workplace PCBU to indicate the presence and location of asbestos or ACM, carry out a suitable risk assessment, and develop an asbestos management plan.

In most cases, the survey will have three aims.

1. To find and record the location, extent and product type of any assumed or known asbestos and ACM.
2. To inspect and record information on the accessibility, condition² and surface treatment of any assumed or known asbestos and ACM.
3. To determine and record the asbestos type, either by collecting representative samples of suspect materials for laboratory identification, or by making an assumption based on the product type and its appearance, etc.

A management survey is the standard survey carried out to support the workplace PCBU in identifying asbestos in the workplace. Its purpose is to identify, so far as is reasonably practicable, the presence and location of any asbestos or assumed ACM in a building which could give rise to a risk of exposure to respirable asbestos fibres. This includes ACM that could be damaged or disturbed during normal occupancy, including foreseeable maintenance and installation.

Management surveys will often involve minor intrusive work and some disturbance. The extent of intrusion will vary between premises and depend on what is reasonably practicable for individual properties. It may depend on factors such as the type of building, the nature of construction, accessibility etc.

A management survey should include an assessment of the ACM's condition and its ability to release fibres into the air if it is disturbed in some way.

The survey report can be used as a basis to start developing a management plan and prioritise actions, but in itself does not constitute a management plan.

13.11 Refurbishment & Demolition Survey

Refurbishment & Demolition audits will be carried out in the event of:

- Refurbishment of a building structure
- Complete demolition of a building
- Partial demolition of a building
- Demolition of an outlying building on a property

The purpose of asbestos refurbishment and demolition surveys is to help PCBUs locate all the asbestos in a workplace (or the relevant part) before work commences.

A Refurbishment & Demolition Survey is an intrusive audit as the auditor must reach all areas of the property to ensure that no asbestos remains unfound. Samples will be taken from all materials in or on the property that potentially contain asbestos. At the auditor's discretion an area can be noted as may contain asbestos, this will be done when an area cannot be accessed. A follow up investigation must take place as soon as access to the area is available. Refurbishment & Demolition audits can be done in occupied buildings but there will be evidence of the audit. Due to the nature of the audit it is recommended that the building is vacant. Every location must be inspected and noted with at least one sample, noted as may contain asbestos or listed as no asbestos present. Once the refurbishment & demolition audit is complete a report will be created and provided with a live asbestos register.

A demolition survey may be conducted to establish the economic future or viability of a building. The survey results would determine the outcome. The survey will need careful managing, with personnel and equipment/furnishings being moved or protected (as necessary) while the survey progresses through the building. Again, the survey areas must be isolated, and the surveyed areas must be fit for reoccupation before people move back in.

Refurbishment and demolition surveys are technically more challenging than management surveys, as their purpose is to identify all ACM within a particular building area or within the whole premises, so this can be removed. Many buildings have been individually designed with their own layout and materials. There may have been refurbishments and modifications over the years, with changes and alterations to the building structure and appearance (eg false floors, ceilings and walls, concealed and hidden areas, and surface treatments). Building drawings may not have been updated.

The level of competency and knowledge needed for refurbishment and demolition surveys is greater than for management surveys, and the intrusive nature of these surveys presents more health and safety risks.

Note: The exception is the refurbishment and demolition survey, where information on the condition of the asbestos is usually not needed, since the ACM will; so far as is reasonably practicable, be removed before the demolition or refurbishment starts. However, if the removal will not take place for some time after the survey (e.g. more than three months), the ACM must be managed during this period. In this case, the condition of the ACM should be determined, and remedial action taken as appropriate.



14. Risk Control Options.

An asbestos management programme should be seen as part of an organisation's overall approach to risk management.

Where the evaluation process has revealed a likelihood of exposure to asbestos fibres, all practicable steps must be taken to ensure that employees and others are protected.

The control of asbestos hazards should use the most appropriate method for the particular circumstances. Methods of control include removal, enclosure, and encapsulation or sealing, and should be based upon assessment of the condition of the asbestos, the possibility of further damage or deterioration, and the potential for exposure of personnel to airborne asbestos.

Where the asbestos is in a stable condition, no immediate action may be necessary.

The H&S Act requires employers to take all practicable steps to eliminate significant hazards. Removing asbestos from a building or structure is consistent with this requirement. However, it must also be considered that, in the process of removal, airborne asbestos fibre levels may actually increase. Furthermore, it may not always be practicable or necessary to remove all of the asbestos. Good judgement should be exercised, and a process of assessment based on location, condition and friability should be used when assessing the various control methods available to effectively manage the risk.

Synthetic Mineral Fibre (SMF)

Synthetic Mineral Fibre (SMF) is a man-made insulation material used extensively in industrial, commercial and residential sites as fire rating, reinforcement in construction materials and as acoustic and thermal insulators. Types of SMF materials include fibreglass, ceiling insulation, rockwool, ceramic fibres and continuous glass filaments.

There are two basic forms of Synthetic Mineral Fibre (SMF) insulation, bonded and un-bonded.

- Bonded SMF is where adhesives, binders or cements have been applied to the SMF before delivery and the SMF product has a specific shape.
- Un-bonded SMF has no adhesives, binders or cements and the SMF is loose material packed into a package.

Exposure to SMF can result in short-term skin, nose, eye and respiratory tract. The extent to which health is affected will depend on the type, size, concentration and period of exposure to SMF.

The use of and the safe removal of SMF materials should be conducted in accordance with the Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres (Department of Labour, 1994).



Report: G-00116

15. Other Documentation and Reports

From: Brian Stirton
Sent: Tuesday, 26 January 2021 3:44 pm
To: [REDACTED]
Subject: Blue Baths closure
Attachments: SC36804200 21012615480.pdf

Hello [REDACTED]

As discussed yesterday and again this morning, please see attached the closure letter for the Blue Baths.

As also discussed, we will endeavor to assist you in the continuation of your business as much as we can in the interim.

I understand your frustration, however, as discussed, the liability and risk to council at this time, having been informed of the ISA numbers, cannot, and should not be ignored.

We want our tenants and their guests to safe within our buildings, and we simply cannot be sure of that given the ISA rating.

I hope the DSA finding are at a significantly higher level, however, as discussed with [REDACTED] from DHC, there are simply too many variables to make that conclusion at this early stage.

I will touch base with you tomorrow to see what other assistance we can offer.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

26 January 2021

Civic Centre
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand

██████████
BLUE BATHS ESTABLISHMENT LIMITED
██████████ LAKE TARAWERA,
ROTORUA 3076

Dear ██████████

Council decision on Blue Baths building - all or part is earthquake prone

Site address: BLUE BATHS
85 OTUAWHATA DRIVE – GOVERNMENT GARDENS
ROTORUA

The Council has been provided with an Initial Seismic Assessment from EQ Struc for the building at the above address.

I am writing to advise you that the Council accepts this ISA and using this information has determined that the building or part of the building is initially considered **earthquake prone**. The ISA earthquake rating for this building is 15% of the New Building Standard (NBS) at IL2 (10% of NBS at IL3).

BBEL are receiving this letter as discussed, as the sole trader/ occupier of the above building.

Council consultants, EQ Struc, are in the process of completing a full Detailed Seismic Assessment (DSA) of the building, which is expected to be completed late February. In the interim, and following receipt of the ISA coupled with the recent spate of earthquakes on the 25th January 2021, Council has decided to close the building to public and staff until such time as the DSA has been completed and the final NBS% is confirmed.

As such the closure will come into effect at 5pm Tuesday 26th January 2021. All commercial works must cease at that time, with the exception of the removal of key items required for the business. All items required for the continuation of the BBEL business should be removed as soon as is practicable.

All safety protocols should be in place for the safe removal of items, including, but not limited to;

- Only key staff required for the removal of items shall be on site.
- All upstairs offices should be vacated ASAP.
- A register of who is on site should be kept at the main reception, staff should sign in and sign out, and staff should not work alone in the building.
- All emergency routes and exits should be clear and available for use by staff of site.

Council will cease the rental and operating cost charges from 5pm Tuesday 26th January 2021, until such time as occupancy can be reinstated.

Once the DSA is completed, and Council can confirm the NBS % for the building, a timeline for the re-entry to the building will be made.

If you have any questions or would like to discuss the process moving forward, please contact me.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Brian Stirton', with a long horizontal stroke extending to the right.

Brian Stirton

Legal and Property Manager – Rotorua Lakes Council

From: Brian Stirton
Sent: Tuesday, 2 February 2021 11:36 am
To: Neil Mullen
Subject: RE: RDC Blue Baths - CS872 - Overdue BWOF

Hello Neil,

Thanks for that.

I'll pop down and see you confidentially about this building.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Neil Mullen <Neil.Mullen@rotorualc.nz>
Sent: Tuesday, February 2, 2021 11:34 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: RDC Blue Baths - CS872 - Overdue BWOF
Importance: High

Hi Brian,
Just keeping you in the loop,
See below.

Thanks.

Neil Mullen *Building Compliance Officer – Building Warrant of Fitness*
P: 07 3518077 | M: [0276460324](tel:0276460324) | E: neil.mullen@rotorualc.nz | W: rotorualakescouncil.nz

From: FSS Compliance <compliance@firesecurity.co.nz>
Sent: Tuesday, 2 February 2021 11:31 AM
To: Neil Mullen <Neil.Mullen@rotorualc.nz>; vertrans.co.nz>
Cc: firesecurity.co.nz>
Subject: RE: RDC Blue Baths - CS872 - Overdue BWOF
Importance: High

Good morning Neil

There has been some issue regarding the SS8 12A for Blue Baths. I have been trying for months to get this 12A from Veterans.

@Office Vetrans – can you please advise ASAP where you are at with being able to provide the SS8 12A for this site.

██████████ Compliance Administrator
FIRE SECURITY SERVICES

██████████
11-19 Ken Browne Drive, Hamilton
PO Box 27142, Hamilton 3257
www.firesecurity.co.nz
0800 11 46 11



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From: Neil Mullen <Neil.Mullen@rotorualc.nz>
Sent: Tuesday, 2 February 2021 11:22 AM
To: FSS Compliance ██████████ firesecurity.co.nz>
Subject: Blue Baths

Hi ██████████
Can you advise what is holding up the Blue Baths BWOF please.

Thanks.

Neil Mullen *Building Compliance Officer – Building Warrant of Fitness*
P: 07 3518077 | M: 0276460324
E: neil.mullen@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

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From: [REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, 4 February 2021 4:08 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 55798 - The Blue Baths - RLP020895
Attachments: Invoice Project 1015676.0000R 000000055798_20210204110727.pdf

Good afternoon,

Please find attached our January 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand

[REDACTED] www.tonkintaylor.co.nz  T+T profile



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Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

31 January 2021
Invoice No: 55798
Your reference: RLP020895
Project Manager: XXXXXXXXXX

Project 1015676.0000R Geotechnical investigations and assessment to support seismic assessment of The Blue Baths

Invoice for January 2021:

- EQ StructGroup Consulting expenses

Phase	02	Seismic Assessment_Structural	
Expenses			8,273.91
		Subtotal excluding GST	8,273.91
		15% GST	1,241.09
		Total this Invoice	<u><u>\$9,515.00</u></u>

Due Date: 7 February 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**



TAX INVOICE

Tonkin and Taylor Group Limited
PO Box 317
Tauranga

Invoice Date
22 Dec 2020

Invoice Number
INV-4851

GST Number
104-844-529

EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Description	Quantity	Unit Price	Amount NZD
Job No: 31854 Name: Blue Bath Rotorua			
CONSULTING - Consultants Advice regarding the Estimated NBS of the building, including site inspection	1.00	2,000.00	2,000.00
Property File costs	1.00	21.74	21.74
		Subtotal	2,021.74
		TOTAL GST 15%	303.26
		TOTAL NZD	2,325.00

Due Date: 5 Jan 2021

All payments to ANZ Bank and Branch: 06-0103-0171902-00

Please quote your invoice number shown above as reference for the payment.

This invoice is due within 14 days of the invoice date.

Thank you for your business!



[View and pay online now](#)



PAYMENT ADVICE

To: EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Customer	Tonkin and Taylor Group Limited
Invoice Number	INV-4851
Amount Due	2,325.00
Due Date	5 Jan 2021
Amount Enclosed	

Enter the amount you are paying above



TAX INVOICE

Tonkin and Taylor Group Limited
PO Box 317
Tauranga

Invoice Date
29 Jan 2021

Invoice Number
INV-4931

GST Number
104-844-529

EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Description	Quantity	Unit Price	Amount NZD
Client Order No: Job No: 31854 Name: Blue Bath Rotorua			
CONSULTING - Detailed Seismic Assessment with Retrofit Options (25% progress invoice on quoted amount)	1.00	5,500.00	5,500.00
		Subtotal	5,500.00
		TOTAL GST 15%	825.00
		TOTAL NZD	6,325.00

Due Date: 20 Feb 2021

All payments to ANZ Bank and Branch: 06-0103-0171902-00
Please quote your invoice number shown above as reference for the payment.
This invoice is due within 14 days of the invoice date.

Thank you for your business!



[View and pay online now](#)



PAYMENT ADVICE

To: EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Customer Tonkin and Taylor Group Limited

Invoice Number INV-4931

Amount Due 6,325.00

Due Date 20 Feb 2021

Amount Enclosed

Enter the amount you are paying above

From: Nikoletta Michael
Sent: Tuesday, 9 February 2021 4:39 pm
To: Brian Stirton
Subject: RE: [REDACTED] Blue Baths

Thanks!

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: [07 351 8282](tel:073518282) | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Tuesday, 9 February 2021 4:26 PM
To: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Subject: [REDACTED] Blue Baths

Hello Nikoletta,

[REDACTED] email is

[REDACTED]

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Tuesday, 16 February 2021 10:26 am
To: Brian Stirton
Subject: Blue Baths Variation request VO2
Attachments: 20210212.loe_VO2.pdf

Hi Brian,
Please find attached our variation request VO2 for your acceptance. As discussed on the phone last week, I have gone ahead and confirmed the CPTs for next Thursday (25th). It took slightly longer to get them onsite as we need to wait for the DOWNS notice for drilling a geothermal area.
Give me a call if you have any questions.

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, CMEngNZ
Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile



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He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest pr

Please see our website for the latest update, or get in touch if there is anything we can do to :

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Rotorua District Council
C/- Rotorua Lakes Council

Attention: Brian Stirton

Dear Brian

Variation Order 2
Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Following our recent email of 7 January and subsequent discussions, and in accordance with your request, we are pleased to vary our proposal of 13 October 2020 (T+T ref: 1015676) to include an addendum for preliminary foundation recommendations to the geotechnical investigations and assessment report dated November 2020.

1 Scope of work

Following discussions with EQStruc and yourself, we propose to use Cone Penetration Tests (CPTs) to further evaluate the liquefaction and lateral spread risk on the building. The temperature measurements from the borehole investigation confirmed the temperature was less than 60° to 5 to 8 m bgl at the site, however, cold water was used during drilling which may have suppressed the temperature. CPT reliability decreases at temperatures above 60° but provides a more reliable measure of the liquefaction/cyclic softening risk at the site compared to boreholes. We propose the following works:

- 3 No. CPTs located adjacent to existing boreholes (excluding BH1) to around 6 m bgl or excessive temperatures. We have confirmed with Perry Geotech that emergency shut off valve installation is not required, and we can use a geothermal stand over by Rotorua Well Drillers.
- Additional 4 No. hand auger, Scala penetrometer and shear vane tests (if applicable), located adjacent to the existing boreholes to 3 mbgl or refusal.
- Preliminary assessment of the geotechnical ultimate bearing capacity of the soil using Scala and CPT correlations and Meyerhof/Vesic strip footing bearing capacity assessment for variable footing depths/widths.
- Additional seismic foundation load assessment using Plaxis finite element software analysis of the critical footings with liquefied/cyclic softened soil strengths. Critical foundations, allowable deformations and static/seismic loadings are to be confirmed by EQStruc.

- Update the ground model, liquefaction and lateral spreading sections of the T+T October 2020 report and summarise the bearing capacity assessment and recommendations for preliminary design and seismic capacity assessment.
- Recommend additional investigations/design required for any foundation remediation design works.

If CPT investigations are not possible due to too high temperatures too close to the ground surface, the liquefaction/lateral spreading and cyclic softening assessments will not be able to be advanced from our current understanding based on standard penetration tests (SPTs) and the shear wave velocity work completed by others.

To do this work we intend to use relevant existing information in published databases. The terms of use of these databases often require that we upload equivalent data that we collect for your project. By accepting this proposal, you agree to us uploading the relevant data collected from your project.

We will use all reasonable endeavours to meet our responsibilities to you, however we cannot be responsible for any delay, event or circumstance outside our reasonable control due to the impact of COVID-19 (including travel disruptions, self-isolation or quarantine requirements, ill health or other delay or inability of our staff or subcontractors to perform or access a site for any reason). If any of these circumstances do arise, we may seek to negotiate with you a variation to this proposal which enables us to complete our work for you on mutually acceptable terms, failing which either party may terminate our engagement.

2 Programme

We will start work relating to this variation week as soon as possible after you have confirmed your desired solution. As a consequence of the variation, our revised programme for our services is as follows:

- Start date for site investigation is dependent on availability of CPT operator and geothermal stand over by Rotorua Well Drillers (preliminary confirmation by Perry Geotech for week commencing 15 February 2021).
- Start date for foundation assessment dependent on receipt of critical foundation identification, loads and allowable deformations from EQStruc.
- We will update the report within four weeks after CPT information is received by T+T.

3 Fees

Our fee for the services outlined in this variation will be on a time and expenses basis, with an indicative budget estimate of \$15,400 (exclusive of GST). We have allowed for an extra \$1,000 contingency sum for possible laboratory testing for Atterberg, PSD or sulphate content testing that may be required following the CPT testing to confirm soil properties for borderline liquefiable soils if required. We will advise if we believe additional laboratory testing is required before we proceed.

Site investigation work has inherent uncertainties such as variable subsoil conditions, access and equipment logistics and is dependent on the weather. We will endeavour to complete this variation within our budget estimate and will inform you if it is likely that the total indicative budget estimate is to be exceeded.

This variation is in addition to our current agreed fee giving a total project budget of \$74,243 (exclusive of GST).

A breakdown of this revised budget is as follows:

	Fees	Disbursements	TOTAL
Original Engagement (invoiced)	\$19,664	\$1,579	\$21,243
Previous Variation (VO1)	\$3,000	\$33,600	\$36,600
This Variation (VO 2)	\$12,300	\$3,100 + \$1,000 contingency	\$15,400 + \$1,000 contingency
Revised Total Budget (excluding GST)	\$34,964	\$38,279 + \$1,000 contingency	\$73,243 + \$1,000 contingency

We will invoice monthly, on or after the first working day of the month, for work undertaken in the preceding month. If payment becomes overdue and we are unable to agree alternative payment terms with you, we reserve the right to suspend work and to withhold deliverables. This will not apply in the case where you have advised us that you have a genuine dispute with our invoice (or part of our invoice) and you have paid any undisputed amounts.

4 Terms and conditions

The work will be carried out as an extension to our existing engagement and in accordance with our previously agreed conditions of engagement set out in our letter of engagement dated 13 October 2020.

Please note that this offer is valid for three months from the date of this letter.

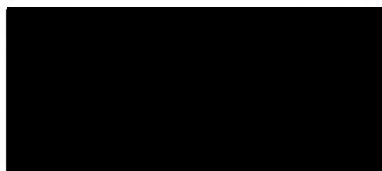
5 Closing remarks

We trust that this satisfactorily meets your needs and look forward to receiving your instruction to proceed. You can confirm your acceptance by returning the attached signatory form. Alternatively, we will take your instruction to proceed as confirmation that you accept this variation proposal.

We will be pleased to discuss any aspect of this variation or to supply additional information if this is required.

Please refer any further enquiries or correspondence to Craig Davanna.

