Hutt City Council
30 Laings Road
Private Bag 31912
Lower Hutt 5040
New Zealand
www.huttcity.govt.nz
T 04 570 6666
F 04 569 4290

9 September 2022

Melissa Nightingale
New Zealand Herald
[redacted]

Tēnā koe Melissa

Request for Information – Local Government Official Information and Meetings Act (LGOIMA) 1987

We refer to your official information request dated 10 August 2022 for information about 'red-stickered' earthquake-prone buildings.

We have interpreted your request as applying to notices issued under S133 of the Building Act 2004. S133 notices are often issued when building owners have exceeded the prescribed period for strengthening or when the earthquake risk of the building warrants it.

The information you have requested is provided below.

1. *How many red stickered buildings there are within council's area*

One

2. *The locations of the buildings*

13 Elizabeth St, Petone

3. *When they were red stickered and when they were yellow stickered*

The building at 13 Elizabeth St was originally issued a s124 notice on 30 May 2008 and a notice under s124(2)(b) and s128 on 19 September 2016

4. *What percentage of the NBS they are and when that assessment was made*

As at November 2008, this building had a NBS of 18%

5. *Whether the buildings are publicly or privately owned*

This building is privately owned

6. *Whether the buildings are considered to pose any risk to the public externally, e.g. from facades*

Hutt City Council has had discussions with the building owners over several years. Structural work has now taken place and we believe this has improved the structural performance of the building.

7. *Any plans in place to demolish or strengthen red stickered buildings or take over ownership of them*

No

8. *Documents, memos or correspondence relating to the buildings since they were red stickered*

Documentation associated with the building since September 2016 is enclosed with this letter. Note that some material has been redacted under section 7(2)(a) of the LGOIMA, to protect privacy, and under section 7(2)(h), to protect legal privilege.

There is a building consent (BC 211601) that was issued for strengthening the building and a resource consent (RM 220101) for work on the building. Documents relating to these are available on the Council's website, here: www.huttcity.govt.nz/property-and-building/search-property-and-building?query=13+Elizabeth+street. A further building consent (BC 220333) is currently being processed to convert the building into a dwelling.

9. *If held, the current estimated value of the land on which the buildings sit (as at the time of this LGOIMA response)*

The GV for the land is $580,000

Hutt City Council's public website, here: www.huttcity.govt.nz/property-and-building/building-consents/seismic-information, also contains background information relating to seismic risk. This includes a seismic register of Council-owned buildings.

You have the right to seek an investigation and review by the Ombudsman of this response. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this letter may be published on the Council's website.

Nāku noa, nā

Susan Sales
Senior Advisor, Official Information and Privacy

Encl Documents associated with 13 Elizabeth Street, Petone

Susan Sales

From: [redacted] s7(2)(a)
Sent: Wednesday, 18 September 2019 12:59 pm
To: Chris Hoddinott
Cc: Claire Stevens
Subject: 13 Elizabeth St, Petone - Exemption to carry out seismic work.
Attachments: Opus re 13 Elisabeth St Part 1.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Chris,

As discussed, I am writing to request an exemption from a requirement to carry out seismic upgrade work at the above property. This property has been identified as earthquake prone.

The information you require to consider this application is follows:

- Nobody occupies this building on a regular or irregular basis.
- The building is approximately 6.0 metres from its boundary with Elizabeth St.
- The building is approximately 2.5 metres from the boundary of 11 Elizabeth St, but this includes a 1.5 metre footpath between the two parcels of land.
- The building is approximately 1.0 metre from its boundary with the footpath between 13 and 11 Elizabeth St.
- The building is approximately 5.0 metres from its boundary with 15 Elizabeth St.
- The building is approximately 4.0 metres from its rear boundary with the WelTec car park.

I attach a report from Opus detailing the risk posed to passers by and neighbouring plots in the event of collapse. The report includes recommendations to mitigate this risk. I am in the process of having this work costed.

The report has to be in two parts as it is too big to send as one. You will get the second part shortly.

Would you please advise if exemption can be granted once the proposed risk mitigation work is complete.

Thanks,

[redacted] s7(2)(a)

Released under the Local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Monday, 7 October 2019 3:53 pm
To: [redacted]
Cc: Claire Stevens
Subject: RE: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

H [redacted]. It will be intresting to see what Opus say regarding the fence option. Let me know when you hear from them.

I'll also let you know once I hear back from Heritage NZ

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

From: [redacted]
Sent: Monday, 7 October 2019 12:01 PM
To: Chris Hoddinott
Cc: Claire Stevens
Subject: RE: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

Thank you Chris.

Re the boundary fencing, I was thinking along the same lines and asked Opus that question earlier today.

I will do nothing more for now until we have answers from Heritage New Zealand and Opus re the fence.

Thanks again for your guidance on this.

Regards,

[redacted]

Released under the local Government Official Information and Meetings Act

From: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Sent: Monday, 7 October 2019 11:53 AM
To: [redacted]
Cc: Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: RE: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

Hi [redacted]

Thanks for your application for an exemption from the requirement to carry out seismic work under section 133AN of the Building Act 2004.
I note that OPUS has identified a potential risk to people outside the Northern and Western property boundaries in the event of an earthquake, and have included a proposed propping design to mitigate this risk.

I have sent this information to Heritage New Zealand to request their feedback on this proposal. I will let you know once I hear back from them.

Feedback from our building team is that the proposed propping work would require an application for an exemption from building consent. If you decide to apply for an exemption most of the information required in this case would be supplied by your engineer. It might be useful to get them to fill out the application form.

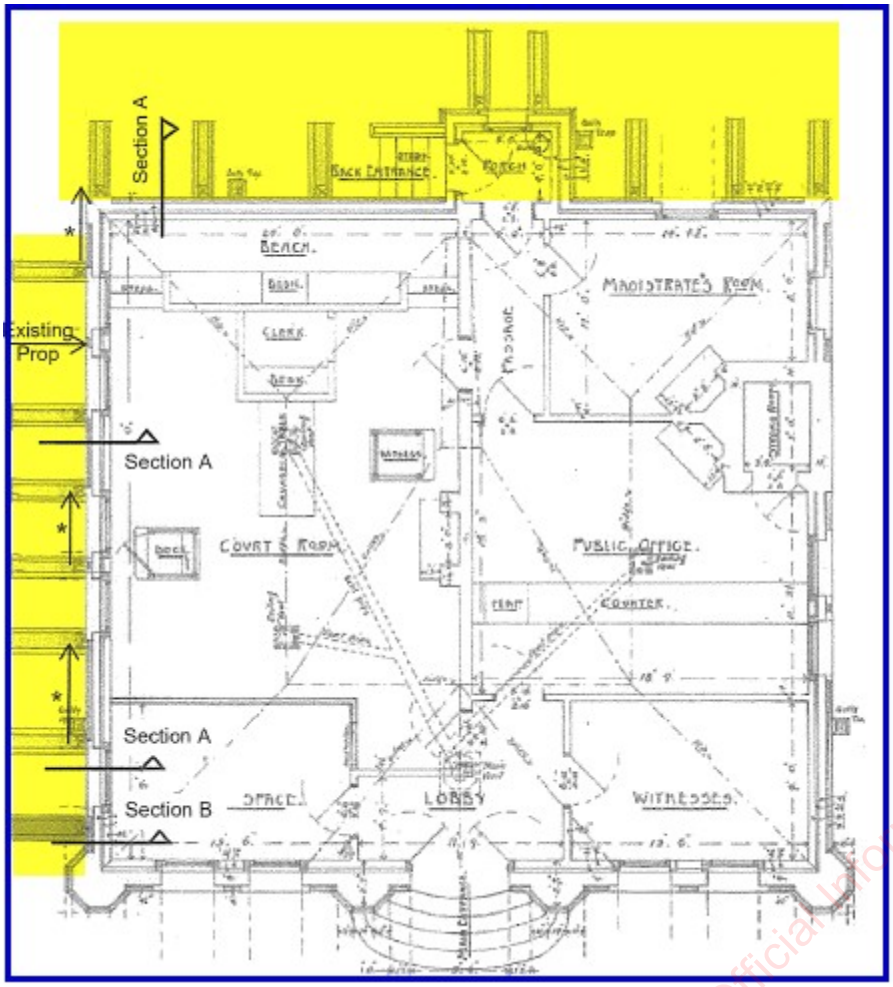
Information we would require for a building consent exemption application includes:

- Providing a completed exemption application form
- Providing detailed information from your engineer to show how the propping is to be constructed
- Providing a Producer statement (PS1) from your engineer for the design
- Providing a schedule of your engineers proposed inspections to check the propping (I expect they would only require 1 inspection but they would be able to advise you of this)
- Paying the application for exemption fee which is listed on our fees schedule as $640. (On our fees schedule it is referred to as 'Schedule 1 exemption')

You may wish to wait until I hear back from Heritage New Zealand to see what their feedback is on the proposal. Another avenue that could be worth exploring is seeking feedback from your engineer if the risk to people outside the property boundaries could be mitigated by improving the boundary fences rather than propping the building? If this was possible no building consent/building consent exemption or resource consent would be triggered as long as the fence/s was no higher than 2metres high

Proposed propping on Northern and Western building facades

Released under the Official Information and Meetings Act



Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

Released under the Local Government Official Information and Meetings Act

---

From: [redacted] s7(2)(a)
Sent: Wednesday, 18 September 2019 12:59 PM
To: Chris Hoddinott
Cc: Claire Stevens
Subject: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

Hi Chris,

As discussed, I am writing to request an exemption from a requirement to carry out seismic upgrade work at the above property. This property has been identified as earthquake prone.

The information you require to consider this application is follows:

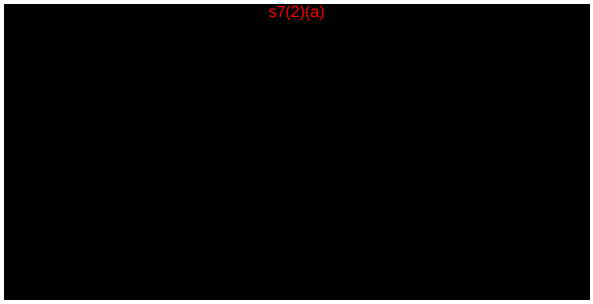
- Nobody occupies this building on a regular or irregular basis.
- The building is approximately 6.0 metres from its boundary with Elizabeth St.
- The building is approximately 2.5 metres from the boundary of 11 Elizabeth St, but this includes a 1.5 metre footpath between the two parcels of land.
- The building is approximately 1.0 metre from its boundary with the footpath between 13 and 11 Elizabeth St.
- The building is approximately 5.0 metres from its boundary with 15 Elizabeth St.
- The building is approximately 4.0 metres from its rear boundary with the WelTec car park.

I attach a report from Opus detailing the risk posed to passers by and neighbouring plots in the event of collapse. The report includes recommendations to mitigate this risk. I am in the process of having this work costed.

The report has to be in two parts as it is too big to send as one. You will get the second part shortly.

Would you please advise if exemption can be granted once the proposed risk mitigation work is complete.

Thanks,



Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz

HUTT CITY TE AWA KAIRANGI

I vote for my community

He aha te take me pōti koe?
Why will you vote?

Released under the Local Government Official Information and Meetings Act

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Susan Sales

From: Chris Hoddinott
Sent: Thursday, 1 August 2019 7:19 am
To: s7(2)(a)
Cc: Claire Stevens
Subject: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi s7(2)(a)

Thanks for calling in to see us a few weeks ago to discuss two of the building owned by s7(2)(a)

Out of Scope

- 13 Elizabeth street, Petone

  During our meeting the possibility of applying for an exemption from the requirement to carry out seismic work was discussed. Section 133AN of the Building Act 2004 outlines that owners of buildings subject to an earthquake-prone building notice may make an application in relation to this. An exemption provides a means for a building to remain in an earthquake-prone state while the options for remediating the building are worked through without the owner being subject to possible enforcement action due to an expired earthquake-prone building notice.

  The eligibility criteria for exemptions is based around the level of risk a building poses to people. If the risk is perceived to be low enough an exemption may be granted. In considering the level of risk to people the number and frequency of people occupying and in close proximity to a building are considered. Buildings in close proximity to footpaths or other public thoroughfares would not be eligible for an exemption.

  If an exemption is granted the details of the exemption will be recorded in the national earthquake-prone building register and an exemption notice affixed to the building.
  If an exemption is granted and the number and frequency of people occupying or in close proximity to a building changes the legislation allows the exemption may be revoked at any time.

  To apply for an exemption the building owner or their representative will need to:

1. Apply to Hutt City Council in writing (this may be by letter or email format). Once we receive the application we will send an invoice for the application fee of $160. This fee will need to be paid before the application is processed. Please note, this application fee allows for 1 hour of our time processing the application. If additional time is required beyond this initial hour additonal charges may be incurred.

2. Provide with the application a brief statement to outline the occupancy of the building. Please state:
   a. How many people occupy the building
   b. How frequently the building is occupied
   c. The proximity of passers-by to the building (note the approximate distance of the building to the boundaries and any fencing to prevent passers-by entering the property). An aerial photograph may be useful to include to respond to this enquiry along with a written explanation.

Released under the Official Information and Meetings Act

3. I am aware that parts of this unreinforced masonry building are in poor repair and as such some temporary propping has been added to provide some support to some of the brick wall sections. We would expect to have written advice from a structural engineer included with your application advising if there is any expected risk to neighbouring properties or passers-by in the event of an earthquake if the building failed and collapsed. Particularly with regard to the childcare centre next door.

Note: I acknowledge this building has previously been issued with a notice stating no person may use or occupy the building. However the information requested in question 2 is required to be stated as a formal part of the exemption application process.

Please let me know if you require any additional information.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz F huttcitycouncil

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz

sign up to our newsletter

Released under the Local Government Official Information and Meetings Act

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Susan Sales

From: [redacted]
Sent: Wednesday, 18 September 2019 1:01 pm
To: Chris Hoddinott; Claire Stevens
Subject: Second part of Opus report re 13 Elisabeth St.
Attachments: Opus re 13 Elisabeth St Part 2.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

[redacted]

Released under the local Government Official Information and Meetings Act

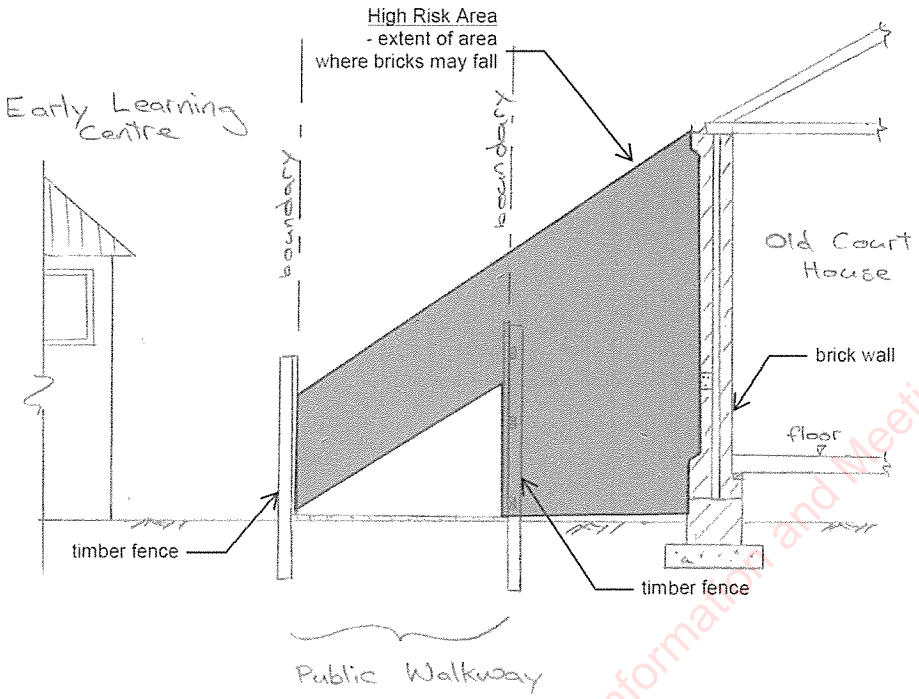


Figure 6 Section through Old Court House west wall showing extent of High Risk Area

The brick walls along the front of the building (south side) are thicker than the other sides so they perform mildly better. There is a medium risk that the front brick walls will collapse outwards. Failure of the front wall is likely be contained within the property due to the large distance between the existing building and the boundary fence. This side of the building is therefore unlikely to pose a risk to persons beyond the property boundary. A site plan showing the extent of falling bricks is given in Figure 7.

Previous earthquakes have already damaged the porch at the rear of the building and caused some of the brick parapet to fall off. These walls are at high risk of collapsing further. The boundary fence on the north side of the property is lower than the other sides so there is a chance that the bricks will fall over the top of the fence. This could then become a hazard to persons who are standing near the north boundary fence.

The residential section to the East of the property is unlikely to be affected by seismic damage to the Old Court House. There is adequate distance between the timber boundary fence and the building that fallen bricks will be contained within the property. At most, the bricks will hit the base of the timber fence, but go no further.

Released under the Local Government Official Information and Meetings Act

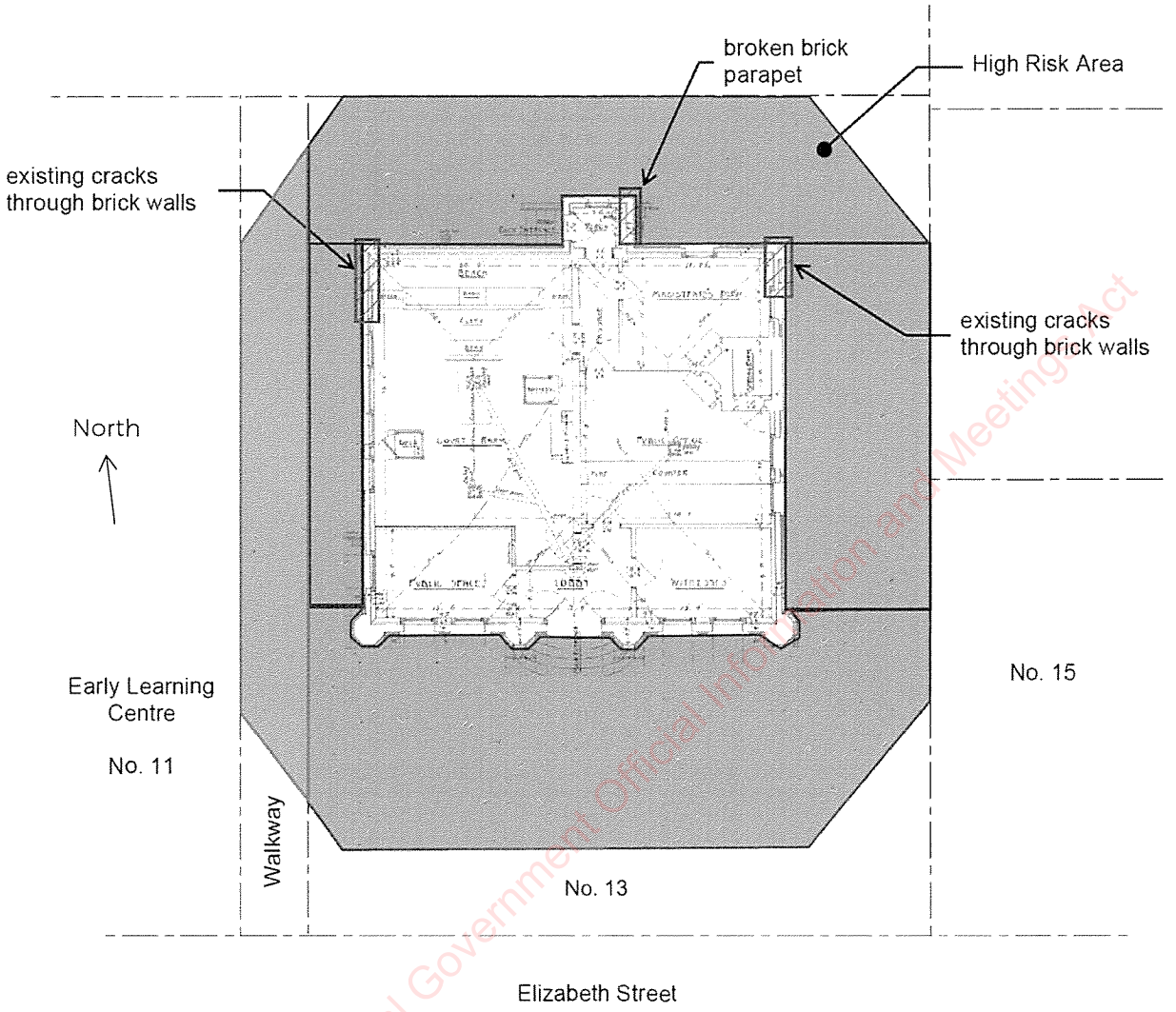


Figure 7 Site Plan of 13 Elizabeth Street, Petone showing extent of High Risk Area

Released under the local Government Official Information and Meetings Act

6 Temporary Seismic Restraint

Based on our risk assessment, WSP Opus propose the following measures to restrain the existing building in the short term and reduce the risk to occupants outside the property boundary. Illustrative sketches are provided in Appendix A.

- Install timber props beside the west and north wall between the boundary fence and the wall. Refer to sketch 1 and 2 for the location of these props and general arrangement.
- Secure the property with a locked gate. Place warning/hazard signs on the boundary fence to deter people from entering the property.
- Increase the height of the timber fence on the north and west side of the property to prevent people from climbing over the boundary and catch any loose bricks.

The proposed restraint system is a conceptual scheme and is limited to the high risk areas which are exposed to the public. Before commencing the detailed design of the restraint system, a general measurement should be made of the existing structure and co-ordination with a contractor.

7 Limitations and Assumptions

Below are the limitations and assumptions made during the assessment of all structures.

a. The opinions in this document are based on the conditions and information available at the time the document was published and assume that the structure was built as per the materials, reinforcement sizes, etc. shown on the drawings that were available to us.

b. The assessment does not cover any non-structural components within the buildings.

8 Conclusion

The Old Court House Building achieves a rating of <34%NBS and is considered a High to Very High to neighbouring buildings when compared with a new building which has been designed to meet current New Zealand Standards. A building with an earthquake rating less than 34 %NBS fulfils one of the requirements for the Territorial Authority to consider it to be an Earthquake-Prone Building (EPB) in terms of the Building Act 2004. Conceptual seismic restraint for the building is provided in Appendix A of this report.

The brick perimeter walls on all but the south side of the building have a high chance of collapsing outwards in a 1 in 250 year seismic event. The area of highest risk is along the west side of the building where there is a walkway which provides access to WelTec campus off Elizabeth Street. There is a narrow distance between this walkway and the building. If the external brick wall collapses outwards, then it can topple onto and over the boundary fence into the walkway. We recommend that timber props are installed at regular centres along this side of the building between the fence and the wall.

Failure of the brick walls poses a moderate risk to persons outside the property boundary on the north side. There is a large grass area beside the building to catch the fallen bricks however there is still a chance they could extend past the fence. Therefore, we recommend that propping is installed to this side of the building as well.

Seismic damage to the building is unlikely to create a hazard to people outside the property on the east and south side. If these two sides of the building are left unrestrained then we recommend that steps are taken to deter people from entering the property. This could be achieved by securing the entrance gate off Elizabeth Street and modifying the fence to the north of the property so that is cannot be mounted.

9 Disclaimer

This report and the conclusions within are prepared for Wellington Institute of Technology in accordance with the clients brief and should not be relied on by other parties for any other purpose or use without written confirmation from WSP Opus of the purpose and suitability.

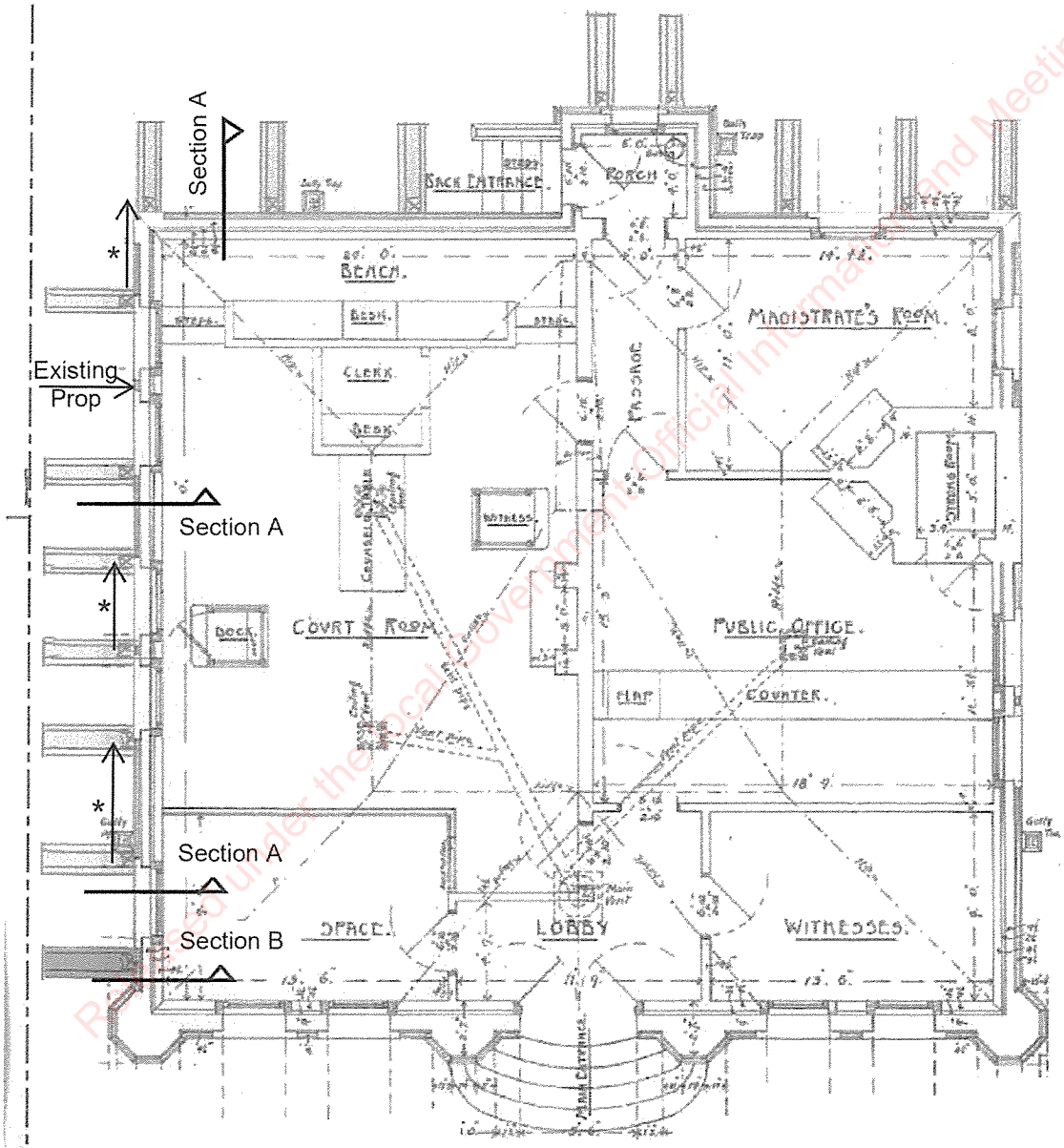
Released under the Local Government Official Information and Meetings Act

Appendix A
Conceptual Restraint Sketches

Released under the local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	1 of 3
Project Description:	Old Court House	Office:	Wellington
	13 Elizabeth Street, Petone	Computed:	5/09/2019
	Floor Plan	Check:	