Yours sincerely



Project Director

Attached: Signatory form

12-Feb-21

\\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

Variation Proposal Signatory form

T+T Ref: 1015676
 Date: 12 February 2021
 Contract: Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Confirmation by Client: I/we acknowledge that I/we have read the above variation proposal. I/we agree that the work described in the proposal will be carried out under the existing contract terms (including the limitations of liability) referenced in the proposal, and I/we authorise the above.

Client name: Rotorua District Council
 Client Address: C/- Rotorua Lakes Council
 Attention: Brian Stirton

Signature: _____
 Name: _____
 Date: _____

Please provide the following information if different:

Client Name and Address	Invoicing Entity Name* and Address (if different to Client)
_____	_____
_____	_____
_____	_____
_____	_____

* Invoicing entity to also give the "Confirmation by Client" above by signing below

Signature: _____
 Name: _____
 Date: _____

Please return one signed copy to [redacted] of Tonkin + Taylor at email [redacted]@tonkintaylor.co.nz or to the address on the letterhead.

12-Feb-21
 \\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

From: Brian Stirton
Sent: Friday, 19 February 2021 2:25 pm
To: Michelle Overbeek
Subject: RE: Electricity Meter Query

Hello Michelle,

Not a problem.

Under the lease the tenant is responsible for payment of outgoings , which is included in the first schedule of the lease, as noted below.

“2) Charges for water, gas, electricity, telecommunications and other utilities or services, including line charges.”

Outgoings

3.1 The Tenant shall pay the outgoings properly and reasonably incurred in respect of the property which are specified in the First Schedule. Where any outgoing is not separately assessed or levied in respect of the premises then the Tenant shall pay such proportion of it as is specified in the First Schedule or if no proportion is specified then such fair proportion as shall be agreed or failing agreement determined by arbitration

So, yes the tenant should be paying the outgoings.

Having said that – as there is always more to the story, you may have heard that we temporarily closed the building on the 25th January, and until such time as it reopens we are not charging rent or outgoings.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Michelle Overbeek <Michelle.Overbeek@rotorualc.nz>

Sent: Friday, February 19, 2021 2:11 PM

To: Brian Stirton <Brian.Stirton@rotorualc.nz>

Subject: FW: Electricity Meter Query

Hey Brian,

I hope you are well?

Sorry to drag you into this but I am hoping you can clarify if the power costs in relation to the Blue Baths Café and Building should be covered by RLC and on-charged or if these costs should be borne by the lessee.

Appreciate your advice.

Thanks

Michelle

From: Julie Wenham <Julie.Wenham@rotorualc.nz>
Sent: Friday, 19 February 2021 11:52 AM
To: [REDACTED] <[REDACTED]@carbonems.com>
Cc: Michelle Overbeek <Michelle.Overbeek@rotorualc.nz>
Subject: Electricity Meter Query

Kia ora [REDACTED]

We have a new Director of our Museum and she is querying some costs with our finance department, one of these is electricity. Can you please confirm for me how many meters we have at the Museum and the Bluebaths. I have looked at the spreadsheets you provide and have found the following:

Museum

ICP 0008201215TU-D46

Acct 105346276

Offsite museum storage Tallyho St

ICP0007115241TU-A67

Acct 105344532

Bluebaths Café

ICP0000969225TU-7F5

Acct 112688764

Bluebaths

ICP0001255823UN-54B

Acct 105334308

Can you confirm if the above are all that we have?

Kind regards

Julie Wenham Finance Officer – Procurement & Contract Administration

P: 351 8078

E: Julie.Wenham@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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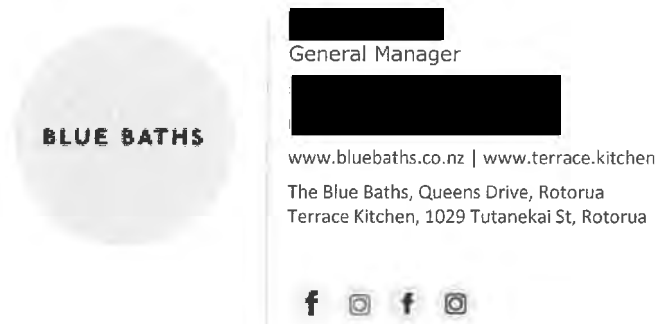
From: [REDACTED] bluebaths.co.nz>
Sent: Friday, 19 February 2021 3:36 pm
To: Brian Stirton
Subject: FW: Re Lift Inspection

Hi Brian

See below from Vertrans Assoc regarding lift inspection.
Are they able to access the building? Would you prefer to coordinate this?
I don't mind either way, just let me know your preference please.

Thanks very much

[REDACTED]



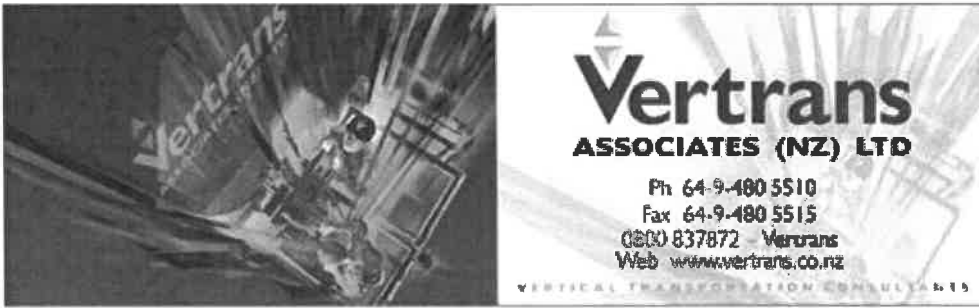
From: [REDACTED] vertrans.co.nz>
Sent: Friday, February 19, 2021 12:35:18 PM
To: Info <info@bluebaths.co.nz>
Cc: [REDACTED] vertrans.co.nz>
Subject: Re Lift Inspection

Hi,

We are looking to undertake an inspection of the lift for the BWOFF on Monday morning.
Can you please advise what time you will be open?

Regards,

[REDACTED] | Director
Vertrans Associates (NZ) Ltd
Building 3, 1 William Pickering Drive, Rosedale, Auckland 0632
Phone: 09 480 5510 or 0800 837872
Mobile: [REDACTED]
POST: PO Box 300-302, Albany 0752, Auckland, New Zealand



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From: Nikoletta Michael
Sent: Tuesday, 23 February 2021 11:45 am
To: Brian Stirton
Subject: FW: Announcement regarding closure of Blue Baths
Attachments: Blue Baths info.docx

FYI – as mentioned on the phone, [REDACTED] will try and give you a call today. News release is attached for your info.

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: [07 351 8282](tel:073518282) | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: Nikoletta Michael
Sent: Tuesday, 23 February 2021 11:40 AM
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: RE: Announcement regarding closure of Blue Baths

Thanks for letting me know [REDACTED] I'll check in with Brian later today.

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: [07 351 8282](tel:073518282) | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Tuesday, 23 February 2021 11:32 AM
To: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Subject: RE: Announcement regarding closure of Blue Baths

Hi Nikoletta, yes I have read it and no I am not comfortable with it at all. I would like to discuss further with Brian Stirton, and will endeavour to do this today.

Thanks

From: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Sent: Tuesday, 23 February 2021 11:19 am
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: Announcement regarding closure of Blue Baths

Kia ora [REDACTED] just checking in to see if you've had a chance to review the attached announcement about the Blue Baths?

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: [07 351 8282](tel:073518282) | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: Nikoletta Michael
Sent: Thursday, 18 February 2021 2:18 PM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: Announcement regarding closure of Blue Baths

Kia ora [REDACTED]

My name is Nikoletta and I'm one of the communications advisors at Rotorua Lakes Council.

As I understand Brian has mentioned to you, we are looking to publicly announce that the Blue Baths have closed following the results of the recent seismic assessment. I have attached the news release I have drafted and just wanted to run this past you to make sure you were comfortable with the content and to see if you'd like to include any comment or information about your business. Also let me know if you have any other suggestions.

Once finalised, we'll publish this on Council's channels (website, social media etc) and send it out as a media release.

Let me know if you have any questions and I look forward to your feedback.

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: 07 351 8282
E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



XX February 2021

Rotorua Blue Baths undergoing seismic assessment

The Blue Baths, a much-loved heritage building in Rotorua, has been closed while a detailed seismic assessment of the building is completed.

Last year Rotorua Lakes Council commissioned a full geotechnical survey of the ground under the Blue Baths. From this survey, an initial seismic assessment of the building was generated in January 2021 and found the Blue Baths to be meeting only 15% of current building standards (68% and over is considered acceptable).

After receiving this report, Council has made the decision to close the building to ensure peoples' safety and has commissioned an urgent detailed seismic assessment of the building, as well as additional ground testing. The findings from this next assessment and tests will help determine the future of the Blue Baths.

Rotorua Lakes Council's Operations Group Manager, Jocelyn Mikaere, says while disappointing, the safety of people needs to come first.

"The health and safety of people is imperative. We know the Blue Baths is an important building to the Rotorua community but with the building not meeting current building standards, we have no choice but to close its doors.

"The results from the detailed seismic assessment, currently underway, will help us determine the future of the Blue Baths.

"We appreciate that the closure has been disruptive to our long-time tenant, [REDACTED] and we have investigated alternative venues with her."

Since 1999 [REDACTED] has provided food and beverage services, bathing, functions, concerts and weddings from the Blue Baths....

While the Blue Baths remains closed, [REDACTED] will be operating from

Due to Rotorua's natural environment and the age of buildings in the district, earthquake proneness is not uncommon here. Work to earthquake strengthen Te Aka Mauri – Rotorua Library, and the Fenton Street iSite, has previously been completed and work to strengthen the Rotorua Museum and Sir Howard Morrison Performing Arts Centre is currently underway.

These buildings were identified as being an earthquake risk under legislation introduced following the Christchurch earthquakes. Buildings deemed to be a risk require further assessment to ascertain if they are earthquake-prone and therefore require remedial work. Construction methodology has changed, as has legislation in terms of required standards, and this has affected the safety rating of many buildings, forcing the closure of a number of public council-owned buildings around New Zealand.

Commented [NM1]: [REDACTED] Would you like us to include this type of info? If so, please edit these lines as necessary.

From: [REDACTED]@bluebaths.co.nz>
Sent: Tuesday, 23 February 2021 4:06 pm
To: Brian Stirton
Cc: Geoff Williams; Steve Chadwick; Jean-Paul Gaston; Jocelyn Mikaere; Thomas Colle
Subject: FW: Announcement regarding closure of Blue Baths
Attachments: Blue Baths info.docx

Kia ora Brian

I am surprised to see that you are planning to proceed with a press release about the Blue Baths closure (attached from Nikoletta Michael - RLC Senior Communications Advisor)

I have sent a letter to Geoff Williams dated 12 Feb 2021 (through my commercial lawyer [REDACTED]) addressing concerns over RLC's handling of this current fiasco and its effect on my business.

I have not heard back, nor even received from him the professional courtesy of acknowledgement of the letter.

On that basis alone, I think it is completely inappropriate (and unnecessary) to send out something as potentially harmful as this statement to the public.

Certainly, I do not want my name or my business' name mentioned in it, or any referral to RLC's assistance to help BBEL find an alternative venue. Let's be clear - you insisted on as close to immediate eviction as we could physically manage, and the fleeting "investigated alternative venues with [REDACTED]" was tokenism at best.

It most certainly was not that – as the Mayor said to me - " we gave you a week to get out and offered you the EEC". That's absolute rubbish.

Secondly, the DSA, under your own timeline, is only days away ("expected end of February"), so why would you put out something so damaging now, that could well be nullified in a few day's time?

I have real concerns about RLC's management not being honest and transparent with me/BBEL regarding the RFP process in general for the Blue Baths building and the handling of this current farcical situation only adds weight to this perception.

Your media release states:

"Rotorua Lakes Council's Operations Group Manager, Jocelyn Mikaere, says while disappointing, the safety of people needs to come first..."

*The health and safety of people is imperative. We know the Blue Baths is an important building to the Rotorua community but with the building not meeting current building standards, **we have no choice but to close its doors.**"*

This statement is plain wrong, misleading and completely at odds with what [REDACTED] Principal Structural Engineer, EQSTRUC says in his letter accompanying the relevant report to the Council, as follows:

*"These defects are unlikely to result in structural failure in the normal use of the building and **there are no short-term remedial actions required. Therefore, the building is not considered as a Life Safety threat.**"*

Finally, I note in the media statement that you say "(.....68% and over is considered acceptable)."

What happened to the 33%, as previously discussed was the threshold needed for us to be able to occupy the building again?

Brian, I look forward to hearing the results of the DSA.

And a proper response to my 12 Feb letter. These are important issues – not just to me but to all Rotorua ratepayers. The Council management should be clear that they cannot quietly sweep them under the carpet – I/BBEL will hold them to account.

Regards

██████████
Managing Director
The Blue Baths Establishment Ltd

From: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Sent: Tuesday, 23 February 2021 11:19 am
To: ██████████bluebaths.co.nz>
Subject: Announcement regarding closure of Blue Baths

Kia ora █████ just checking in to see if you've had a chance to review the attached announcement about the Blue Baths?

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: [07 351 8282](tel:073518282) | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: Nikoletta Michael
Sent: Thursday, 18 February 2021 2:18 PM
To: ██████████bluebaths.co.nz>
Subject: Announcement regarding closure of Blue Baths

Kia ora █████

My name is Nikoletta and I'm one of the communications advisors at Rotorua Lakes Council.

As I understand Brian has mentioned to you, we are looking to publicly announce that the Blue Baths have closed following the results of the recent seismic assessment. I have attached the news release I have drafted and just wanted to run this past you to make sure you were comfortable with the content and to see if you'd like to include any comment or information about your business. Also let me know if you have any other suggestions.

Once finalised, we'll publish this on Council's channels (website, social media etc) and send it out as a media release.

Let me know if you have any questions and I look forward to your feedback.

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: 07 351 8282
E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

XX February 2021

Rotorua Blue Baths undergoing seismic assessment

The Blue Baths, a much-loved heritage building in Rotorua, has been closed while a detailed seismic assessment of the building is completed.

Last year Rotorua Lakes Council commissioned a full geotechnical survey of the ground under the Blue Baths. From this survey, an initial seismic assessment of the building was generated in January 2021 and found the Blue Baths to be meeting only 15% of current building standards (68% and over is considered acceptable).

After receiving this report, Council has made the decision to close the building to ensure peoples' safety and has commissioned an urgent detailed seismic assessment of the building, as well as additional ground testing. The findings from this next assessment and tests will help determine the future of the Blue Baths.

Rotorua Lakes Council's Operations Group Manager, Jocelyn Mikaere, says while disappointing, the safety of people needs to come first.

"The health and safety of people is imperative. We know the Blue Baths is an important building to the Rotorua community but with the building not meeting current building standards, we have no choice but to close its doors.

"The results from the detailed seismic assessment, currently underway, will help us determine the future of the Blue Baths.

"We appreciate that the closure has been disruptive to our long-time tenant, [REDACTED] and we have investigated alternative venues with her."

Since 1999 [REDACTED] has provided food and beverage services, bathing, functions, concerts and weddings from the Blue Baths....

While the Blue Baths remains closed, [REDACTED] will be operating from

Due to Rotorua's natural environment and the age of buildings in the district, earthquake proneness is not uncommon here. Work to earthquake strengthen Te Aka Mauri – Rotorua Library, and the Fenton Street iSite, has previously been completed and work to strengthen the Rotorua Museum and Sir Howard Morrison Performing Arts Centre is currently underway.

These buildings were identified as being an earthquake risk under legislation introduced following the Christchurch earthquakes. Buildings deemed to be a risk require further assessment to ascertain if they are earthquake-prone and therefore require remedial work. Construction methodology has changed, as has legislation in terms of required standards, and this has affected the safety rating of many buildings, forcing the closure of a number of public council-owned buildings around New Zealand.

Commented [NM1]: [REDACTED] Would you like us to include this type of info? If so, please edit these lines as necessary.

From: Thomas Colle
Sent: Wednesday, 24 February 2021 8:40 AM
To: Geoff Williams
Cc: Jocelyn Mikaere
Subject: RE: RLC -BBEL: ISA ASSESSMENT -WITHOUT NOTICE CLOSURE OF THE BLUE BATHS

I have asked Brian to liaise with our solicitors, and we will formally respond to her through them.

Thomas Collé Chief Financial Officer
P: 07 3484199 | E: thomas.colle@rotorualc.nz | W: rotorualakescouncil.nz

From: Kim McGrath <Kim.McGrath@rotorualc.nz> **On Behalf Of** Geoff Williams
Sent: Tuesday, 23 February 2021 4:38 pm
To: Thomas Colle <Thomas.Colle@rotorualc.nz>
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>
Subject: FW: RLC -BBEL: ISA ASSESSMENT -WITHOUT NOTICE CLOSURE OF THE BLUE BATHS
Importance: High

Kim McGrath **Tīheru Ohu Toihautū** | Executive Support Officer, Chief Executive's Office
07 351 8142 | 0276288045 | kim.mcgrath@rotorualc.nz | rotorualakescouncil.nz

From: [REDACTED] <[\[REDACTED\]@copelandlawyers.com](mailto:[REDACTED]@copelandlawyers.com)>
Sent: Friday, 12 February 2021 5:16 pm
To: Geoff Williams <Geoff.Williams@rotorualc.nz>
Cc: Steve Chadwick <Steve.Chadwick@rotorualc.nz>; [REDACTED] <[\[REDACTED\]@copelandlawyers.com](mailto:[REDACTED]@copelandlawyers.com)>
Subject: RLC -BBEL: ISA ASSESSMENT -WITHOUT NOTICE CLOSURE OF THE BLUE BATHS
Importance: High

Dear Geoff

Please see our letter [attached](#).

Regards

[REDACTED]

Mark Copeland Lawyers

Rotorua and Auckland
Level 1, 284 Te Ngae Road, Tarawera Roundabout
PO Box 6083, ROTORUA 3043
NEW ZEALAND
Ph: +64 7 345 9050
Fax: +64 7 345 9053

[REDACTED]
copeland@copelandlawyers.com
www.copelandlawyers.com
twitter.com/markcopelandlaw
www.irglobal.com



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**MARK
COPELAND
LAWYERS**

Mark Copeland LL.B. Dip.Theol

Level 1, GJ Gardner Building
284 Te Ngae Road, Rotorua
PO Box 6083, Whakarewarewa
Rotorua 3043, New Zealand

P +64 7 345 9050

F +64 7 345 9053

E copeland@copelandlawyers.com

12 February 2021

The Chief Executive
Rotorua Lakes Council
Private Bag 3029
ROTORUA 3046

For: Geoff Williams
By email: geoff.williams@rotorualc.nz

Dear Sir

**ROTORUA LAKES COUNCIL (RLC) – BLUE BATHS ESTABLISHMENT LIMITED (BBEL):
ISA ASSESSMENT – WITHOUT NOTICE CLOSURE OF THE BLUE BATHS**

We act for BBEL, the current tenant of The Blue Baths premises, and BBEL's Director [REDACTED]

We refer to RLC's letter to BBEL dated 26 January 2021, advising BBEL of the immediate closure of The Blue Baths premises due to an *earthquake prone* Initial Seismic Assessment (ISA) Rating obtained by RLC.

BBEL is shocked and disappointed to receive RLC's letter, requiring BBEL to immediately vacate its leased Blue Baths premises.

Among numerous concerns BBEL notes:

1. In June 2012 Sigma Consultants, Rotorua provided to RLC an earthquake assessment at a 95% NBS Rating for The Blue Baths. At this time Sigma advised the RLC that...*we do not consider [The Blue Baths building] to be an Earthquake Prone or an Earthquake Risk Building, or requiring any seismic strengthening work.* Sigma Consultants, being a long-standing Rotorua-based professional engineering firm, is very familiar with The Blue Baths buildings.
2. BBEL has tenanted The Blue Baths for over 20 years. Over this lengthy period it has worked hard and spent considerable amounts of its own money to develop The Blue Baths into a successful and well-regarded Events venue. This success has created positive, tangible benefits for the city of Rotorua and its inhabitants.
3. For at least the last 12 years BBEL has raised with RLC on many occasions the fact of urgent owner maintenance required for The Blue Baths Building. This includes the need for urgent deferred maintenance on leaking balconies, leaking pools and broken-down water pipes.

However, RLC has ignored BBEL's requests, and none of this important maintenance has been carried out. The lack of any material maintenance by RLC led directly to BBEL's (reluctant) decision in June 2020 to permanently close The Blue Baths pools, due to their run-down and shabby state.

4. In October 2018 RLC formally requested BBEL and other parties to provide an EOI concerning the redevelopment of The Blue Baths. In January 2019, within 48 hours of the EOI process closing, RLC advised BBEL that its RFP redevelopment proposal had been selected as RLC's preferred partner proposal.
5. Since this time BBEL has regularly discussed with RLC its detailed plans and proposals for the sustainable future redevelopment of The Blue Baths. These communications have included detailed discussions with the Rotorua Economic Development Unit (Michele Templar, Rebecca Wright and Chair John McRae) as well as a wide range of senior managers within RLC. At all times RLC has been aware of BBEL's actions in progressing both parties' agreed Blue Baths agenda.
6. Following RLC's formal selection of BBEL and its invitation to proceed, from February 2019 BBEL commenced The Blue Baths revitalisation project.
7. Since early 2019 BBEL has commissioned, at an aggregate approximate cost of s7(2)(b)(ii) in reliance on RLC's agreement to work with BBEL in this revitalisation project:
 - (a) A detailed Geotechnical Assessment for The Blue Baths from O'Sullivan & Associates, peer-reviewed by [REDACTED] expert Geotech and Dam Safety Engineer. (A copy of this Report was provided by BBEL to RLC in 2020, in utmost good faith.);
 - (b) Architectural redevelopment Plans from [REDACTED] Heritage Architect and [REDACTED] Hospitality Specialist Architect;
 - (c) Structural Engineering advice from [REDACTED] Senior Structural Engineer, DHC;
 - (d) Professional 3D Scanning and Modelling of The Blue Baths, carried out by [REDACTED] Surveyor, ENVIVO;
 - (e) Thermal modelling of The Blue Baths, conducted by [REDACTED] Mechanical Engineer Director ECubed, Passive Energy Environmental Solutions;
 - (f) Formal advice on Fire Engineering for the redeveloped Blue Baths;
 - (g) Professional Planning and related advice from [REDACTED] Senior Planner, Sigma Consultants;
 - (h) Professional Quantity Surveying Advice from Kingstons, specialist Quantity Surveyors; and
 - (i) Professional Project Management advice from [REDACTED] RDT Pacific.
8. Accordingly, with RLC's encouragement and full knowledge, for the last 24 months BBEL has had a number of expert engineers and other relevant professionals crawling all over The Blue

Baths buildings. Not once in the comprehensive geotechnical and other expert Reports as commissioned and paid for by BBEL have material concerns been raised about potential earthquake instability or related risks posed by The Blue Baths premises. While these Reports have acknowledged that in redeveloping The Blue Baths some strengthening of the building structure will be necessary, nowhere have they warned that The Blue Baths present an imminent injury or life-threatening risk.

9. In June 2020, following all the above preparatory work done by BBEL, Sigma Consultants lodged with RLC a formal Resource Consent for the re-development of The Blue Baths.
10. In the last nine months BBEL and RLC have had a number of further, face to face talks concerning BBEL's detailed proposals for the parties to redevelop and future-proof The Blue Baths. The Mayor (in October 2020) and the CEO of RLC (on 28 July 2020) have each personally participated in these meetings.
11. As a result of these discussions in late 2020 BBEL presented to RLC a detailed Terms Sheet proposal for the joint venture redevelopment of the Blue Baths, including a proposed §7(2)(b) §7(2)(b)(ii) direct cash investment by BBEL into such redevelopment.
12. BBEL had understood that its Blue Baths Redevelopment Proposal was to go without delay to the relevant RLC decision-making body for final consideration. However no response has to-date been received from RLC.
13. Notwithstanding all the above, including RLC's express selection of BBEL as its preferred redevelopment partner through its formal EOI / RFP process, the enormous time and effort it has encouraged BBEL to expend on redevelopment proposals and the approximately §7(2)(b)(ii) spent by BBEL to-date in developing such proposals, RLC has now seen fit to:
 - (a) Unilaterally commission an ISA for The Blue Baths without any reference to BBEL;
 - (b) Accept without question Tonkin & Taylors's advice – as set out in a wholly outsourced Report prepared by EQ Struct – that The Blue Baths is *earthquake prone*, having been assessed at a 15% NBS (IL2) Grade E Rating*, without any reference to BBEL or to the several relevant Reports recently commissioned by BBEL, as seen by RLC;
 - (c) Through RLC's senior managers, including the RLC CEO who has been personally involved in recent Blue Baths redevelopment discussions with BBEL, in late January 2021 make a unilateral decision to immediately close The Blue Baths premises:
 - (i) Despite having the relevant Tonkin & Taylor / EQ Strucs Report since 22 December 2020; and
 - (ii) Despite there being no law in New Zealand which states that a structure which is allocated a 15% NBS Rating through an ISA must be closed; and
 - (iii) Without giving any thought to its existing legal relationships with and obligations to BBEL concerning The Blue Baths; and

- (iv) Without giving any thought to the serious commercial impact such immediate closure will have on BBEL's business as conducted at The Blue Baths for over 20 years;
- (d) Provide BBEL with less than 24 hours' notice** of this ISA and RLC's requirement that BBEL immediately vacate The Blue Baths premise; and
- (e) Make lip-service efforts to assist BBEL to urgently find alternative premises, from which to manage and perform its significant events and catering businesses.

[*The Blue Baths were built in 1932 after the Napier Earthquake, and there is no record over the last 90 years of the Baths ever suffering any material earthquake damage.

**Not the *one weeks' notice* which Mayor Chadwick has advised [REDACTED] she understood (from RLC management) had been provided to BBEL.]

14. BBEL considers these actions by RLC to be peremptory, unjustified, unconscionable and bad faith behaviour by the Council.

15. We highlight that RLC has taken these actions despite:

- (a) The ISA evaluation process used for The Blue Baths by Tonkin & Taylor / EQ Struc by their own admission (and as is well known) being an abbreviated, largely visual, non-invasive or full and proper technical assessment; and
- (b) EQ Struc expressly including the following advice in its Report cover letter to Tonkin & Taylor dated 22 December 2020 that:

Regardless of structural weaknesses (structural or non-structural elements that do not meet the current requirements of clause B1 of the NZBC with respect to ultimate limit state seismic actions) there were no observed structural weaknesses that result in the building being unsafe to occupy (p1); and

Earthquake Prone buildings are not "Dangerous" buildings by default under the Building Act. Therefore, the decision to close the building based on the earthquake rating is at the owner's discretion (p2); and

These defects are unlikely to result in structural failure in the normal use of the building and there are no short-term remedial actions required. Therefore, the building is not considered as a Life Safety threat (p4).

- (c) Tonkin & Taylor's / EQ Struc's key summary advice to RLC dated 22 December 2020 as follows:

Therefore, the subject building is Potentially Earthquake Prone and in accordance with the current legislation, further action is required regarding the earthquake rating of these buildings (p1 Main Report).*

[*i.e. the earthquake rating, not the safety of The Blue Baths.]

16. These clear, unambiguous statements from RLC's own advisors raise salient questions as to whether the RLC has even read its own expert advice and, if even if it has, the existence of an ulterior motive/s for the RLC's actions in forcing BBEL to immediately vacate The Blue Baths for claimed safety reasons without notice.
17. RLC's actions have caused BBEL significant loss, including the direct costs of being forced to immediately re-locate its events and catering businesses (including removing large fittings and fixtures from its scaled Kitchen) as well as significant general damages for the stress, anxiety and reputational loss caused by RLC's peremptory actions. Again, it appears that RLC has had no regard for BBEL's well established business as conducted at The Blue Baths, including the fact of event bookings having to be cancelled as a result of RLC's actions.
18. BBEL is a sophisticated business, and its director is a prominent Rotorua business [REDACTED]. BBEL has clear rights at law and under The Blue Baths Lease. It is of serious concern to BBEL that these rights and RLC's consequent obligations to BBEL have been wholly ignored by RLC in taking these unjustified closure actions.
19. Consequently, we place RLC on formal notice that BBEL reserves all of its rights against RLC for its actions leading up to, and its unilateral decision to close, The Blue Baths, without notice, including all losses suffered by BBEL as a result of BBEL's actions.
20. Meanwhile, please inform our client of the outcome of the Council's formal DSA, and when [REDACTED] can re-take possession of The Blue Baths premises, as soon as the DSA is received by RLC this month.

Yours faithfully

[REDACTED]

Cc: Mayor Steve Chadwick
Steve.Chadwick@rotorualc.nz

From: Brian Stirton
Sent: Thursday, 25 February 2021 1:07 pm
To: Kaa Dhanjee
Subject: FW: Blue Baths VO2: Geotechnical investigations and assessment to support seismic assessment and remediation of the Blue Baths
Attachments: 20210212.Ioe_VO2.pdf

Hello Kaa,

Can you please raise a new PO for Tonkin and Taylor for \$16,400 plus gst.

Please charge the same code you used for the Blue Batch Geotech report last time (also T&T)

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, February 25, 2021 1:04 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Subject: Blue Baths VO2: Geotechnical investigations and assessment to support seismic assessment and remediation of the Blue Baths

Hi Brian,

Hope you are having a good week so far.

I understand that the above mentioned work is underway. To tie off the admin/contracting side, can you please reply to this email to confirm you happy with the attached?

Any questions please let [REDACTED] or myself know.

Many thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest pr

Please see our website for the latest update, or get in touch if there is anything we can do to :

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Rotorua District Council
C/- Rotorua Lakes Council

Attention: Brian Stirton

Dear Brian

Variation Order 2
Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Following our recent email of 7 January and subsequent discussions, and in accordance with your request, we are pleased to vary our proposal of 13 October 2020 (T+T ref: 1015676) to include an addendum for preliminary foundation recommendations to the geotechnical investigations and assessment report dated November 2020.

1 Scope of work

Following discussions with EQStruc and yourself, we propose to use Cone Penetration Tests (CPTs) to further evaluate the liquefaction and lateral spread risk on the building. The temperature measurements from the borehole investigation confirmed the temperature was less than 60° to 5 to 8 m bgl at the site, however, cold water was used during drilling which may have suppressed the temperature. CPT reliability decreases at temperatures above 60° but provides a more reliable measure of the liquefaction/cyclic softening risk at the site compared to boreholes. We propose the following works:

- 3 No. CPTs located adjacent to existing boreholes (excluding BH1) to around 6 m bgl or excessive temperatures. We have confirmed with Perry Geotech that emergency shut off valve installation is not required, and we can use a geothermal stand over by Rotorua Well Drillers.
- Additional 4 No. hand auger, Scala penetrometer and shear vane tests (if applicable), located adjacent to the existing boreholes to 3 mbgl or refusal.
- Preliminary assessment of the geotechnical ultimate bearing capacity of the soil using Scala and CPT correlations and Meyerhof/Vesic strip footing bearing capacity assessment for variable footing depths/widths.
- Additional seismic foundation load assessment using Plaxis finite element software analysis of the critical footings with liquefied/cyclic softened soil strengths. Critical foundations, allowable deformations and static/seismic loadings are to be confirmed by EQStruc.

- Update the ground model, liquefaction and lateral spreading sections of the T+T October 2020 report and summarise the bearing capacity assessment and recommendations for preliminary design and seismic capacity assessment.
- Recommend additional investigations/design required for any foundation remediation design works.

If CPT investigations are not possible due to too high temperatures too close to the ground surface, the liquefaction/lateral spreading and cyclic softening assessments will not be able to be advanced from our current understanding based on standard penetration tests (SPTs) and the shear wave velocity work completed by others.

To do this work we intend to use relevant existing information in published databases. The terms of use of these databases often require that we upload equivalent data that we collect for your project. By accepting this proposal, you agree to us uploading the relevant data collected from your project.

We will use all reasonable endeavours to meet our responsibilities to you, however we cannot be responsible for any delay, event or circumstance outside our reasonable control due to the impact of COVID-19 (including travel disruptions, self-isolation or quarantine requirements, ill health or other delay or inability of our staff or subcontractors to perform or access a site for any reason). If any of these circumstances do arise, we may seek to negotiate with you a variation to this proposal which enables us to complete our work for you on mutually acceptable terms, failing which either party may terminate our engagement.

2 Programme

We will start work relating to this variation week as soon as possible after you have confirmed your desired solution. As a consequence of the variation, our revised programme for our services is as follows:

- Start date for site investigation is dependent on availability of CPT operator and geothermal stand over by Rotorua Well Drillers (preliminary confirmation by Perry Geotech for week commencing 15 February 2021).
- Start date for foundation assessment dependent on receipt of critical foundation identification, loads and allowable deformations from EQStruc.
- We will update the report within four weeks after CPT information is received by T+T.

3 Fees

Our fee for the services outlined in this variation will be on a time and expenses basis, with an indicative budget estimate of \$15,400 (exclusive of GST). We have allowed for an extra \$1,000 contingency sum for possible laboratory testing for Atterberg, PSD or sulphate content testing that may be required following the CPT testing to confirm soil properties for borderline liquefiable soils if required. We will advise if we believe additional laboratory testing is required before we proceed.

Site investigation work has inherent uncertainties such as variable subsoil conditions, access and equipment logistics and is dependent on the weather. We will endeavour to complete this variation within our budget estimate and will inform you if it is likely that the total indicative budget estimate is to be exceeded.

This variation is in addition to our current agreed fee giving a total project budget of \$74,243 (exclusive of GST).

A breakdown of this revised budget is as follows:

	Fees	Disbursements	TOTAL
Original Engagement (invoiced)	\$19,664	\$1,579	\$21,243
Previous Variation (VO1)	\$3,000	\$33,600	\$36,600
This Variation (VO 2)	\$12,300	\$3,100 + \$1,000 contingency	\$15,400 + \$1,000 contingency
Revised Total Budget (excluding GST)	\$34,964	\$38,279 + \$1,000 contingency	\$73,243 + \$1,000 contingency

We will invoice monthly, on or after the first working day of the month, for work undertaken in the preceding month. If payment becomes overdue and we are unable to agree alternative payment terms with you, we reserve the right to suspend work and to withhold deliverables. This will not apply in the case where you have advised us that you have a genuine dispute with our invoice (or part of our invoice) and you have paid any undisputed amounts.

4 Terms and conditions

The work will be carried out as an extension to our existing engagement and in accordance with our previously agreed conditions of engagement set out in our letter of engagement dated 13 October 2020.

Please note that this offer is valid for three months from the date of this letter.

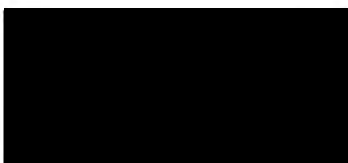
5 Closing remarks

We trust that this satisfactorily meets your needs and look forward to receiving your instruction to proceed. You can confirm your acceptance by returning the attached signatory form. Alternatively, we will take your instruction to proceed as confirmation that you accept this variation proposal.

We will be pleased to discuss any aspect of this variation or to supply additional information if this is required.

Please refer any further enquiries or correspondence to Craig Davanna.

Yours sincerely



Project Director

Attached: Signatory form

12-Feb-21

\\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

Variation Proposal Signatory form

T+T Ref: 1015676
 Date: 12 February 2021
 Contract: Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Confirmation by Client: I/we acknowledge that I/we have read the above variation proposal. I/we agree that the work described in the proposal will be carried out under the existing contract terms (including the limitations of liability) referenced in the proposal, and I/we authorise the above.

Client name: Rotorua District Council
 Client Address: C/- Rotorua Lakes Council
 Attention: Brian Stirton

Signature: _____

Name: _____

Date: _____

Please provide the following information if different:

Client Name and Address	Invoicing Entity Name* and Address (if different to Client)
_____	_____
_____	_____
_____	_____
_____	_____

* Invoicing entity to also give the "Confirmation by Client" above by signing below

Signature: _____

Name: _____

Date: _____

Please return one signed copy to [redacted] of Tonkin + Taylor at email [redacted] or to the address on the letterhead.

12-Feb-21
 \\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

From: [REDACTED]tonkintaylor.co.nz>
Sent: Thursday, 25 February 2021 1:37 pm
To: Brian Stirton
Subject: RE: Blue Baths VO2: Geotechnical investigations and assessment to support seismic assessment and remediation of the Blue Baths

Perfect thanks

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Thursday, 25 February 2021 1:06 PM
To: [REDACTED]tonkintaylor.co.nz>
Subject: RE: Blue Baths VO2: Geotechnical investigations and assessment to support seismic assessment and remediation of the Blue Baths

Hello [REDACTED]

Please accept this email as approval for the attached.

I will get a new purchase order raised for this work, for you to reference on your invoice.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]tonkintaylor.co.nz>
Sent: Thursday, February 25, 2021 1:04 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED]tonkintaylor.co.nz>
Subject: Blue Baths VO2: Geotechnical investigations and assessment to support seismic assessment and remediation of the Blue Baths

Hi Brian,

Hope you are having a good week so far.

I understand that the above mentioned work is underway. To tie off the admin/contracting side, can you please reply to this email to confirm you happy with the attached?

Any questions please let [REDACTED] or myself know.

Many thanks, [REDACTED]

Ngā Mihi | Kind regards,

██████████ | Project Controller

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand

██████████ www.tonkintaylor.co.nz  [T+T profile](#)



To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest pr

Please see our website for the latest update, or get in touch if there is anything we can do to :

NOTICE: This email together with any attachments is confidential, may be subject to legal privilege and may contain proprietary information, including information protected by copyright. If you are not the intended recipient, please do not copy, use or disclose the information in it, and confidentiality and privilege are not waived. If you have received this in error, please notify us immediately by return email and delete this email.

Rotorua District Council
C/- Rotorua Lakes Council

Attention: Brian Stirton

Dear Brian

Variation Order 2
Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Following our recent email of 7 January and subsequent discussions, and in accordance with your request, we are pleased to vary our proposal of 13 October 2020 (T+T ref: 1015676) to include an addendum for preliminary foundation recommendations to the geotechnical investigations and assessment report dated November 2020.

1 Scope of work

Following discussions with EQStruc and yourself, we propose to use Cone Penetration Tests (CPTs) to further evaluate the liquefaction and lateral spread risk on the building. The temperature measurements from the borehole investigation confirmed the temperature was less than 60° to 5 to 8 m bgl at the site, however, cold water was used during drilling which may have suppressed the temperature. CPT reliability decreases at temperatures above 60° but provides a more reliable measure of the liquefaction/cyclic softening risk at the site compared to boreholes. We propose the following works:

- 3 No. CPTs located adjacent to existing boreholes (excluding BH1) to around 6 m bgl or excessive temperatures. We have confirmed with Perry Geotech that emergency shut off valve installation is not required, and we can use a geothermal stand over by Rotorua Well Drillers.
- Additional 4 No. hand auger, Scala penetrometer and shear vane tests (if applicable), located adjacent to the existing boreholes to 3 mbgl or refusal.
- Preliminary assessment of the geotechnical ultimate bearing capacity of the soil using Scala and CPT correlations and Meyerhof/Vesic strip footing bearing capacity assessment for variable footing depths/widths.
- Additional seismic foundation load assessment using Plaxis finite element software analysis of the critical footings with liquefied/cyclic softened soil strengths. Critical foundations, allowable deformations and static/seismic loadings are to be confirmed by EQStruc.

- Update the ground model, liquefaction and lateral spreading sections of the T+T October 2020 report and summarise the bearing capacity assessment and recommendations for preliminary design and seismic capacity assessment.
- Recommend additional investigations/design required for any foundation remediation design works.