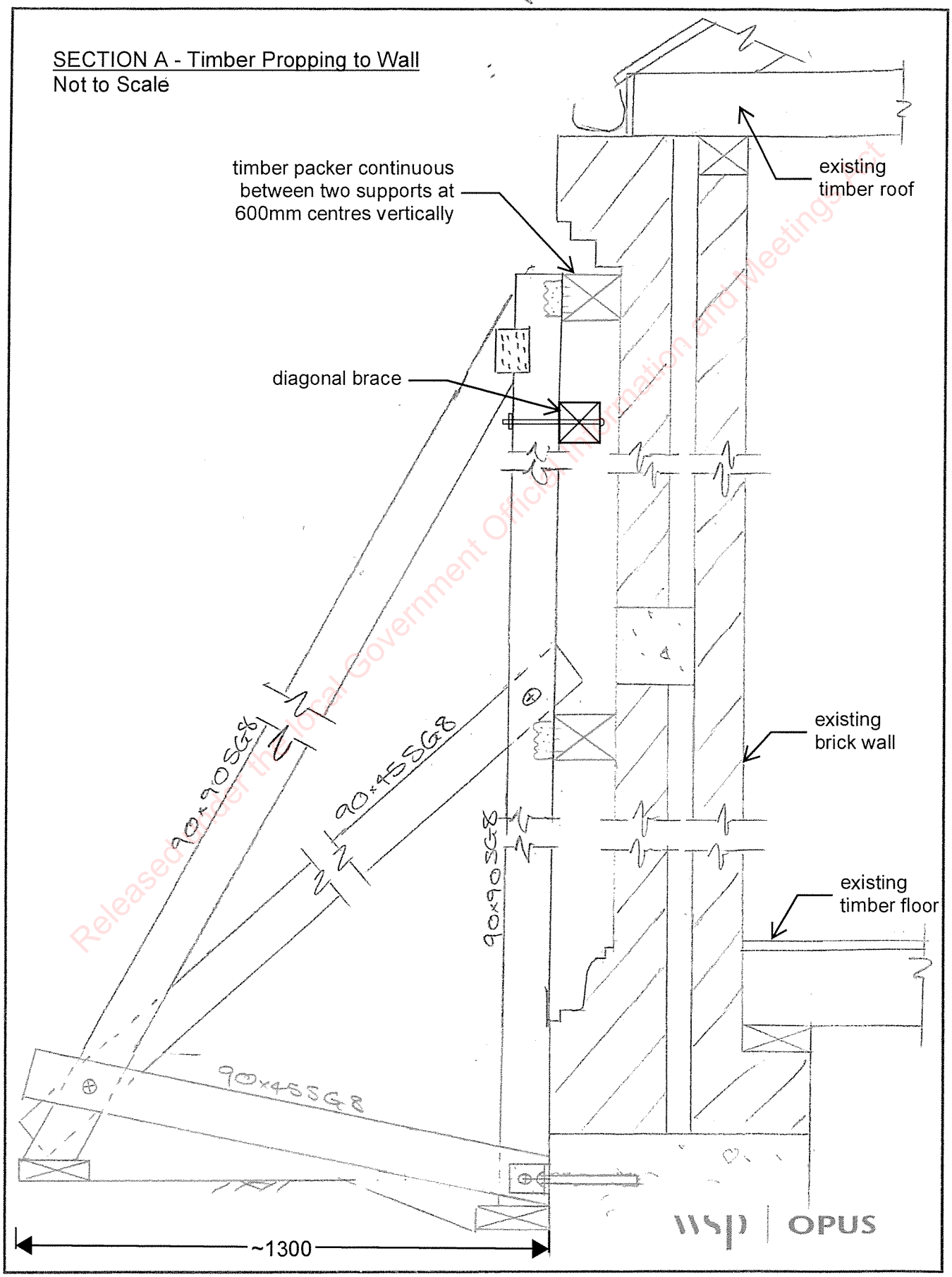


* - Diagonal 90x90 brace between propping

Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

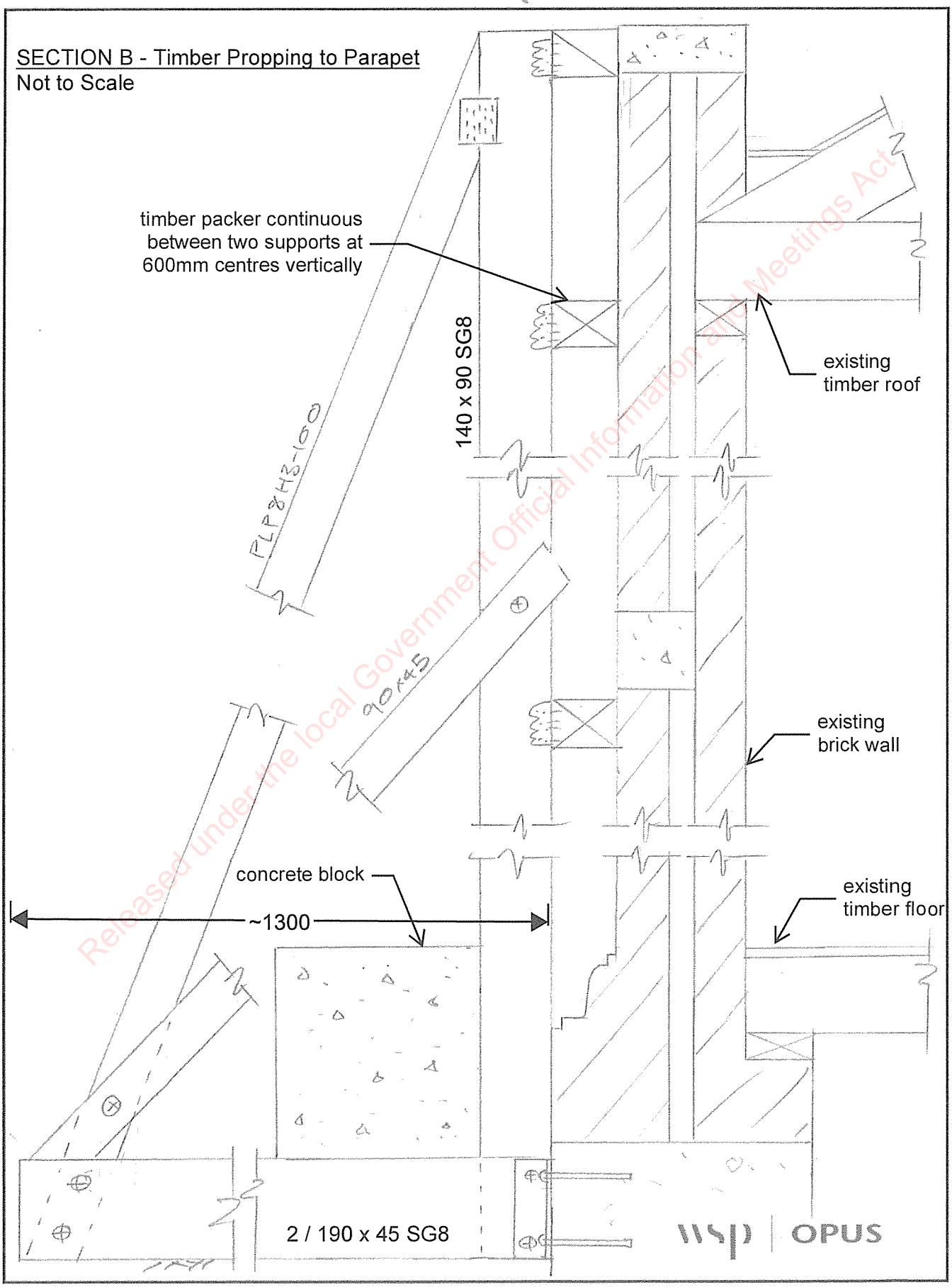
Project/Task/File No:	5-C3970.00	Sheet No	2 of 3
Project Description:	Old Court House (3 Elizabeth St, Petone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	



Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	3 of 3
Project Description:	Old Court House 13 Elizabeth St Pelone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	

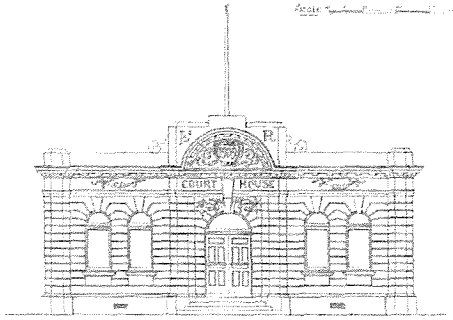


Released under the local Government Official Information and Meetings Act

Appendix B
Original Building Drawings

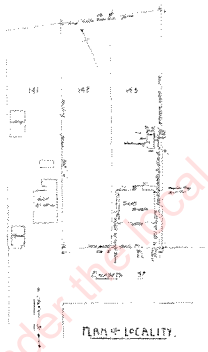
Released under the local Government Official Information and Meetings Act

PETONE COURT HOUSE



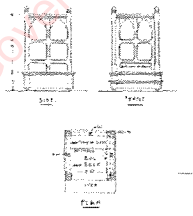
FRONT ELEVATION.

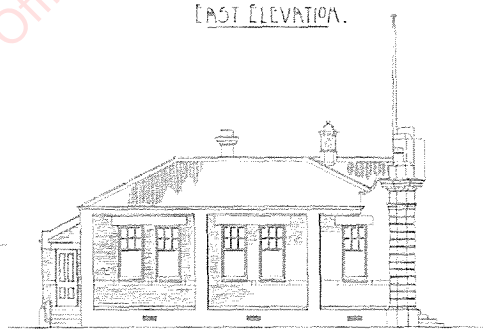
EAST ELEVATION.



PLAN OF LOCALITY.

WITNESS BOX AND DESK.





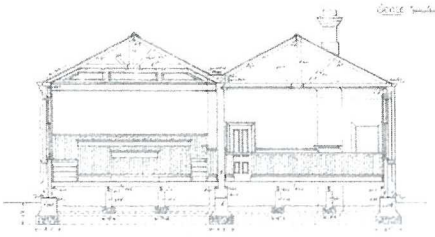
WEST ELEVATION.

P.W.D. 25462

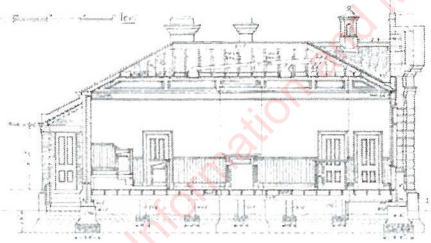
Released under the Official Information Act

PETONE COURT HOUSE

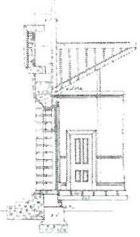
DRAWING No 1



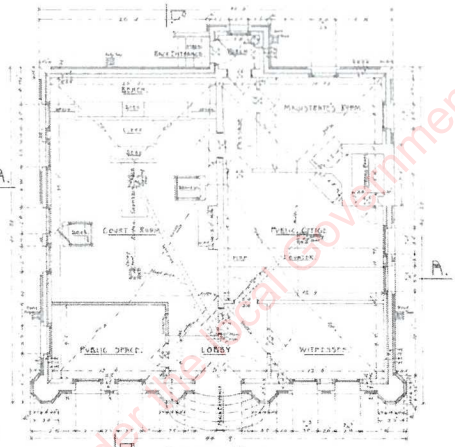
SECTION. A.A.



LONGITUDINAL SECTION. B.B.

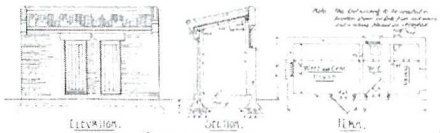


SECTION.
THROUGH FRONT ENTRANCE



GROUND PLAN.

BACK ELEVATION.



OUTBUILDINGS.

1509

P.W.D. 25462

Released under the Local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Thursday, 1 August 2019 1:43 pm
To: [redacted]
Cc: Claire Stevens
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi [redacted]

Thanks for the update about the two buildings. We look forward to receiving your application for an exemption for 13 Elizabeth street, Petone.
Feel free to call me if you require any additional info or if you wish to discuss.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

---

From: [redacted]
Sent:
To: Chris Hoddinott
Cc: Claire Stevens
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi Chris,

I am very happy to work with you and Claire on this as there are obvious benefits to all involved.

[redacted]

In regard to 13 Elizabeth St, I am in Petone tomorrow and will get the information I need to submit the application.

Thanks again for your help.

Regards,

[redacted]

Released under the Local Government Official Information and Meetings Act

[redacted]

From: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Sent: Thursday, 1 August 2019 7:19 AM
To: [redacted]
Cc: Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi [redacted]

Thanks for calling in to see us a few weeks ago to discuss two of the building owned by [redacted]

[redacted]

- 13 Elizabeth street, Petone

  During our meeting the possibility of applying for an exemption from the requirement to carry out seismic work was discussed. Section 133AN of the Building Act 2004 outlines that owners of buildings subject to an earthquake-prone building notice may make an application in relation to this. An exemption provides a means for a building to remain in an earthquake-prone state while the options for remediating the building are worked through without the owner being subject to possible enforcement action due to an expired earthquake-prone building notice.

  The eligibility criteria for exemptions is based around the level of risk a building poses to people. If the risk is perceived to be low enough an exemption may be granted. In considering the level of risk to people the number and frequency of people occupying and in close proximity to a building are considered. Buildings in close proximity to footpaths or other public thoroughfares would not be eligible for an exemption.

  If an exemption is granted the details of the exemption will be recorded in the national earthquake-prone building register and an exemption notice affixed to the building.
  If an exemption is granted and the number and frequency of people occupying or in close proximity to a building changes the legislation allows the exemption may be revoked at any time.

  To apply for an exemption the building owner or their representative will need to:

1. Apply to Hutt City Council in writing (this may be by letter or email format). Once we receive the application we will send an invoice for the application fee of $160. This fee will need to be paid before the application is processed. Please note, this application fee allows for 1 hour of our time processing the application. If additional time is required beyond this initial hour additonal charges may be incurred.

2. Provide with the application a brief statement to outline the occupancy of the building. Please state:
   a. How many people occupy the building
   b. How frequently the building is occupied

Released under the local Government Official Information and Meetings Act

c. The proximity of passers-by to the building (note the approximate distance of the building to the boundaries and any fencing to prevent passers-by entering the property). An aerial photograph may be useful to include to respond to this enquiry along with a written explanation.

3. I am aware that parts of this unreinforced masonry building are in poor repair and as such some temporary propping has been added to provide some support to some of the brick wall sections. We would expect to have written advice from a structural engineer included with your application advising if there is any expected risk to neighbouring properties or passers-by in the event of an earthquake if the building failed and collapsed. Particularly with regard to the childcare centre next door.

Note: I acknowledge this building has previously been issued with a notice stating no person may use or occupy the building. However the information requested in question 2 is required to be stated as a formal part of the exemption application process.

Please let me know if you require any additional information.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz F huttcitycouncil

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz

sign up to our newsletter

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Released under the local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Thursday, 30 January 2020 10:22 am
To: s7(2)(a)
Cc: Claire Stevens
Subject: RE: Old Courthouse, Petone - 13 Elizabeth Street
Attachments: Application for a Discretionary Exemption from Building Consent.pdf; REPORTS - Opus risk assessment 13 Elizabeth St.pdf

Hi s7(2)(a)

We received feedback from Heritage New Zealand (HNZ) regarding the proposed temporary wall propping. Overall HNZ were supportive of the proposal to install temporary propping although they did have some concerns about the proposal for the work to be carried out under a Discretionary Exemption from Building Consent. When work is done under a building consent it allows Heritage NZ to have some input. HNZ did however state that if the work does proceed under a Discretionary Exemption from Building Consent they'd be prepared to work with the owners of the building/applicants on a voluntary basis. HNZ would want to see more detailed drawings of the actual work involved for the proposed propping.

I suggest you contact s7(2)(a) from Heritage New Zealand to further discuss the proposal:

s7(2)(a)

Attached is a copy of the application form to apply for a discretionary exemption from building consent. Most of the supporting information required in this case would be supplied by your engineer. It might be useful to get them to fill out the application form.

Information we would require for a building consent exemption application includes:

- Providing a completed exemption application form
- Providing detailed information from your engineer to show how the propping is to be constructed. The attached report from Opus provides a good overview of the proposal. We would expect more detailed drawings and calculations outlining the design.
- Providing a Producer statement (PS1) from your engineer for the design
- Providing a schedule of your engineers proposed inspections to check the propping (I expect they would only require 1 inspection but they would be able to advise you of this)
- The proposal we've discussed is for temporary propping. I note the Opus report outlines the conceptual propping measures are for less than 5 years. The exemption would be issued on this basis.
- Paying the application for exemption fee which is listed on our fees schedule as $640. (additional time if required $160 per hour)(On our fees schedule it is referred to as 'Schedule 1 exemption')
- Once you have the application form completed and other relevant information you can apply online.

Let me know if you need any more information or assistance in applying for a building consent exemption.

Below is a building I spotted recently on my holiday while driving through Germany:

Released under the Official Information Act

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

Released under the local Government Official Information and Meetings Act

---

From: Claire Stevens
Sent: Wednesday, 29 January 2020 4:52 PM
To: s7(2)(a)
Cc: Chris Hoddinott
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

Sorry about this- I dropped the ball

We have info from heritage- We need an exemption from building consent application for the proposed work then we can issue time extension

I am out of the office until next Monday – do you have the forms for this/

Regards

Claire

Claire Stevens
Acting Building and Quality Assurance Manager

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6666, **W** www.huttcity.govt.nz

Claire Stevens
Acting Building Quality Assurance Manager

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6666, **M** 027 241 6365, **W** www.huttcity.govt.nz

sign up to our newsletter

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: [redacted] s7(2)(a)
Sent:
To: Chris Hoddinott; Claire Stevens
Subject: FW: Old Courthouse, Petone

Hi Chris / Claire,

Any response from Heritage yet please.

I am keen to move this on if I can.

If no response yet, I suggest we progress without their input. You can only wait so long!!

Thanks,

[redacted] s7(2)(a)

Released under the Local Government Official Information and Meetings Act

From: s7(2)(a)
Sent: Wednesday, 27 November 2019 10:15 AM
To: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Cc: Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: FW: Old Courthouse, Petone

Hi Chris,

Have Heritage NZ come back to you yet please?

It seems to be taking an age.

Thanks,

s7(2)(a)

From: s7(2)(a)
Sent: Thursday, 7 November 2019 1:31 PM
To: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>; Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: RE: Old Courthouse, Petone

Hi Chris,

Just wondering if you had heard anything back from Heritage NZ yet?

My CE wants this moved on, so I am happy to contact them directly if you think that would help.

Regards,

s7(2)(a)

s7(2)(a)

Released under the local Government Official Information and Meetings Act

From: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Sent: Tuesday, 8 October 2019 12:07 PM
To: s7(2)(a) >; Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

Thanks for the feedback. I'll wait to hear back from Heritage NZ and pass on their response to you.
Providing they have no objections to the wall propping proposal we can look at the building consent exemption for that work

Kind regards,

Chris

From: [redacted]
Sent: Tuesday, 8 October 2019 11:28 AM
To: Chris Hoddinott; Claire Stevens
Subject: FW: Old Courthouse, Petone

Hi Chris / Claire,

Please see below response from Opus re the fence option.

Certainly an alternative, but not the preferred option at this point.

Regards,

[redacted]

From: Murray, Robyn <Robyn.Murray@wsp.com>
Sent: Monday, 7 October 2019 4:43 PM
To: [redacted]
Subject: RE: Old Courthouse, Petone

Hi [redacted]

We looked into the option of putting a mesh fence above the existing timber fence to catch the bricks as the wall collapses. The fence still needs to be propped back to the ground in a similar manner to what has been shown for the wall, as it needs to take the horizontal impact of the bricks. We concluded that the same amount of propping attached to the wall would achieve the same result and no mesh would be required.

I will wait to hear on how you would like to proceed with the procurement.

Regards,

Robyn Murray
Senior Structural Engineer

WSP | OPUS

[redacted]

Released under the Local Government Official Information and Meetings Act

[redacted]

WSP Opus
L8 Majestic Centre
100 Willis St
Wellington 6011
New Zealand

wsp-opus.co.nz

From: [redacted]
Sent: Monday, 7 October 2019 10:21 AM
To: Murray, Robyn <Robyn.Murray@wsp.com>
Subject: Old Courthouse, Petone

Hi Robyn,

As discussed last week, I have asked my procurement team if a sole source procurement is acceptable under the circumstances.

I will let you know the outcome.

The following is just a thought aimed at reducing cost.

Your scheme looks as though it will not only control the spread of rubble, but significantly reduce the likelihood of the building collapsing. As our objective is simply to control the spread of rubble, would a suitably designed wire mesh fence along the boundaries in question be a more cost effective solution?

Your thoughts please.

Thanks,

[redacted]

Released under the local Government Official Information and Meetings Act

NOTICE: This communication and any attachments ("this message") may contain information which is privileged, confidential, proprietary or otherwise subject to restricted disclosure under applicable law. This message is for the sole use of the intended recipient(s). Any unauthorized use, disclosure, viewing, copying, alteration, dissemination or distribution of, or reliance on, this message is strictly prohibited. If you have received this message in error, or you are not an authorized or intended recipient, please notify the sender immediately by replying to this message, delete this message and all copies from your e-mail system and destroy any printed copies.

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Released under the local Government Official Information and Meetings Act

APPLICATION FOR A DISCRETIONARY EXEMPTION FROM BUILDING CONSENT

Building Act 2004 - Schedule 1, exemption (2)

A building consent exemption under Schedule 1(2) of the Building Act 2004 is the formal decision issued by a territorial authority confirming a building consent is not required for the intended building works

COUNCIL USE ONLY Application No:

An up-to-date version of Adobe Reader is required to fill this form out Download for free
http://get.adobe.com/reader/

I request that you issue an exemption on the basis:

☐ (a) The completed work is likely to comply with the building code if it is carried out in accordance with your proposal;

AND/OR

☐ (b) If the completed work were not to comply with the building code, it would unlikely endanger any people or building provided it is carried out in accordance with your proposal.

I request that you send the approved documents to me:

☐ via Email (no charge)

☐ Hard copy (charges will apply) ☐ Collect or ☐ Post

THE BUILDING (project location)

Building name: *[if applicable]*

Building street address:

Legal description of land where building is located: *[state legal description as at the date of application and if subdivision is proposed, include details of relevant lot numbers and subdivision consent]*

THE PROJECT

Detailed description of work:

Date when work was completed:

Does the building or site have any cultural heritage significance, or is it a marae? [refer to district plan]

☐ Yes ☐ No

Estimated value of building work on which building levy will be calculated: [includes GST]

$ _____

Released under the local Government Official Information and Meetings Act

EXEMPTIONS DETAILS

Means of Compliance: *[Specify the standards, acceptable solutions, or MBIE guidance documents that may apply]*

Design responsibilities: *[Who is carrying out the design work? What qualifications and experience do they have to carry out work of this complexity?]*

Construction responsibilities: *[Who is carrying out the building work? What qualifications and experience do they have to carry out work of this complexity?]*

Quality assurance: *[For example, a summary of any QA system used, including details of site inspections by architect, designer, engineer, site supervisor, etc.]*

Released under the local Government Official Information and Meetings Act

SUPPORTING DOCUMENTS

With your application include information relevant to the project which may include:

- ☐ All relevant drawings (site plan, floor plan, elevations, typical sections)
- ☐ Specifications
- ☐ Critical member sizes and critical construction details
- ☐ Product information
- ☐ Photographs
- ☐ If an engineer is involved, provide the engineer's calculations and sketches, including a producer statement - design.
- ☐ Any other information relevant to the project

PRIVACY STATEMENT

Council may hold, use and disclose personal information you have provided:

- to communicate with you for council purposes;
- to tell you about products and services it believes may be of interest to you; and
- to enable it to maintain its records and carry out its statutory functions.

You have the right under the Privacy Act 1993 to access, and have corrected, information held by Council, which is at 30 Laings Road, Lower Hutt 5040, 04 570 666.

THE OWNER *(must be completed and all details must be the owner's)*

Owners name: : *[for individuals, state the preferred form of title e.g. Mr, Mrs, Ms, Miss Dr. For companies, trusts and other organisations provide a contact person's name.]*		
Owner's mailing address:		
Street address/registered office:		
Owner's contact details:	**Landline:**	**Mobile:**
	After hours:	**Fax:**
	Email:	

Proof of ownership: *[please attach one of the following as evidence, as appropriate to the circumstances]*
Copy of certificate of title, no more than three months old. ☐ Lease ☐ Agreement for sale and purchase

THE OWNER'S AGENT *(only required if application is being made on behalf of the owner)*

Agent's name: : *[for individuals, state the preferred form of title e.g. Mr, Mrs, Ms, Miss Dr. For companies, trusts and other organisations provide a contact person's name.]*		
Agent's mailing address:		
Street address/registered office:		
Agent's contact details:	**Landline:**	**Mobile:**
	After hours:	**Fax:**
	Email:	
First point of contact for:		
Invoicing	☐ Owner	☐ Applicant
Correspondence/further information	☐ Owner	☐ Applicant

DECLARATION AND SIGNATURES

All of the information in this application is, to the best of my knowledge, true and correct.
In signing this document electronically, and submitting it to Hutt City Council, I declare that I am the person named in this document and that I am either the owner of the property to which the application relates, or the agent acting on behalf of the owner.

Signed by the owner:

Signature: .....

Print name: .....

Date: .....

OR

Signed by the agent: On behalf of, or with authority from, the owner

Signature: .....

Print name: .....

Date: .....

Released under the local Government Official Information and Meetings Act

wsp | OPUS

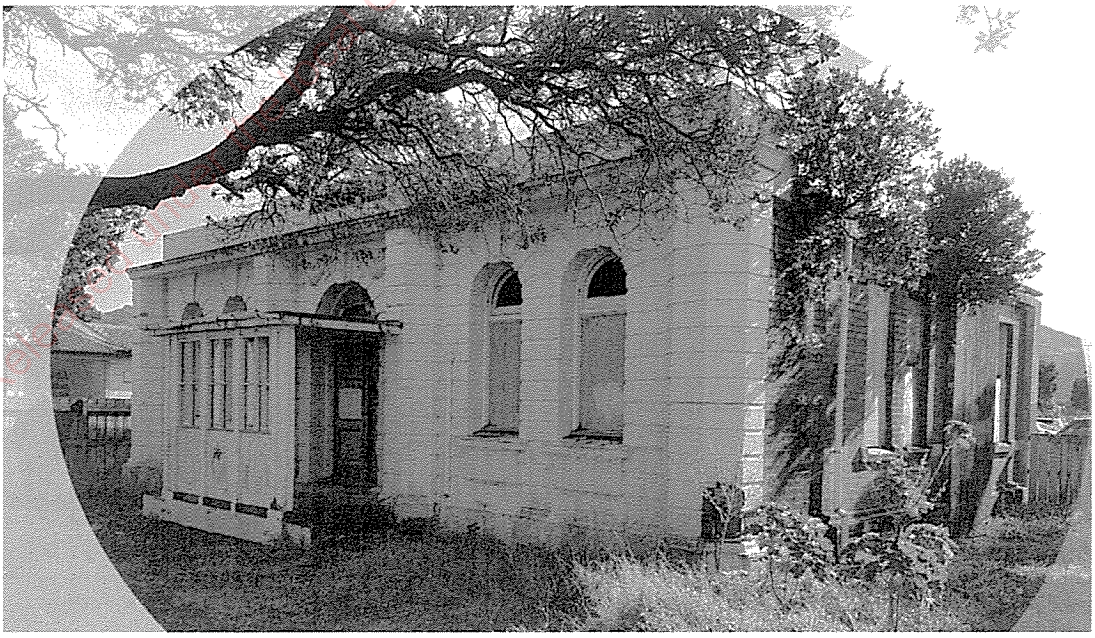
Risk Assessment

Old Court House

13 Elizabeth Street, Petone

Wellington Institute of Technology
Private Bag 39803
Lower Hutt 5045 New Zealand

Released under the Official Information and Meetings Act



Contact Details

Robyn Murray
L8, Majestic Centre, 100 Willis St
PO Box 12 003, Wellington 6144
New Zealand

s7(2)(a)

Document Details:
Date: 18/09/2019
Reference: 5-C3970.00
Status: Rev 1

Prepared By

2019.09.18 09:51:29+12'00'

Robyn Murray
Senior Structural Engineer

Reviewed By

Stanley Chung
Senior Structural Engineer

Approved for Release By

Brendon Cornell
Principal Structural Engineer

Released under the local Government Official Information and Meetings Act

Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status
0	13/09/2019	Robyn Murray	Stanley Chung	Brendon Cornell	Draft
1	18/09/2019	Robyn Murray	Stanley Chung	Brendon Cornell	Final

Revision Details

Revision	Details
0	Draft issued for client review
1	Final

Released under the local Government Official Information and Meetings Act

Executive Summary

WSP Opus has been engaged by Wellington Institute of Technology (WelTec) to carry out a high-level risk assessment of the Old Court House, located at 13 Elizabeth Street, Petone, Lower Hutt, and to propose some conceptual measures for restraining the existing structure. The terms and conditions of our scope of work are set out in our Offer of Service dated 28th August 2019.