If CPT investigations are not possible due to too high temperatures too close to the ground surface, the liquefaction/lateral spreading and cyclic softening assessments will not be able to be advanced from our current understanding based on standard penetration tests (SPTs) and the shear wave velocity work completed by others.

To do this work we intend to use relevant existing information in published databases. The terms of use of these databases often require that we upload equivalent data that we collect for your project. By accepting this proposal, you agree to us uploading the relevant data collected from your project.

We will use all reasonable endeavours to meet our responsibilities to you, however we cannot be responsible for any delay, event or circumstance outside our reasonable control due to the impact of COVID-19 (including travel disruptions, self-isolation or quarantine requirements, ill health or other delay or inability of our staff or subcontractors to perform or access a site for any reason). If any of these circumstances do arise, we may seek to negotiate with you a variation to this proposal which enables us to complete our work for you on mutually acceptable terms, failing which either party may terminate our engagement.

2 Programme

We will start work relating to this variation week as soon as possible after you have confirmed your desired solution. As a consequence of the variation, our revised programme for our services is as follows:

- Start date for site investigation is dependent on availability of CPT operator and geothermal stand over by Rotorua Well Drillers (preliminary confirmation by Perry Geotech for week commencing 15 February 2021).
- Start date for foundation assessment dependent on receipt of critical foundation identification, loads and allowable deformations from EQStruc.
- We will update the report within four weeks after CPT information is received by T+T.

3 Fees

Our fee for the services outlined in this variation will be on a time and expenses basis, with an indicative budget estimate of \$15,400 (exclusive of GST). We have allowed for an extra \$1,000 contingency sum for possible laboratory testing for Atterberg, PSD or sulphate content testing that may be required following the CPT testing to confirm soil properties for borderline liquefiable soils if required. We will advise if we believe additional laboratory testing is required before we proceed.

Site investigation work has inherent uncertainties such as variable subsoil conditions, access and equipment logistics and is dependent on the weather. We will endeavour to complete this variation within our budget estimate and will inform you if it is likely that the total indicative budget estimate is to be exceeded.

This variation is in addition to our current agreed fee giving a total project budget of \$74,243 (exclusive of GST).

A breakdown of this revised budget is as follows:

	Fees	Disbursements	TOTAL
Original Engagement (invoiced)	\$19,664	\$1,579	\$21,243
Previous Variation (VO1)	\$3,000	\$33,600	\$36,600
This Variation (VO 2)	\$12,300	\$3,100 + \$1,000 contingency	\$15,400 + \$1,000 contingency
Revised Total Budget (excluding GST)	\$34,964	\$38,279 + \$1,000 contingency	\$73,243 + \$1,000 contingency

We will invoice monthly, on or after the first working day of the month, for work undertaken in the preceding month. If payment becomes overdue and we are unable to agree alternative payment terms with you, we reserve the right to suspend work and to withhold deliverables. This will not apply in the case where you have advised us that you have a genuine dispute with our invoice (or part of our invoice) and you have paid any undisputed amounts.

4 Terms and conditions

The work will be carried out as an extension to our existing engagement and in accordance with our previously agreed conditions of engagement set out in our letter of engagement dated 13 October 2020.

Please note that this offer is valid for three months from the date of this letter.

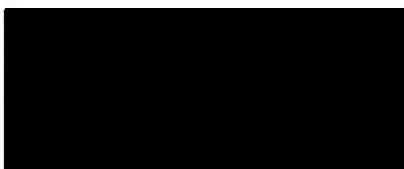
5 Closing remarks

We trust that this satisfactorily meets your needs and look forward to receiving your instruction to proceed. You can confirm your acceptance by returning the attached signatory form. Alternatively, we will take your instruction to proceed as confirmation that you accept this variation proposal.

We will be pleased to discuss any aspect of this variation or to supply additional information if this is required.

Please refer any further enquiries or correspondence to Craig Davanna.

Yours sincerely



Project Director

Attached: Signatory form

12-Feb-21

\\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

Variation Proposal Signatory form

T+T Ref: 1015676
 Date: 12 February 2021
 Contract: Geotechnical investigations and assessment to support seismic assessment and remediation of The Blue Baths

Confirmation by Client: I/we acknowledge that I/we have read the above variation proposal. I/we agree that the work described in the proposal will be carried out under the existing contract terms (including the limitations of liability) referenced in the proposal, and I/we authorise the above.

Client name: Rotorua District Council
 Client Address: C/- Rotorua Lakes Council
 Attention: Brian Stirton

Signature: _____

Name: _____

Date: _____

Please provide the following information if different:

Client Name and Address	Invoicing Entity Name* and Address (if different to Client)
-------------------------	---

_____	_____
_____	_____
_____	_____
_____	_____

* Invoicing entity to also give the "Confirmation by Client" above by signing below

Signature: _____

Name: _____

Date: _____

Please return one signed copy to [REDACTED] of Tonkin + Taylor at email [REDACTED] or to the address on the letterhead.

12-Feb-21

\\ttgroup.local\corporate\tauranga\projects\1015676\contractual\vo2\20210212.loe_vo2.docx

From: [REDACTED]@eqstruc.co.nz>
Sent: Friday, 26 February 2021 12:12 pm
To: Brian Stirton
Cc: [REDACTED]
Subject: Blue Baths - Site Investigation Plans
Attachments: 31854 - Blue Baths Rotorua Plans - Testing Locations Mark-up.pdf

Hi Brian

As we discussed, we are going to do some scanning and testing on coming Tuesday and Wednesday (2 & 3 March). I have attached the plan for different types of tests and the proposed locations.

Please, let me know if you have any questions.

Kind Regards

[REDACTED]
Structural Engineer
BE (Hons), GFireE, MEngNZ
[REDACTED]
www.eqstruc.co.nz

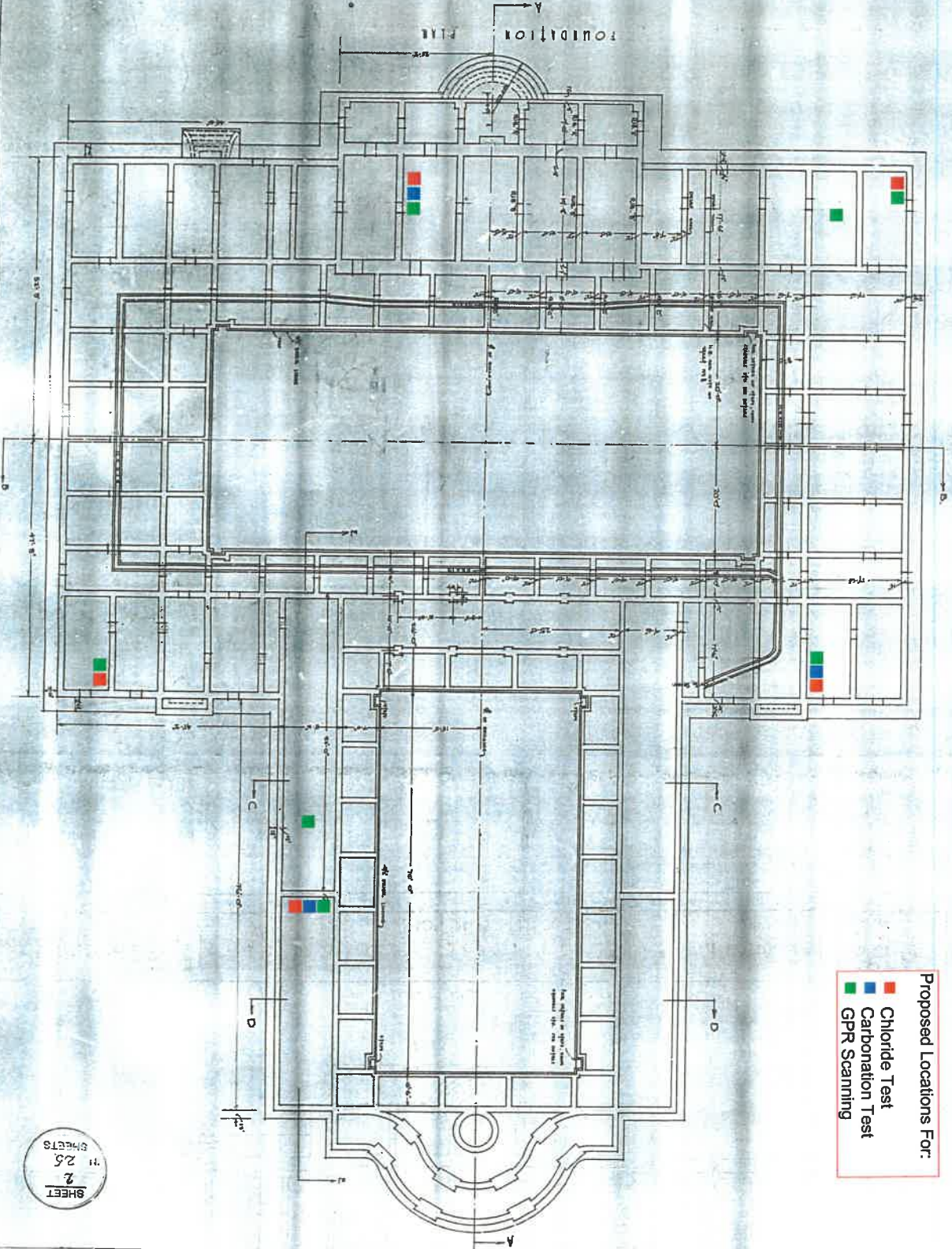
EQSTRUC Limited
78 New North Road, Eden Terrace, Auckland
14 Lombard Street, Te Aro, Wellington

Project No.	6287
Client	BLU DATA BUILDING ROTORUA
Architect	PUBLIC WORKS ARCHITECTURAL SERVICES
Scale	SCALE: 8 FEET TO AN INCH
Date	
Drawn By	
Checked By	
Approved By	

BLU DATA BUILDING ROTORUA

PUBLIC WORKS ARCHITECTURAL SERVICES
PMB 78216
6287

NOTE: SECTION LINES ON THIS PLAN REFER TO SHEET 5 ONLY



Proposed Locations For:

- Chloride Test
- Carbonation Test
- GPR Scanning



SHEET 2
OF 25
SHEETS

PWD 15216 - 6287

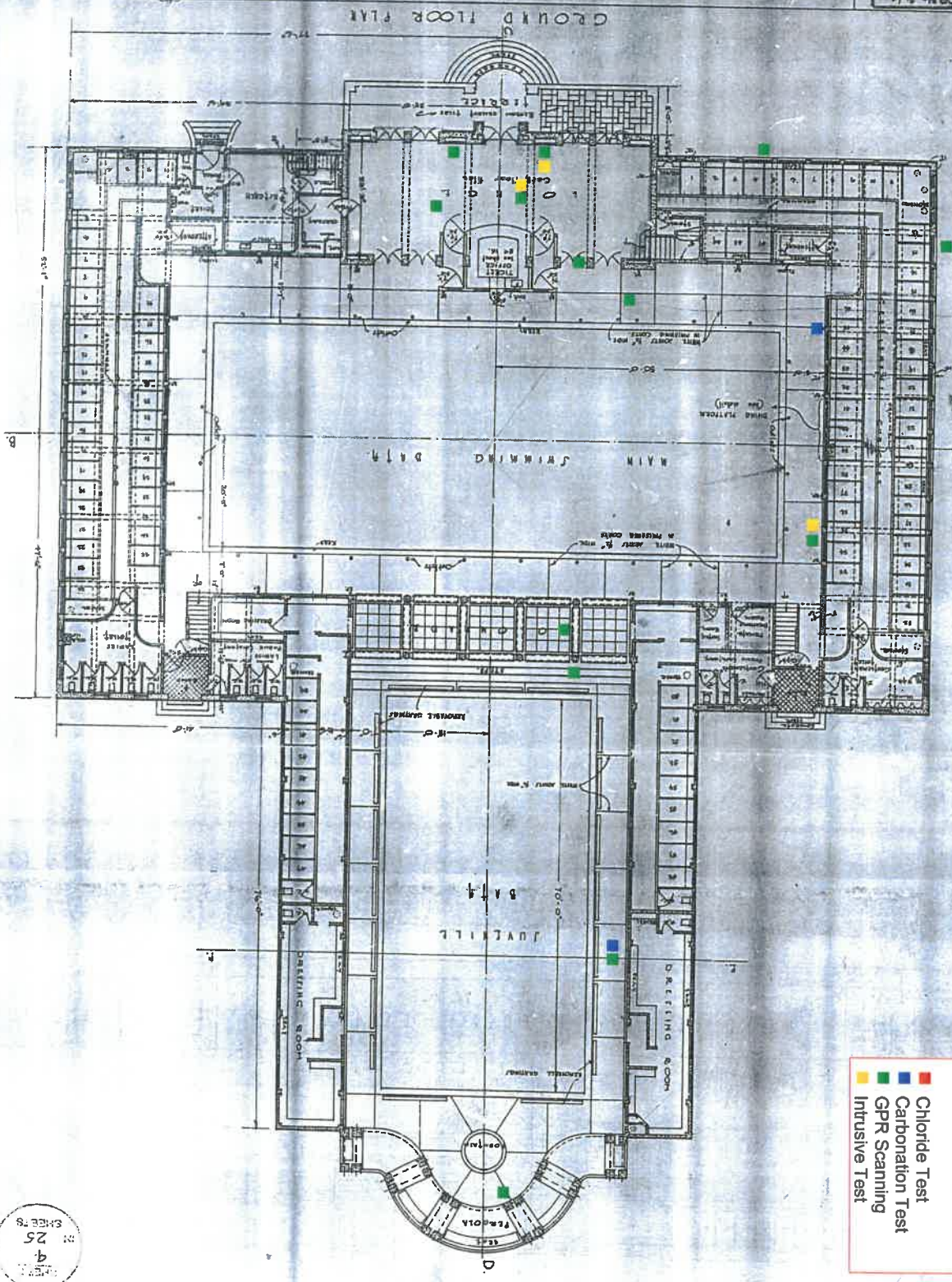
PWD. 78216
6287

PARSONS
BRINCKERHOFF
CORPORATION
ARCHITECTURAL
BRANCH

BLUE DATA BUILDING ROTORUA

SCALE - 8 FEET TO AN INCH

JOB No. 547
DATE
BY
CHECKED
APPROVED



Proposed Locations For:

- Chloride Test
- Carbonation Test
- GPR Scanning
- Intrusive Test



25
4
SHEET 88

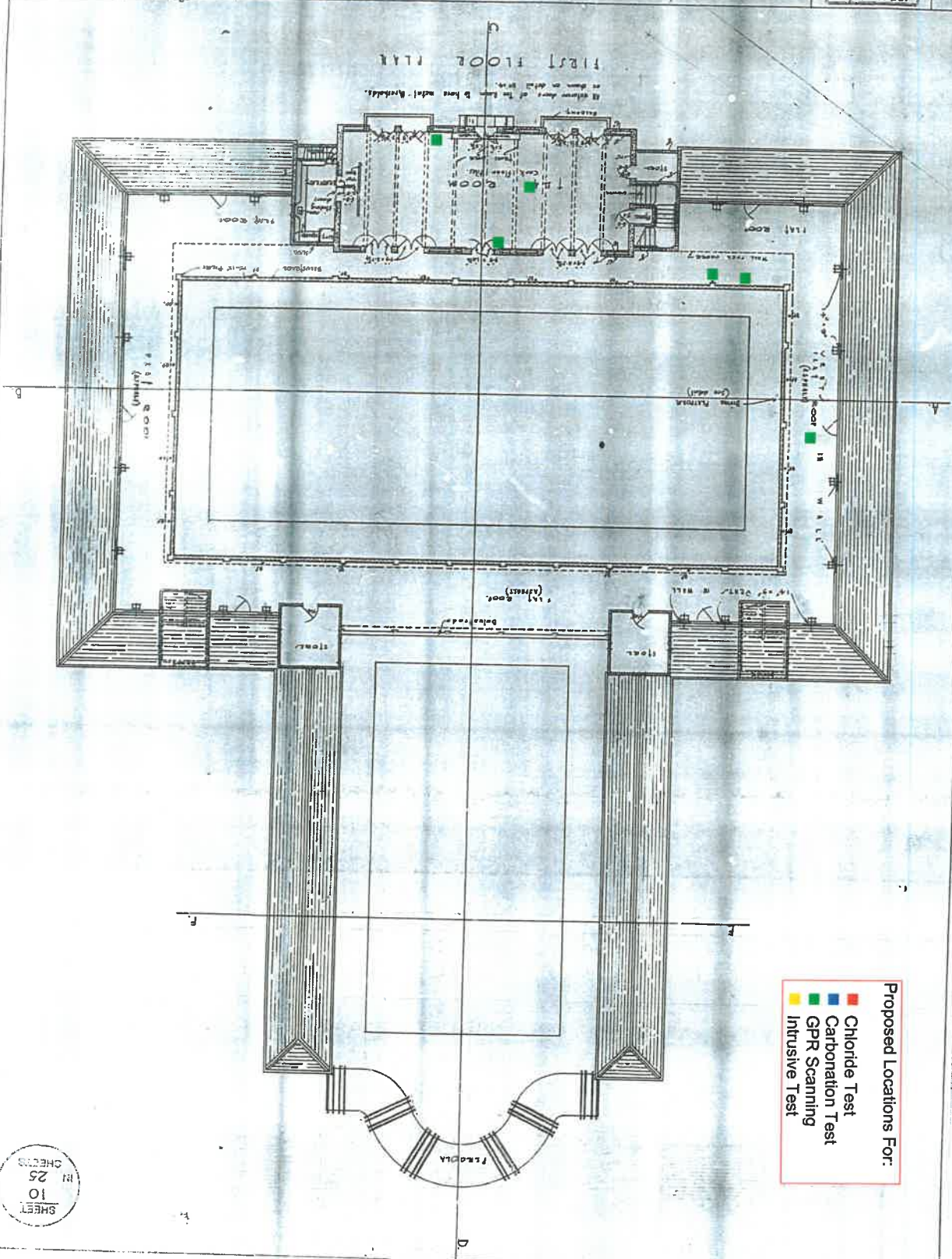
01/28/29

JOB No. 30
DATE: 01/28/29
DRAWN BY: [illegible]
CHECKED BY: [illegible]

BLUL BATH BUILDING ROTORU +

SCALE - 8/11 TO AN INCH

PWD 78216
5287



- Proposed Locations For:
- Chloride Test
 - Carbonation Test
 - GPR Scanning
 - Intrusive Test



SHEET 10
 CHECKED 25
 IN 25

From: Brian Stirton
Sent: Friday, 26 February 2021 12:40 pm
To: Jocelyn Mikaere; Geoff Williams; Thomas Colle
Subject: FW: Blue Baths access

Hello Jocelyn, Geoff and Thomas,

Just to keep you in the loop.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



From: Brian Stirton
Sent: Friday, February 26, 2021 12:38 PM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: Blue Baths access

Hello [REDACTED]

I have just spoken to the structural engineers – they now plan to have the report to us on the 12th March, providing they have no issues with the intrusive testing and we have no further Covid-19 lockdown restrictions.

We may be able to provide a verbal figure earlier, however, I cannot guarantee that.

As discussed on the phone last week the engineers could not travel to site during the Covid-19 lockdown.

They have always said the report would be 10 to 12 days after the intrusive investigation works were completed.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

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A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Friday, February 26, 2021 10:42 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: Blue Baths access

Hi Brian

I really need a more definitive answer if possible please.

I have clients holding their bookings with us, who will cancel if we aren't able to let them know very soon ie end of Feb as you originally said.

Is your your provider not able to give you a date ?

Get [Outlook for iOS](#)

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, February 26, 2021 10:36:11 AM
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: FW: Blue Baths access

Hello [REDACTED]

The CPT ground testing was completed yesterday, this will feed into the DSA. The structural "intrusive" testing and wall xray that was scheduled, and postponed due to Auckland's level Covid-19 lockdown, is now happening on Tuesday next week.