The building has been assessed by Hutt City Council as Potentially Earthquake Prone. The building is also listed as a Heritage 2 Building in the Lower Hutt District Plan. The owner is required to strengthen the building within 15 years from the building being identified as Earthquake-Prone under the Buildings (Earthquake-prone Buildings) Amendment Act 2016. WelTec are planning to apply to Hutt City Council for an exemption from strengthening as they intend to sell the property. In lieu of strengthening, WelTec wish to safeguard the public by constructing temporary restraints around the high-risk areas of the building. At present the building is unoccupied, and has been so since 1991.

The original building was constructed around 1911 as a single storey structure with brick perimeter and internal partition walls. A timber roof supporting light metal roofing sheets spans onto the brick walls. Along the front wall the brick external wall continues up past the roof line to create a parapet. Shallow concrete pad foundations support the brick walls and shallow concrete piles support the internal timber floor.

Risk Assessment

WSP Opus engineers noted numerous cracks to the external brick walls which is evidence of past earthquake damage. The north-east and north-west corner of the building has the most damage with bricks bowing outwards and diagonal stepped cracks through the brick work. We expect that the brick perimeter walls are likely to fail out of plane when subject to a 1 in 250 year seismic event.

The area of highest risk is along the west side of the building where there is a walkway which provides access to WelTec campus off Elizabeth Street. There is a narrow distance between this walkway and the building. If the external brick wall collapses outwards, then it can topple onto and over the boundary fence into the walkway. We recommend that timber props are installed at regular centres along this side of the building between the fence and the wall.

Failure of the brick walls poses a moderate risk to persons outside the property boundary on the north side. There is a large grass area beside the building to catch the fallen bricks however there is still a chance they could extend past the fence. Therefore, we recommend that propping is installed to this side of the building as well. A conceptual seismic restraint scheme is provided in Appendix A.

Seismic damage to the building is unlikely to create a hazard to people outside the property on the east and south side. If these two sides of the building are left unrestrained then we recommend that steps are taken to deter people from entering the property. This could be achieved by securing the entrance gate off Elizabeth Street and modifying the fence to the north of the property so that is cannot be mounted.

Released under the Local Government Official Information and Meetings Act

Contents

Released under the local Government Official Information and Meetings Act

1 Scope

WSP Opus has been engaged by WelTec to assess the risk that the Old Court House building at 13 Elizabeth Street in Petone, Lower Hutt poses on neighbouring properties and the public in the event of a low intensity earthquake. We have also provided conceptual measures for restraining the existing structure in the short term (less than 5 years). Our assessment has been completed with reference to the following seismic assessment guidelines.

- The Seismic Assessment of Existing Buildings: Technical Guidelines for Engineering Assessments, July 2017, Version 1.

The Guidelines have been produced by the New Zealand Society of Earthquake Engineering (NZSEE) in conjunction with the Ministry of Business, Innovation and Employment (MBIE) and the Earthquake Commission.

2 Building Description

2.1 Building History

The Old Court House was originally constructed circa 1911 and is listed in the Lower Hutt District Plan as a Heritage 2 building. It served as the Magistrate's Court for the first 40 years after it was built and was then turned into the Petone Police Station. The building has been unoccupied since 1991 when the police station was relocated to Jackson Street. In 2002 the site was purchased by Wellington Institute of Technology (WelTec) who also own the campus to the North of the property. An Initial Evaluation Procedure (IEP) has been completed by others and determined that the building is Potentially Earthquake Prone. WelTec now intend to sell the property and apply for an exemption from Hutt City Council for strengthening the building.

2.2 Site

The properties to the North and West of the Old Court House are also owned by WelTec. There is about a 1.5m clearance between the west side of the building and the boundary fence. A public access way ~2m wide runs parallel to this boundary fence to connect the WelTec campus facilities with Elizabeth Street. Beyond this access route is a preschool and directly to the north of the building is carparking. To the east there is a residential property and there is about a 4.5m distance between the Old Court House and the eastern boundary fence.

Released under the Local Government Official Information and Meetings Act

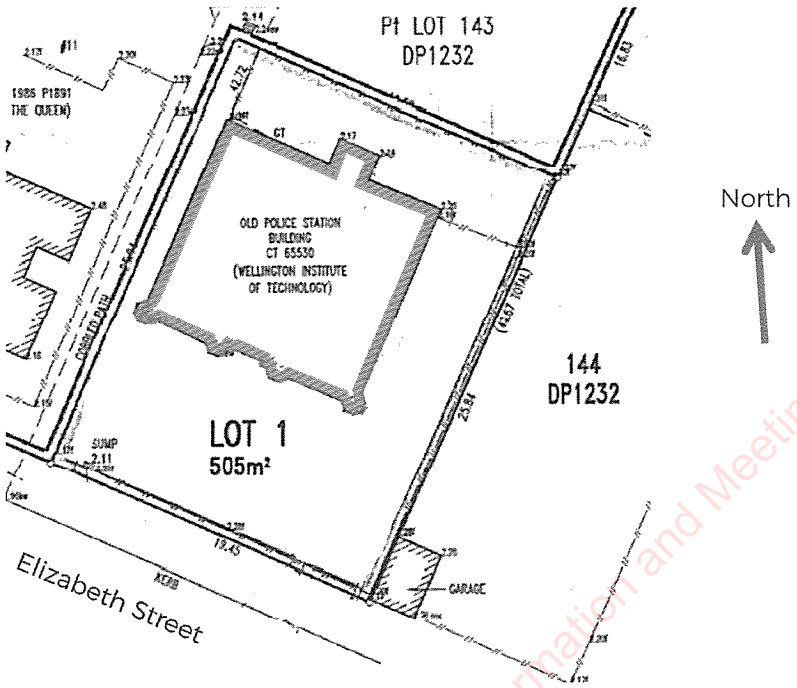


Figure 1: Site Plan of Old Court House Building at 13 Elizabeth Street, Petone

2.3 Building Structure

The building was constructed in the Edwardian Baroque style which is typical for buildings of its era. Perimeter walls are unreinforced masonry (brick) which extend up past the roof line to form a parapet at the building's frontage off Elizabeth Street. The front wall has been heavily plastered with ornate features while on the other three sides is exposed brickwork. A double hip roof has been formed over the square plan area of the building and supports corrugated metal sheet roofing. There is a small timber canopy over the front of the door on the south side and a small lean to entrance at the rear of the building.

Based on our visual assessment of the building and the information provided on the original archive drawings we infer that the building has the following structure:

- Cavity brick walls.
- Perimeter brick walls supported on shallow concrete pad foundations with a DPC layer in between the brick and concrete.
- A continuous unreinforced concrete beam at sill level around the building's perimeter within the width of the wall.
- Reinforced concrete lintel above all windows and doors.
- Timber framed roof.
- Internal timber floor spanning onto the perimeter concrete foundations and supported at internally by shallow concrete piles.
- Remains of a brick chimney on the east side of the building.

The original drawings show that a 2.5m high parapet the building was constructed over the building's frontage. The height of this parapet has since been reduced to about 0.7m above roof level and was likely done in response to the 1947 earthquake in Gisborne.

Released under the Local Government Official Information and Meetings Act

Figure 2: East elevation of Old Court House Building

Released under the Local Government Official Information and Meetings Act

3 Information Sources

3.1 Drawings

Original drawings for the structure were located from Archives New Zealand. Refer to Appendix B.

3.2 Site Geotechnical Information

The site is located within Petone town centre and is generally flat. Research by GNS Science et al. has indicated that the subsoils in this area are Class D – Deep or Soft Soil Site in accordance with NZS1170.5[1]. Previous geotechnical investigations along Jackson Street have indicated that there is a high chance of liquefaction for a seismic event with an annual probability of exceedance of 1 in 200 years. Given this information, it is likely that there will also be liquefaction at 13 Elizabeth Street for the same scale seismic event.

The close proximity of the Petone foreshore and Hutt River to the site indicates that the ground water table is fairly close to the ground surface. These factors also lead to the area being identified by the Hutt City Council as part of the tsunami risk zone. The site is classed by the Greater Wellington Regional Council as having a 2% AEP (Annual Exceedance Probability) risk of flooding. There is no risk of falling rocks or debris from nearby hills.

3.3 Site Visit and Investigations

A site visit was conducted by WSP Opus structural engineers on the 22nd August 2019 to view the building's exterior. It was not possible to view the interior of the building safely. Rough order of magnitude measurements were taken of the building exterior and we took note of any visible damage to the exterior walls.

[1] Refer to the paper *"NZS1170.5:2004 Site Subsoil Classification of Lower Hutt,"* published April 2011

4 Existing Building Condition

The building is showing a number of signs of earthquake damage due to the presence of cracking through the brick walls. The worst area of damage is at the northern end of the building. Very little cracking was observed on the front wall (south side).

At the two corners of the building on the north side there is severe cracking around the window lintels and through the brickwork. The walls and corner columns are leaning outwards and diagonal cracks have formed though the brick wall beside the windows. The brick beam along the top of the wall at these two corners has a vertical crack about 5-10mm wide. Refer to Figure 3 and Figure 4 for the extent of damage.

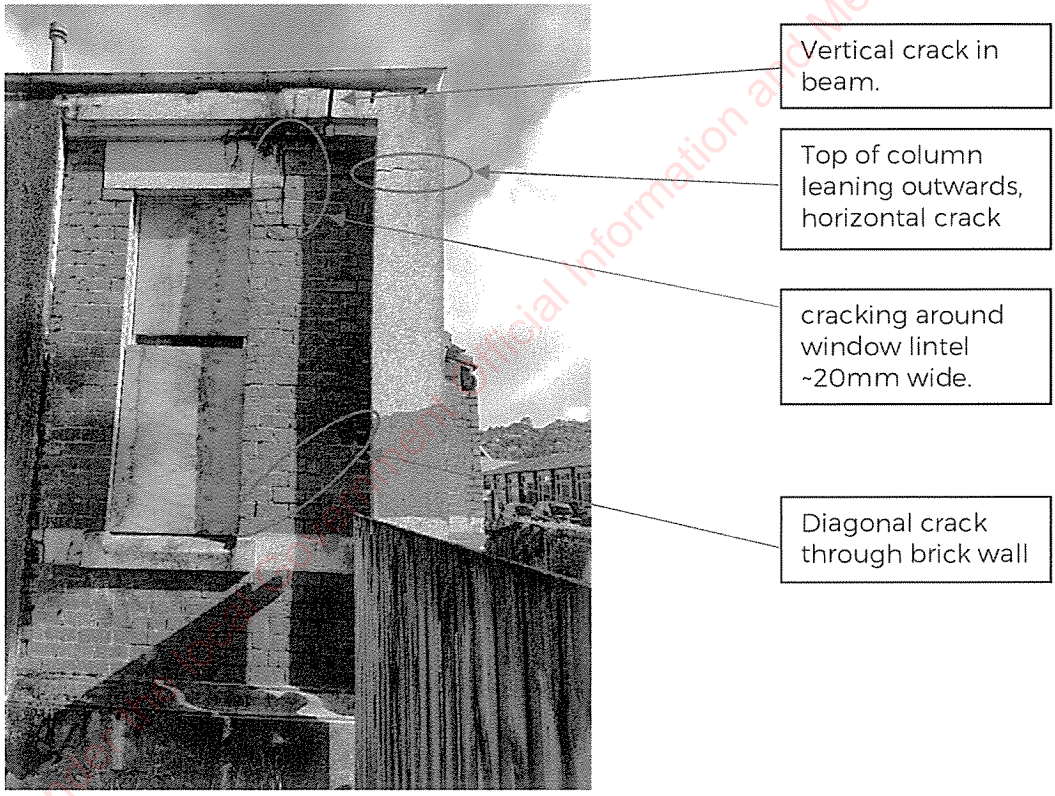


Figure 3: North-East corner of Old Court House showing damage to brick walls

Released under the Official Information Act

Some bricks have fallen away at the top of the wall which forms the lean to on the north side of the building. All the brick columns around the building have minor horizontal cracks (1-2mm wide).

On the west side of the building there is a portion of brick wall between the windows which is bowing outwards. Shoring has already been installed between the wall and the fence to support this section of brick wall. Mortar between the bricks in other areas of the wall on this side has been dislodged/or is missing.

Figure 4: North-West corner of Old Court House showing damage to brick walls

The concrete lintel over two windows on the east side of the building has a horizontal crack along its entire length. This crack has likely been caused by rusting of the reinforcing inside the concrete. The sheet metal roofing is also showing severe signs of rust.

Figure 5 East wall of Old Court House with horizontal crack through concrete lintel

5 Risk Assessment

WSP Opus have carried out a high-level assessment of the likely building damage in a 1 in 250 year seismic event as defined in NZS1170.5. Our assessment is based on sound engineering judgement given the temporary nature of the proposed restraining works. The building is considered as a normal structure with no special requirements for post disaster functionality and is therefore classed as 'Importance Level 2' (IL2) as per Table 3.3 of AS/NZS 1170.0. New Zealand Standards require a new IL2 structure with a design life of 5 years to have enough strength and stability to withstand a 1 in 250 year seismic event.

5.1 Earthquake Return Period

Risk level is proportional to how frequent an event occurs and the scale of impact from that event. The New Zealand Standards have quantified the acceptable risk level for new buildings by setting minimum requirements for the structure when subject to a certain level of ground shaking that is expected to occur at the site. The primary objective is to ensure the life safety of the building occupants by avoiding collapse of the structural system during a large seismic event.

The level of ground shaking used for the design of a new building is described in the New Zealand Standard, NZS1170.5 in terms of 'Earthquake Return Period'. An earthquake with a small return period, such as a 1 in 25 year event, is an earthquake which occurs frequently and with a low intensity of ground shaking. An earthquake of this size is expected to occur at least twice during the 50 year design life of a structure. A large return period corresponds to a very rare earthquake, which is estimated to occur possibly once during the design life of the structure and cause severe ground shaking. An Importance Level 2 building is required to withstand an earthquake with a return period of 1 in 500 years.

5.2 Relative Earthquake Risk

An Earthquake Rating is given to a building as a whole to indicate the seismic standard achieved in regard to human life safety compared with the minimum seismic standard required of a similar new building on the same site. The rating is expressed in terms of percentage of new building standard achieved (XXX%NBS). The earthquake rating for a building as a whole takes account of, and may be governed by, the earthquake scores for individual building elements.

Table A3.1 taken from the NZSEE Guidelines gives a proposed grading system for existing buildings, as one way of interpreting the %NBS score. The risk description for a certain %NBS is the risk to occupants or to neighbouring buildings relative to a building that just meets the minimum performance standard indicated by clause B1 of the Building Code.

Building Grade	%NBS	Approximate Relative Risk to a New Building	Life-Safety Risk Description
A +	>100	<1	Low risk
A	80 to 100	1 to 2 times	Low risk
B	67 to 79	2-5 times	Low or medium risk
C	34 to 66	5-10 times	Medium Risk
D	20 to 33	10-25 times	High Risk
E	<20	More than 25 times	Very High Risk

Released under the Local Government Official Information and Meetings Act

5.3 Seismic Resisting System

The brick perimeter walls are the main structural elements in the building which resist seismic loads. These walls are perforated with windows and doors so their in-plane strength is quite low. Seismic load is transferred into the ground through friction between the concrete foundations under the brick walls and the soil. Diagonal cracking through the brick walls is evidence of where the seismic demand on the walls has exceeded their in-plane strength.

The brick walls do not provide any seismic resistance for the building when seismic load acts across their weak axis. The brick walls rely on the connection to the roof to provide support in this case, which in turn transfers the seismic load into the return brick walls. The outer leaf of the brick wall on the west side of the building is already showing signs of failing about its weak axis.

The existing damage noted on site indicates that the brick walls on the east and west side of the building have tried to resist seismic load from previous earthquakes and consequently failed. The remaining strength of these elements is dubious and therefore they are unlikely to be able to withstand another large earthquake.

5.4 High Risk Areas

The building is classified as Potentially Earthquake Prone by Hutt City Council which means that the structure meets less than 34%NBS. The NZSEE Grading system indicates that the building poses a High to Very High risk when compared with a new building which has been designed to meet current New Zealand Standards. In rough terms, it means the building may not be able to withstand an earthquake with a return period of 1 in 25 years.

The most high risk elements of the building are the brick perimeter walls should they topple outwards. The West side of the building is of particular concern to the public as they are within close proximity to the existing building (about 1.5m away). The stability of the brick perimeter walls, calculated in accordance with MBIE Guidelines, does not meet the likely seismic demand from a 1 in 250 year seismic event which then designates it as a high risk element. Falling bricks will collide with the timber fence which runs along the property boundary beside the walkway. The upper most part of the brick wall could pass over the top of the fence and become a severe hazard to pedestrians using the walkway. The risk area is illustrated in Figure 6. The fence may have enough strength to withstand the impact of the bricks and therefore contain some of the bricks within the property. The possibility of bricks falling onto the walkway is a life safety risk and we have suggested a method for restraining the bricks in Appendix A.

Released under the Local Government Official Information and Meetings Act

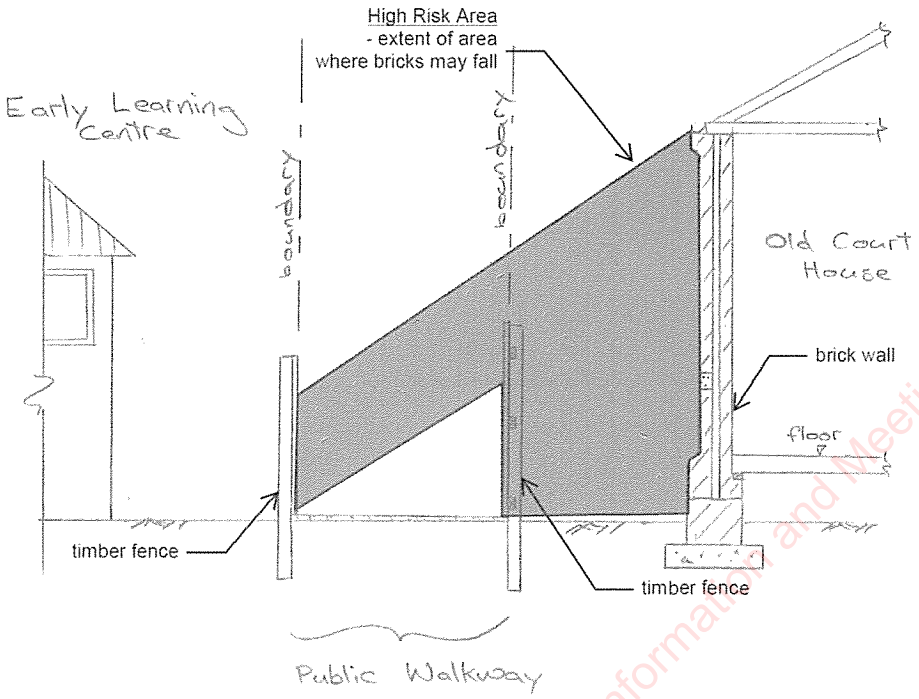


Figure 6 Section through Old Court House west wall showing extent of High Risk Area

The brick walls along the front of the building (south side) are thicker than the other sides so they perform mildly better. There is a medium risk that the front brick walls will collapse outwards. Failure of the front wall is likely be contained within the property due to the large distance between the existing building and the boundary fence. This side of the building is therefore unlikely to pose a risk to persons beyond the property boundary. A site plan showing the extent of falling bricks is given in Figure 7.

Previous earthquakes have already damaged the porch at the rear of the building and caused some of the brick parapet to fall off. These walls are at high risk of collapsing further. The boundary fence on the north side of the property is lower than the other sides so there is a chance that the bricks will fall over the top of the fence. This could then become a hazard to persons who are standing near the north boundary fence.

The residential section to the East of the property is unlikely to be affected by seismic damage to the Old Court House. There is adequate distance between the timber boundary fence and the building that fallen bricks will be contained within the property. At most, the bricks will hit the base of the timber fence, but go no further.

Released under the Local Government Official Information and Meetings Act

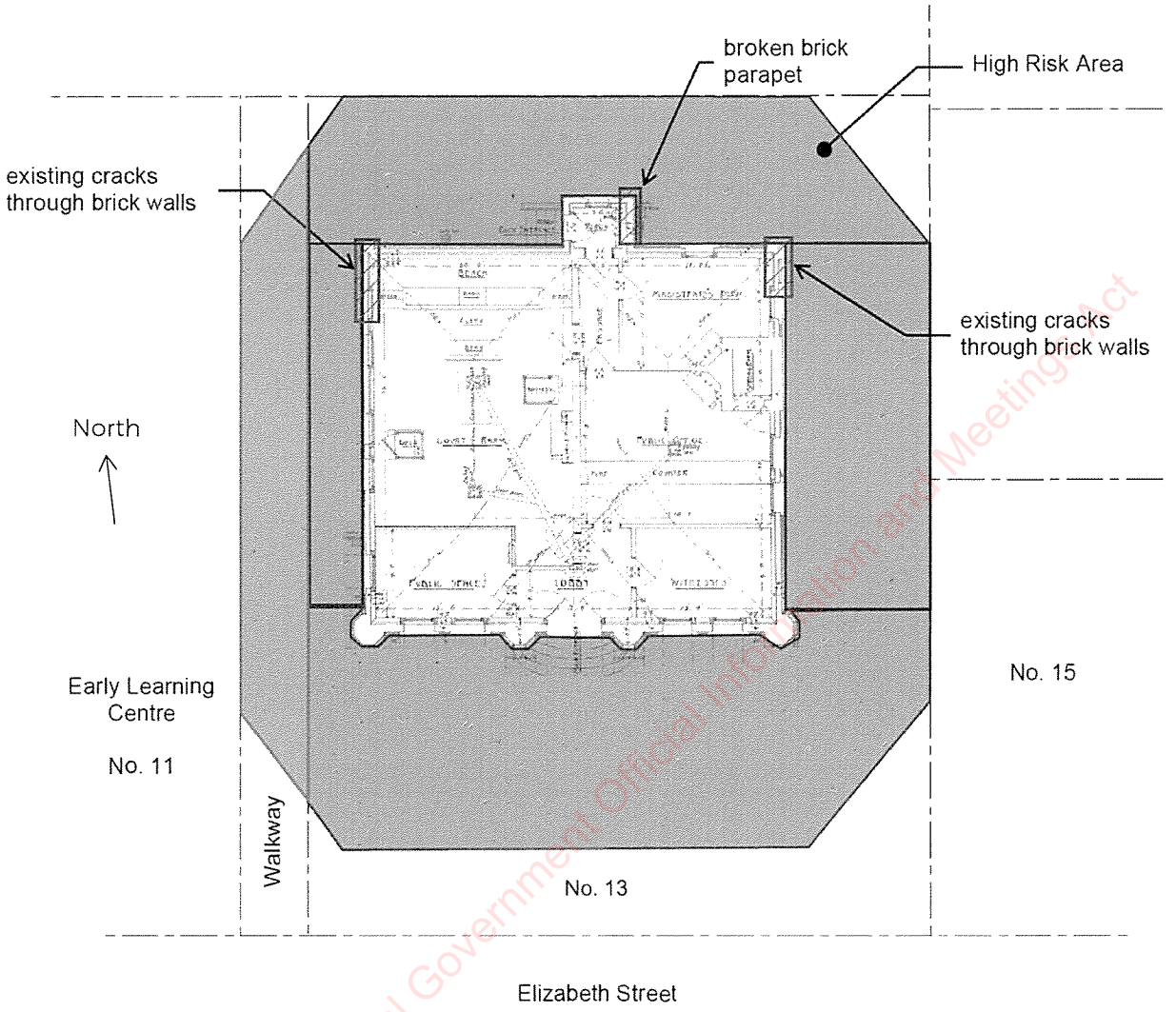


Figure 7 Site Plan of 13 Elizabeth Street, Petone showing extent of High Risk Area

Released under the local Government Official Information and Meetings Act

6 Temporary Seismic Restraint

Based on our risk assessment, WSP Opus propose the following measures to restrain the existing building in the short term and reduce the risk to occupants outside the property boundary. Illustrative sketches are provided in Appendix A.

- Install timber props beside the west and north wall between the boundary fence and the wall. Refer to sketch 1 and 2 for the location of these props and general arrangement.
- Secure the property with a locked gate. Place warning/hazard signs on the boundary fence to deter people from entering the property.
- Increase the height of the timber fence on the north and west side of the property to prevent people from climbing over the boundary and catch any loose bricks.

The proposed restraint system is a conceptual scheme and is limited to the high risk areas which are exposed to the public. Before commencing the detailed design of the restraint system, a general measurement should be made of the existing structure and co-ordination with a contractor.

7 Limitations and Assumptions

Below are the limitations and assumptions made during the assessment of all structures.

a. The opinions in this document are based on the conditions and information available at the time the document was published and assume that the structure was built as per the materials, reinforcement sizes, etc. shown on the drawings that were available to us.

b. The assessment does not cover any non-structural components within the buildings.

8 Conclusion

The Old Court House Building achieves a rating of <34%NBS and is considered a High to Very High to neighbouring buildings when compared with a new building which has been designed to meet current New Zealand Standards. A building with an earthquake rating less than 34 %NBS fulfils one of the requirements for the Territorial Authority to consider it to be an Earthquake-Prone Building (EPB) in terms of the Building Act 2004. Conceptual seismic restraint for the building is provided in Appendix A of this report.

The brick perimeter walls on all but the south side of the building have a high chance of collapsing outwards in a 1 in 250 year seismic event. The area of highest risk is along the west side of the building where there is a walkway which provides access to WelTec campus off Elizabeth Street. There is a narrow distance between this walkway and the building. If the external brick wall collapses outwards, then it can topple onto and over the boundary fence into the walkway. We recommend that timber props are installed at regular centres along this side of the building between the fence and the wall.

Failure of the brick walls poses a moderate risk to persons outside the property boundary on the north side. There is a large grass area beside the building to catch the fallen bricks however there is still a chance they could extend past the fence. Therefore, we recommend that propping is installed to this side of the building as well.

Seismic damage to the building is unlikely to create a hazard to people outside the property on the east and south side. If these two sides of the building are left unrestrained then we recommend that steps are taken to deter people from entering the property. This could be achieved by securing the entrance gate off Elizabeth Street and modifying the fence to the north of the property so that is cannot be mounted.

9 Disclaimer

This report and the conclusions within are prepared for Wellington Institute of Technology in accordance with the clients brief and should not be relied on by other parties for any other purpose or use without written confirmation from WSP Opus of the purpose and suitability.