Once this is done the draft report will be issued relatively quickly.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
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A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Friday, February 26, 2021 8:53 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: Blue Baths access

Morena Brian

We have clients requesting an update on whether we can host their events at the Blue Baths in March.

It's the end of Feb, do you have a DSA yet?

Regards

-----Original Message-----

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Wednesday, 10 February 2021 10:51 am
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: RE: Blue Baths access

Hello [REDACTED]

As requested, please see the attached documents

Regards

Brian

Sent from my Samsung Galaxy smartphone.

----- Original message -----

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Date: 10/02/21 10:21 AM (GMT+12:00)
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Blue Baths access

Hello Brian

Am I able to read the BB ISA report please, by email thanks [REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Thursday, 28 January 2021 9:32 am
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: Blue Baths access

Hello [REDACTED]

Am I able to obtain a key for the Blue Baths please, so I can arrange for the structural engineers to get access in February for the DSA.

Regards

Brian Stirton Legal & Property Manager - Property Services

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz <<mailto:brian.stirton@rotorualc.nz>> | W:

[rotorualakescouncil.nz](http://rotorualakescouncil.nz/?utm_source=Stationery&utm_medium=Email&utm_content=Sarah%2BDicker&utm_campaign=Stationery) <http://rotorualakescouncil.nz/?utm_source=Stationery&utm_medium=Email&utm_content=Sarah%2BDicker&utm_campaign=Stationery>

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

[\[http://images.rotoruaNZ.com/stationery/rlc_logo_blue.gif?v=4\]](http://images.rotoruaNZ.com/stationery/rlc_logo_blue.gif?v=4)<http://www.rotorualakescouncil.nz/?utm_source=Stationery&utm_medium=Email&utm_content=Sarah%2BDicker&utm_campaign=Stationery>

From: Brian Stirton
Sent: Friday, 26 February 2021 8:59 pm
To: [REDACTED]
Subject: RE: Blue Baths access

Hello [REDACTED]

No that is fine to enter to remove key items you require.

Please follow the same staff safety protocols as you did last time while on site.

Regards

Brian.

Sent from my Samsung Galaxy smartphone.

----- Original message -----

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Date: 26/02/21 4:55 PM (GMT+12:00)
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: RE: Blue Baths access

Hello Brian

In light of this delay, we need to access the BB building on Monday to pick up more gear.

Any issues?

[REDACTED]

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, 26 February 2021 12:38 pm
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: Blue Baths access

Hello [REDACTED]

I have just spoken to the structural engineers – they now plan to have the report to us on the 12th March, providing they have no issues with the intrusive testing and we have no further Covid-19 lockdown restrictions.

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ROTORUA
LAKES COUNCIL

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[REDACTED]

[Get Outlook for iOS](#)

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, February 26, 2021 10:36:11 AM
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: FW: Blue Baths access

Hello [REDACTED]

The CPT ground testing was completed yesterday, this will feed into the DSA. The structural "intrusive" testing and wall xray that was scheduled, and postponed due to Auckland's level Covid-19 lockdown, is now happening on Tuesday next week.

Once this is done the draft report will be issued relatively quickly.

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A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

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Sent: Friday, February 26, 2021 8:53 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: Blue Baths access

Morena Brian

We have clients requesting an update on whether we can host their events at the Blue Baths in March. It's the end of Feb, do you have a DSA yet?

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Subject: RE: Blue Baths access

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As requested, please see the attached documents

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Brian

Sent from my Samsung Galaxy smartphone.

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February for the DSA.

Regards

Brian Stirton Legal & Property Manager - Property Services

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz <<mailto:brian.stirton@rotorualc.nz>> | W:

rotorualakescouncil.nz <http://rotorualakescouncil.nz/?utm_source=Stationery&utm_medium=Email&utm_content=Sarah%2BDicker&utm_campaign=Stationery>

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

[http://images.rotoruaNZ.com/stationery/rlc_logo_blue.gif?v=4] <http://www.rotorualakescouncil.nz/?utm_source=Stationery&utm_medium=Email&utm_content=Sarah%2BDicker&utm_campaign=Stationery>

From: Brian Stirton
Sent: Monday, 1 March 2021 7:23 am
To: [REDACTED]
Subject: Blue Baths testing

Hello [REDACTED]

Well here we go again.

I assume that there will not be the site inspection tomorrow, due to the Covid-19 alert level change in Auckland, please let me know if this is the case, as I assume this is not classified as "essential works".

If it is cancelled, can you please reschedule for Monday the 8th if you can, as these changes in alert levels for Auckland are causing some issues for us all here. Obviously this will, depend on work load and alert level dropping to level 2 or 1 in Auckland next week, however, I need to let the tenant know asap, as the site is still closed and we need to do this work before we know if we can re-open.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Tuesday, 2 March 2021 9:56 am
To: Brian Stirton
Cc: Jocelyn Mikaere; Thomas Colle
Subject: RE: Blue Baths - structural review postponed

Hi Brian

Whilst it is undoubtedly good news that they doing the work today, clients have lost patience with the delay, we have lost two good corporate dinner bookings for March (a total of 380 pax) that have both chosen to use other venues in Rotorua for their events.

Gut wrenching for us as we have tried to recover some of the losses of 2020 with these hard-earned corporate groups. And unnecessary that we are in this position at all – as your consultant points out – when the building has “no short-term remedial actions required”.

Regards

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, 1 March 2021 12:58 pm
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

I have been in discussions with the engineers, and I am happy to confirm that we have just received dispensation/exemption for the engineers to travel to Rotorua, so they will be on site tomorrow.

So hopefully we are now back on track.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Monday, March 1, 2021 10:05 AM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: Blue Baths - structural review postponed

Hello [REDACTED]

It looks like we have to postpone the engineers investigation works again, as the engineers are in lockdown in Auckland.

I have spoken to them this morning, and they are going to apply for an exemption, however, this paperwork may take a few days to go through and there is no guarantee that the exemption will be granted.

I have also re-booked them for Monday next week, so if Auckland move to level 2 on Sunday night/early Monday morning, then they will attend site on the 8th, however, this will depend on Auckland's Covid-19 alert level.

Unfortunately this will delay the report yet again, however, this is out of all of our control at this stage.

Best case scenario is we will now get the report on 19th, possibly the 22nd.

I will keep you informed with any updates as they come to hand.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Wednesday, 3 March 2021 12:23 pm
To: [REDACTED]
Subject: RE: Re Lift Inspection

Hello [REDACTED]

Thanks for the email below.

Sorry I thought KONE had sorted this as I spoke to them directly – as they have a policy regarding this.

I will follow up, again, with [REDACTED] on this and get back to you asap if that is okay.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | **M:** 027 268 9707
E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Wednesday, March 3, 2021 11:56 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: Re Lift Inspection

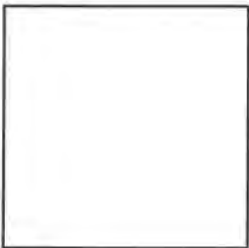
Hi Brian

See below from [REDACTED] at Vertrans.

Would you like us to allow access during this period or wait until we have the report?

Many thanks

[REDACTED]



[REDACTED]
General Manager
[REDACTED]
www.bluebaths.co.nz | www.terrace.kitchen
The Blue Baths, Queens Drive, Rotorua
Terrace Kitchen, 1029 Tutanekei St, Rotorua



From: [REDACTED] <[REDACTED]@vertrans.co.nz>
Sent: Wednesday, 3 March 2021 11:39 AM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Cc: [REDACTED] <[REDACTED]@vertrans.co.nz>
Subject: RE: Re Lift Inspection

Hi [REDACTED]

Has there been any advancement on this?

Regards,
[REDACTED] | Director
Vertrans Associates (NZ) Ltd
Building 3, 1 William Pickering Drive, Rosedale, Auckland 0632
Phone: 09 480 5510 or 0800 837872
[REDACTED]
POST: PO Box 300-302, Albany 0752, Auckland, New Zealand



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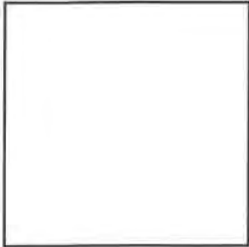
From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Friday, 19 February 2021 3:39 pm
To: [REDACTED] <[REDACTED]@vertrans.co.nz>
Subject: FW: Re Lift Inspection

Hi [REDACTED]

I have forwarded your message to Brian Stirton at council to check if we can allow access or if they will arrange access direct with you.

I'll let you know should we have any updates.

Many thanks
[REDACTED]



[Redacted]
General Manager

[Redacted]
www.bluebaths.co.nz | www.terrace.kitchen
The Blue Baths, Queens Drive, Rotorua
Terrace Kitchen, 1029 Tutanekai St, Rotorua



From: Info <info@bluebaths.co.nz>
Sent: Friday, 19 February 2021 12:36 PM
To: [Redacted] <[Redacted]@bluebaths.co.nz>
Subject: Fwd: Re Lift Inspection

Many thanks,
[Redacted]

From: [Redacted] <[Redacted]@vertrans.co.nz>
Sent: Friday, February 19, 2021 12:35:18 PM
To: Info <info@bluebaths.co.nz>
Cc: [Redacted] <[Redacted]@vertrans.co.nz>
Subject: Re Lift Inspection

Hi,

We are looking to undertake an inspection of the lift for the BWOFF on Monday morning.
Can you please advise what time you will be open?

Regards,

[Redacted] | Director
Vertrans Associates (NZ) Ltd
Building 3, 1 William Pickering Drive, Rosedale, Auckland 0632
Phone: 09 480 5510 or 0800 837872

[Redacted]
POST: PO Box 300-302, Albany 0752, Auckland, New Zealand



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From: [REDACTED]@tonkintaylor.co.nz>
Sent: Wednesday, 3 March 2021 2:56 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 56796 - The Blue Baths - RLP020895
Attachments: Invoice Project 1015676.0000R 000000056796_20210303025334.pdf

Good afternoon,

Please find attached our February 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand

[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest pr

Please see our website for the latest update, or get in touch if there is anything we can do to :

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Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

28 February 2021
Invoice No: 56796
Your reference: RLP020895
Project Manager: [REDACTED]

Project 1015676.0000R Geotechnical investigations and assessment to support seismic assessment of The Blue Baths

Invoice for February 2021:

- Project initiation and site inspection
- EQ Struc Group Consulting expenses

Phase 02 Seismic Assessment_Structural

Professional Fees	1,703.63
Expenses	3,630.00
Subtotal excluding GST	5,333.63
15% GST	800.04
Total this Invoice	<u>\$6,133.67</u>

Due Date: 7 March 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**



TAX INVOICE

Tonkin and Taylor Group Limited
PO Box 317
Tauranga

Invoice Date
26 Feb 2021

Invoice Number
INV-4975

GST Number
104-844-529

EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Description	Quantity	Unit Price	Amount NZD
Job No: 31854 Name: Blue Bath Rotorua			
CONSULTING - Detailed Seismic Assessment with Retrofit Options (40% Progress Invoice)	1.00	3,300.00	3,300.00
		Subtotal	3,300.00
		TOTAL GST 15%	495.00
		TOTAL NZD	3,795.00

Due Date: 15 Mar 2021

All payments to ANZ Bank and Branch: 06-0103-0171902-00

Please quote your invoice number shown above as reference for the payment.

This invoice is due within 14 days of the invoice date.

Thank you for your business!



[View and pay online now](#)



PAYMENT ADVICE

To: EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Customer	Tonkin and Taylor Group Limited
Invoice Number	INV-4975
Amount Due	3,795.00
Due Date	15 Mar 2021
Amount Enclosed	

Enter the amount you are paying above

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Wednesday, 3 March 2021 3:51 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 56422 - The Blue Baths - RLP021563
Attachments: Invoice Project 1015676.1000R 000000056422_20210302020220.pdf

Good afternoon,

Please find attached our February 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] Project Controller

Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest priority.

Please see our website for the latest update, or get in touch if there is anything we can do to support you.

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Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

28 February 2021
Invoice No: 56422

Your reference: RLP021563
Project Manager: XXXXXXXXXX

Project 1015676.1000R RLC Blue Baths_Seismic Assessment_Geotechnical

- Supervising CPT investigations
- Design co-ordination with EQ Struc

Professional Fees	4,536.00
	Subtotal excluding GST 4,536.00
	15% GST 680.40
	Total this Invoice <u><u>\$5,216.40</u></u>

Due Date: 7 March 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**

From: Brian Stirton
Sent: Monday, 15 March 2021 9:34 am
To: [REDACTED]
Subject: RE: Blue Baths testing

Hello [REDACTED]

And as at 9:00am this morning the Mayor is now also involved.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Monday, March 15, 2021 8:32 AM
To: [REDACTED] <[\[REDACTED\]@conkintaylor.co.nz](mailto:[REDACTED]@conkintaylor.co.nz)>
Subject: FW: Blue Baths testing

Hello [REDACTED]

Are you able to accelerate this, as the tenant, via [REDACTED] lawyer, is getting a little anxious. I got another email on Friday from [REDACTED], which I have not responded to at this stage.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[\[REDACTED\]@eqstruc.co.nz](mailto:[REDACTED]@eqstruc.co.nz)>
Sent: Friday, March 12, 2021 1:04 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[\[REDACTED\]@conkintaylor.co.nz](mailto:[REDACTED]@conkintaylor.co.nz)>; [REDACTED] <[\[REDACTED\]@eqstruc.co.nz](mailto:[REDACTED]@eqstruc.co.nz)>
Subject: Re: Blue Baths testing

Hi Brian

I understand that you need to answer your tenant. We need the inputs from the geotech team, as the foundation is critical. Once we receive the data, it will take us a couple of days to send you the initial NBS% rating of the building. After a week or two, we can then issue the finalised report.

Kind Regards

██████████
Structural Engineer
BE (Hons), GFireE, MEngNZ

██████████
www.eqstruc.co.nz

EQSTRUC Limited

78 New North Road, Eden Terrace, Auckland
14 Lombard Street, Te Aro, Wellington

On Fri, 12 Mar 2021 at 08:00, Brian Stirton <Brian.Stirton@rotorualc.nz> wrote:

Hello ██████████

I was just wondering if you have any information available for us on the Blue Baths DSA.

Obviously we have a tenant that wants to move back in, and we are dealing with that, however, it would be extremely beneficial if we had some information to share asap. Even an email providing an interim finding would be good.

Happy to discuss.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: ██████████ <██████████@eqstruc.co.nz>

Sent: Monday, March 1, 2021 4:31 PM

To: Brian Stirton <Brian.Stirton@rotorualc.nz>

Cc: ██████████ <██████████@tonkintaylor.co.nz>

Subject: Re: Blue Baths testing

Hi Brian

Following our phone discussion today, we will meet you tomorrow morning at Blue Baths site. We will be there by 8:30 am.

Best Regards

[REDACTED]

On Mon, 1 Mar 2021 at 7:23 AM, Brian Stirton <Brian.Stirton@rotorualc.nz> wrote:

Hello [REDACTED]

Well here we go again.

I assume that there will not be the site inspection tomorrow, due to the Covid-19 alert level change in Auckland, please let me know if this is the case, as I assume this is not classified as “essential works”.

If it is cancelled, can you please reschedule for Monday the 8th if you can, as these changes in alert levels for Auckland are causing some issues for us all here. Obviously this will, depend on work load and alert level dropping to level 2 or 1 in Auckland next week, however, I need to let the tenant know asap, as the site is still closed and we need to do this work before we know if we can re-open.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@tompkinswake.co.nz>
Sent: Thursday, 4 March 2021 1:58 pm
To: Brian Stirton
Cc: [REDACTED]
Subject: FW: Rotorua Lakes Council - Blue Baths Establishment Limited
Attachments: RJB-222361-451-54-1 Letter to Mark Copeland Lawyers 4 March 2021.pdf

Hi Brian

Please see **attached** finalised letter as sent for your records. We will be in touch again when a response is received.

Kind regards
[REDACTED]

[REDACTED] Senior Associate

P 07 349 8701 | [REDACTED]@tompkinswake.co.nz
Rotorua | Hamilton | Auckland | Tauranga

TOMPKINS WAKE



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From: [REDACTED]
Sent: Thursday, 4 March 2021 1:57 PM
To: [REDACTED]@copelandlawyers.com
Cc: [REDACTED]@tompkinswake.co.nz>
Subject: Rotorua Lakes Council - Blue Baths Establishment Limited

Dear [REDACTED]

Please see our letter **attached** in respect of the above matter.

Kind regards
[REDACTED]

4 March 2021

Mark Copeland Lawyers
PO Box 6083
Whakarewarewa
ROTORUA

Partner: Kate Cornege

File Ref: 222361-451

For: [REDACTED]
Email: [REDACTED]@copelandlawyers.com

Rotorua Lakes Council - Blue Baths Establishment Limited

1. We act for Rotorua Lakes Council ("RLC"). We understand that you act for Blue Baths Establishment Limited ("BBEL") and its director [REDACTED]
2. We refer to your letter dated 12 February 2021 to RLC in relation to the closure of the Blue Baths building, of which your client is tenant and our client landlord. We have been instructed by our client to provide a response to your letter and set this out below.

Background

3. Our client has instructed us on the following background to the closure of the Blue Baths. It is not clear whether you have been provided with all the relevant information, so we have set this out in some detail:
 - (a) You have referred to Sigma Consultants' 2012 report, which assessed the Blue Baths as 95% NBS. However, the disclaimer to that rating was that the assumption had been made that the structure was located on "good ground". Sigma Consultants understood that the ground was currently being reviewed by a geotechnical specialist, but this had not been completed as at the date of the report. In fact, the geotechnical report referenced was never obtained. Also of note is Sigma Consultants' advice that the finding in the report did not preclude the probability of significant damage occurring in seismic events such that "when failure occurs it will be sudden, with a large amount of uncontrolled damage, and collapse will follow shortly after".
 - (b) RLC was aware that Sigma Consultants' 2012 assessment needed updating, on the basis that the rating was based on the ground conditions which had not been subject to a geotechnical assessment. Furthermore, the closure of the Museum in 2017 and the geotechnical advice relating to that land (being in close proximity of the Blue Baths) raised questions as to the reliability of Sigma Consultants' 95% NBS rating.
 - (c) In 2019 RLC took steps to obtain a Detailed Seismic Assessment ("DSA") on the Blue Baths and engaged Cheal to carry out the assessment. A preliminary geotechnical assessment was prepared by Cheal as the first step in this process.

- (d) On 7 June 2019 RLC wrote to BBEL to advise that the initial research by Cheal had indicated that there were possible issues with the ground conditions. On the basis that the earthquake assessment by Sigma Consultants was based on the assumption of good ground, further testing was required. BBEL was advised that RLC was preparing to procure a full geotechnical and DSA to provide certainty as to the NBS% of the Blue Baths. In the meantime, RLC urged caution in proceeding with the redevelopment (including design). A copy of this letter and covering email is **enclosed** for your reference.
- (e) [REDACTED] subsequently raised a concern that the DSA was taking too long to complete and was holding up the progress of works BBEL proposed to carry out on the building. In what RLC understands was an attempt to expedite matters, BBEL advised it would be prepared to pay for a DSA to be completed. The intention was that RLC would carry out a peer review at RLC's cost, via RLC's consultants, once the DSA had been completed and provided to RLC by BBEL.
- (f) However, while a geotechnical assessment was carried out by O'Sullivan & Associates for BBEL, this was not provided to RLC until late 2020. Furthermore, the DSA was never completed, although RLC was not advised of this fact. As a result of the delays in the geotechnical assessment being provided to RLC, RLC engaged Tonkin & Taylor Limited to carry out their own geotechnical investigations to support a seismic assessment of the Blue Baths building. EQ Struc Limited were subsequently engaged by Tonkin & Taylor to provide advice on the structural elements of the Blue Baths, which included an Initial Seismic Assessment ("ISA").
- (g) On or about 22 December 2020 RLC received the ISA for the Blue Baths prepared by EQ Struc. EQ Struc assessed the Blue Baths to have a rating of 15% NBS (IL2), Grade E. A copy of the ISA was provided to BBEL.
- (h) On 25 January 2021 a number of earthquakes struck in and around Rotorua (the largest a 4.9 magnitude earthquake).
- (i) On 25 January 2021 Brian Stirton of RLC contacted [REDACTED] and visited the site that afternoon, to discuss RLC's decision to immediately close the Blue Baths as a result of the very low ISA rating and the earthquakes which had occurred that day, in its capacity as the Territorial Authority.
- (j) On 26 January 2021 RLC provided BBEL with written notice that:
 - (i) The Blue Baths building was considered earthquake prone on the basis that the ISA earthquake rating for the building was 15% of the NBS at IL2 (10% of NBS at IL3).
 - (ii) EQ Struc were in the process of completing a full DSA of the building, expected to be completed late February.
 - (iii) As a result of the ISA combined with the earthquakes on 25 January 2021, RLC had made the decision to close the building until such time as the DSA had been completed and the final NBS% confirmed.
 - (iv) The closure would come into effect at 5pm Tuesday 26 January 2021.