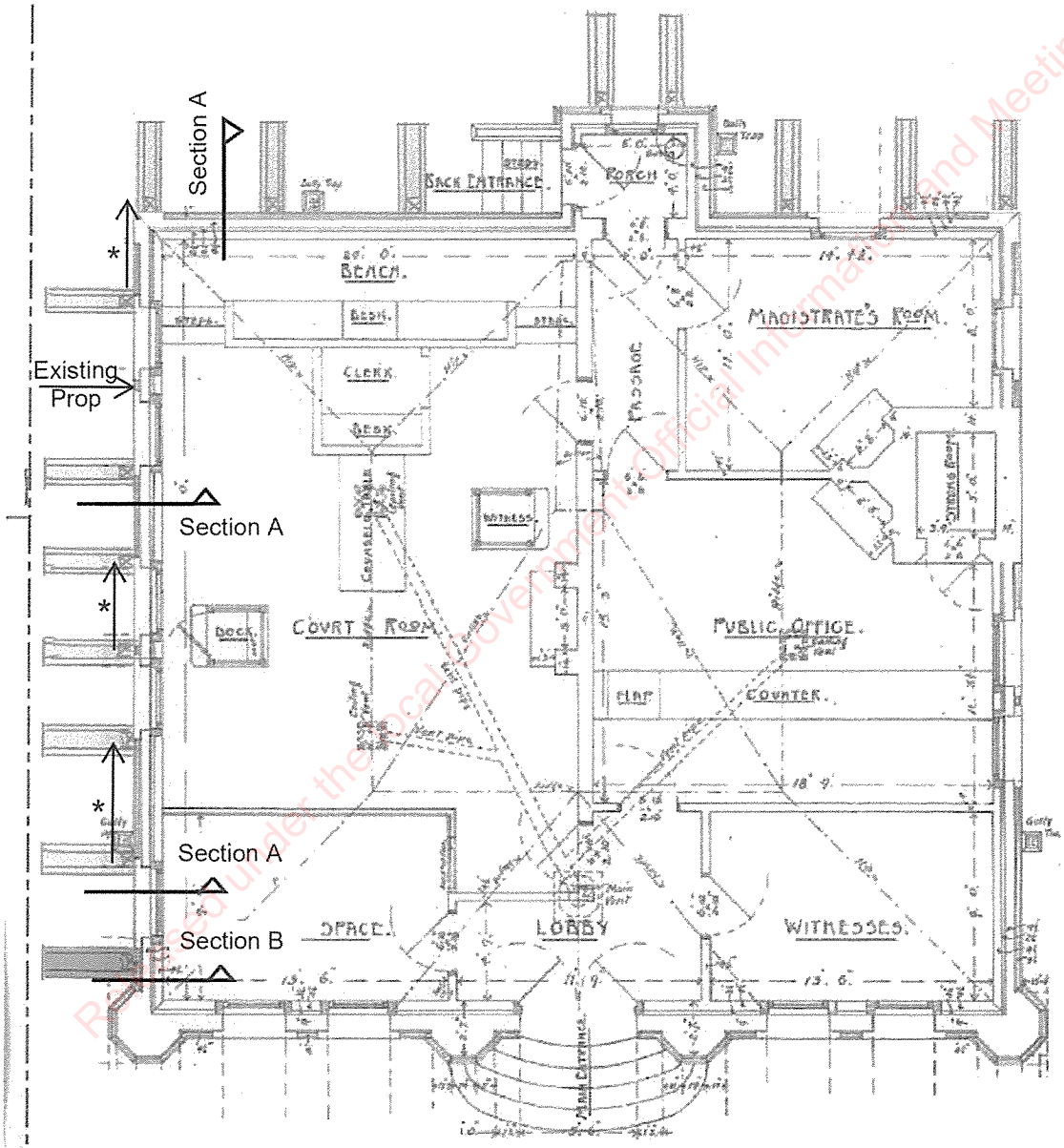
Released under the Local Government Official Information and Meetings Act

Appendix A
Conceptual Restraint Sketches

Released under the local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	1 of 3
Project Description:	Old Court House	Office:	Wellington
	13 Elizabeth Street, Petone	Computed:	5/09/2019
	Floor Plan	Check:	

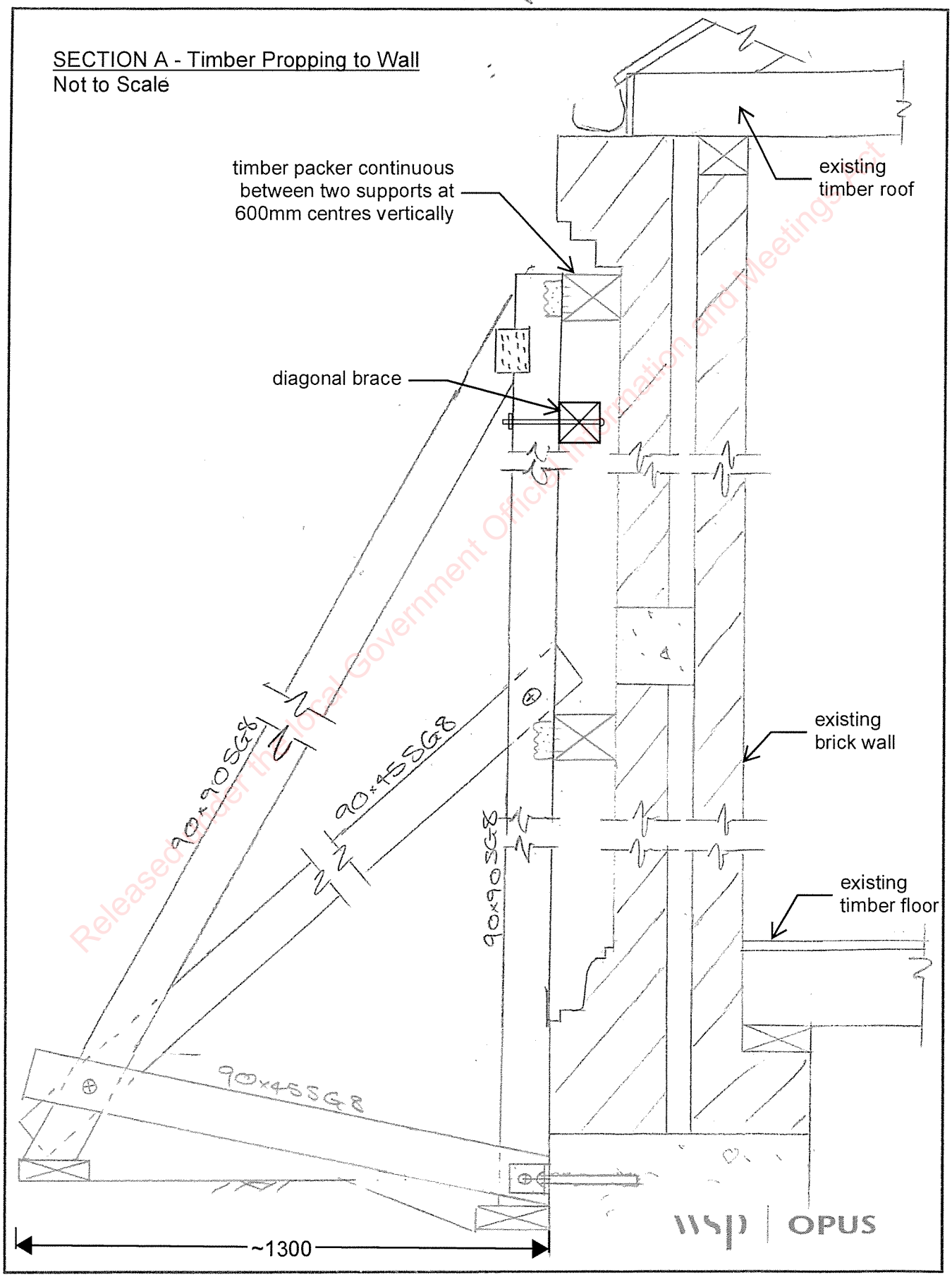


* - Diagonal 90x90 brace between propping

Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

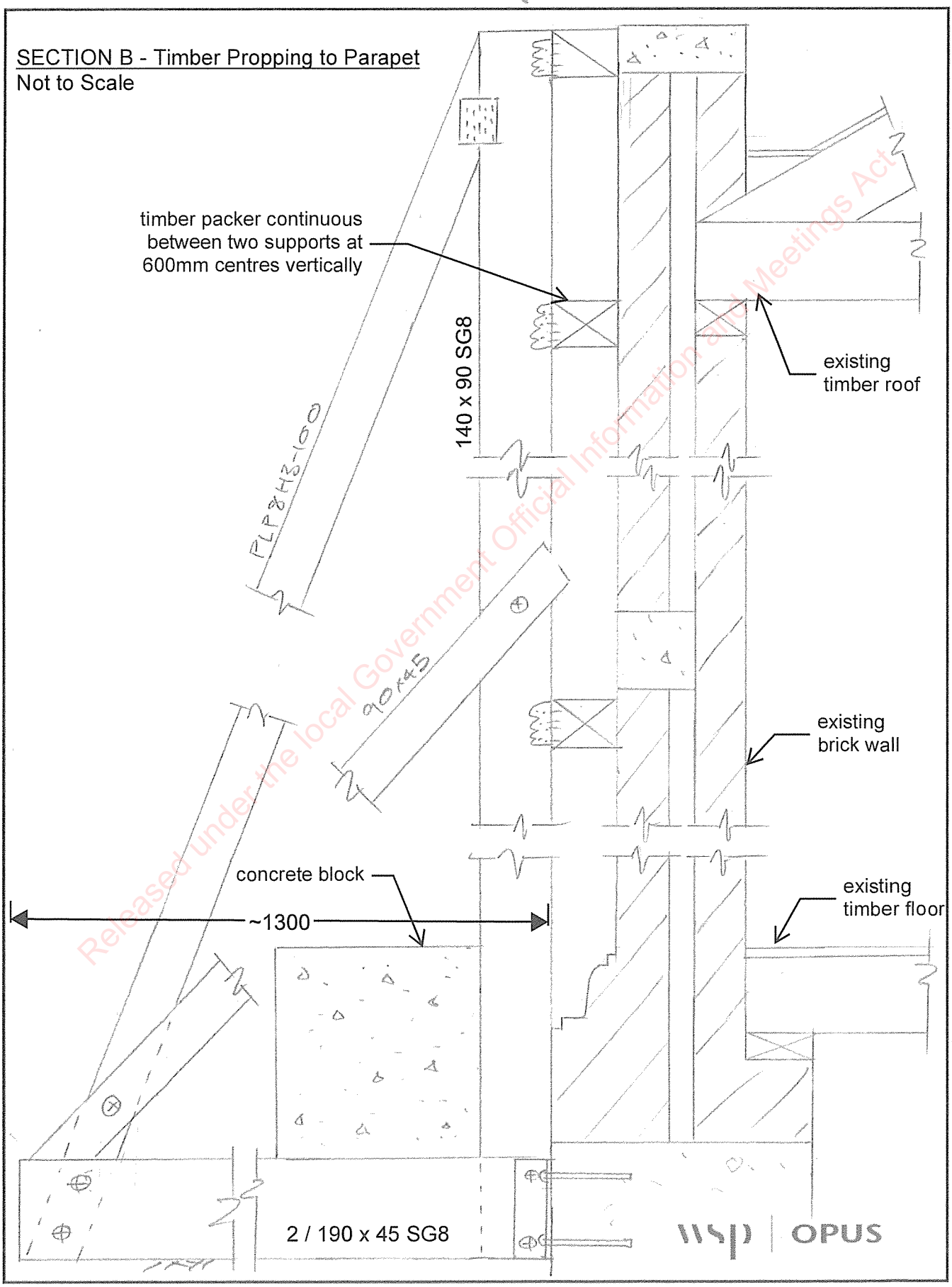
Project/Task/File No:	5-C3970.00	Sheet No	2 of 3
Project Description:	Old Court House (3 Elizabeth St, Petone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	



Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	3 of 3
Project Description:	Old Court House 13 Elizabeth St Pelone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	

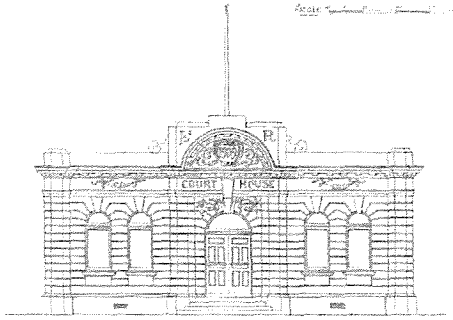


Released under the local Government Official Information and Meetings Act

Appendix B
Original Building Drawings

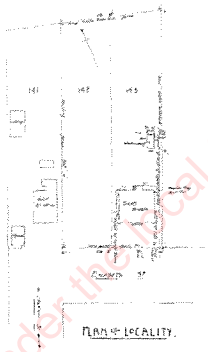
Released under the local Government Official Information and Meetings Act

PETONE COURT HOUSE



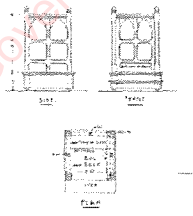
FRONT ELEVATION.

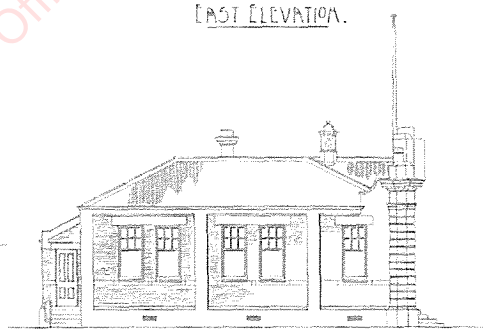
EAST ELEVATION.



PLAN OF LOCALITY.

WITNESS BOX AND DESK.



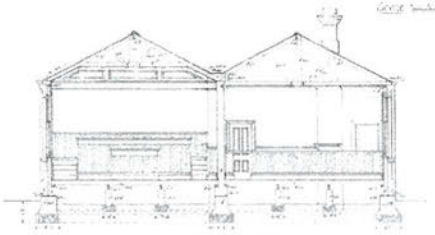


WEST ELEVATION.

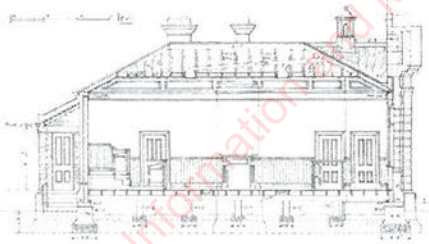
P.W.D. 25462

Released under the Official Information Act

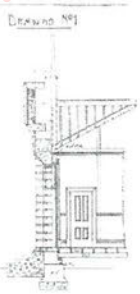
PETONE COURT HOUSE



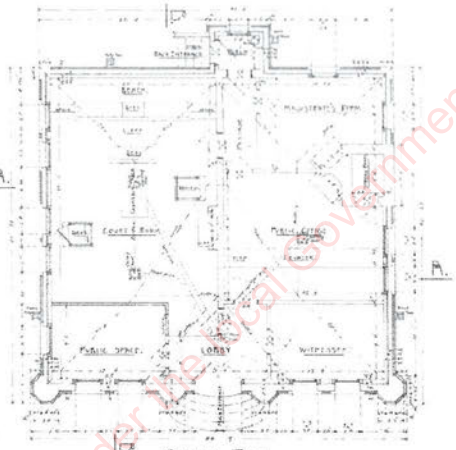
SECTION. A.A.



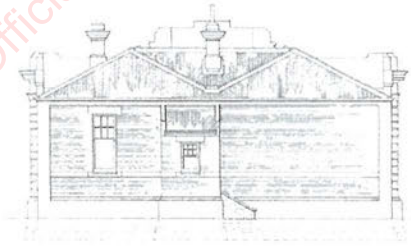
LONGITUDINAL SECTION. B.B.



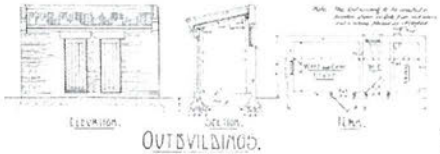
SECTION.



GROUND PLAN.



BACK ELEVATION.



OUTBUILDINGS.

1909

P.W.D. 25462

Released under the Local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Monday, 30 March 2020 10:48 am
To: s7(2)(a)
Cc: Claire Stevens; Chris Gosling; Mike Humphrey
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

Great to see you've got the documentation together for the exemption application. It looks like most of the documentation required is there, but I do note the following:

- The application form needs to be signed at the bottom of the last page. You can sign this as the 'agent'
- Producer Statement PS1 from WSP states it is in relation to 'part only' of the proposed work. I'd expect the PS1 to show it is for 'all' of the proposed building work in this instance

Please upload the relevant files using the following link to get the application in the Hutt City Council system:

apply online.

Lastly, It might be useful to contact s7(2)(a) from Heritage New Zealand sooner rather than later to further discuss the proposal to ensure they are supportive of the specific details of how the building is to be propped:

s7(2)(a)

I hope you and your family are all well and staying safe in these unusual times,

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz

HUTT CITY TE AWA KAIRANGI

Hutt te manawa at Heart

sign up to our newsletter

Released under the local Government Official Information and Meetings Act

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: s7(2)(a)
Sent: Friday, 27 March 2020 1:53 p.m.
To: Chris Hoddinott
Cc: Claire Stevens; Chris Gosling
Subject: FW: Old Courthouse, Petone

Hi Chris / Claire,

Please find attached s7(2)(a) application for exemption from building consent in regard to the propping work proposed for the Old Courthouse, 13 Elizabeth St, Petone.

s7(2)(a) is the owner of the property and I am submitting the application in my role as s7(2)(a).

Once approved, I will work with Heritage New Zealand to ensure any concerns they have are dealt with.

Please come back to me if you have any questions.

Regards,

s7(2)(a)

Released under the Official Information and Meetings Act

From: Murray, Robyn <Robyn.Murray@wsp.com>
Sent: Friday, 27 March 2020 12:26 pm
To: s7(2)(a)
Cc: Behan, James <james.behan@wsp.com>
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

I hope you are coping well staying at home.

After an exciting week of changes we now have the documentation for the Old Court House completed. Please find attached the documentation for the Application for Building Consent Exemption which can also be used for Construction. This includes:

- Specification
- Producer Statement PS1
- Drawings
- Calculations
- Application form
- Risk Assessment report

In the application form it asks for the owner of the building. Is that s7(2)(a) or is it you? If it's s7(2)(a) it might be better to put yourself as the agent.

Let me know how you want to proceed with the next stage of work.

Regards,

Robyn Murray
Senior Structural Engineer

s7(2)(a)

WSP
Level 9 Majestic Centre
100 Willis St
Wellington 6011
New Zealand

wsp.com/nz

Released under the local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Monday, 7 October 2019 11:53 am
To: [redacted]
Cc: Claire Stevens
Subject: RE: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

Hi [redacted]

Thanks for your application for an exemption from the requirement to carry out seismic work under section 133AN of the Building Act 2004.
I note that OPUS has identified a potential risk to people outside the Northern and Western property boundaries in the event of an earthquake, and have included a proposed propping design to mitigate this risk.

I have sent this information to Heritage New Zealand to request their feedback on this proposal. I will let you know once I hear back from them.

Feedback from our building team is that the proposed propping work would require an application for an exemption from building consent. If you decide to apply for an exemption most of the information required in this case would be supplied by your engineer. It might be useful to get them to fill out the application form.

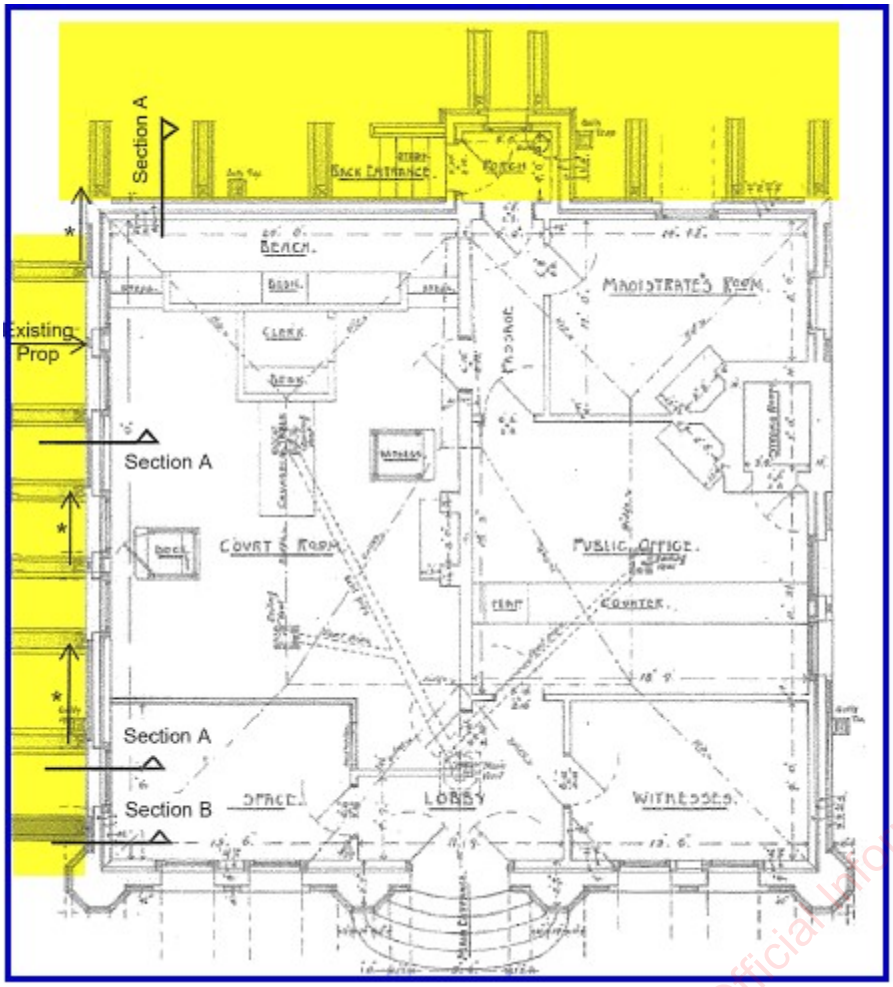
Information we would require for a building consent exemption application includes:

- Providing a completed exemption application form
- Providing detailed information from your engineer to show how the propping is to be constructed
- Providing a Producer statement (PS1) from your engineer for the design
- Providing a schedule of your engineers proposed inspections to check the propping (I expect they would only require 1 inspection but they would be able to advise you of this)
- Paying the application for exemption fee which is listed on our fees schedule as $640. (On our fees schedule it is referred to as 'Schedule 1 exemption')

You may wish to wait until I hear back from Heritage New Zealand to see what their feedback is on the proposal. Another avenue that could be worth exploring is seeking feedback from your engineer if the risk to people outside the property boundaries could be mitigated by improving the boundary fences rather than propping the building? If this was possible no building consent/building consent exemption or resource consent would be triggered as long as the fence/s was no higher than 2metres high

Proposed propping on Northern and Western building facades

Released under the Local Government Official Information and Meetings Act



Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

Released under the Local Government Official Information and Meetings Act

---

From: [redacted] s7(2)(a)
Sent: Wednesday, 18 September 2019 12:59 PM
To: Chris Hoddinott
Cc: Claire Stevens
Subject: 13 Elizabeth St, Petone - Exemption to carry out seismic work.

Hi Chris,

As discussed, I am writing to request an exemption from a requirement to carry out seismic upgrade work at the above property. This property has been identified as earthquake prone.

The information you require to consider this application is follows:

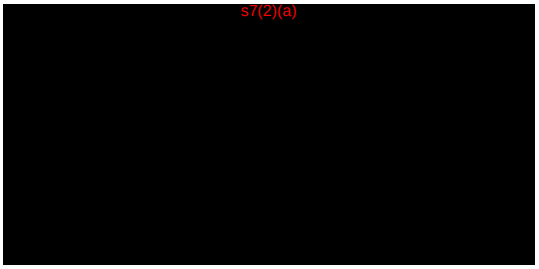
- Nobody occupies this building on a regular or irregular basis.
- The building is approximately 6.0 metres from its boundary with Elizabeth St.
- The building is approximately 2.5 metres from the boundary of 11 Elizabeth St, but this includes a 1.5 metre footpath between the two parcels of land.
- The building is approximately 1.0 metre from its boundary with the footpath between 13 and 11 Elizabeth St.
- The building is approximately 5.0 metres from its boundary with 15 Elizabeth St.
- The building is approximately 4.0 metres from its rear boundary with the WelTec car park.

I attach a report from Opus detailing the risk posed to passers by and neighbouring plots in the event of collapse. The report includes recommendations to mitigate this risk. I am in the process of having this work costed.

The report has to be in two parts as it is too big to send as one. You will get the second part shortly.

Would you please advise if exemption can be granted once the proposed risk mitigation work is complete.

Thanks,



Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz

HUTT CITY TE AWA KAIRANGI

I vote for my community

He aha te take me pōti koe?
Why will you vote?

Released under the Local Government Official Information and Meetings Act

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Susan Sales

From: Stephen Dennis
Sent: Tuesday, 7 April 2020 3:26 pm
To: Chris Hoddinott
Cc: Claire Stevens
Subject: RE: Old Courthouse, Petone

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Chris,

Yes all is well here, although it is still very busy!

I think we talked on this matter previously, not sure if this has just rolled on since then.

But you are correct, providing no demolition is taking place and a building consent is not required then they will not need a resource consent as this is somewhat of a repair situation (albeit more of a precautionary temporary measure). My main concern is probably similar to HNZ and that is to ensure that the intention is that this is just a temporary fix.

I would also highly recommend they take on board what HNZ has provided in the way of guidance.

IF you have anything else just let me know.

Cheers,
Stephen

From: Chris Hoddinott
Sent: Monday, 6 April 2020 12:05 PM
To: Stephen Dennis
Cc: Claire Stevens
Subject: FW: Old Courthouse, Petone

Hi Stephen,

I hope you're keeping well? All good here.

Weltec are looking at putting some temporary propping on the old courthouse building at 13 Elizabeth street, Petone. They're going to apply for an exemption from building consent to carry out the work.
So no building consent will be required. I can't remember who I talked to in our resource consents team about this? My understanding is the work won't trigger a resource consent because they don't need a building consent? Can you confirm that is correct?

The proposed propping is to two sides of the building. It looks like the propping is largely self-supported with minimal effect on the building. The attached 'Propping Drawing' file shows what's proposed.

The applicant and I have both been in contact with Heritage NZ about it. HNZ have made various demands and recommendations. Attached is the latest e-mail from Laura at HNZ.

Cheers,

Released under the Local Government Official Information and Meetings Act

Chris

From: [redacted]
Sent: Friday, 27 March 2020 1:53 PM
To: Chris Hoddinott
Cc: Claire Stevens; Chris Gosling
Subject: FW: Old Courthouse, Petone

Hi Chris / Claire,

Please find attached [redacted] application for exemption from building consent in regard to the propping work proposed for the Old Courthouse, 13 Elizabeth St, Petone.

[redacted] is the owner of the property and I am submitting the application in my role as [redacted].

Once approved, I will work with Heritage New Zealand to ensure any concerns they have are dealt with.

Please come back to me if you have any questions.

Regards,

[redacted]

Released under the Local Government Official Information and Meetings Act

From: [redacted]
Sent: Friday, 27 March 2020 12:26 pm
To: [redacted]
Cc: Behan, James <james.behan@wsp.com>
Subject: RE: Old Courthouse, Petone

Hi [redacted]

I hope you are coping well staying at home.

After an exciting week of changes we now have the documentation for the Old Court House completed. Please find attached the documentation for the Application for Building Consent Exemption which can also be used for Construction. This includes:

- Specification
- Producer Statement PS1
- Drawings
- Calculations
- Application form
- Risk Assessment report

In the application form it asks for the owner of the building. Is that [redacted] or is it you? If it's [redacted] it might be better to put yourself as the agent.

Let me know how you want to proceed with the next stage of work.

Regards,

Robyn Murray
Senior Structural Engineer

s7(2)(a)

WSP
Level 9 Majestic Centre
100 Willis St
Wellington 6011
New Zealand

wsp.com/nz

Released under the local Government Official Information and Meetings Act

Susan Sales

From: [redacted]
Sent: Friday, 27 March 2020 1:53 pm
To: Chris Hoddinott
Cc: Claire Stevens; Chris Gosling
Subject: FW: Old Courthouse, Petone
Attachments: 13 Elizabeth St Specification March 2020.pdf; Application for a Discretionary Exemption from Building Consent 20 03 12.pdf; Schedule to accompany Producer Statement.pdf; Producer Statement PS1 2020 03 27.pdf; Propping Drawing 2020 03 27.pdf; Structural Calculation Package 2020 03 26.pdf; 13 Elizabeth Street Report 19 09 18 rev1.pdf

Hi Chris / Claire,

Please find attached [redacted] application for exemption from building consent in regard to the propping work proposed for the Old Courthouse, 13 Elizabeth St, Petone.

[redacted] is the owner of the property and I am submitting the application in my role as [redacted].

Once approved, I will work with Heritage New Zealand to ensure any concerns they have are dealt with.

Please come back to me if you have any questions.

Regards,

[redacted]

Released Under the local Government Official Information and Meetings Act

---

From: [redacted]
Sent: Friday, 27 March 2020 12:26 pm
To: [redacted]
Cc: Behan, James <james.behan@wsp.com>
Subject: RE: Old Courthouse, Petone

Hi [redacted]

I hope you are coping well staying at home.

After an exciting week of changes we now have the documentation for the Old Court House completed. Please find attached the documentation for the Application for Building Consent Exemption which can also be used for Construction. This includes:

- Specification
- Producer Statement PS1
- Drawings
- Calculations
- Application form

- Risk Assessment report

In the application form it asks for the owner of the building. Is that s7(2)(a) or is it you? If it's s7(2)(a) it might be better to put yourself as the agent.

Let me know how you want to proceed with the next stage of work.

Regards,

Robyn Murray
Senior Structural Engineer

s7(2)(a)

WSP
Level 9 Majestic Centre
100 Willis St
Wellington 6011
New Zealand

wsp.com/nz

150 YEARS IN AOTEAROA
Shaping the future of Aotearoa since 1870

Released under the local Government Official Information and Meetings Act

SPECIFICATION

of work to be done and materials to be used in carrying out the works shown on the accompanying drawings

Temporary Seismic Propping

13 Elizabeth Street, Petone
Lower Hutt 5012

Released under the local Government Official Information and Meetings Act

Project Ref: 5-C3970.00
March 2020

Specification built using masterspec software
Masterspec ID: 194634

masterspec

TABLE OF CONTENTS

Released under the local Government Official Information and Meetings Act

1220 PROJECT

1. GENERAL

This general section describes the project including:
- A description of the work
- Design construction safety
- Site description, features and restrictions
- Design parameters for design by contractor
- Archaeological discovery

1.1 READ ALL SECTIONS TOGETHER
Read all general sections together with all other sections.

1.2 DESCRIPTION OF THE WORK
The work comprises of temporary timber propping to support the north and west wall of the Old Court House in Petone in a moderate seismic event.

1.3 NO RESTRICTED BUILDING WORK
This project does not include Restricted Building Work.

Design Construction Safety

1.4 DESIGN CONSTRUCTION SAFETY
The project designers are unaware of unusual or atypical features, which a reasonably experienced contractor may not be aware of, that may present a hazard or risk during a typical construction process. The Contractor is still required to undertake its own assessment, to determine if they consider there are any further safety matters and provide for these in carrying out the construction of the work.

Site

1.7 SITE
The site consists of: Flat section set back 500m from the Petone waterfront.
As shown on drawing: SK - 100

1.8 LEGAL DESCRIPTION
The site of the works, the street address and the legal description are shown on the drawings.

1.9 EXISTING BUILDINGS
Existing buildings consist of: The Old Court House - an existing one storey brick walled building with light timber framed floor and roof.
Refer drawing(s): SK - 100 to SK - 220

Site environment - Durability

1.10 EXPOSURE ZONE
The exposure zone is to NZS 3604, Section 4 Durability, 4.2 Exposure zones and NZBC E2/AS1.
The site zone is: D

Archaeological discovery

1.11 REPORT FINDING ANY ANTIQUITIES AND ITEMS OF VALUE
Report the finding of any fossils, antiquities and other items of value, to the Contract Administrator. All to remain undisturbed until approval is given for removal.

Pre-1900, items or evidence of human activity on the site, come under the Heritage New Zealand Pouhere Taonga Act 2014. If such items or evidence is discovered work must stop immediately and the Contract Administrator must be notified immediately. The site

Released under the Local Government Official Information and Meetings Act

may be classified as an Archaeological Site under the Act, and the Contract Administrator or Owner must contact the Heritage New Zealand for authority to proceed.

Post-1900 items remain the property of the owner, pre-1900 items may remain the property of the owner or the Crown subject to what is found.

Released under the local Government Official Information and Meetings Act

1250 TEMPORARY WORKS & SERVICES

1. GENERAL

This general section relates to temporary works and services required for the construction of the contract works. It includes
- Temporary works and services including temporary fencing and hoardings
- Scaffolding
- General care and protection
- Rubbish removal

Temporary works

1.1 COSTS RELATING TO TEMPORARY WORKS
Pay all rates/fees in respect of temporary works.

1.2 MAINTENANCE OF TEMPORARY WORKS
Maintain alter, adapt and move temporary works and services as necessary. Clear away when no longer required and make good.

1.3 SAFEGUARD THE SITE, THE WORKS AND MATERIALS
Take reasonable precautions to prevent unauthorised access, including access outside working hours, to the site, the works and adjoining property. Safeguard the site, the works, materials and plant from damage and theft.

Temporary services

1.4 WATER
Provide clean, fresh water for the works and make arrangements for distributing about the site.

1.5 ELECTRICITY
To AS/NZS 3012.
Nominate the person to install and be responsible for the complete temporary electrical installation. The name and designation of the person responsible is to be displayed prominently and close to the main switch or circuit breaker.

Inspect and overhaul the installation at such intervals as are prescribed by the network utility operator but not more than three monthly intervals.

1.6 IMAGING
Keep available devices able to take and send quality printable digital photographs.

Care and protection - existing buildings

1.7 PROTECT EXISTING BUILDINGS
Protect existing buildings and other designated features which are to remain in position during the execution of the works.

1.8 PROTECT ACCESS ROUTES
Protect access routes and areas adjacent to the work area that are to remain in place. Comply with all fire egress requirements at all times.

1.9 MAKE GOOD - EXISTING BUILDINGS
Make good all damage to existing buildings caused in carrying out the contract works.

Care and protection - Site

1.10 LOCATE AND PROTECT SURVEY MARKS
Review information provided relating to survey marks. Physically locate and protect survey marks. Where required use a licensed cadastral surveyor to reinstate survey marks disturbed during construction.

Released under the local Government Official Information and Meetings Act

1.11 LOCATE EXISTING SERVICES
Review information provided relating to underground and above ground services. Physically locate the position of all such services. Arrange with the network utility operator for all necessary exploratory work, location, protection, isolation, off-setting, reinstatement or alterations required. Record any alterations made to such utilities.

1.12 PROTECT EXISTING SERVICES
Protect existing services and parts of service systems, whether indicated or not, that are to remain in place during the execution of the works. Provide temporary caps or covers to prevent the ingress of dust and other contaminants into the systems, ducts, pipes etc. Reinstate where required and repair any damage resulting from carrying out the contract works.

1.13 PROTECT EXISTING LANDSCAPE ELEMENTS
Protect existing trees, fences, gates, walls, gardens and other designated landscape features which are to remain in position during the execution of the works. Construct a temporary fence at the outer edge of the drip line of trees to be protected. Comply with territorial authority requirements.

1.14 MAKE GOOD - SITE
Make good all damage to existing roads, footpaths, grounds, services, landscape elements and site features caused in carrying out the contract works.

Care and protection - Project

1.15 TEMPORARY PROTECTION
Provide and maintain temporary protection as required to protect products during transport, storage and handling. Provide temporary protection as required to protect the work in progress and the finished work. Refer to 1270 CONSTRUCTION for removal of protection.

1.16 SPECIAL PROTECTION GENERAL
Refer to individual work sections for any special protection requirements.

Care and protection - miscellaneous

1.17 TEMPORARY STORAGE
Provide temporary storage areas and protective covers and screens to meet the requirements of the products to be stored.

Rubbish removal

1.18 PERIODIC RUBBISH REMOVAL
Maintain on site appropriate means for the storage and removal of construction waste material. Where required or appropriate provide for the separate storage of recyclable waste and other materials requiring special disposal.

Released under the Official Information Act

1270 CONSTRUCTION

1. GENERAL

This GENERAL section relates to common requirements for construction issues including:
- Quality control and assurance
- Noise and nuisance
- Set-out and tolerances
- Common execution requirements
- Qualifications
- Common product requirements
- Cleaning during the works
- Removal of protection
- Completion requirements
- Commissioning
- Practical completion submission
- Defects period submissions
- Completion submissions

Quality control and assurance

1.1 QUALITY ASSURANCE

Carry out and record regular checks of material quality and accuracy, including:
- Concrete quality and finish.
- Dimensional accuracy of structural column locations (following completion of foundations).
- All perimeter columns and frames for plumb.
- Framing timber moisture content.

Where any material, quality or dimension falls outside specified or required tolerances, obtain written direction from the contract administrator. Where building consent approval is affected, confirm remedial action with the Building Consent Authority.

Provide all materials, plant, attendances, supervision, inspections and programming to ensure the required quality standards are met by all project personnel.

1.2 PROVIDE QUALITY PLAN

Prepare a quality plan for the execution of the contract works and submit a copy of the quality plan to the Contract Administrator within 10 Working Days of the date of award of the contract. The quality plan shall describe the procedures for meeting the requirements of the contract in respect of:
- Materials and workmanship
- Monitoring and maintaining subcontractors' performance
- Record keeping
- The level of documentation for signing off the contract works as complete
- Procedures to ensure that all persons engaged in undertaking the contract works are qualified, experienced and trained for the work they are undertaking
- Inspection and testing required by the contract
- Auditing the quality plan

1.3 REVIEW OF QUALITY PLAN

Within 5 working days of the contractor submitting a quality plan to the contract administrator for review, the contract administrator may advise that:
- they have completed their final review, or
- that they have undertaken a review and require resubmission of the quality plan.

Review by the contract administrator of the quality plan does not make the quality plan a contract document. The contractor at all times remains responsible for the construction of the Works. If resubmission of a quality plan is required, the contract administrator will give their reasons. The contractor shall take account of the reasons and resubmit a revised quality plan within a period of 5 working days.

Released under the New Zealand Official Information and Meetings Act

1.4 COMMENCEMENT OF WORK
Do not commence any part of the contract works, other than establishment, setting out and site preparation until the contract administrator has completed their final review of the quality plan.

1.5 NOTICE
Give notice to the contract administrator and any other nominated person of hold points and notification points. Refer to work sections and 1260 PROJECT MANAGEMENT for hold points and notification points required.

1.6 NOTIFIABLE WORK
Lodge notice of the intention to commence any notifiable work and any work that will at any time include any notifiable work, in accordance with Health and Safety in Employment Regulations 1995.

Noise and nuisance

1.7 LIMIT CONSTRUCTION NOISE
Minimise the effects of noise generation by including in the planning of the work such factors as placing of plant, programming the sequence of operations and other management functions. Limit construction noise to comply with the requirements of NZS 6803, the requirements of the Resource Management Act sections 326, 327 and 328 and the Health and Safety in Employment Regulations 1995 clause 11.

1.8 ACCEPTABLE NOISE LEVELS
Refer to NZS 6803 Tables 2 and 3 for the upper limits of construction work noise received in residential zones, dwellings in rural areas, industrial areas and commercial areas, note also the allowed adjustments. Do not exceed these limits or any limits imposed by regional councils or territorial authorities.

1.9 PROVIDE INFORMATION TO NEIGHBOURS
Provide information to neighbours of any noise generation from the site liable to constitute a problem. Explain to them the means being used to minimise excessive noise and establish with them the timings most suitable for the noise generating work to be carried on.

Discuss with any complainant the measures being used to minimise noise. Where possible modify these measures to accommodate particular circumstances. Finally, determine the sound level at the location under discussion using methods and observation reporting as laid down in NZS 6803. If the noise level is above the upper limits of NZS 6803, table 2 and table 3, cease the noise generating operation and remedy the problem.

1.10 INCONVENIENCE TO OTHERS
When the works are to be carried out in or around occupied premises, ascertain the nature and times of occupation and use. Carry out the works in a manner to minimise inconvenience, nuisance and danger to occupants and users.

1.11 ROADWAY AND FOOTPATH
Keep the adjacent footpath and road clear at all times. Where work must be carried out in the roadway or footpath, obtain required consents from the territorial authority. Where temporary use is made of the footpath or roadway for deliveries and the like ensure that public safety is protected and the goods and materials moved as soon as practicable. Sweep, wash and otherwise clean the roadway/footpath and restore it to its previous condition.

1.12 VEHICLE CROSSING
Make good damage that has occurred as a result of carrying out the contract works. Where there has been significant damage, contact the territorial authority and obtain instructions for making good. Pay the territorial authority costs associated with making good.

Released Under Local Government Official Information and Meetings Act

1.13 DIRT AND DROPPINGS
Remove dirt and droppings deposited on public or private thoroughfares from vehicles servicing the site to the satisfaction of the appropriate authorities and the contract administrator.

1.14 DAMAGE AND NUISANCE
Take precautions to prevent damage and nuisance from water, fire, smoke, dust, rubbish and all other causes resulting from the construction works.

1.15 SMOKE FREE REQUIREMENTS
In accordance with the Smoke Free Environments Act 1990 smoking is not allowed on site.

1.16 RESTRICTIONS
Do not:
- light rubbish fires on the site.
- bring dogs on to or near the site.
- bring radios/audio players on to the site.

Set-out and tolerances

1.17 CHECK DIMENSIONS
Check all dimensions both on drawings and site, particularly the correlation between components and work in place. Take all dimensions on drawings to be between structural elements before linings or finishes, unless clearly stated otherwise.

1.18 TOLERANCES
All work to be level, plumb, and true to line and face. Unless otherwise specified in specific work sections of this specification, tolerances for structural work shall comply with the following:

Concrete construction:	To NZS 3109 Concrete construction Clause 3.9 Tolerances for reinforcement Table 5.1 Tolerance for precast components Table 5.2 Tolerance for in situ construction To NZS 3114 Concrete surface finishes
Timber framing:	To NZS 3604 Timber-framed buildings Clause 2.2 Tolerances Table 2.1 Timber framing tolerances

Refer to work sections for tolerance requirements for finishes.

Execution

1.19 EXAMINE PREVIOUS WORK
Before commencing any part of the work carefully examine the previous work on which it depends, to ensure it is of the required standard.

1.20 REPORT DEFECTIVE PREVIOUS WORK
Refer defects to the contractor to be remedied, if the remedy is outside the scope of the contract documents the contractor shall obtain direction from the contract administrator. Do not carry out work over previous work that is defective and will affect the required standard.

1.21 EXECUTION GENERALLY
Construct the work in accordance with the documents issued for construction including any direction that may have been given by the contract administrator that varies the construction document.

1.22 EXECUTION - NO DETAIL IS PROVIDED
The documents issued for construction will not include all details relating to every material, junction and interface with other materials.

Released under the local Official Information and Meetings Act

Where the detail provided is of a general nature, or where no detail is provided, refer to the manufacturer's documents for information relating to installation and execution of that part of the work.

Where there is more than one method or detail appropriate to the part of the work in question, refer the options to the Contract Administrator for direction as to which detail or method to use.

1.23 EXECUTION - ACCEPTABLE SOLUTION IS REFERRED TO
Where a NZBC Acceptable Solution is referred to in the specification but not shown on the plans, obtain a copy of that Acceptable Solution and make it available to the workers carrying out that part of the work.

1.24 MINIMISE DELAYS DUE TO WEATHER
Use appropriate techniques and methods to prevent damage and minimise delays due to weather.

Defective or damaged work

1.25 DEFECTIVE OR DAMAGED WORK
Repair defective, damaged and marked elements, or replace them where repair is not possible or will not be acceptable. Adjust operation of equipment and moving parts not working correctly. Refer to individual work sections for any special requirements.

Hot work - fire safety

1.26 HOT WORK
Generally, to NZS 4781 Code of Practice for Safety in Welding and Cutting, includes but not limited to: Welding; flame cutting; disc cutting; grinding; bitumen blowers; blow lamps; brazing; burning off; soldering; use of hot air guns.
Note - where the standard refers to the use of asbestos, alternative fire-resistant materials are to be used.

1.27 COMBUSTIBLE MATERIAL
Manage fire risk to adjacent combustible materials by isolating hot work at a safe distance away, or store combustible materials away from fire hazards. Additional precautions may be necessary if combustible material cannot be separated from hot work, refer to NZS 4781, 6.1.4.

1.28 HOT WORK PERMIT
A hot work permit, issued by the main contractor, is required when it is not possible to isolate hot work from adjacent fire hazards. Refer to example in NZS 4781, Appendix A.

1.29 FIRE SYSTEMS
Fire systems should remain operational where possible while welding or cutting work is performed. Where required, shield fire systems to NZS 4781 clause 6.4.

1.30 DURING SUSPENDED WORK
Maintain a fire watch at least 30-minutes after hot works are suspended e.g. during lunch breaks or overnight, to NZS 4781, clause 6.2.7.
For hot works in confined spaces, prevent potential ignition of flammable gases, to NZS 4781 clause 6.5.

Qualifications

1.31 QUALIFICATIONS GENERALLY
The work is to be carried out by workers and / or supervisors who are experienced, competent and familiar with the materials and the techniques specified. Workers must also be familiar with the manufacturers' and suppliers' installation and application instructions and standard details provided by them in relation to the use of the products for this project. If requested provide evidence of qualification / experience.

Released under the Local Government Official Information and Meetings Act

1.32 QUALIFICATIONS – PRODUCER STATEMENTS
Where producer statements are required for parts of the work, ensure that person is suitably qualified and authorized to issue such producer statements.

1.33 REPLACEMENT OF PERSON
Should it be necessary to replace a person, ensure that records of work, producer statements, warranties and the like required for the part of the work they have carried out are obtained.

Ensure that the replacement person takes responsibility for the work they carry out and that they are able to provide such records of work, producer statements, warranties and the like required as a condition of the contract and the building consent.

Products

1.34 NEW PRODUCTS
Products to be new unless stated otherwise, of the specified standard, and complying with all cited documents.

1.35 COMPATIBILITY OF PRODUCTS
Ensure all parts of a construction or finish are compatible and their individual use approved by the manufacturers and suppliers of other parts of the system. Source all parts of a system from a single manufacturer or supplier.

1.36 DELIVERY, STORAGE & HANDLING OF PRODUCTS
Protect products during transit and delivery on site and / or off site. Reject and replace goods that are defective or damaged or will not provide the required finish.

Handle products carefully to avoid damage and distortion and in accordance with codes of practice and the manufacturer's or supplier's requirements. Avoid any contact with potentially damaging surfaces or conditions.

Store products to avoid visual damage, environmental damage, mechanical damage and distortion. Store in accordance with codes of practice and the product manufacturer's or supplier's requirements. Maintain the proper condition of any protective packaging, wrapping and support.

Refer to individual work sections for any special requirements.

1.37 SUBSTRATE CONDITIONS
Ensure substrate conditions are within the manufacturer's or supplier's stated guidelines both before and during the installation of any material, product or system. Obtain written instructions on the necessary action to rectify unsatisfactory conditions.

1.38 INSTALLING PRODUCTS
Install in accordance with the manufacturer's or supplier's technical literature. Ensure that all installers are familiar with the required substrate conditions and the manufacturer's or supplier's specified preparation, fixing and finishing techniques.

1.39 COMPLY WITH STANDARDS
Comply with the relevant and/or cited Standard for any material or component. Obtain certificates of compliance when requested by the contract administrator.

1.40 CONDITION OF PRODUCTS
To be in perfect condition when incorporated into the work.

1.41 INCOMPATIBLE PRODUCTS
Separate incompatible materials and metals with separation layers, sleeves or gaskets of plastic film, bituminous felt or mastic or paint coatings, installed so that none are visible on exposed surfaces.

Released Under the Local Government Official Information and Meetings Act

Spares & maintenance products

1.42 SPARES & MAINTENANCE PRODUCTS
Collect, protect, package, label and store safely all spares and maintenance products specified in the work sections. Give the contract administrator an inventory of all spares and maintenance products.

If no instruction is given within a work section for the location of spares and maintenance products, then deliver to the owner.
If no instruction is given within a work section for timing in relation to the provision of spares and maintenance products, then provide at practical completion.

Cleaning during the works

1.43 PERIODIC SITE CLEANING
Carry out periodic site cleaning during the contract period. Place waste material in appropriate storage pending removal from the site. Keep food waste separate from construction waste.

1.44 TRADE CLEANING
Keep the work area clean, remove of all debris, unused and temporary materials and elements from the site as work progresses and on completion. Refer to individual work sections for any specific requirements.

Remove protection

1.45 REMOVE PROTECTION
Remove all temporary markings, labels, packaging and coverings to products unless instructed otherwise, or where they are required for protection.

Maintain temporary protection until removal is required by the manufacturer/supplier, the execution of the work or the requirements of individual work sections. Re-establish protection as necessary.

Remove temporary protection and special protection immediately prior to practical completion or before when there is no further risk of damage.

Refer to individual work sections for any special removal requirements.

Completion

1.46 SPECIAL REQUIREMENTS
Refer to individual work sections for any special completion requirements.

1.47 LEAVE WORK
Leave work to the standard required for the following procedures.

1.48 COMPLETION - TESTS & CERTIFICATION
Carry out tests as detailed in the work sections. If testing identifies a failure to meet performance requirements, notify the contract administrator and any nominated recipient, identify and correct the cause of failure and repeat the test. Submit test results and certification documentation to the contract administrator and any nominated recipient.

1.49 REMOVE CONSTRUCTION WASTE
Remove all debris, unused materials and the like from the site. Arrange for material to be recycled to be collected or delivered to the recycler.

1.50 COMPLETE ALL SERVICES
Ensure all services are complete and operational, with all temporary labelling removed, required labelling fixed and service instructions provided.

Released under the local Government Official Information and Meetings Act

1.51 CLEANING BY CONTRACTOR

Clear the contract works of all construction materials, waste, dirt and debris. Clean the contract works including:

- Wipe all surfaces to remove construction dust.
- Wipe dust from glass. Take particular care when removing paint or cementitious materials to not damage the glass. Do not use metal scrappers that may damage the glass.
- Remove adhesive residue left by labels and other temporary protection/markings.
- Wash down external concrete including driveways and concrete masonry. Take care when waterblasting to not cause damage to the surface or allow water to enter the building.
- Remove rubbish and building material from the area immediately adjacent to the contract works.

Commissioning

1.52 SPECIAL REQUIREMENTS

Refer to individual work sections for any special commissioning requirements.

1.53 SECURITY AT COMPLETION

Remove any temporary lock cylinders and complete final keying prior to handing over keys to the principal on completion of the works. Leave the works secure with all accesses locked. Account for all keys/cards/codes and hand to the principal along with an itemised schedule, retaining a duplicate schedule signed by the principal as a receipt.

Practical completion submission

1.54 ADDITIONAL PRACTICAL COMPLETION INFORMATION

In addition to requirements in the contract and contained elsewhere in the specification provide the following information submissions for practical completion:

- All documents which the contractor has obtained on behalf of the owner/occupier.
- Information required by the owner/occupier to be able to use the building.
- Advice that NUO accounts in the contractor's name have been closed and as appropriate changed to be in the name of the owner/occupier.
- A list of persons to be contacted to carry out any emergency or remedial work including 24 hour/7 day contact details.

1.55 ADDITIONAL PRACTICAL COMPLETION REQUIREMENTS

Refer to the conditions of contract for the definition of practical completion and the conditions relating to practical completion.

Defects period submissions

1.56 DEFECTS REMEDIATION - SUBMISSIONS

Provide the following at periods required by the contract administrator, where no period is stated, provide this information monthly:

- A copy of the contractor's check list identifying remaining defects and omissions to be completed recording progress made in completing and correcting the items.
- A copy of lists issued by the principal/employer identifying omissions and defects recording progress made in completing and correcting the items.
- A copy of lists issued by the contract administrator identifying omissions and minor defects recording progress made in completing and correcting the items.

Completion submissions

1.57 FINAL COMPLETION - SUBMISSIONS

In addition to requirements in the contract and contained elsewhere in the specification provide:

- Contractors advice that all defects have been corrected and omissions and deferred work completed.
- All documents which the contractor has obtained on behalf of the owner/occupier.

Released under the Local Government Official Information and Meetings Act

2241 EXCAVATION

1. GENERAL

This section relates to the excavating required for the building works, removing surface soils and the disposal of excavated material.

Documents

1.1 DOCUMENTS REFERRED TO
Documents referred to in this section are:

NZS 4402	Methods of testing soils for civil engineering purposes
WorkSafe NZ	Good Practice Guidelines - Excavation Safety

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

Requirements

1.2 ARCHAEOLOGICAL DISCOVERY
If fossils, antiquities and other items of value are found refer to the general section 1220 PROJECT for actions to be taken with archaeological discovery.

Performance

1.3 ACCESS FOR MACHINES
Determine working conditions and access for machines. Take into account the time of year, the nature of the ground and subsoil to be excavated, the ground water table and all matters influencing the carrying out of the work.

1.4 SAFE WORKING CONDITIONS
Provide safe working conditions and adequate support to excavations at all times to WorkSafe NZ, Good Practice Guidelines - Excavation Safety. Cover holes and fence off trenches and banks.

1.5 FOUNDATION BEARING
Request written instructions if a natural bearing is:
- reached at a lesser depth or
- not reached at the depth shown on the drawings.

In made-up ground excavate down to a natural bearing. Remove unsuitable material that is exposed and replace with compacted backfill.

1.6 INSPECTION
Arrange for inspections and before placing any new work. If bearing becomes inadequate due to any cause then stop work and request further instructions.

1.7 SITE MEASUREMENT, OTHER FORMATIONS
If for any reason the excavations have to vary from the drawings, those affected to be solid measured and the quantity recorded and agreed to in writing as the excavation proceeds.

2. PRODUCTS

Materials

2.1 TOPSOIL
Weathered soil, with organic inclusions capable of supporting the growth of vegetation.

2.2 CUT MATERIAL
Consisting of sands, gravels, sedimentary materials, clays, scoria and similar deposits.

Released under the New Zealand Government Official Information and Meetings Act

2.3 ROCK
Defined as material encountered in excavations which because of its size or position can be removed only by breaking up by explosives or mechanical plant such as jack hammers or percussion drills.

2.4 UNCONTROLLED FILL
Variable fill material placed with little or no compaction control.

2.5 EXCAVATED FILL
Material from other formations in the excavation which may be selected and approved as suitable for filling and complying with NZS 4402 by having grading and moisture content properties that will allow compaction to 95% of maximum density.

3. EXECUTION

Conditions

3.1 REPORT
Report any survey pegs, bench marks, and the like on any features, leaving them undisturbed until approval is given for removal.

3.2 RETAINED FEATURES
Refer to SELECTIONS/drawings for those features to be retained. Mark out those features to be retained with 1 metre high 50mm x 50mm timber stakes with yellow plastic tape between, to eliminate accidental damage.

3.3 COMPLY
Comply with the requirements of WorkSafe NZ, Good Practice Guidelines - Excavation Safety.

3.4 WORK BY OTHERS
Before taking over work done on the site by others check all levels and conditions and report any discrepancies affecting further work.

3.5 EXISTING SERVICES AND FOUNDATIONS
Locate underground services and foundations before work is started. Any information provided regarding the location of these services and foundations is given from available records but with no guarantee of accuracy as regards alignment or depth. Furthermore no guarantee is given or implied that the information provided covers all existing services and foundations. Make good at no extra cost damage to existing services to the satisfaction of the appropriate network utility operator. Protect existing roads, footpaths, gutters, crossings etc from damage during work.

3.6 KEEP FREE OF WATER
Keep excavations free from water and keep water from excavations clear of other construction work.

3.7 TERRITORIAL AUTHORITY REQUIREMENTS
Obtain from the territorial authority requirements for the method of discharging water from the site.

3.8 FORM SUMPS
Form sumps outside the line of foundations and deep enough to drain excavations. Pump from sumps without disturbing excavations or any material in place.

3.9 SILT CONTROL
Undertake silt control measures required by territorial authorities and network utility operators in relation to design, location and discharge into the drainage system.

Released under the Official Information and Meetings Act

Application

3.10 DIVERT WATERWAYS
Temporarily divert as necessary all ditches, field drains and other waterways encountered during the excavations and reinstate to approval on completion.

3.11 EXCAVATION GENERALLY
Excavate for pads, strip foundations and tie beams to the profiles and levels shown on the drawings. Allow clearance for working space and formwork as necessary. Trim to required profiles, falls and levels. If pouring against natural ground excavate an extra 25mm that side to provide 75mm minimum cover to reinforcement horizontally. Bench surface of sloping ground to receive filling.
Use plant and equipment suitable for the purpose.

3.12 OVER EXCAVATION
Make good with well compacted backfill.

3.13 EXCAVATED BACKFILL
Stockpile selected excavated backfill on site where directed so that it does not impede continuing works until it is required.

Finishing

3.14 BATTERS, TEMPORARY PROTECTION
Protect batters with a change of level between crest and toe of more than 1.5 metres from weather erosion with a waterproof covering of either hessian and tar, or heavy duty black polythene sheet. Seal at joints and securely fix down at crest and toe. Maintain coverings in good condition until the ground is secured by permanent construction.