- (v) Rental and operating cost charges would cease from 5pm Tuesday 26 January 2021.
- (vi) Once the DSA was completed, and RLC could confirm the NBS% for the building, a timeline for re-entry to the building would be made.

Basis for closure

4. As you will be aware, a building is considered earthquake prone if it is assessed as being under 34% NBS (as per [3.4.1] of the EPB methodology which provides that a territorial authority must accept the requirements of s 133AB(1)(a) are satisfied as the building will have its ultimate capacity exceeded in a moderate earthquake). Based on the ISA rating, RLC determined the building, or part, to be earthquake prone as set out in its letter to BBEL of 26 January 2021.
5. As has been communicated to your client, the decision to close the building was made with tenant and public safety as the primary concern. RLC was not prepared to entertain any risk of loss of life or injury should a catastrophic failure of the building occur. This was a reasonable decision taken by RLC in the circumstances whereby the building has been assessed as earthquake prone with a very low earthquake rating. While there has been criticism levelled at RLC that the EQ Struc report was received by RLC in December 2020, yet closure of the Blue Baths was not notified until late January 2021, RLC's decision must be considered in the context of the earthquakes which occurred in Rotorua on 25 January 2021.
6. Without further assessment, RLC cannot know whether those earthquakes have had any bearing on the structural integrity of the building, or whether they may have worsened the buildings NBS%. We also stress that the closure decision is an interim measure to protect public safety until such time as the DSA is complete and RLC has further information available.
7. While the Blue Baths are closed, BBEL has ceased paying rental and outgoings on the property. RLC has also attempted to provide alternative commercial kitchen facilities to BBEL (on the understanding that the Blue Baths were primarily utilised by BBEL for food preparation rather than as an events venue, pending the further works BBEL was exploring), but BBEL did not accept the facilities offered.
8. We are instructed that the DSA will likely be completed by 12 March 2021. While RLC had initially been advised that the DSA would be available by the end of February, COVID-19 related delays beyond our client's control (arising from the Auckland Level 3 lockdowns), have expanded that timeframe. A copy of the DSA will be made available to BBEL as soon as it is received. RLC intends at that point in time to discuss with your client next steps in relation to its tenancy of the Blue Baths and occupation of the building. In the meantime, RLC reserves its position in relation to the lease between the parties and the other matters set out in your letter.

Yours faithfully
TOMPKINS WAKE




Partner/Senior Associate

encl.

-----Original Message-----

From: Rob Pitkethley <Rob.Pitkethley@rotorualc.nz>

Sent: Friday, June 7, 2019 12:30 PM

From: Rob Pitkethley <Rob.Pitkethley@rotorualc.nz>
Sent: Friday, June 7, 2019 12:30 PM
To: [REDACTED]@bluebaths.co.nz
Cc: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Emailing: Geotech Investigation Blue Baths.pdf

Kia ora [REDACTED]

I left you a phone message about the attached letter. Some recent work we've had done on assessing the ground around the Blue Baths questions the assumptions used to estimate the earthquake strength of the building as a percentage of New Building Standards (%NBS). We are getting more work done to obtain a Detailed Seismic Assessment (DSA) and in the mean time we would urge caution on going much further with redevelopment plans. Brian and Bruce in the Property Team are managing the project to get the DSA done so if you require any more detail you can call myself or Brian.

Nga mihi
Rob

7 June 2019

File Ref: 60-14-030\10

Doc No: RDC-921606

Civic Centre
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand

BLUE BATHS ESTABLISHMENT LIMITED
[REDACTED]

BY EMAIL ONLY: [REDACTED]

Dear [REDACTED]

GEOTECHNICAL INVESTIGATION – BLUE BATHS

We recently instructed Cheal to begin a review and investigation into the soil conditions beneath the Blue Baths and have since received a Preliminary Geotechnical Assessment (PGA).

Council wanted to understand the long term risks associated with the current building, which included an assessment of the ground conditions at the site. The PGA doesn't specifically evaluate foundation capacity or the performance of the building under static and/ or seismic loading conditions.

However, the initial research has identified that there are possible issues arising from a shallow water table, geothermally altered ground, variable ground conditions, soft ground and other geothermal related issues.

Council's current earthquake assessment for the Blue Baths building was produced by Sigma Consultants Limited in 2012. The minimum seismic strength was assessed as 95 – 100% NBS. The assessment was based on the assumption of good ground. In light of Cheal's initial findings, we know that this assumption needs further testing.

We are now preparing to procure a full geotechnical and detailed seismic assessment to provide certainty as to the %NBS of the Blue Baths.

Until such time as the assessments have been completed, we urge caution in proceeding with the redevelopment (including design). We understand that you have engaged a structural and a geotechnical engineer. We would be grateful if you could share any reports that may assist in providing certainty as to %NBS. We will provide updates on the progress of this exercise in due course.

Yours faithfully



Rob Pitkethley
Sport, Recreation and Environment Manager

From: Brian Stirton
Sent: Monday, 15 March 2021 9:33 am
To: Thomas Colle
Subject: FW: Blue Baths - structural review postponed

Hello Thomas,

FYI below.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Monday, March 15, 2021 9:22 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: Steve Chadwick <Steve.Chadwick@rotorualc.nz>
Subject: Re: Blue Baths - structural review postponed

For goodness sake Brian, we need to know today, we have confirmed clients and prospective clients expecting a phone call today - the 15th March - because I thought we would have heard at least some indication from you by Friday. Considering I was assured it was originally supposed to be "by the end of February " ...and that we were then "back on track" after the Auckland shutdown.

This situation is very hard on my staff who are trying to hang on to their jobs by hanging on to clients . It's all a very fine balance at the moment.
And every day lost is significant and critical as the corporate enquires are coming in thick and fast at the moment as people get organised for the year.

[REDACTED]

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From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, March 15, 2021 8:36 AM
To: [REDACTED]
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

I contacted both engineering companies on Thursday of last week, and again this morning, and asked for an update.

I would expect to hear back about the NBS% in the next day or two, and the full report maybe next week, which we will obviously have pear reviewed, but the main this is knowing the % in the first instance.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Friday, March 12, 2021 11:45 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: Blue Baths - structural review postponed

Hi Brian
Do you have any update on the Blue Baths situation?
Have they given any indication of outcome and timing for the full report ?
[REDACTED]

Get [Outlook for iOS](#)

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, March 1, 2021 12:58 PM
To: [REDACTED]
Cc: Jocelyn Mikaere; Thomas Colle
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

I have been in discussions with the engineers, and I am happy to confirm that we have just received dispensation/exemption for the engineers to travel to Rotorua, so they will be on site tomorrow.

So hopefully we are now back on track.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: Brian Stirton
Sent: Monday, March 1, 2021 10:05 AM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: Blue Baths - structural review postponed

Hello [REDACTED]

It looks like we have to postpone the engineers investigation works again, as the engineers are in lockdown in Auckland.

I have spoken to them this morning, and they are going to apply for an exemption, however, this paperwork may take a few days to go through and there is no guarantee that the exemption will be granted.

I have also re-booked them for Monday next week, so if Auckland move to level 2 on Sunday night/early Monday morning, then they will attend site on the 8th, however, this will depend on Auckland's Covid-19 alert level.

Unfortunately this will delay the report yet again, however, this is out of all of our control at this stage.

Best case scenario is we will now get the report on 19th, possibly the 22nd.

I will keep you informed with any updates as they come to hand.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
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A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Monday, 15 March 2021 9:34 am
To: [REDACTED]
Subject: RE: Blue Baths testing

Hello [REDACTED]

And as at 9:00am this morning the Mayor is now also involved.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Monday, March 15, 2021 8:32 AM
To: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>
Subject: FW: Blue Baths testing

Hello [REDACTED]

Are you able to accelerate this, as the tenant, via her lawyer, is getting a little anxious. I got another email on Friday from her, which I have not responded to at this stage.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[\[REDACTED\]@egstruc.co.nz](mailto:[REDACTED]@egstruc.co.nz)>
Sent: Friday, March 12, 2021 1:04 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[\[REDACTED\]@tonkintaylor.co.nz](mailto:[REDACTED]@tonkintaylor.co.nz)>; [REDACTED] <[\[REDACTED\]@egstruc.co.nz](mailto:[REDACTED]@egstruc.co.nz)>
Subject: Re: Blue Baths testing

Hi Brian

I understand that you need to answer your tenant. We need the inputs from the geotech team, as the foundation is critical. Once we receive the data, it will take us a couple of days to send you the initial NBS% rating of the building. After a week or two, we can then issue the finalised report.

Kind Regards

██████████
Structural Engineer
BE (Hons), GFireE, MEngNZ

██████████
www.eqstruc.co.nz

EQSTRUC Limited
78 New North Road, Eden Terrace, Auckland
14 Lombard Street, Te Aro, Wellington

On Fri, 12 Mar 2021 at 08:00, Brian Stirton <Brian.Stirton@rotorualc.nz> wrote:

Hello ██████████

I was just wondering if you have any information available for us on the Blue Baths DSA.

Obviously we have a tenant that wants to move back in, and we are dealing with that, however, it would be extremely beneficial if we had some information to share asap. Even an email providing an interim finding would be good.

Happy to discuss.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: ██████████ <██████████@eqstruc.co.nz>
Sent: Monday, March 1, 2021 4:31 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: ██████████ <██████████@tonkintaylor.co.nz>
Subject: Re: Blue Baths testing

Hi Brian

Following our phone discussion today, we will meet you tomorrow morning at Blue Baths site. We will be there by 8:30 am.

Best Regards

On Mon, 1 Mar 2021 at 7:23 AM, Brian Stirton <Brian.Stirton@rotorualc.nz> wrote:

Hello [REDACTED]

Well here we go again.

I assume that there will not be the site inspection tomorrow, due to the Covid-19 alert level change in Auckland, please let me know if this is the case, as I assume this is not classified as "essential works".

If it is cancelled, can you please reschedule for Monday the 8th if you can, as these changes in alert levels for Auckland are causing some issues for us all here. Obviously this will, depend on work load and alert level dropping to level 2 or 1 in Auckland next week, however, I need to let the tenant know asap, as the site is still closed and we need to do this work before we know if we can re-open.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: [1061 Haupapa St](#), Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Thursday, 18 March 2021 7:07 am
To: Jocelyn Mikaere; Geoff Williams; Thomas Colle
Subject: FW: Indicative %NBS rating of the Blue Baths

Morena Jocelyn, Geoff and Thomas,

As per below, the indicative %NBS from EQStruct considers the building to be earthquake prone. They are not able to let me know the exact % figure at this stage, but suggested it would be somewhere in the 20's. This is under Importance Level 2 (IL2 maximum 500 pax on site), and with IL3 (over 500 pax) this % would drop by another 30%.

The report is currently being written, and will be peer reviewed, however, I would suggest we have a quick meeting to discuss this building and the correspondence to be sent to [REDACTED]

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@eqstruc.co.nz>
Sent: Wednesday, March 17, 2021 1:23 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>; [REDACTED] <[REDACTED]@eqstruc.co.nz>; [REDACTED] <[REDACTED]@tonkintaylor.co.nz>; [REDACTED] <[REDACTED]@eqstruc.co.nz>
Subject: Indicative %NBS rating of the Blue Baths

Dear Brian

Based on the input from Geotech engineers and structural calculations, the indicative %NBS rating of the Blue Baths is below 34%.

Once the report is done, we will email it to you (in a week or two approximately).

Let me know if you have any questions.

Kind Regards

[REDACTED]
Structural Engineer
BE (Hons), GFireE, MEngNZ
[REDACTED]
www.eqstruc.co.nz

EQSTRUC Limited

78 New North Road, Eden Terrace, Auckland

14 Lombard Street, Te Aro, Wellington

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, 18 March 2021 7:59 pm
To: Brian Stirton
Cc: [REDACTED]
Subject: Blue Baths Geotech Report Final

Good evening Brian,

Please use the link below to download a copy of our final report for the Blue Bath building .

<https://transfer.tonkinandtaylorgroup.com/link/NkG2USgU11dLqOy3qF2aqR>

Please do not hesitate to contact me should you wish to discuss.

Regards

[REDACTED]

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, IntPE(NZ), CMEngNZ

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand

[REDACTED] www.tonkintaylor.co.nz  T+T profile



To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest priority.

Please see our website for the latest update, or get in touch if there is anything we can do to support you.

NOTICE: This email together with any attachments is confidential, may be subject to legal privilege and may contain proprietary information, including information protected by copyright. If you are not the intended recipient, please do not copy, use or disclose the information in it, and confidentiality and privilege are not waived. If you have received this in error, please notify us immediately by return email and delete this email.

Kim McGrath

From: [REDACTED]@tompkinswake.co.nz>
Sent: Friday, 19 March 2021 4:24 pm
To: [REDACTED]@copelandlawyers.com
Cc: [REDACTED]
Subject: Rotorua Lakes Council - Blue Baths Establishment Limited
Attachments: Ltr to [REDACTED] Copeland Lawyers Blue Baths Update.pdf

Hi [REDACTED]

Please see **attached** correspondence.

Kind regards,

[REDACTED]

[REDACTED]@tompkinswake.co.nz
Rotorua | Hamilton | Auckland | Tauranga

TOMPKINS | WAKE



This e-mail is a confidential communication between Tompkins Wake and the intended recipient. If it has been received by you in error, please notify us by return e-mail immediately and delete the original message. Email communications are not secure and Tompkins Wake does not guarantee them to be free of unauthorised interference, error or virus. In communicating with us by email it is taken that you accept this risk. Please refer to www.tompkinswake.co.nz for more information or to view our standard terms of engagement.

TOMPKINS WAKE

19 March 2021

Mark Copeland Lawyers
PO Box 6083
Whakarewarewa
ROTORUA

For: 
Email: copelandlawyers.com

Westpac House
430 Victoria Street
PO Box 258
DX GP 20031
Hamilton 3240
New Zealand
Ph: (07) 839 4771
Fax: (07) 347 9500
DDI: (07) 929 9996
Mobile: 022 188 6694
andrew.orme@tompkinswake.co.nz

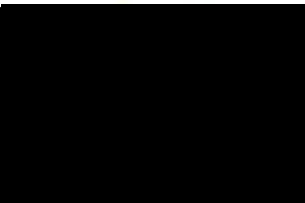
Partner: Andrew Orme

File Ref: 222361-451

Rotorua Lakes Council - Blue Baths Establishment Limited

1. We refer to our letter to you dated 4 March 2021.
2. EQ Struc have advised Council that they have completed their investigations and are finalising their Detailed Seismic Assessment ("DSA"). Once the DSA is received, Council will provide a copy of the DSA to your client. We note that Council will also require the DSA to be peer reviewed.
3. EQ Struc have advised that they consider that the building is under 34% NBS but Council are awaiting the final figure in the DSA.
4. The building will remain closed. Council will be able to consider this further once it has received the DSA, considered its contents and had it peer reviewed.

TOMPKINS WAKE



Partner

encl.

From: Brian Stirton
Sent: Friday, 19 March 2021 4:33 pm
To: [REDACTED]
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

We have received the indicative NBS % rating.

Tomkins & Wake are writing to [REDACTED] regarding this today, as a follow up the their letter on the 4th March.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Friday, March 19, 2021 4:09 PM
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

Yes we are

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Friday, March 19, 2021 2:52 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Fwd: Blue Baths - structural review postponed

Are you still expecting an answer by 5pm today Brian?

[REDACTED]

[Get Outlook for iOS](#)

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Monday, March 15, 2021 9:22 AM
To: Brian Stirton
Cc: Steve Chadwick
Subject: Re: Blue Baths - structural review postponed

For goodness sake Brian, we need to know today, we have confirmed clients and prospective clients expecting a phone call today - the 15th March - because I thought we would have heard at least some indication from you by Friday. Considering I was assured it was originally supposed to be "by the end of February" ...and that we were then "back on track" after the Auckland shutdown.

This situation is very hard on my staff who are trying to hang on to their jobs by hanging on to clients. It's all a very fine balance at the moment.

And every day lost is significant and critical as the corporate enquires are coming in thick and fast at the moment as people get organised for the year.

[REDACTED]

Get [Outlook for iOS](#)

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Monday, March 15, 2021 8:36 AM
To: [REDACTED]
Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

I contacted both engineering companies on Thursday of last week, and again this morning, and asked for an update.

I would expect to hear back about the NBS% in the next day or two, and the full report maybe next week, which we will obviously have pear reviewed, but the main this is knowing the % in the first instance.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
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ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Friday, March 12, 2021 11:45 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: Blue Baths - structural review postponed

Hi Brian

Do you have any update on the Blue Baths situation?

Have they given any indication of outcome and timing for the full report ?

Get Outlook for iOS

From: Brian Stirton <Brian.Stirton@rotorualc.nz>

Sent: Monday, March 1, 2021 12:58 PM

To: [REDACTED]

Cc: Jocelyn Mikaere; Thomas Colle

Subject: RE: Blue Baths - structural review postponed

Hello [REDACTED]

I have been in discussions with the engineers, and I am happy to confirm that we have just received dispensation/exemption for the engineers to travel to Rotorua, so they will be on site tomorrow.

So hopefully we are now back on track.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

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E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton

Sent: Monday, March 1, 2021 10:05 AM

To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>

Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>

Subject: Blue Baths - structural review postponed

Hello [REDACTED]

It looks like we have to postpone the engineers investigation works again, as the engineers are in lockdown in Auckland.

I have spoken to them this morning, and they are going to apply for an exemption, however, this paperwork may take a few days to go through and there is no guarantee that the exemption will be granted.

I have also re-booked them for Monday next week, so if Auckland move to level 2 on Sunday night/early Monday morning, then they will attend site on the 8th, however, this will depend on Auckland's Covid-19 alert level.

Unfortunately this will delay the report yet again, however, this is out of all of our control at this stage.

Best case scenario is we will now get the report on 19th, possibly the 22nd.

I will keep you informed with any updates as they come to hand.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@bluebaths.co.nz
Sent: Friday, 26 March 2021 11:37 am
To: Brian Stirton
Cc: Jocelyn Mikaere; Geoff Williams; Thomas Colle; Steve Chadwick
Subject: RE: BB update

Hi Brian

Thank you for clarifying when you expect to receive the DSA.

Yes, we have cancelled all BB events up until 1st June.

We are trying to get organisers of anything after this date to bear with us until we too, are able to see more detail and gauge the implications.

The reason I asked about the EEC is following your suggestion Brian at the end of Jan, that possibly this could be at least a temporary solution – and the mayor who also said “we offered you the EEC”.

Please be aware that the list of corporate events I shared with you all earlier in the week, is strictly confidential.

We will continue to try to work with organisers to secure the work in other venues.

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, 26 March 2021 10:26 am
To: [REDACTED]@bluebaths.co.nz
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Geoff Williams <Geoff.Williams@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: RE: BB update

Hello [REDACTED]

Thank you for the email below.

Council expects to get the full DSA report late next week. I will provide you with a copy of it as soon as I can.

In line with Council’s decisions regarding the Museum and SHMPAC, the Blue Baths would be treated in the same way, regarding Earthquake Prone building closure.

Obviously until the report is received by council, and peer reviewed, we are not in a position to ascertain the level of remedial works required to improve the %NBS to a suitable level, the timeframe for any remedial works, or even funding availability for the works.

I understand this is not overly helpful given your event bookings outlined below, however, to fully understand the DSA and any possible remedial works, we would expect the venue to be closed until at least June, at a minimum. Depending on remedial works required, the venue may well remain closed for some time. Given this, all the events outlined below could be affected.

Regarding the use of the EEC as an out-caters event, as you will know there is an “exclusive rights” contract with Eurest for the EEC, so it this is not possible.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



From: [REDACTED] bluebaths.co.nz>
Sent: Wednesday, March 24, 2021 11:07 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: Steve Chadwick <Steve.Chadwick@rotorualc.nz>
Subject: BB update

Mōrena Brian and Steve

Are you able to update me with a firm'ish date when you expect the BB DSA report will be out please?

Below is a list of our larger corporate events that at this stage we have been unable to relocate to other venues. We are currently working hard to try and get these groups to stick with us until we have further certainty about the Blue Baths longer term position.

Losing this business entirely will decimate our events income over the coming winter. It may also mean that Rotorua misses out on the economic benefit if some of these groups decide to go to another destination because of the uncertainty of venue availability .

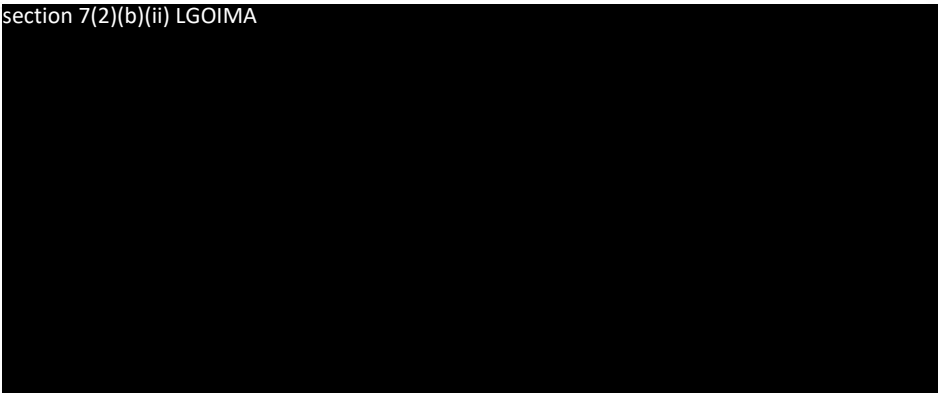
My question to you is, could we use space at the EEC to host these events? So that we have an alternative space to offer them.

And we would treat these events as out-caters ie not use Eurest's kitchen.

Thanks, I look forward to your urgent response please.

[REDACTED]

section 7(2)(b)(ii) LGOIMA



From: Brian Stirton
Sent: Tuesday, 30 March 2021 9:08 am
To: [REDACTED]
Subject: Blue Baths DSA

Hello [REDACTED]

Just following up on our texts from last week.

Has [REDACTED] provided any further timeframe regarding the provision of the DSA report?.

My initial thoughts was that this was to be provided 10 days post them receiving the latest Geotechnical information from T&T. Then on the 17th March [REDACTED] suggested the report would be “approximately a week or two” from the 17th.

Apologies for pushing this, however, as you are aware we have some major decisions to make on this building, including the peer review arrangements and timing.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | **M:** 027 268 9707
E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, 1 April 2021 2:26 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 57387 - The Blue Baths - RLP020895
Attachments: Invoice Project 1015676.0000R 000000057387_20210401022302.pdf

Good afternoon,

Please find attached our March 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile



To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest priority.

Please see our website for the latest update, or get in touch if there is anything we can do to support you.

NOTICE: This email together with any attachments is confidential, may be subject to legal privilege and may contain proprietary information, including information protected by copyright. If you are not the intended recipient, please do not copy, use or disclose the information in it, and confidentiality and privilege are not waived. If you have received this in error, please notify us immediately by return email and delete this email.

Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

31 March 2021
Invoice No: 57387
Your reference: RLP020895
Project Manager: XXXXXXXXXX

Project 1015676.0000R Geotechnical investigations and assessment to support seismic assessment of The Blue Baths

Invoice for March 2021:

- EQ Struc Group Consulting expenses - Structural assessment 90% complete.

Phase	02	Seismic Assessment_Structural	
Professional Fees			102.38
Expenses			14,080.00
		Subtotal excluding GST	14,182.38
		15% GST	2,127.36
		Total this Invoice	\$16,309.74

Due Date: 7 April 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**



TAX INVOICE

Tonkin and Taylor Group Limited
PO Box 317
Tauranga

Invoice Date
29 Mar 2021

Invoice Number
INV-5087

GST Number
104-844-529

EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Description	Quantity	Unit Price	Amount NZD
Job No: 31854 Name: Blue Bath Rotorua			
90% completed less already invoiced for Blue Baths DSA	1.00	12,800.00	12,800.00
		Subtotal	12,800.00
		TOTAL GST 15%	1,920.00
		TOTAL NZD	14,720.00

Due Date: 12 Apr 2021

All payments to ANZ Bank and Branch: 06-0103-0171902-00
Please quote your invoice number shown above as reference for the payment.
This invoice is due within 14 days of the invoice date.

Thank you for your business!



[View and pay online now](#)

PAYMENT ADVICE

To: EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Customer	Tonkin and Taylor Group Limited
Invoice Number	INV-5087
Amount Due	14,720.00
Due Date	12 Apr 2021
Amount Enclosed	

Enter the amount you are paying above

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Thursday, 1 April 2021 2:31 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 57390 - The Blue Baths - RLP021563
Attachments: Invoice Project 1015676.1000R 000000057390_20210401022919.pdf

Good afternoon,

Please find attached our March 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest priority.

Please see our website for the latest update, or get in touch if there is anything we can do to :

NOTICE: This email together with any attachments is confidential, may be subject to legal privilege and may contain proprietary information, including information protected by copyright. If you are not the intended recipient, please do not copy, use or disclose the information in it, and confidentiality and privilege are not waived. If you have received this in error, please notify us immediately by return email and delete this email.

Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

31 March 2021
Invoice No: 57390

Your reference: RLP021563
Project Manager: XXXXXXXXXX

Project 1015676.1000R RLC Blue Baths_Seismic Assessment_Geotechnical

- Revised geotechnical report and additional ground investigations.

Professional Fees	9,909.39
Expenses	2,718.93
Unit Charges	199.20
	Subtotal excluding GST 12,827.52
	15% GST 1,924.13
	Total this Invoice <u><u>\$14,751.65</u></u>

Due Date: 7 April 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**

From: Brian Stirton
Sent: Tuesday, 6 April 2021 8:11 am
To: [REDACTED]
Subject: Blue Baths

Hello [REDACTED]

I spoke to [REDACTED] last week, and he was working over Easter to try to complete the report.

Then he was going to get it peer reviewed internally.

Having said that, I was wondering if you are able to request a draft copy (even pre peer review) to be provided today, so I have something.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Thursday, 8 April 2021 11:53 am
To: Thomas Colle
Cc: Jocelyn Mikaere; Geoff Williams
Subject: Blue Baths - DSA update

Morena Thomas,

I have spoken to [REDACTED] our engineer from EQStruc, this morning about the provision of the Blue Baths DSA report.

We are now expecting to receive the final report tomorrow (complete and internally peer reviewed by EQStruc). Obviously we will still need to get an external peer review of this report moving forward. I am waiting for [REDACTED] [REDACTED] from Dunning Thornton to let me know if they are able to carry out the peer review, or at least provide us with names of companies that could.

EQStruc provided me with a verbal DSA rating, pre peer review, is between 15% and 20% of NBS, under both IL2 or IL3, so no real change there.

During my call we discussed 4 main topics, being;

1. Ductile columns
2. Sheer Walls connections
3. Poor state of Foundations
4. The current %NBS

[REDACTED] stated that there is probably no one item that could be "strengthened" to lift the building above the 34% figure, however, we would need to see the report before we can confirm this.

I have informed [REDACTED] this morning, that we expect the report tomorrow, and that as agreed, I will supply [REDACTED] with a copy when it arrives.

I also mentioned that the rating is between 15% and 20% and that the best case scenario may be that the building is closed for quite some time. Again, I cannot determine this until I see the report. However, [REDACTED] is pressing for information in order to inform [REDACTED] future booking requests.

[REDACTED] mentioned that [REDACTED] hope was that the building may be round the 28% and that small amount of work could be done to bring it above 34%. I informed [REDACTED] that this is highly unlikely, especially given the nature of the likely works to rectify items 1 through 3 above.

Happy to discuss.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton
Sent: Monday, 12 April 2021 4:18 pm
To: [REDACTED]
Subject: RE: BB DSA

Hello [REDACTED]

I have just received the report, which I am going through now.

It is 174 MB file, so I have included the executive summary below, until I can get you the full report.

Unfortunately the rating is 15% NBS and has several issues across several items, but I'll keep reading the document. I will give you a call tomorrow to discuss, but it doesn't look good at this stage. .

Executive Summary

Tonkin + Taylor engaged EQ Struc Limited behalf of Rotorua Lakes Council to conduct a Detailed Seismic Assessment (DSA) of the Blue Baths Building in Rotorua.

The main objective of the DSA is to determine a seismic rating for the building in terms of %NBS (Percentage of New Building Standard). The seismic rating indicates the relative life safety risk when compared to that of a similar new building on the same site.

The DSA was carried out in accordance with the Ministry of Business, Innovation and Employment (MBIE) guidelines by EQ Assess, for the seismic assessment of an existing building.

The subject building is a Reinforced Concrete (RC) frame structure and was originally constructed in 1932 and it features two swimming pools surrounded by a single storey structure that represents the pool amenity services such as toilets, changing rooms, etc.

At the main entrance, there is a two-storey structure with a Foyer on the ground floor and a Tearoom on the second floor. The Tearoom is connected to the roof of the single storey structure, which is partially a terrace with periphery concrete parapets. The structural system of this part of the building is a combination of RC frames as well as shear walls on both sides of the main entrance. The roof of the structure is comprised of timber trusses that span between the RC columns.

The entire building foundation consists of RC raft (250mm thick). Above this raft are 1000mm deep ground beams that support the suspended RC slab of the ground floor.

Based on the results from the DSA, **the building achieves 15% NBS (IL2), Grade E1**, which is determined based on the worst performing structural element (i.e., Critical Structural Weakness), the following is a summary of the key findings:

- The primary concrete framing of the structure is inadequately confined. Some beams and columns have minimal stirrups (R6 & R9 stirrups) at large spacing (larger than the section depth). Invasive testing unveiled the stirrups present in the columns/beams are less than what was specified in the construction drawings.
- Lack of horizontal and vertical transverse reinforcements in beam and column joints.

- Use of plain round (smooth bars) with weak 180-degree shallow hooks.
- Actual dimensions of beams onsite were found to be narrow in width when compared to the construction drawings. B1 beam is 85mm narrower than stated within property file drawings.
- There is extensive rust in the existing reinforcement specially in the concrete slabs and the ground beams.
- Invasive investigation showed that major parts of the concrete structure have high levels of carbon and sulphate attack. This explains the expansive corrosion that is evident in the structure. Invasive investigation also showed that minimal cover of only 20 mm and 25 mm were found in the columns and beams, respectively.
- The foundations were prone to all the extreme aspects of geothermal activity from extreme heat (reaching 70°C) and moisture (the top of raft of large area were covered by water ponds) to hydrogen sulphide (H₂S). Many active geothermal springs are very close to the building. Rachel Spring is only about 15m away. All the above is considered as a severe corrosive environment for concrete over the years.
- Some columns are resting on the large voids within the ground beams others are resting directly on the thin shallow raft (instead of resting on the ground beams). Cracking at these locations was also evident. A visual inspection also revealed the presents of DPC sheets between the top of the ground beam and the ground level slab. The DPC sheets will reduce the interlocking capacity between ground beam and the solid ground slab above.
- The Geotechnical report indicated that extensive liquefaction is likely to be triggered from a ULS design earthquake.
- The Geotechnical report also provided expected weak foundation soil spring stiffness during seismic events that heavily affected the ground beam designed actions.
- The Geotechnical report found that there is a large differential settlement over a noticeably short length of the foundations, this would result that the lightly reinforced raft and ground beams not being able to withstand the seismic event.
- Ground beams achieved a maximum 15% NBS based on soil-structure interaction analysis that we performed using T+T Geotechnical parameters.
- Reinforced concrete (RC) columns rotation and moment capacities achieved less than 34%NBS

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: Brian Stirton

Sent: Monday, April 12, 2021 1:00 PM

To: [REDACTED] <[REDACTED]@bluebaths.co.nz>

Subject: RE: BB DSA

Hello [REDACTED] – I am expecting it this afternoon.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Monday, April 12, 2021 12:59 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: BB DSA

An update on ETA we could expect to see the DSA Brian?

Get Outlook for iOS

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Thursday, April 8, 2021 7:06:30 AM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: BB DSA

Hello [REDACTED]

Thanks for the email below.

I am chasing the engineers and missed a call from them last night, with no answer when I returned their call.

I will follow up again this morning.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

ROTORUA
LAKES COUNCIL

From: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Sent: Wednesday, April 7, 2021 3:12 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: BB DSA

Is there an update Brian?

We have clients contacting us daily about their events scheduled at BB over the coming months.

Get Outlook for iOS

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Tuesday, April 6, 2021 1:13:08 PM
To: [REDACTED] <[REDACTED]@bluebaths.co.nz>
Subject: RE: BB DSA

Hello [REDACTED]

I asked that very same question this morning.

I'll ring them shortly as I have not had a response.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] [\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)
Sent: Tuesday, April 6, 2021 12:40 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Re: BB DSA

Hi Brian

Are you able to provide an update on when you expect to receive the DSA please?

Get [Outlook for iOS](#)

From: [REDACTED]
Sent: Wednesday, March 31, 2021 2:44:41 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: BB DSA

Brian do you expect to get this before Easter ?
An update would be appreciated.

Get [Outlook for iOS](#)

From: Brian Stirton
Sent: Tuesday, 13 April 2021 11:27 am
To: [REDACTED]
Subject: FW: email addresses

Hello [REDACTED]

Are you able to send the link to the DSA for the Blue Baths to [REDACTED] consultants, and [REDACTED] as well.

The email below has their email addresses.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

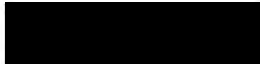
ROTORUA
LAKES COUNCIL

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Tuesday, April 13, 2021 11:15 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: email addresses

Hi Brian

I look forward to receiving the link to the DSA as discussed.

If this can also be provided to the following people involved that would be appreciated.



Plenty Group



www.plentygroup.co.nz

- Terrace Kitchen
- Terrace Airside
- Terrace Catering
- Eastwood Cafe
- Blue Baths

From: Brian Stirton
Sent: Tuesday, 13 April 2021 11:27 am
To: [REDACTED]
Subject: RE: email addresses

Hello [REDACTED]

I have sent the request for the link to T&T.

Regards

Brian Stirton *Legal & Property Manager - Property Services*
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

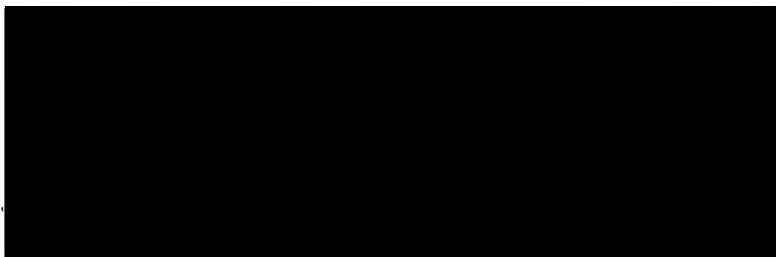
**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Tuesday, April 13, 2021 11:15 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: email addresses

Hi Brian

I look forward to receiving the link to the DSA as discussed.

If this can also be provided to the following people involved that would be appreciated.



[REDACTED]
Plenty Group

[REDACTED]
www.plentygroup.co.nz

Terrace Kitchen
Terrace Airside
Terrace Catering
Eastwood Cafe
Blue Baths

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Wednesday, 14 April 2021 10:07 am
To: Brian Stirton
Cc: [REDACTED]
Subject: Blue Baths DSA report

Hi Brian,
Link to download a copy of the DSA is provided below.
<https://transfer.tonkinandtaylorgroup.com/link/NSUDUeSi7zv3x8A3p4tpNJ>

Regards
[REDACTED]

[REDACTED] | Senior Geotechnical Engineer
BSc (Hons), MSc, CEng, MICE, CPEng, IntPE(NZ), CMEngNZ
Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  **T+T profile**



To send me large files you can use my [file drop](#)



He waka eke noa - we're all in this together :)

T+T is well placed to provide continuity of service as the COVID-19 situation evolves, wellbeing of our people, clients, suppliers and communities remaining our highest priority.

Please see our website for the latest update, or get in touch if there is anything we can do to support you.

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From: [REDACTED]@dunningthornton.co.nz
Sent: Tuesday, 20 April 2021 11:18 am
To: Brian Stirton
Subject: RE: Peer Review of the DSA for Blue Baths

We have had an internal review and do not think we could fit this in for 3months or so unfortunately.

I would suggest querying same teams as you did the museum. The only other options would be Christchurch people if it is just a DSA, for which you could add Batchellor McDonald, Ruamoko and Lewis Bradford to the list...

Regards,

[REDACTED] | Director



Dunning Thornton Consultants Ltd

[REDACTED]
www.dunningthornton.co.nz

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Thursday, 8 April 2021 11:41 AM
To: [REDACTED]@dunningthornton.co.nz
Subject: Peer Review of the DSA for Blue Baths

Hello [REDACTED]

I hope the email finds you well.

As discussed a few weeks ago, we are conducting a DSA on the Blue Baths in Rotorua.

The DSA is being carried out by EQStruc and the report is expected tomorrow.

I was wondering if you had the opportunity to discuss Dunning Thornton's work load and ability to carry out a peer review of the DSA.

Additionally, as discussed, if you are not able to provide this service, are you in a position to provide names of suitably qualified company that may be able to do this.

FYI – discussions with EQStruc today, prior to the release of the report, place the building somewhere between 15% and 20% of NBS, and I understand the DSA is quite a substantial document.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED]@tonkintaylor.co.nz>
Sent: Tuesday, 4 May 2021 3:40 pm
To: Accounts Payable
Cc: Brian Stirton
Subject: Tonkin + Taylor Invoice 58516 - The Blue Baths - RLP020895
Attachments: Invoice Project 1015676.0000R 000000058516_20210504033818.pdf


Good afternoon,

Please find attached our April 2021 invoice for the abovementioned project.

If you have any question please don't hesitate to contact myself or [REDACTED]

Thanks, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] | Project Controller

Tonkin + Taylor - *Exceptional thinking together*
Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand
[REDACTED] www.tonkintaylor.co.nz  T+T profile

 **Tonkin+Taylor**

To send me large files you can use my [file drop](#)

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Rotorua Lakes Council
PO Box 3029
Rotorua 3046

Attention: Brian Stirton

30 April 2021
Invoice No: 58516

Your reference: RLP020895
Project Manager: XXXXXXXXXX

Project 1015676.0000R Geotechnical investigations and assessment to support seismic assessment of The Blue Baths

Invoice for April 2021:

- EQ Struc Group Consulting expense - Carbonation Testing.
- Issued final Detailed Seismic Assessment report.