Completion

3.15 LEAVE
Leave work to the standard required by following procedures.

3.16 SURPLUS TOPSOIL
Remove unwanted stripped soil from the site continually as the work proceeds. Clean up continually any soil if dropped on footpaths or roads.

3.17 SURPLUS MATERIAL
Remove surplus excavated material from the site continually as the excavation proceeds. Clean up continually any excavated material dropped on footpaths or roads.

Released under the Local Government Official Information and Meetings Act

3813P PROWOOD LAMINATED STRUCTURAL FRAMING

1. GENERAL

This section relates to the supply and installation of Prowood laminated engineered timber.
It includes:
- Prolam® laminated posts

Documents

1.1 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC B1/VM1	Structure
NZBC B2/AS1	Durability
AS/NZS 1170.0	Structural design actions - General principles
AS/NZS 1170.1	Structural design actions - Permanent, imposed and other actions
AS/NZS 1170.2	Structural design actions - Wind actions
AS/NZS 1170.3	Structural design actions - Snow and ice actions
NZS 1170.5	Structural design actions - Earthquake actions - New Zealand
AS/NZS 1328.1	Glued laminated structural timber - Performance requirements and minimum production requirements
NZS 3602	Timber and wood-based products for use in buildings
NZS 3604	Timber-framed buildings
NZS 3640	Chemical preservation of round and sawn timber
AS/NZS 4364	Timber - Bond performance of structural adhesive

1.2 MANUFACTURER/SUPPLIER DOCUMENTS
PROWOOD Ltd documents related to work in this section are:
Prolam® User Guide
Prolam® Preferred specifying program
Copies of the above literature are available from **PROWOOD** Ltd

Web:	www.prolamnz.com
Email:	info@prowoodnz.co.nz
Telephone:	03 526 7436
Facsimile:	03 526 7437

Requirements

1.3 QUALIFICATIONS
Carry out the installation of the laminated engineered timber work with experienced and competent trades people familiar with the materials and techniques specified.

1.4 NO SUBSTITUTIONS
Substitutions are not permitted to any specified **PROWOOD** products or associated components or accessories. The structural properties of other manufactures laminated products may not be comparable.

1.5 CO-ORDINATION
Refer to all drawings to ensure details and fixings required are provided for in the laminated structural work.

Performance

1.6 DURABILITY
Timber species and/or treatment selected in accordance with NZBC B2/AS1, NZS 3602, Tables1, 2 or 3. The adhesive to be Type 1 to AS/NZS 4364, for Service Class 3 conditions (exterior non-protected) to AS/NZS 1328.1, Table A1, **Type of adhesive for given service conditions**. The adhesive manufacturer's information states that the adhesive can match the durability of the timber up to 50years

Released under the local Government Official Information and Meetings Act

2. PRODUCTS

Materials - laminated timber

2.1 PROLAM®
Laminated engineered timber posts, beams, lintels, rafters, bearers, joists, floor and pre-cambered lintels to AS/NZS 1328.1. Can be supplied sanded and finished with a construction sealer.

2.2 RADIATA PINE TREATMENT
Radiata pine treated to NZS 3640, NZBC B2/AS1.

2.3 ADHESIVE
Hexion Sylvic R27 with Sylvic Hardener LS, a Type1 adhesive to AS/NZS 4364, for Service Class 3 conditions (exterior non-protected) to AS/NZS 1328.1, Table A1, **Type of adhesive for given service conditions**.

Components

2.4 STEEL BRACKETS - STRAPS
Mild steel galvanized or stainless steel straps and brackets to suit application. Refer to **Prolam**® User Guide and Prolam preferred specifying program for fixing and support details.

2.5 FIXING PLATES
Tylok plates to suit application. Refer to **Prolam**® User Guide and Prolam preferred specifying program for fixing and support details.

2.6 CORROSION RISKS
For interior timber, treated with copper-based timber preservatives (H3.2 or higher), use a minimum of hot-dipped galvanized steel fixings and fasteners.

For exterior timber, timber in damp areas and timber subject to occasional wetting, use only stainless steel (or equivalent) fixings and connectors, when the timber is treated with; Copper Azole (CuAz, Preservative code 58), Alkaline Copper Quaternary (ACQ, Preservative code 90), Micronise Copper Azole (code 88) or Micronised Copper Quaternary (code 89).

3. EXECUTION

Conditions

3.1 DELIVER AND HANDLE
Deliver and handle members so no structural damage occurs, corners and edges are not damaged, or surfaces marked or stained.

3.2 HANDLING
Handle laminated timber products with nylon strops or similar to prevent damage.

3.3 STORE
Stack on level bearers, 150mm minimum clear of the ground. Store under cover to keep dry prior to installation.

3.4 DEFECTS
Discard material showing visual defects affecting its structural integrity.

3.5 ERECTION GENERALLY
Carry out the erection of laminated and associated support framing for houses and similar structures to the requirements of NZS 3604. Comply with NZBC B1/VM1, 6.0 Timber. Refer to **PROWOOD** guidelines for the installation of laminated structural framing. Prop long length beams and lintels at the mid span until the moisture content has reached a suitable level for the application of internal linings.

Released under the local Government Official Information and Meetings Act

Application

3.6 ERECTION
Lift, place and fix **Prolam**® beams, lintels and rafters without overstressing or deformation. Use temporary supports as needed without causing damage. Fix laminated timber members to NZS 3604 and to **PROWOOD** requirements. Ensure all laminated timber members correctly located, plumb and true to line and face.

3.7 BEARING AND SUPPORT DETAILS
To NZS 3604, for details of bearing and support, nailing down to supports, installation of joist hangers, for joists oblique to bearer, concentrated loads from jamb studs or posts and limited notching at end supports.

3.8 FINISH TO LAMINATED TIMBER
Exterior **Prolam**® members to be sealed to **Prolam**® User Guide and **Prolam**® preferred specifying program. Refer to painting sections for the paint or stain finish required.

Completion

3.9 REPLACE
Replace or repair damaged elements.

3.10 REMOVE
Remove debris, unused materials and elements from the site.

3.11 LEAVE
Leave work to the standard required by following procedures.

4. SELECTIONS
Substitutions are not permitted to the following, unless stated otherwise.

4.1 PROLAM® POSTS

Location:	Refer to Plan
Type/size:	**Prolam**® PLP8 (115mm x 115mm)
Species:	Radiata pine CCA (preservative code 01 or 02) H5
Grade:	GL8 No.2 Clears

Released under the local Government Official Information and Meetings Act

3821 TIMBER FRAMING

1. GENERAL

This section relates to the supply and erection of timber framing, as a framed structure, or as part of a partitioning system.

1.1 ABBREVIATIONS AND DEFINITIONS
Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following abbreviations apply specifically to this section:
SG Structural grade to NZS 3604, 1.3 **Definitions**

Documents

1.2 DOCUMENTS
Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC B2/AS1	Durability
AS/NZS 2904	Damp-proof courses and flashings
NZS 3602	Timber and wood-based products for use in building
NZS 3603	Timber structures standard
NZS 3604	Timber-framed buildings
NZS 3622	Verification of timber properties
NZS 3631	New Zealand timber grading rules
NZS 3640	Chemical preservation of round and sawn timber
WorkSafe NZ	Guidelines for the provision of facilities and general safety in the construction industry.
BRANZ BU 582	Structurally fixed cavity battens

A copy of** NZS 3604 **Timber-framed building, must be held on site.

1.3 DIMENSIONS
All timber sizes except for roof battens are actual minimum dried sizes.

2. PRODUCTS

Materials

2.1 TIMBER FRAMING, TREATED
Species, grade and in service moisture content to NZS 3602, NZBC B2/AS1 and treatment to NZS 3640, NZBC B2/AS1. Structural grade (SG) to NZS 3604, NZS 3622 with properties to NZS 3603.

2.2 APPEARANCE TIMBERS
Graded to NZS 3631, treated where required by NZBC B2/AS1, NZS 3602, table 1, and treatment to NZS 3640.

Components

2.3 NAILS
Type to NZS 3604, section 4, **Durability**.

2.4 BOLTS AND SCREWS
Bolts and screws of engineering and/or coach type complete with washers, to the requirements of NZS 3604, section 4, **Durability**.

2.5 THREADED RODS
Use stainless steel threaded rods of the required length, with washers and nuts at both ends, when stainless steel bolts of the required length are not available.

Released under the Local Government Official Information and Meetings Act

2.6 TIMBER CONNECTORS AND FIXINGS
Supply for each particular joint the connectors and fixings as noted on the drawings. Comply with the requirements of the manufacturer and NZS 3604, section 4, **Durability**.

2.7 POWDER ACTUATED FASTENERS
To type, size and charge required by the powder actuated tool manufacturer for each particular member and the substrate.

2.8 CORROSION RISKS
For interior timber, treated with copper-based timber preservatives (H3.2 or higher), use a minimum of hot-dipped galvanized steel fixings and fasteners.

For exterior timber, timber in damp areas and timber subject to occasional wetting, use only stainless steel (or equivalent) fixings and connectors, when the timber is treated with; Copper Azole (CuAz, Preservative code 58), Alkaline Copper Quaternary (ACQ, Preservative code 90), Micronise Copper Azole (code 88) or Micronised Copper Quaternary (code 89).

3. EXECUTION

Conditions

3.1 PROTECT TIMBER
Protect all timber against damage and from inclement weather. Ensure that any variation in moisture content is kept to a minimum, before and after erection and before enclosure.

3.2 EXECUTION
Execution to comply with NZS 3604, except as varied in this specification. Execution to include those methods, practices and processes contained in the unit standards for the National Certificate in Carpentry and the National Certificate in Joinery (cabinetry, exterior joinery, stairs).

3.3 SEPARATION
Separate all timber framing timbers from concrete, masonry and brick by: -
- a full length polyethylene damp-proof membrane overlapping timber by at least 6mm; or
- a 12mm minimum free draining air space

3.4 FRAMING MOISTURE CONTENT
Maximum allowable equilibrium moisture content (EMC) for non air-conditioned or centrally heated buildings, for framing to which linings are attached.
- At erection: 24% EMC maximum
- At enclosure: 20% EMC maximum
- At lining: 16% EMC maximum

3.5 TOLERANCES
Permissible deviations from established lines, grades and dimensions equal to or less than the following. Multiples of given limits are not cumulative.

- Deviation in plan, up to 10 metres, 5mm
- Deviation in plan, over 10 metres, 10mm total

- Deviation from horizontal, up to 10 metres, 5mm
- Deviation from horizontal, over 10 metres, 10mm total

- Deviation from vertical position per 3 metres, 3mm

- Deviation from horizontal and vertical, within openings, 3mm.

Released under the Local Government Official Information and Meetings Act

Application

3.6 SET-OUT
Set-out framing generally as indicated on the drawings.

3.7 SET TIMBERS
Set timbers true to required lines and levels with mitres, butt joints, laps and housings cut accurately to provide full and even contact over the whole of the bearing surface.

3.8 TIMBER CUTTING
Select and cut spanning members to minimise allowable defects and avoiding knots and short grain on edges in the middle third, and shakes, splits and checks at mid-span and close to ends.

3.9 HOLES AND NOTCHES
Limit holes and notches, checks and half-housing for the structure to those allowable in NZS 3604. Neatly form holes and notches for services without lessening the structural integrity of the member.

3.10 CUTTING
Cutting for straightening to comply with NZS 3604, 8.5.3, **Straightening studs**.

3.11 EXPOSED TIMBER CONNECTORS AND FIXINGS
Do not use steel timber connectors and fixings on any structural framing exposed to view unless detailed on the drawings.

3.12 POWDER-ACTUATED FASTENING TOOLS
Comply with the requirements of WorkSafe NZ and the Health and Safety at Work Act 2015. Powder-actuated fastening tool operators to have the appropriate current Certificate and/or Licence and tools to have the appropriate certificate of fitness if necessary.

3.13 FORM NAILED JOINTS
Fully drive nails in all structural joints with the number and location for each particular joint, to the requirements of the nailing schedules of NZS 3604. Where splitting could occur, pre-drill to 80% of nail diameter.

3.14 FORM BOLTED JOINTS
Drill for and set bolts to ensure full bearing and development of the joint strength, with tension to just set the washers into timber or to engineering specific design.

3.15 FIT CONNECTORS AND FIXINGS
Fit connectors and fixings to obtain full bearing over all contact surfaces and full development of the required loading capacity for that particular joint and in accordance with the manufacturer's requirements or to engineering specific design.

Completion

3.16 CLEAN UP
Clean up timber framing as the work proceeds so no offcuts, chips, sawdust or any other matter or items remain behind the claddings or linings.

3.17 LEAVE
Leave work to the standard required by following procedures.

3.18 REMOVE
Remove debris, unused materials and elements from the site.

Released under the Local Government Official Information and Meetings Act

4. SELECTIONS

4.1 EXTERIOR EXPOSED TIMBER

Member	Species	Grade	Treatment
Exterior propping:	Radiata pine	SG8	H3.2 CCA
Ground contact members	Radiata pine	SG8	H5 CCA

Note: All CCA preservative code 01 or 02

Released under the local Government Official Information and Meetings Act

APPLICATION FOR A DISCRETIONARY EXEMPTION FROM BUILDING CONSENT

Building Act 2004 - Schedule 1, exemption (2)

A building consent exemption under Schedule 1(2) of the Building Act 2004 is the formal decision issued by a territorial authority confirming a building consent is not required for the intended building works

COUNCIL USE ONLY

Application No:

An up-to-date version of Adobe Reader is required to fill this form out Download for free
http://get.adobe.com/reader/

I request that you issue an exemption on the basis:

- ☑ (a) The completed work is likely to comply with the building code if it is carried out in accordance with your proposal;

AND/OR

- ☐ (b) If the completed work were not to comply with the building code, it would unlikely endanger any people or building provided it is carried out in accordance with your proposal.

I request that you send the approved documents to me:

- ☑ via Email (no charge)
- ☐ Hard copy (charges will apply) ☐ Collect or ☐ Post

THE BUILDING (project location)

Building name: *[if applicable]* Old Courthouse

Building street address: 13 Elizabeth St, Petone, Wellington.

Legal description of land where building is located: *[state legal description as at the date of application and if subdivision is proposed, include details of relevant lot numbers and subdivision consent]*

Part Lot 143 Deposited Plan 1232

THE PROJECT

Detailed description of work:

Temporary seismic support to north and west perimeter brick wall.

Date when work was completed: Not yet started.

Does the building or site have any cultural heritage significance, or is it a marae? [refer to district plan]

☑ Yes ☐ No

Estimated value of building work on which building levy will be calculated: [includes GST]

$ 20,000

Released under the Local Government Official Information and Meetings Act

EXEMPTIONS DETAILS

Means of Compliance: *[Specify the standards, acceptable solutions, or MBIE guidance documents that may apply]*

Standards used: NZS3603:1993, NZS3602:2003, NZS3604:2011, AS/NZS1170:2002
Means of compliance: B1/VM1, B2/AS1
Guideline referred to: The Seismic Assessment of Existing Building by MBIE, July 2017

Design responsibilities: *[Who is carrying out the design work? What qualifications and experience do they have to carry out work of this complexity?]*

Robyn Murray BE Civil (Hons), CPEng 1017187
Robyn is a Senior Structural Engineer at WSP in Wellington with 10 years of structural design and consulting experience of small to medium buildings. Her designs include seismic strengthening of brick buildings up to 3 storeys high.

Construction responsibilities: *[Who is carrying out the building work? What qualifications and experience do they have to carry out work of this complexity?]*

Grant Taylor MNZIOB, LBP (BP113653)
Grant is a Director and Construction Manager of Wilson Building Wellington. He has over 10 years experience working on construction both in Wellington and in London.

Quality assurance: *[For example, a summary of any QA system used, including details of site inspections by architect, designer, engineer, site supervisor, etc.]*

Please refer to the attached list of inspections by a WSP engineer during construction.

Released under the local Government Official Information and Meetings Act

SUPPORTING DOCUMENTS

With your application include information relevant to the project which may include:

- ☑ All relevant drawings (site plan, floor plan, elevations, typical sections)
- ☑ Specifications
- ☑ Critical member sizes and critical construction details
- ☑ Product information
- ☑ Photographs
- ☑ If an engineer is involved, provide the engineer's calculations and sketches, including a producer statement - design.
- ☐ Any other information relevant to the project

PRIVACY STATEMENT

Council may hold, use and disclose personal information you have provided:

- to communicate with you for council purposes;
- to tell you about products and services it believes may be of interest to you; and
- to enable it to maintain its records and carry out its statutory functions.

You have the right under the Privacy Act 1993 to access, and have corrected, information held by Council, which is at 30 Laings Road, Lower Hutt 5040, 04 570 666.

THE OWNER *(must be completed and all details must be the owner's)*

Owners name: : *[for individuals, state the preferred form of title e.g. Mr, Mrs, Ms, Miss Dr. For companies, trusts and other organisations provide a contact person's name.]* Wellington Institute of Technology.		
Owner's mailing address: [redacted] s7(2)(a)		
Street address/registered office: [redacted] s7(2)(a)		
Owner's contact details:	**Landli** [redacted] s7(2)(a)	
	After	
	Email:	
Proof of ownership: *[please attach one of the following as evidence, as appropriate to the circumstances]* Copy of certificate of title, no more than three months old. ☑ Lease ☐ Agreement for sale and purchase		

THE OWNER'S AGENT *(only required if application is being made on behalf of the owner)*

Agent's name: : *[for individuals, state the preferred form of title e.g. Mr, Mrs, Ms, Miss Dr. For companies, trusts and other organisations provide a contact person's name.]*		
Agent's mailing address:		
Street address/registered office:		
Agent's contact details:	**Landline:**	**Mobile:**
	After hours:	**Fax:**
	Email:	
First point of contact for:		
Invoicing	☑ Owner	☐ Applicant
Correspondence/further information	☑ Owner	☐ Applicant

DECLARATION AND SIGNATURES

All of the information in this application is, to the best of my knowledge, true and correct.
In signing this document electronically, and submitting it to Hutt City Council, I declare that I am the person named in this document and that I am either the owner of the property to which the application relates, or the agent acting on behalf of the owner.

Signed by the owner:

Signature: .....

Print name: .....

Date: .....

OR

Signed by the agent: On behalf of, or with authority from, the owner

Signature: .....

Print name: .....

Date: .....

Attachment to Producer Statement PS1

To	Hutt City Council
From	Robyn Murray
Office	Wellington
Date	27/03/20
File	5-C3970.00
Subject	Temporary Seismic Support to 13 Elizabeth Street, Petone, Lower Hutt 5012

To Whom It May Concern,

The drawings for the project titled "Temporary Seismic Support", Revision A are included in the WSP structural design package to accompany the structural Producer Statement PS1 for 13 Elizabeth Street, Petone, Lower Hutt, as part of the application for Building Consent exemption.

The following schedule of inspections is required to meet the level of Construction Monitoring nominated on the Producer Statement PS1, and to ensure the intent of the design is met:

Table 1: Schedule of Inspections

Inspection	Stage	Reason
Timber propping	Installation	Timber sizes, location, fixings

Please do not hesitate to contact the undersigned should you have any questions.

Regards,

Robyn Murray
Senior Structural Engineer
WSP New Zealand Ltd

Released under the local Government Official Information and Meetings Act

NORTH

PT LOT 142
DP1232

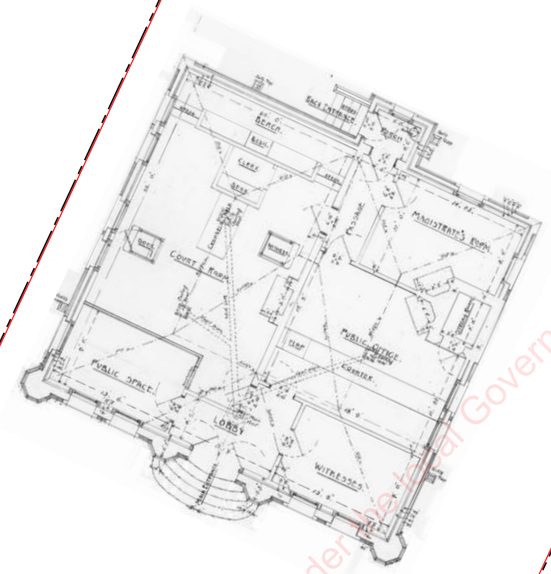
PT LOT 143
DP1232

LOT 149
DP1232

No. 51

LOT 148
DP1232

No. 49



No. 9 - 11

No. 13

LOT 144
DP1232

LOT 145
DP1232

LOT 146
DP1232

ELIZABETH STREET

No. 15

No. 17

Released under the Official Information and Meetings Act
Released under the Local Government Official

REVISION	AMENDMENT	APPROVED	DATE

Wellington Office
+64 4 471 7000

PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:200 @ A3
ORIGINAL SIZE: A3

DRAWN	DESIGNED □ Y	APPROVED
R. MURRAY	E. BROWN	J. BEHAN

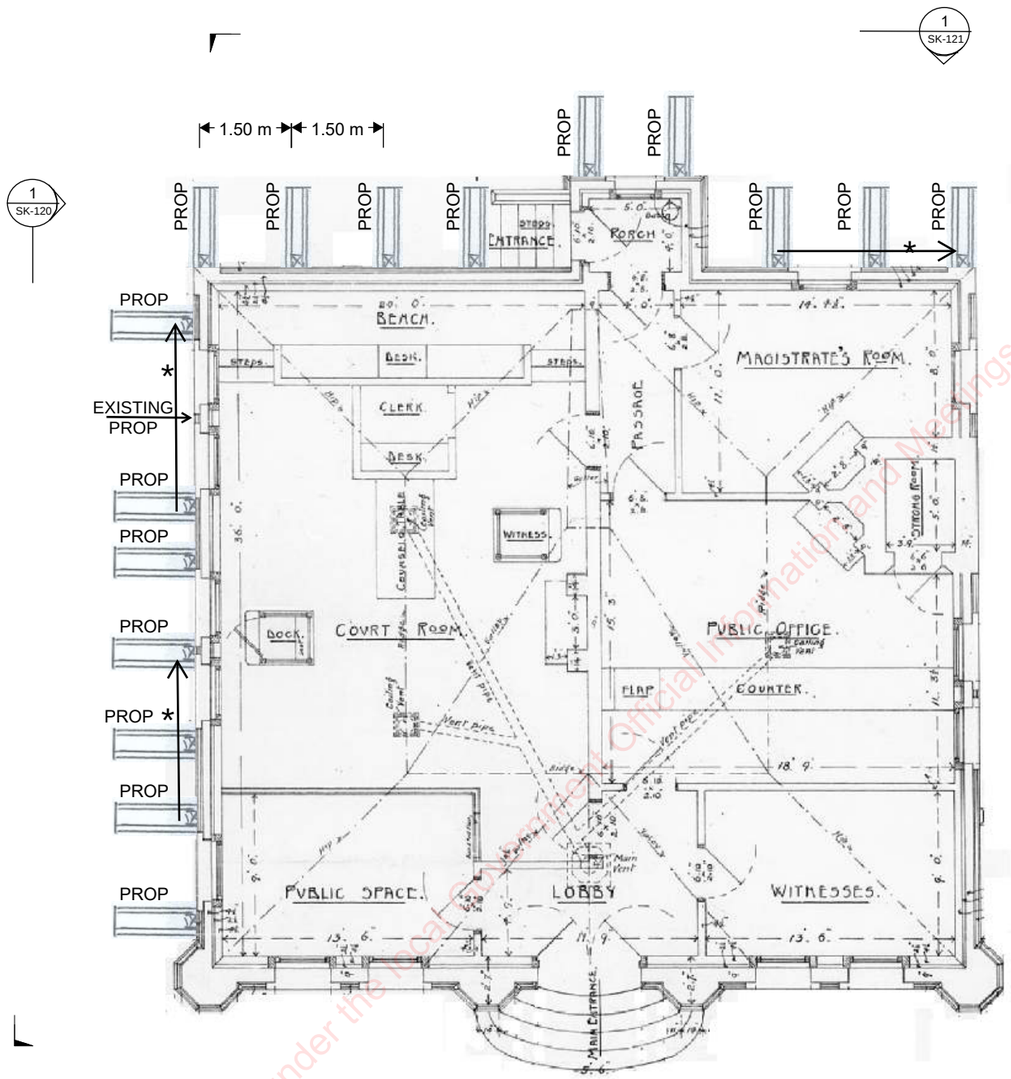
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
J. BEHAN	J. BEHAN	27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
SITE PLAN

WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C3970.00		SK-100	A

Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM



KEY

* - 90 x 90 SG8 BRACE

1 PROPOSED FLOOR PLAN
SCALE 1:100

Released under the Local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

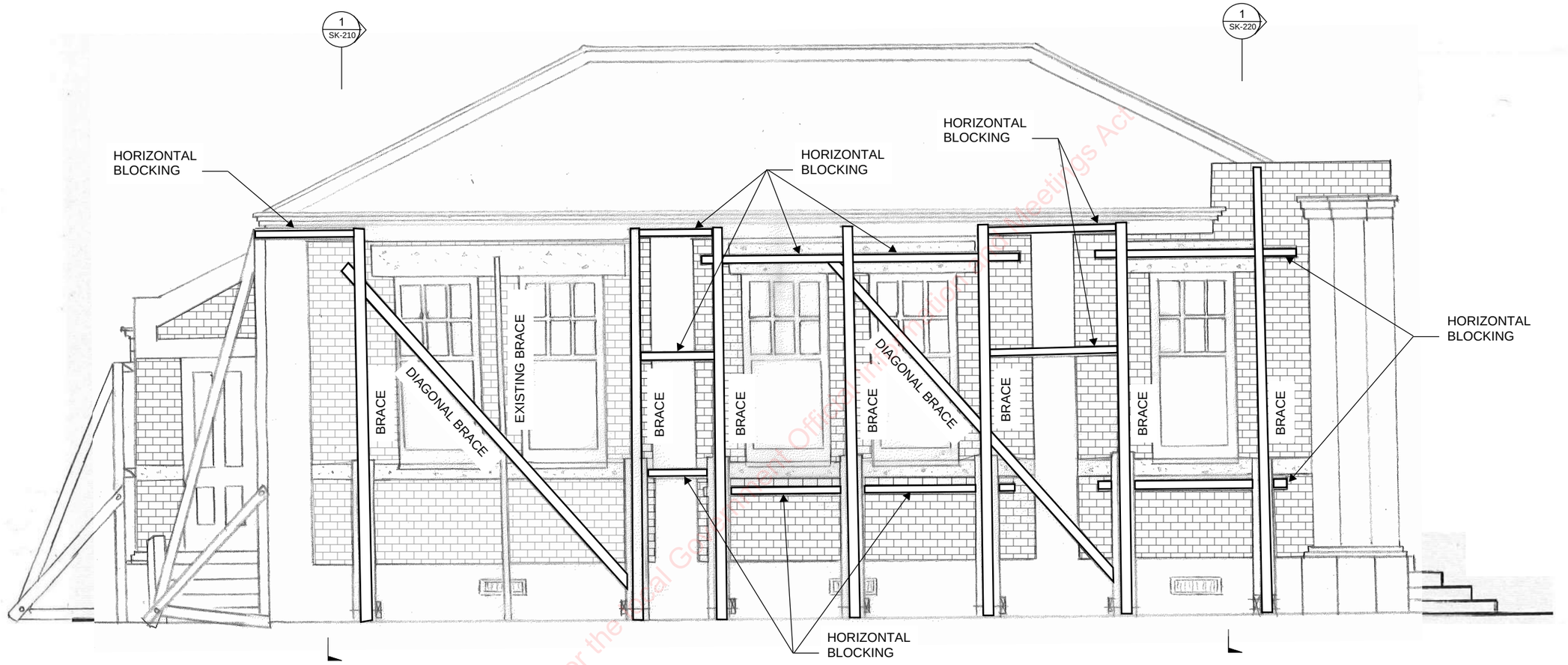
Wellington Office
+64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES			ORIGINAL SIZE
1:100 @ A3			A3
DRAWN	DESIGNED BY	APPROVED	
R. MURRAY	E. BROWN	J. BEHAN	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
J. BEHAN	J. BEHAN	27/03/2020	

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
PROPOSED FLOOR PLAN

WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C3970.00		SK-110	A



1 WEST WALL ELEVATION
- SCALE 1:50

Released under the Local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

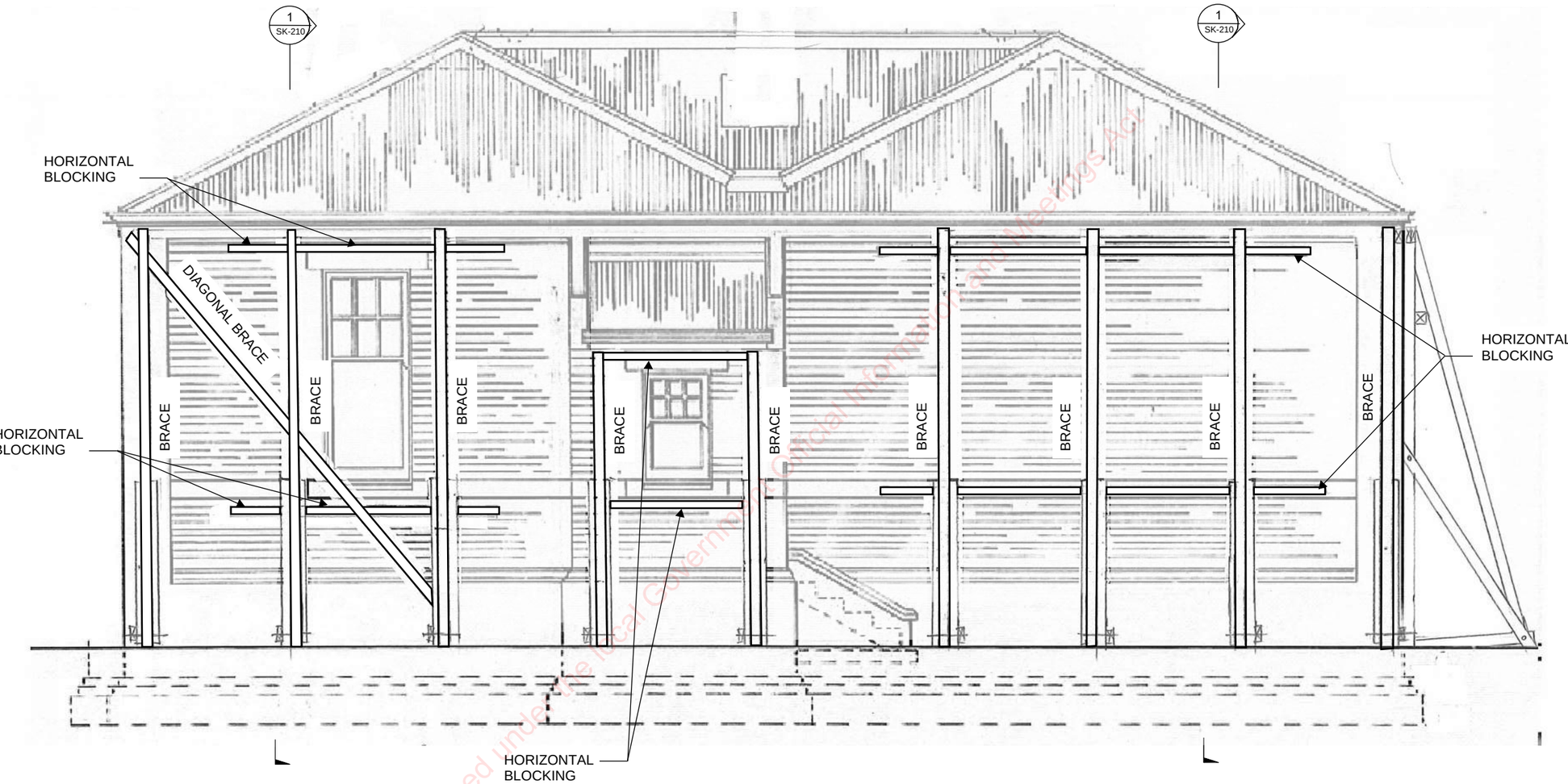
wsp
Wellington Office
+64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:50 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
WEST WALL ELEVATION

WSP PROJECT NO.: 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE:
SHEET NO.: SK-120
REVISION: A



1 / - NORTH WALL ELEVATION
SCALE 1:50

Released under the Local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
+64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:50 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

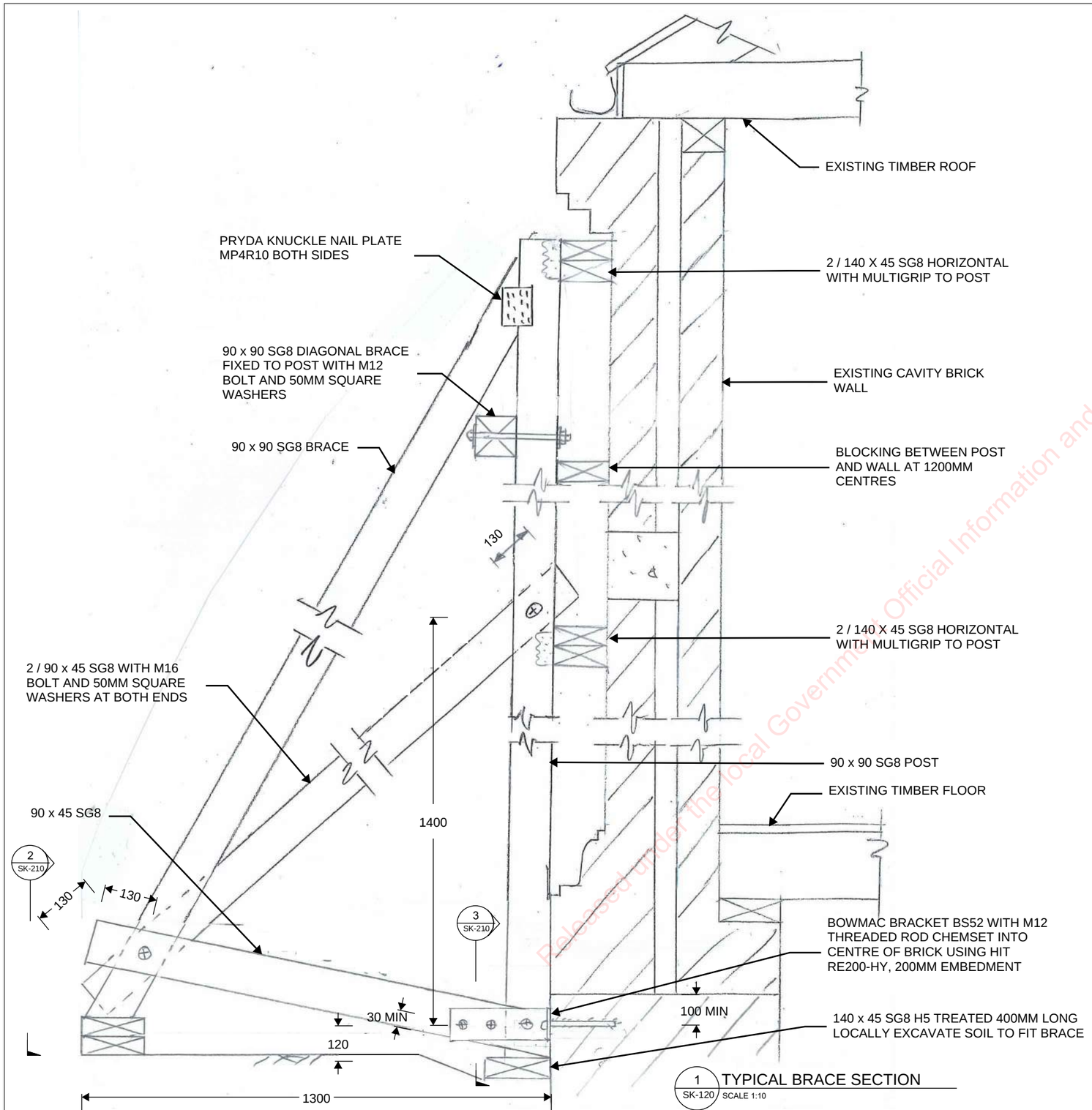
PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
NORTH WALL ELEVATION

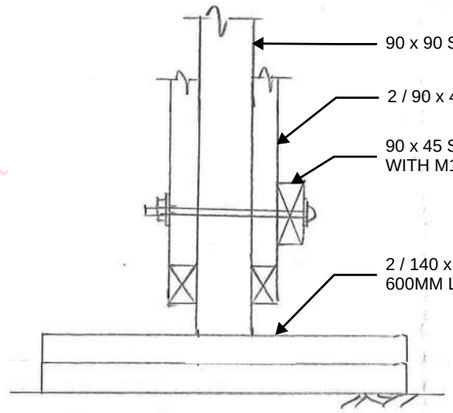
WSP PROJECT NO.: 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE:
SHEET NO.: SK-121
REVISION: A

Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM

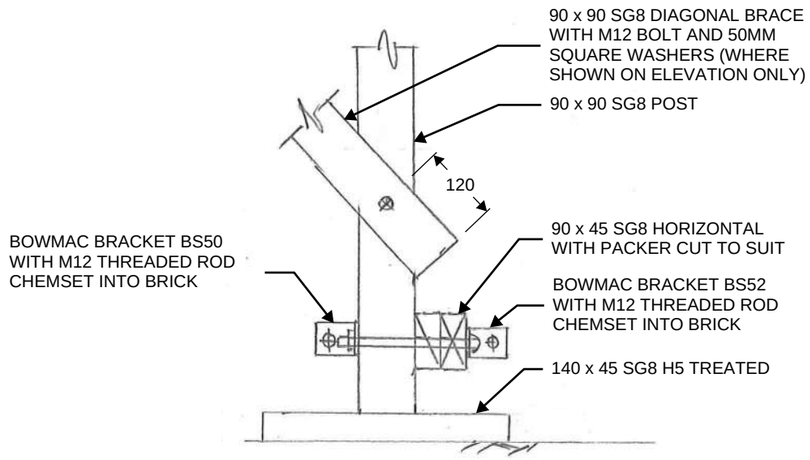
NOTES:
ALL FIXINGS TO BE STAINLESS STEEL.
ALL TIMBER TO BE TREATED TO H3.2 UNLESS NOTED OTHERWISE.
SKEW NAIL TIMBER MEMBERS TOGETHER WHERE NO FIXING SHOWN.



1 SK-120 TYPICAL BRACE SECTION SCALE 1:10



2 SK-210 BRACE DETAIL SCALE 1:10



3 SK-210 BRACE DETAIL SCALE 1:10

Released under the local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
+64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES 1:10 @ A3 | ORIGINAL SIZE A3
DRAWN R. MURRAY | DESIGNED BY E. BROWN | APPROVED J. BEHAN
DRAWING VERIFIED J. BEHAN | DESIGN VERIFIED J. BEHAN | APPROVED DATE 27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
BRACE SECTION

WSP PROJECT NO. 5-C3970.00 | PROJ-ORIG-VOL-LOC-TYPE | SHEET NO. SK-210 | REVISION A

PRYDA KNUCKLE NAIL PLATE
MP6R16 BOTH SIDES

EXISTING TIMBER ROOF

1300

BLOCKING AT 1200MM
CENTRES UP WALL HEIGHT
WITH MULTIGRIP TO POST

PLP8H3-125 BRACE

EXISTING CAVITY BRICK
WALL

120

2 / 90 x 45 SG8 WITH M12
BOLT AND 50MM SQUARE
WASHERS AT BOTH ENDS

BLOCKING AT 1200MM
CENTRES UP WALL HEIGHT
WITH MULTIGRIP TO POST

1400

2 / 140 x 45 SG8 POST
H5 TREATED

EXISTING TIMBER FLOOR

120

2 M12 BOLTS WITH
50MM SQUARE
WASHERS
2 / 140 x 45 SG8
H5 TREATED
600MM LONG

3
SK-220

30 MIN

60

100 MIN

2 BOWMAC BRACKETS BS52 WITH
M12 THREADED ROD CHEMSET
INTO BRICK USING HIT RE200-HY,
200MM EMBEDMENT

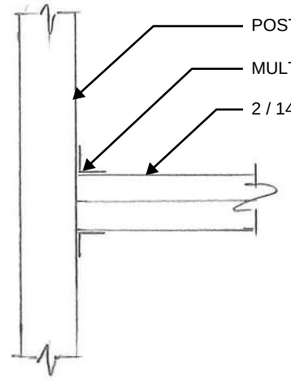
EXCAVATE SOIL LOCALLY TO FIT
BRACE

60

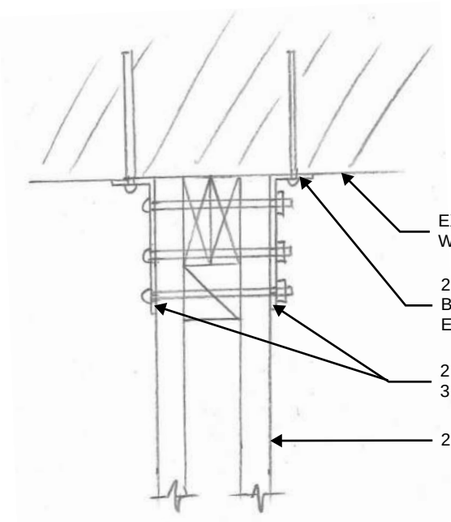
50

1 SK-120 BRACE TO PARAPET SECTION
SCALE 1:10

NOTES:
ALL FIXINGS TO BE STAINLESS STEEL.
ALL TIMBER TO BE TREATED TO H3.2 UNLESS NOTED OTHERWISE.
SKEW NAIL TIMBER MEMBERS TOGETHER WHERE NO FIXING SHOWN.



2 SK-120 BLOCKING TO POST DETAIL
SCALE 1:10



3 SK-220 POST TO BRICK WALL DETAIL
SCALE 1:10

Released under the local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
+64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:10 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
BRACE TO PARAPET SECTION

WSP PROJECT NO. 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE
SHEET NO. SK-220
REVISION A

Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM

Old Court House, Petone – Structural Calculations

Contents

Author	Elena Brown
Office	Wellington
Date	27 March 2020
Project	5-C3970.00

Released under the local Government Official Information and Meetings Act

150 YEARS IN AOTEAROA

Old Court House, Petone – Structural Calculations

1 Introduction

Existing building consists of one storey high cavity brick perimeter walls, timber roof and floor.

The building is classified as potential Earthquake Prone by Hutt City Council. Failure of the North and West wall poses a moderate risk to pedestrians. These calculations are for providing seismic restraint to the west wall through timber propping.

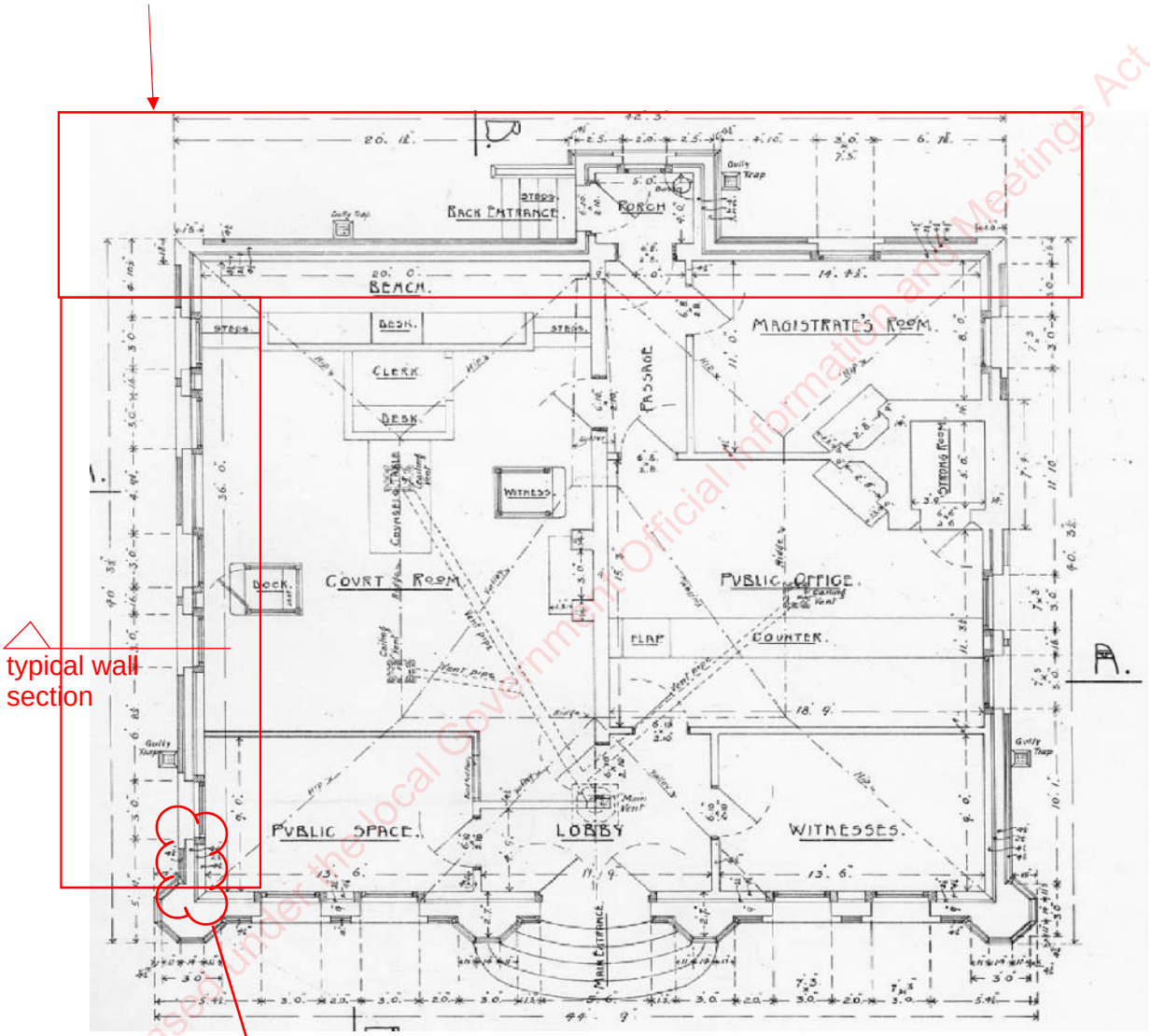
Released under the local Government Official Information and Meetings Act

150 YEARS IN AOTEAROA

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No 1-1	of
Project Description:	Temporary Seismic Propping	Office:	Wellington
	13 Elizabeth Street	Computed:	16/03/2020
	Plan	Check:	

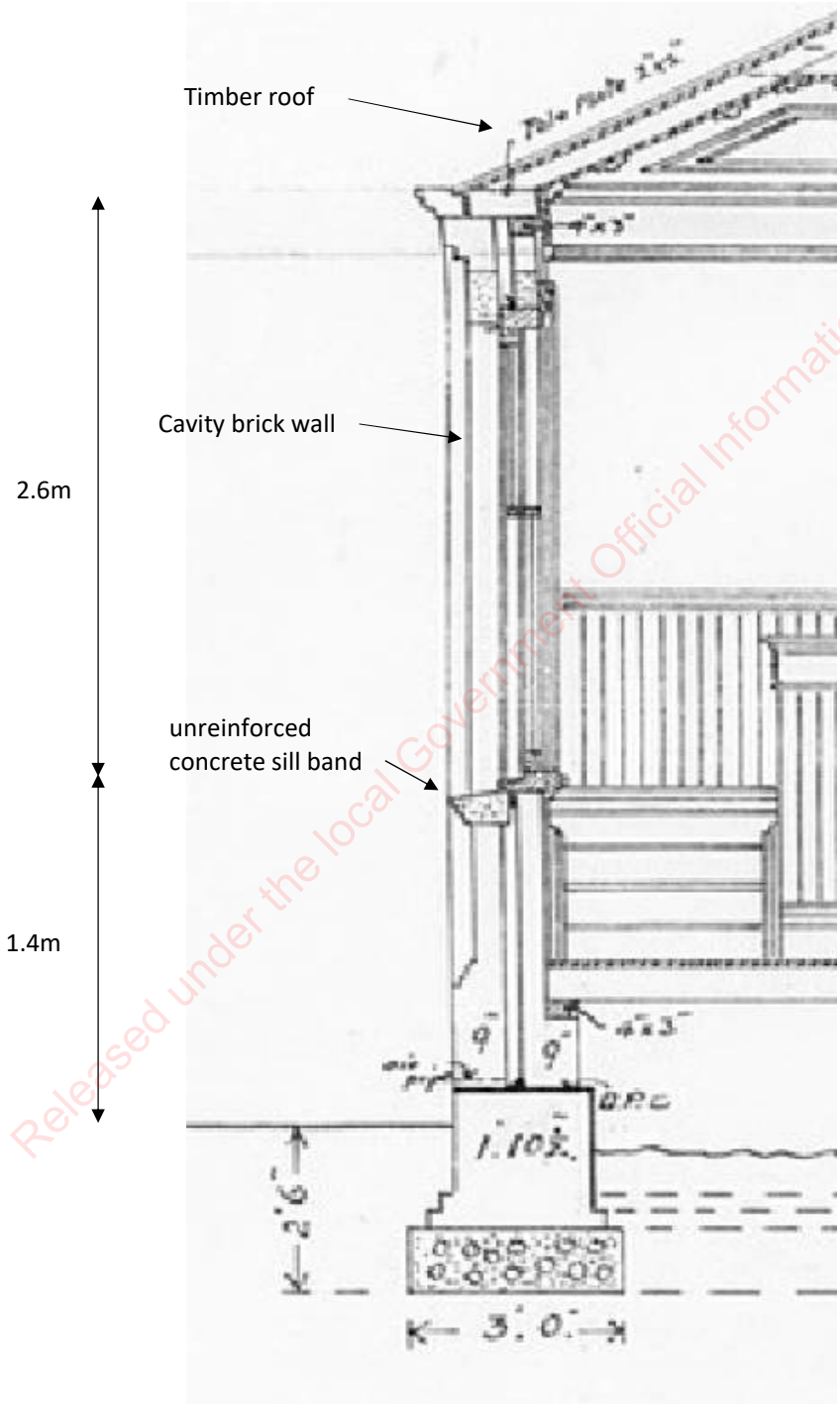
Distance between the boundary fence and West wall of existing building is approx. 1.5m. On North side the distance is 2.5m. There is a risk that the existing building may collapse onto the public space beside the building because the disctance to the boundary is smaller than 1.5H. Propping is designed to support these two sides to prevent collapse onto the public space for a moderate Seismic Event (34%NBS).



Released under the local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No 1-2	of
Project Description:	Temporary Seismic Propping	Office:	Wellington
	13 Elizabeth Street	Computed:	16/03/2020
	West Wall Section	Check:	



Released under the local Government Official Information and Meetings Act

Old Court House, Petone – Structural Calculations

2 Wall Propping Modelling

2.1 Lateral Loading

Released under the local Government Official Information and Meetings Act

150 YEARS IN AOTEAROA

CALCULATION SHEET

Project/Task/File No:	5-C3970.00	Sheet No 2.1 - 1	of
Project Description:	Old Court House, 13 Elizabeth Street, Petone	Office:	Wellington
	Brick Walls Out of Plane	Computed:	26/02/2020
		Check:	

Pinned URM wall out-of-plane stability

Designed in accordance with the New Zealand Society for Earthquake Engineering (NZSEE) October 2017, The Seismic Assessment of Existing Buildings: Section C8 - Seismic Assessment of Unreinforced Masonry Buildings.

Wall Geometry			Value		References
Pinned wall height		h	2.6	m	
Wall nominal thickness		t_{gross}	0.11	m	
Total height to uppermost seismic mass of building		h_n	4	m	
Height from ground to pinned wall centroid		h_i	2.7	m	
Height of wall above		h_p	0	m	
Thickness of wall above		t_p	0.32	m	
Masonry density		γ_w	18	kN/m^3	
Weight of wall per metre width					
Weight of bottom half of pinned wall	$\gamma_w.t_{gross}.2y_b$ =	W_b	2.6	kN/m	*Clause 8-93*
Weight of top half of pinned wall	$\gamma_w.t_{gross}.2y_t$ =	W_t	2.6	kN/m	*Clause 8-93*
Wall weight on top of pinned wall	$\gamma_w.t_p.h_p$ =	W_{above}	0.0	kN/m	*Clause 8-93*
Additional weight on top of wall (G+0.3Q)		P	1.4	kN/m	*Clause 8-93*
Wall Properties					
Effective wall thickness	$t_{gross}(0.975-0.025(P/W))$ =	t	106	mm	*Equation C8B.22*
Bottom pivot point to bottom wall centre of mass	0 or t/2 =	e_b	53	mm	*Figure CB.1*
Central pivot point to top wall centre of mass	t/2 =	e_t	53	mm	*Figure CB.1*
Central pivot point to bottom wall centre of mass	t/2 =	e_o	53	mm	*Figure CB.1*
Top wall centre of mass to force P		e_p	0	mm	*Figure CB.1*
Height from bottom to centre of mass of bottom wall	h/4 =	y_b	650	mm	*Figure CB.1*
Height from top to centre of mass of top wall	h/4 =	y_t	650	mm	*Figure CB.1*
Allowable drift (usually 2.5%)		Ψ	0.025		*Clause C8B.2.8*
Instability deflection parameter a and b					
	$W_by_b+W_t(h-y_t)+Ph$ =	a	10436	Nm/m	*Equation C8.13*
	$W_be_b + W_t(e_o+e_b+e_t) + P(e_o+e_b+e_t+e_p) - \Psi(W_by_b + W_ty_t)$ =	b	695	Nm/m	*Equation C8.12*
Wall Allowable Deflection					
Mid-height instability deflection	bh/2a =	Δ_i	87	mm	*Equation C8.11*
Maximum useable deflection	$0.6\Delta_i$ =	Δ_m	52	mm	
Wall Moment of Inertia					
Bottom mass of wall moment of inertia					
	$(W/2g).([t_{gross}^2 + (h/2)^2]/12)$ =	J_{bo}	37	kg.m^2/m	*Equation C8B.11*
Top mass of wall moment of inertia					
	$(W/2g).([t_{gross}^2 + (h/2)^2]/12)$ =	J_{to}	37	kg.m^2/m	*Equation C8B.11*
Ancillary mass moment of inertia		J_{anc}	0	kg.m^2/m	
Part A	$W_b/g.(e_b^2 + y_b^2)$ =	A	112	kg.m^2/m	*Equation C8.15*
Part B	$W_t/g.[(e_o + e_b + e_t)^2+y_t^2]$ =	B	118	kg.m^2/m	*Equation C8.15*
Part C	$P/g.(e_o + e_b + e_t + e_p)^2$ =	C	4	kg.m^2/m	*Equation C8.15*
Wall rotational inertia	$J_{bo}+J_{to}+A+B+C+J_{anc}$ =	J	307	kg.m^2/m	*Equation C8.15*
Period of the wall	$4.07\sqrt{\frac{J}{a}}$ =	T_p	0.70	s	*Equation C8.14*

Released under the local Government Official Information and Meetings Act

CALCULATION SHEET

Project/Task/File No:	5-C3970.00	Sheet No	2.1 - 2 of
Project Description:	Temporary Seismic Propping	Office:	
	13 Elizabeth Street, Petone	Computed:	26/02/2020
	Existing brick wall out of plane strength	Check:	

Pinned URM wall out-of-plane stability (cont.)

Designed in accordance with the New Zealand Society for Earthquake Engineering (NZSEE) October 2017, The Seismic Assessment of Existing Buildings: Section C8 - Seismic Assessment of Unreinforced Masonry Buildings.