Phase 02 Seismic Assessment_Structural

Professional Fees	136.50
Expenses	7,590.00
Subtotal excluding GST	7,726.50
15% GST	1,158.98
Total this Invoice	<u><u>\$8,885.48</u></u>

Due Date: 7 May 2021

Bank account details for payment of accounts is 03-0195-0136855-00 Westpac Broadway Newmarket, Auckland. For international payments, use SWIFT code WPACNZ2W. Please include the invoice number in the relevant reference field. Account remittances to accts@tonkintaylor.co.nz **Payment is requested within 7 days.**



TAX INVOICE

Tonkin and Taylor Group Limited
PO Box 317
Tauranga

Invoice Date
31 Mar 2021

Invoice Number
INV-5137

GST Number
104-844-529

EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Description	Quantity	Unit Price	Amount NZD
Job No: 31854 Name: Blue Bath Rotorua			
CONSULTING - Undertake invasive and non-invasive investigative works + Carbonation Testing (3 Days).	1.00	6,900.00	6,900.00
		Subtotal	6,900.00
		TOTAL GST 15%	1,035.00
		TOTAL NZD	7,935.00

Due Date: 15 Apr 2021

All payments to ANZ Bank and Branch: 06-0103-0171902-00

Please quote your invoice number shown above as reference for the payment.

This invoice is due within 14 days of the invoice date.

Thank you for your business!



[View and pay online now](#)



PAYMENT ADVICE

To: EQ STRUC GROUP
PO Box 8823
Symonds Street
Auckland 1150
New Zealand
+64 9 929 4633
0800 EQ STRUC
eqstruc.co.nz

Customer	Tonkin and Taylor Group Limited
Invoice Number	INV-5137
Amount Due	7,935.00
Due Date	15 Apr 2021
Amount Enclosed	

Enter the amount you are paying above

From: Brian Stirton
Sent: Thursday, 6 May 2021 3:28 pm
To: Eric Tonkin
Subject: RE: RDC-110808 RC6210 - Land use - New surface for courtyard Blue Baths.PDF

Hello Eric,

Thanks for that.

Can you find anything relating to the costs involved in this – they may not have provided us with that though.

I would take this to be a “make good” item – as not required by council and not requested by or paid for by council

Can you also find anything relating to the roof please.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: Eric Tonkin <Eric.Tonkin@rotorualc.nz>
Sent: Thursday, May 6, 2021 3:11 PM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: FW: RDC-110808 RC6210 - Land use - New surface for courtyard Blue Baths.PDF

Just the start (I am still looking).

This is all I have found at this stage and from the cost I have pretty sure that it only for the new surface of the courtyard area (which prior to this would have been a grassed area).

Of interest is the fact that this consent, while needing Council approval, was given to Blue Baths Establishment Ltd, attention [REDACTED]

Eric Tonkin *Property Portfolio Coordinator, Property and Investment*

P: 07 351-8160 | **M:** [027 644 7148](tel:0276447148) | **E:** eric.tonkin@rotorualc.nz | **W:** rotorualakescouncil.nz

16 June 2004

File Ref: 62-04-049

Doc No: OW-23608

Copy to
P24467
P26136

The Blue Baths Establishment Ltd
Government Gardens
[REDACTED]
ROTORUA

Attn: [REDACTED]

RESOURCE CONSENT	
Approved.....	17-6-04
Appn No.....	6210
Plan No.....	
Date.....	17-6-04

Dear Sir/Madam,

NON-NOTIFIED APPLICATION FOR RESOURCE CONSENT
NOTICE OF DECISION
APPLICANT – THE BLUE BATHS ESTABLISHMENT LTD

I wish to advise that the following decision has been made under authority delegated to staff in respect of the above application:

- (a) That pursuant to Section 93(1)(b) of the Resource Management Act 1991, the Rotorua District Council resolves that the adverse effects of the proposal will be no more than de minimis and the application need not be notified. The Council is satisfied after taking into due consideration the requirements of Section 94, 94A(a) and Section 94B that no persons will be adversely affected by the proposal. Council is also satisfied that no special circumstances exist that require notification of the consent application in accordance with Section 94C(2) of the Resource Management Act 1991.
- (b) That pursuant to Sections 34A, 104, 104B and 108 of the Resource Management Act 1991, the Rotorua District Council resolves to grant consent to the application by The Blue Baths Establishment Ltd to construct a new surface to the courtyard area at Government Gardens, legally described as Pt Lot 3 DPS 15998.

This consent is subject to the following conditions:

- 1. All conditions relating to this resource consent must be met in full and a Planning Compliance Certificate issued within 3 months of completion, unless otherwise specified.
- 2. That the proposal proceeds in accordance with the application submitted numbered 6210/1 and dated by Council 16/06/2004 except where modified by any conditions of this consent.

Construction

- 3. That the concrete shall be pumped into the site and all surfaces and features protected and screened from the pumping process, to the satisfaction of the Director, Environmental Services. There shall be no site mixing or batching of concrete.
- 4. That the paved courtyard area shown on the approved plan be formed, drained and constructed in accordance with Council's Engineering Code of Practice, to the satisfaction of the District Engineer.

The reasons for this decision are that:

- 1. The site is zoned Reserve A in the District Plan and is listed as an historic area registered by the New Zealand Historic Places Trust, whereby any activity in such an area is classified as a Discretionary Activity.**
- 2. Consultation has been undertaken with New Zealand Historic Places Trust and Council's Parks and Recreation department.**
- 3. No persons are considered potentially adversely affected by the proposal.**
- 4. After having regard to the relevant matters in Section 104 of the Act, Council is satisfied that consent can be granted as the relevant Discretionary activity criteria have either been addressed or conditions will ensure they are not compromised. Any adverse effects of the proposal on the environment can be avoided or have been remedied or mitigated by the conditions of consent.**
- 5. The proposal is considered to be consistent with the relevant objectives & policies of the District Plan and the purposes and principles of the Resource Management Act 1991.**

The applicants are advised that:

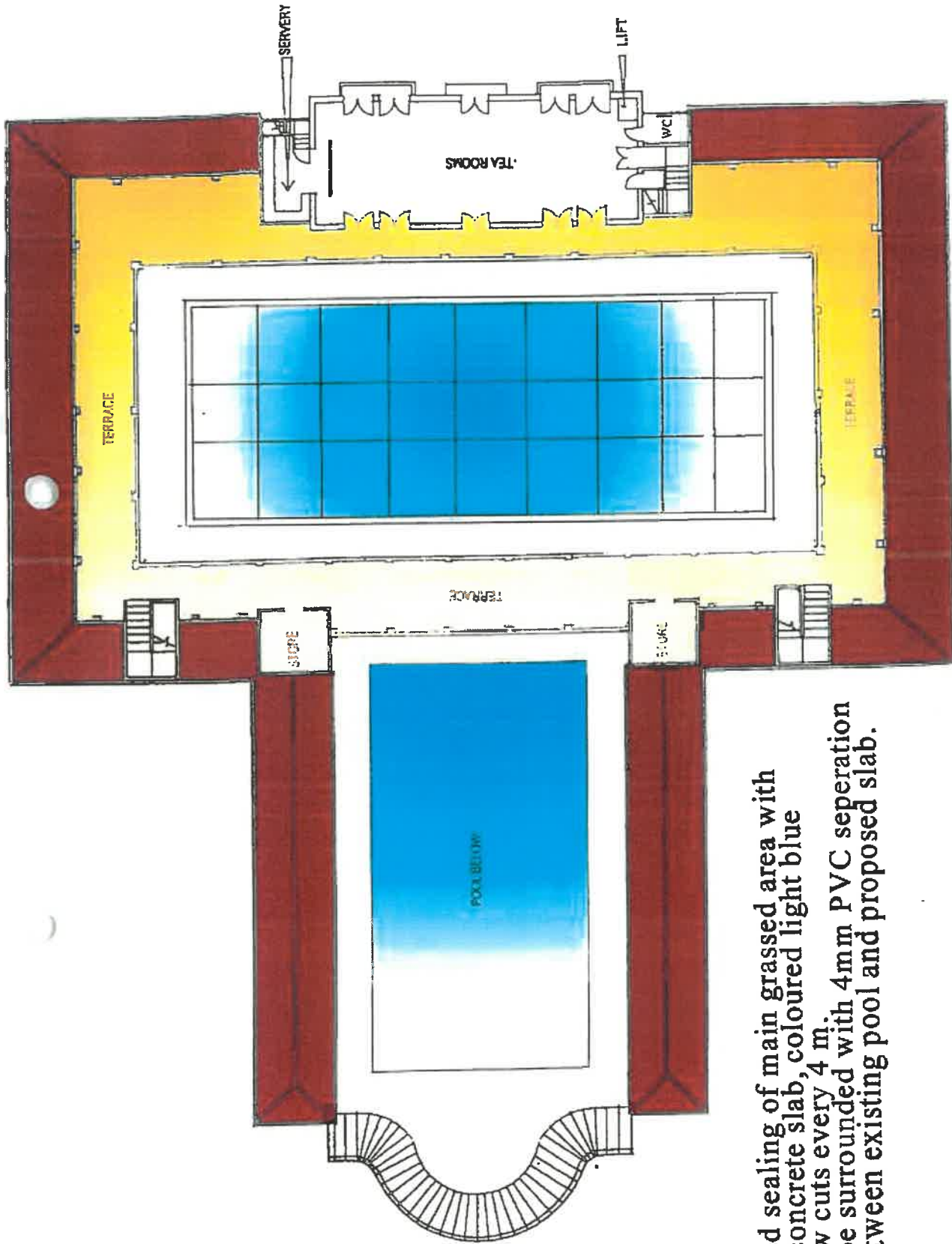
- (a) Fulfilment of the conditions of this consent within the timeframe specified in the consent is necessary to carry out the proposal for which this consent relates. Your progress towards satisfying the conditions of consent will be monitored by Council's Monitoring & Compliance Officer. Please contact the Monitoring & Compliance Officer to schedule a final inspection when you have completed the conditions of consent so that a Planning Compliance Certificate can be issued.**
- (b) Please be advised that both known and unknown archaeological sites are protected under the Historic Places Act 1993. If during the exercising of this consent any archaeological site is uncovered work must stop and permission be obtained from the Historic Places Trust under the provisions of either Section 11 or 12 of the Historic Places Act 1993.**
- (c) If you are dissatisfied with any aspect of the decision, you have a right of objection to Council under section 357 of the Resource Management Act 1991. Please advise Council in writing stating the reasons for the objection and the preferred outcome within 15 working days of receiving this decision. If no objection is received it will be assumed that the applicant accepts this decision.**
- (d) The above consent lapses on the expiry of 5 years after the date of receiving this letter, unless the consent is given effect to.**

If you have any questions regarding this consent, please contact , Rebecca Perrett, Consultant Planner or the Duty Planner.

Yours faithfully



.....
Nigel Wharton
Director, Environmental Services



Proposed sealing of main grassed area with 75mm concrete slab, coloured light blue with saw cuts every 4 m. pad to be surrounded with 4mm PVC seperation strip between existing pool and proposed slab.

RESOURCE CONSENT

Approved..... 17-6-04
 Appn No..... 6210
 Plan No..... 6210/1
 Date..... 17-6-04



From: Eric Tonkin
Sent: Tuesday, 11 May 2021 3:00 pm
To: Brian Stirton
Subject: Blue Baths Credit (AR 138004)

Could I have a quick conversation with you about this when you are free.

Because we stopped the rent in February back dated to January (the invoice for February for example had already been produced) we are now holding a credit of \$7(2)(1) in their Sundry Invoicing account.

Anne-Marie Gale is thinking about paying it back but I have told her to hold off until I have spoken to you.

Eric Tonkin BRM *Property Portfolio Coordinator, Property and Investment*
P: 07 351-8160 | M: 027 644 7148 | F: 07 346-3143
E: eric.tonkin@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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LAKES COUNCIL

Kim-McGrath

From: Stewart Brown
Sent: Thursday, 20 May 2021 11:39 am
To: Brian Stirton
Subject: RE: Blue Baths Geo Thermal connection under the museum.

Thanks Brian

Stewart Brown Kaihautū Mahi Toi Arts & Culture Manager, OHU: MAHI TOI - Arts & Culture
Rotorua Lakes Council P: 07 351 7828 | E: stewart.brown@rotorualc.nz | W: www.rotorualakescouncil.nz

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Thursday, 20 May 2021 11:03 am
To: Stewart Brown <Stewart.Brown@rotorualc.nz>
Subject: RE: Blue Baths Geo Thermal connection under the museum.

Hello Stewart,

We are in the process of notifying BBEL that the building will remain closed.

Given this, and the fact that we may not even be able to carry out cost effective repairs – I have no issue with the removal of this supply.

Regards

Brian Stirton Legal & Property Manager - Property Services
P: 07 348 4199 ext 8235 | M: 027 268 9707
E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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LAKES COUNCIL

From: Stewart Brown <Stewart.Brown@rotorualc.nz>
Sent: Thursday, May 20, 2021 10:52 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Subject: Blue Baths Geo Thermal connection under the museum.

Hi Brian,

As you know the geothermal pipe supplying hot water to the Bluebaths is in poor condition, given the BB will be closed for some time, I am wanting to disconnect the BB from the Museum's geothermal network to increase its heating capacity to reduced power consumption and ultimately less cost to RLC. This would mean that when the BB reopened it would need to find an alternative supply, given the distance from the museum to the BB this may well be a more cost effective option in the future given the condition of the BB network. It also save money in the museum project by not having to reroute the BB network around new foundations.

From: Brian Stirton
Sent: Friday, 21 May 2021 12:35 pm
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: VO3 for Blue Baths project 1015676.0000

Hello [REDACTED]

Thank you for your e-mail below.

Please accept this e-mail as approval for the variation as outlined below.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | **M:** 027 268 9707

E: brian.stirton@rotorualc.nz | **W:** rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Sent: Friday, May 21, 2021 10:03 AM
To: Brian Stirton <Brian.Stirton@rotorualc.nz>
Cc: [REDACTED] <[REDACTED]@tonkintaylor.co.nz>
Subject: VO3 for Blue Baths project 1015676.0000

Good morning Brian,

Confirming your conversation with [REDACTED] this morning about the additional EQ Struc costs incurred for carbonation testing for the above mentioned project. Therefore we are seeking a variation of \$7,200 disbursements to cover these costs. This work will be carried out as an extension of our existing engagement and in accordance with our previously agreed conditions of engagement set out in our letter of engagement dated 13 October 2020.

These costs have already been invoiced to you via Invoice 58516. This email is to just close of the contractual paperwork.

For our records, can you please reply to this email confirming your approval for this variation.

Kind regards, [REDACTED]

Ngā Mihi | Kind regards,
[REDACTED] Project Controller

Tonkin + Taylor - *Exceptional thinking together*

Level 1, Mid City Centre, 1 Devonport Road, Tauranga 3110 | PO Box 317, Tauranga, New Zealand

[REDACTED] www.tonkintaylor.co.nz  T+T profile



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From: Rob Pitkethley
Sent: Friday, 21 May 2021 3:30 pm
To: Brian Stirton
Subject: RE: Update for NWGR Meeting

Thanks Brian – yes will get checked

Rob Pitkethley Kaihautū Mahi Rēhia | Sport, Recreation and Environment Manager.
P: 07 351 8202 | M: 027 8072033 | E: rob.pitkethley@rotorualc.nz | W: rotorualakescouncil.nz

From: Brian Stirton <Brian.Stirton@rotorualc.nz>
Sent: Friday, May 21, 2021 3:04 PM
To: Rob Pitkethley <Rob.Pitkethley@rotorualc.nz>
Cc: Jocelyn Mikaere <Jocelyn.Mikaere@rotorualc.nz>; Thomas Colle <Thomas.Colle@rotorualc.nz>
Subject: RE: Update for NWGR Meeting

Hello Rob,

Thanks for that.

The update is as follows, but should be approved by Jocelyn or Thomas before published.

Additionally, the tenant is not aware at this stage that the Blue Baths may not reopen, and we are working through this with them next week.

Council has concluded our Geotechnical, Initial Seismic Assessment and the Detailed Seismic Assessment of the blue Baths.

The Geotechnical survey has established the ground under and immediately around the Blue Baths is Subsoil Class D: 'Deep or soft soil'

This information was provided to structural engineers EQ Stuc, to enable them to carry out an urgent Initial Seismic Assessment. This assessment found the building to be circa 15% NBS.

This information was used to assist the development of the DSA, also carried out by EQ Struc, in March/April 2021

EQ Struc has assessed the building as earthquake prone at 15% NBS (IL2), Grade E (at IL3 the % would drop to circa 10% NBS). The most serious issues relate to the concrete framing of the structure, the beams and reinforcement, and the foundations. The ground conditions mean that a significant portion of the underlying soils beneath the site are potentially liquefiable in a large earthquake event, which could lead to failure of the foundation system and a catastrophic failure of the building. EQ Struc have observed that it is possible that the building's true NBS is even lower than 15%, as some features have not been able to be fully quantified or taken into account

Council does not wish to carry the risk of, what is essentially a public structure, although run as a commercial enterprise, open at this level NBS, where there could be a sudden and catastrophic failure and collapse of the building, and as such council closed the building in late January 2021.

We are in the process of working through this with the tenant, BBEL, who vacated the site in late January at councils request.

Remedial works may be possible, however, given the nature of the works involved to improve the building to 67% (required for and IL3 Building), council is unsure if this can be achieved. If achievable the costs for these improvements will be significant. Costings have not been carried out at this stage.

Regards

Brian Stirton *Legal & Property Manager - Property Services*

P: 07 348 4199 ext 8235 | M: 027 268 9707

E: brian.stirton@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

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LAKES COUNCIL**

From: Rob Pitkethley <Rob.Pitkethley@rotorualc.nz>

Sent: Friday, May 21, 2021 2:26 PM

To: Brian Stirton <Brian.Stirton@rotorualc.nz>

Subject: Update for NWGR Meeting

Hi Brian

As discussed. I need this updated from below as was told to them in October.

By Monday lunch?

Thanks

Rob

3.5 Blue Baths:

There is an interim lease in place between Council and The Blue Baths Establishment Limited, while investigations are being undertaken as to the feasibility of the proposed redevelopment of the outdoor pool and courtyard space. These investigations include a geotechnical report, structural report and updated seismic report. Once these reports have been finalised, we will be in a position to commence lease negotiations and agree on redevelopment, if any. **Update reqd**

Rob Pitkethley *Kaihautū Mahi Rēhia | Sport, Recreation and Environment Manager.*

Rotorua Lakes Council

P: 07 351 8202. | M: 027 8072033

E: rob.pitkethley@rotorualc.nz | W: rotorualakescouncil.nz

A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand

**ROTORUA
LAKES COUNCIL**

From: Nikoletta Michael
Sent: Thursday, 27 May 2021 11:28 AM
To: [REDACTED]
Subject: RE: Blue Baths

Thank you [REDACTED]

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: 07 351 8282 | E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz

From: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Sent: Thursday, 27 May 2021 11:17 AM
To: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Subject: RE: Blue Baths

Hi Nikoletta
I don't have any issues with the wording you have proposed below.
Thanks
[REDACTED]

From: Nikoletta Michael <Nikoletta.Michael@rotorualc.nz>
Sent: Wednesday, 26 May 2021 3:03 pm
To: [REDACTED] <[\[REDACTED\]@bluebaths.co.nz](mailto:[REDACTED]@bluebaths.co.nz)>
Subject: Blue Baths

Kia ora [REDACTED]

As discussed, we have received a media enquiry from the Rotorua Daily Post about the Blue Baths being closed. I am proposing we respond with the following and just wanted to run this past you. Please let me know if you have any concerns.

Statement: The Blue Baths was initially closed on 26 January 2021 to investigate concerns about the structural integrity of the building. Significant testing has been undertaken to better understand the situation. We are currently working with the lease holder and will provide more information once these discussions have concluded.

Kind regards

Nikoletta Michael *Senior Communications Advisor - Kaitohu Whakapā*
P: 07 351 8282
E: nikoletta.michael@rotorualc.nz | W: rotorualakescouncil.nz
A: 1061 Haupapa St, Private Bag 3029, Rotorua Mail Centre, Rotorua 3046, New Zealand