Seismic Co-efficient	*refer NZS1170.5:2004*		**Value**		**References**
Subsoil class			D		
Spectral Shape Factor		$C_h(0)$	1.12		*Figure 3.2*
Hazard Factor	Wellington	Z	0.4		*Table 3.3*
Return Period Factor		R	1.0		*Table 3.5*
Return Period of Part		R_p	1.0		*Table 8.1*
Near Fault Factor		N(T,D)	1.0		*Clause 3.1.6*
Site Hazard Coefficient		C(0)	0.45		*Equation 3.1(1)*
Part Spectral Shape Factor	$C_h(T).R.Z.N(T,D)$ =	$C_i(T_p)$	1.56		*Page 99 C8-93*
Floor height coefficient		C_{Hi}	1.45		*Clause 8.3*
Design Respond Coefficient	$C(0)C_{Hi}C_i(T_p)$ =	$C_p(T_p)$	1.01		*Equation 8.2(1)*
Wall Displacement at ULS					
Rocking participation factor	$(W_b y_b + W_t y_t).h / 2Jg$ =	γ	1.44		*Equation C8.17*
Displacement response demand	$\gamma(T_p/2p)^2 C_p(T_p) R_p g$ =	D_{ph}	177	mm	*Equation C8.18*
Pinned Wall Compliance with the Building Code					
Compliance	Δ_m/D_{ph}	NBS	**29**	%	*Equation C8.20*
Seismic Shear Demand on Wall	*refer NZS1170.5:2004*				
Rocking horizontal acceleration	$b/(W_b y_b + W_t y_t)$ =	C_m	0.21		*Equation C8.27*
Part response factor		C_{ph}	1.00		*Table 8.2*
Part Spectral Shape Factor		$C_i(0.75)$	2.00		*Equation 8.4(1)*
Design Response Coefficient	$C(0)C_{Hi}C_i(0.75)$ =	$C_p(0.75)$	1.30		*Equation 8.2(1)*
Shear Demand at top	$C_p(0.75)\ C_{ph}\ R_p\ W_t$ =	F_{ph}	3.3	kN/m	*Equation 8.5(1)*
Shear Demand at bottom	$C_p(0.75)\ C_{ph}\ R_p\ W_b$ =	F_{ph}	3.3	kN/m	*Equation 8.5(1)*

Outer leaf of brick wall reaches <34%NBS when spanning between sill and roof level. Propping is designed to support the outer leaf of the brick wall up its full height so that it meets >34%NBS. Seismic demand from the brick wall is found using the parts and components method from NZS1170.5.

$W = C_p(0.75) \times C_{ph} \times t_{gross} \times \gamma_w \times s$

$s = 1.5\ m$ (spacing of timber props)

$W = 1.30 \times 1.0 \times 0.11 \times 18 \times 1.5$

$= 3.9\ kN/m.$

Released under the local Government Official Information and Meetings Act

Old Court House, Petone – Structural Calculations

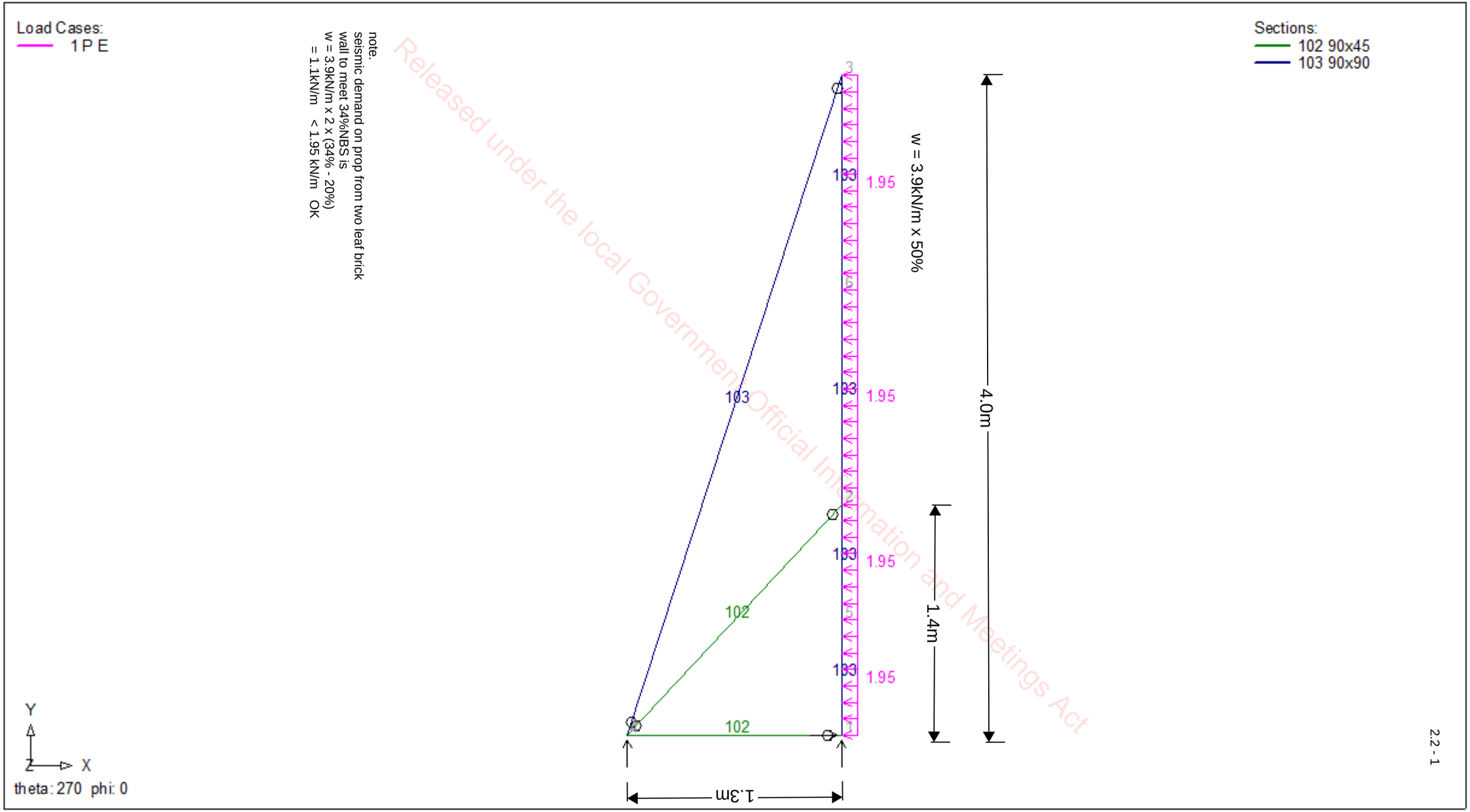
2.2 Microstran

Both the timber propping to wall and timber propping to parapet sections were modelled in Microstran. These models have been used to define the forces acting on the timber props.

Seismic demand from the outer leaf of the wall at 50%NBS has been used for the design of the props. This corresponds to an earthquake with a return period of 1/100 years which meets the required design life loading for Construction Equipment from Table 3.3 of AS/NZS1170.0.

If both the inner and outer leaf of the brick wall apply seismic load to the prop then the overall system is still adequate to resist a Moderate Seismic Event (as defined by the Earthquake Prone Building Methodology). This is because the brick cavity wall on its own meets 20%NBS and the timber props provide additional resistance to bring the wall up to 34%NBS.

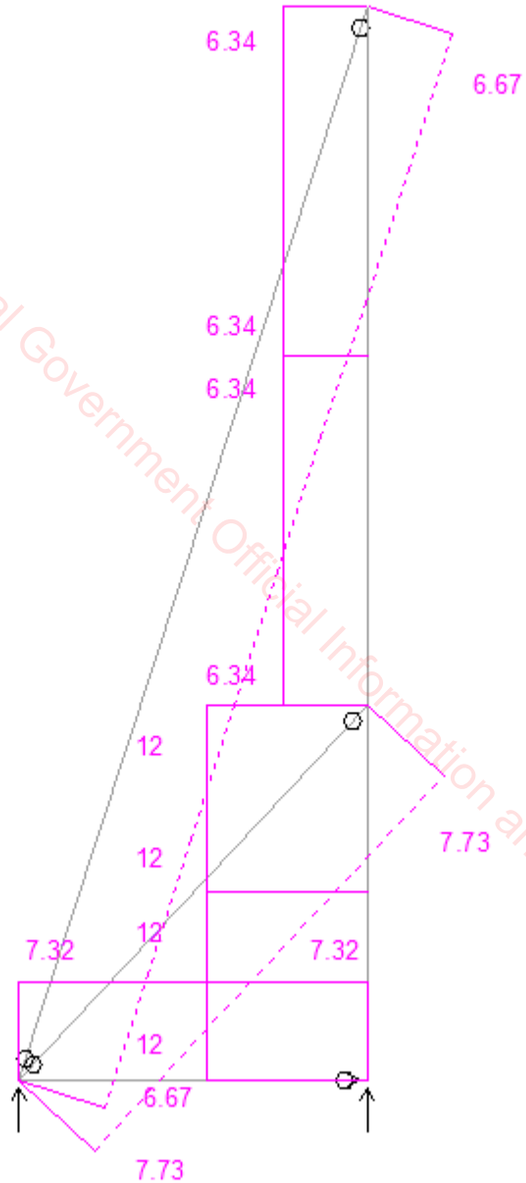
Released under the local Government Official Information and Meetings Act



Released under the local Government Official Information and Meetings Act

Load Cases:
1 P E

Released under the local Government Official Information and Meetings Act



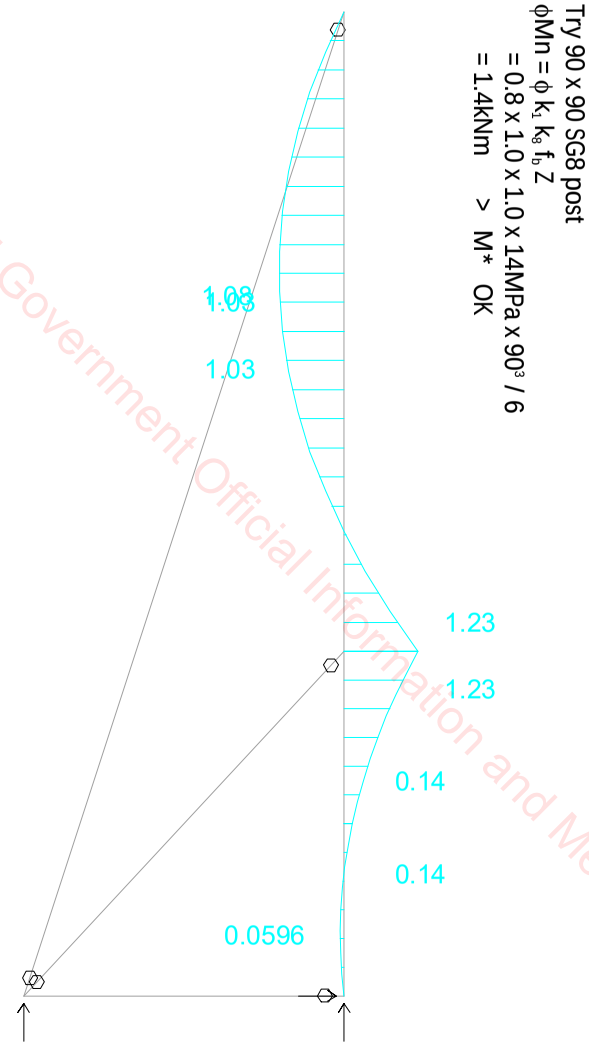
Y
Z X
theta: 270 phi: 0

Axial Force, Fx

2.2 - 2

Released under the local Government Official Information and Meetings Act

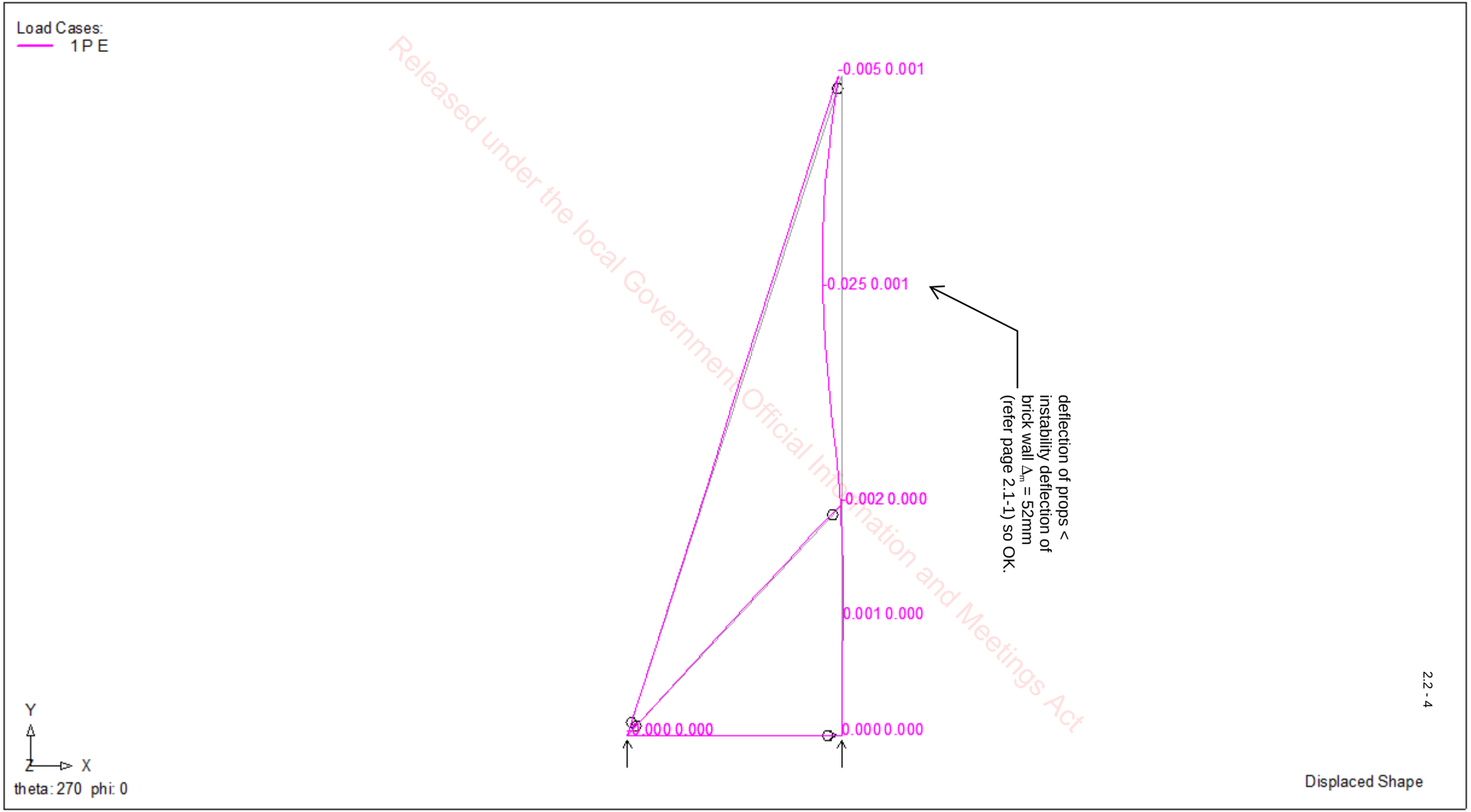
Load Cases:
3 C 0.5E



Y
Z X
theta: 270 phi: 0

BMD

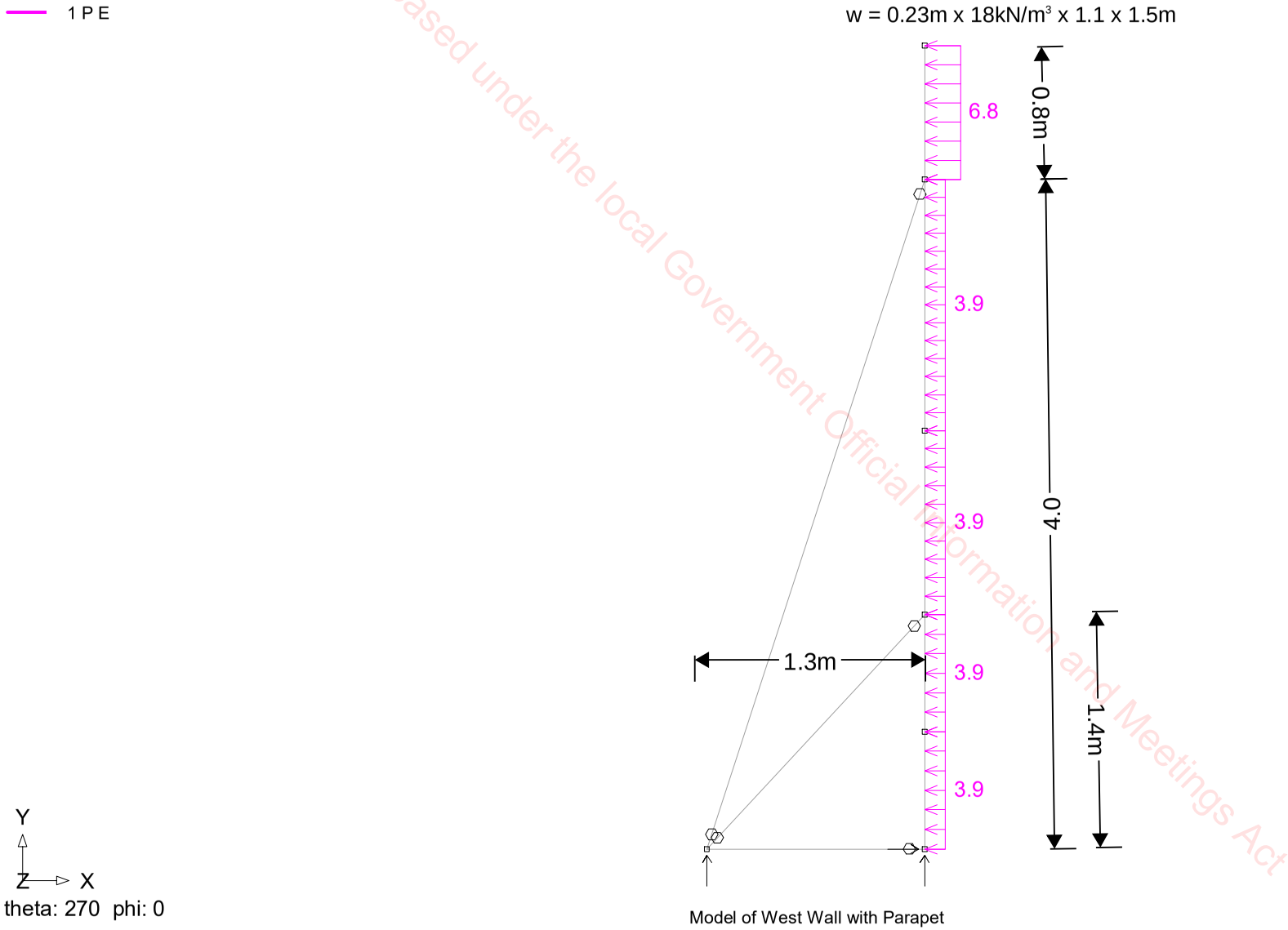
Bending Moment, Mz



Released under the local Government Official Information and Meetings Act

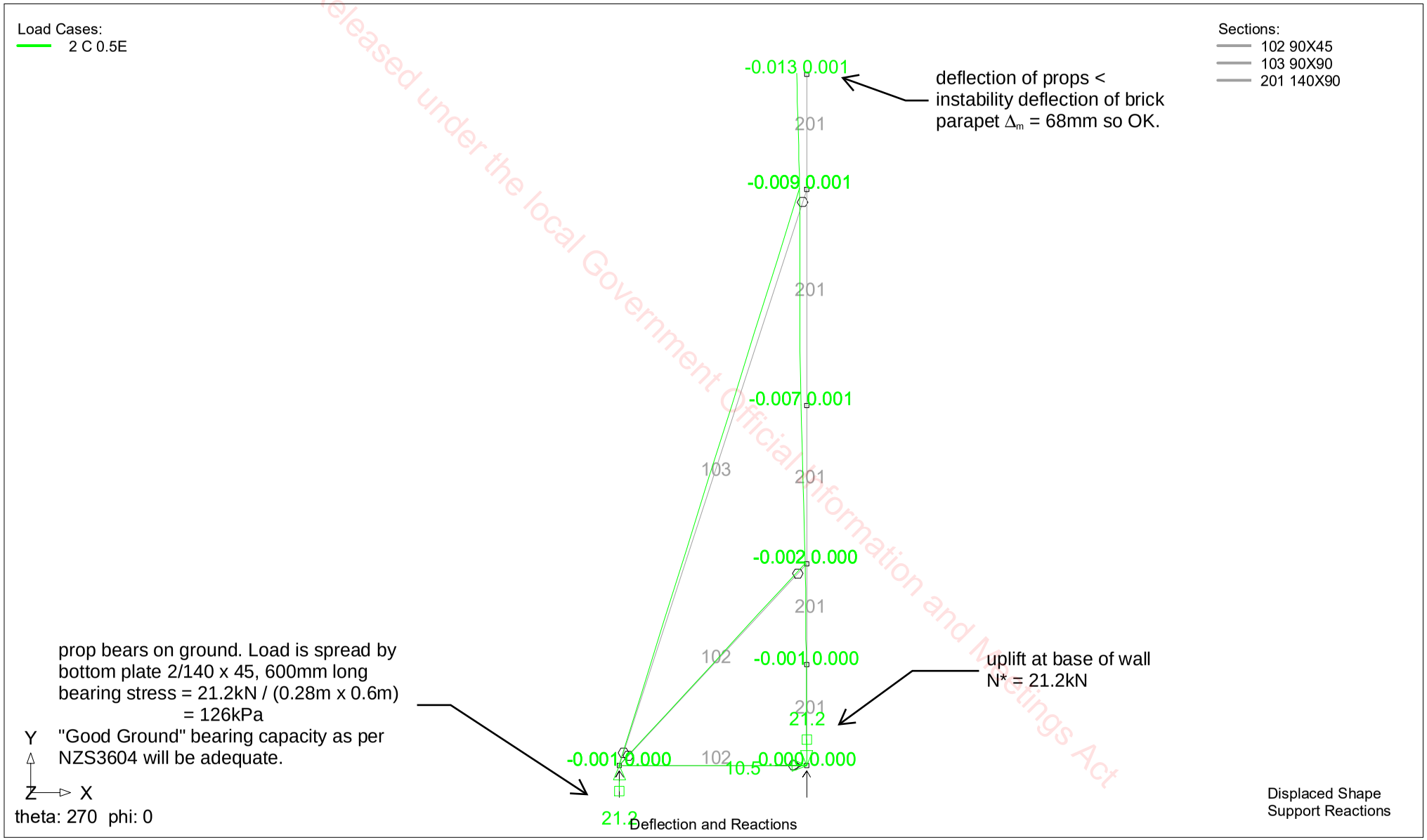
Released under the local Government Official Information and Meetings Act

Load Cases:
1 P E



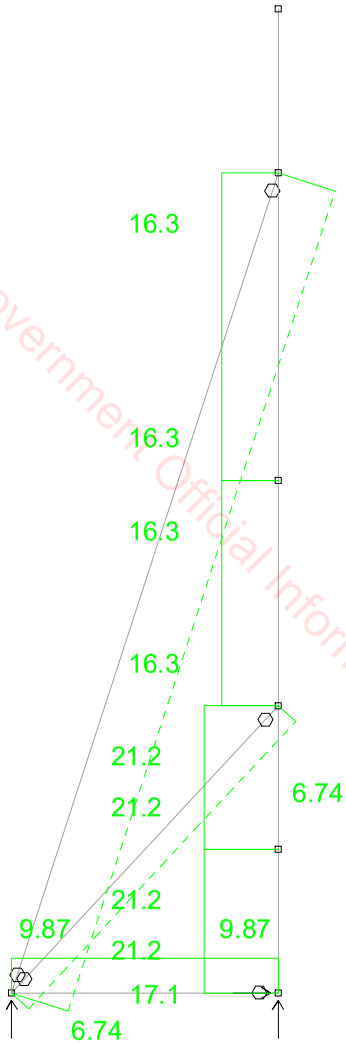
Model of West Wall with Parapet

Released under the local Government Official Information and Meetings Act



Released under the local Government Official Information and Meetings Act

Load Cases:
2 C 0.5E



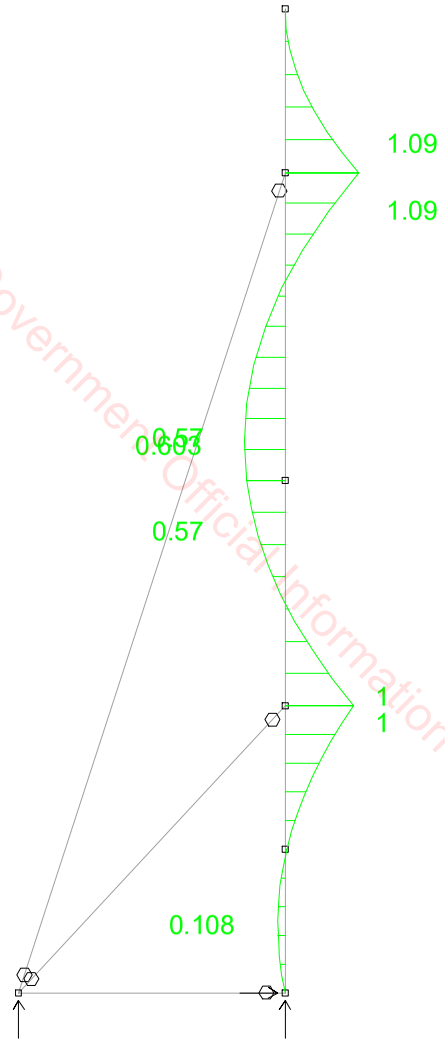
Y
Z X
theta: 270 phi: 0

AFD

Axial Force, Fx

Released under the local Government Official Information and Meetings Act

Load Cases:
2 C 0.5E



Try 140 x 90 SG8 post
$\phi Mn = \phi\ k_1\ k_8\ f_b\ Z$
$= 0.8 \times 1.0 \times 1.0 \times 14MPa \times 140^2 \times 90 / 6$
$= 3.3kNm$ > M* OK

Y
Z X
theta: 270 phi: 0

BMD

Bending Moment, Mz

Old Court House, Petone – Structural Calculations

3 Timber Propping Analysis

3.1 Section A – Timber Propping to Wall

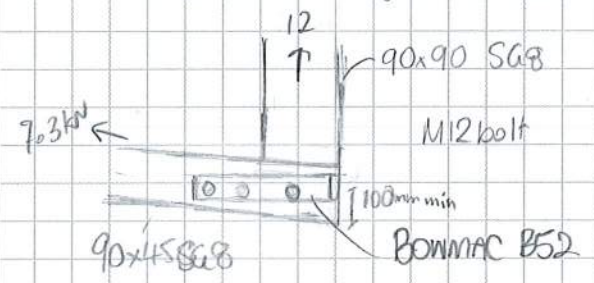
Released under the local Government Official Information and Meetings Act

150 YEARS IN AOTEAROA

CALCULATION SHEET

Project/Task/File No: 5-C3970.00 | Sheet No 3.1 - 1 of
Project Description: Old Court House, 13 Elizabeth Street, Petone, West Wall Propping - Section A | Office:
Computed: / /
Check: / /

For 50% earthquake loading:



Check bolt to timber connection - Worst case

$S^* \leq \phi Q_n$ parallel to grain into vertical post

$Q_n = n k_1 k_{12} k_{13} Q_{sk}$

$Q_{sk1} = 1.25 \times Q_{k1} \times 2$

$b_e = 45mm$

$Q_{k1} = 9.74kN$

$Q_{sk1} = 24.3kN$

$n = 1.0$ 1 bolt
$k_1 = 1.0$ eq load
$k_{12} = 0.7$ green
$k_{13} = 1.0$ 4 bolts.

$\phi = 0.7$

$\phi Q_n = 0.7 \times 1.0 \times 1.0 \times 0.7 \times 1.0 \times 24.3$

$= 11.9kN \approx 5^*$ so OK.

uplift force from post (12kN) is transferred through bowmac bracket into brick footing.

Two additional M12s are bolted to horizontal strut which transfers the 7.3kN force into the footing through the bowmac bracket as well.
Tensile strength of bracket:
$\phi Nt = 0.9 \times 250MPa \times 5 \times (50-14)$
$= 41kN > N^* = 7.3kN$ OK

Shear strength of bracket:
$\phi V = 0.9 \times 0.62 \times 250MPa \times 5 \times (50-14)$
$= 25kN > V^* = 12kN$ OK

Uplift force causes minor bending of bracket due to bolt offset.
$M^* = 12kN \times 0.047m$
$= 0.56kNm$
$\phi M = 0.9 \times 250MPa \times 5 \times 50^2 / 6 \times 1.5$
$= 0.7kNm > M^*$ OK

Adopt BOWMAC B52 bracket w/ M12 bolts

Released under the local Government Official Information and Meetings Act

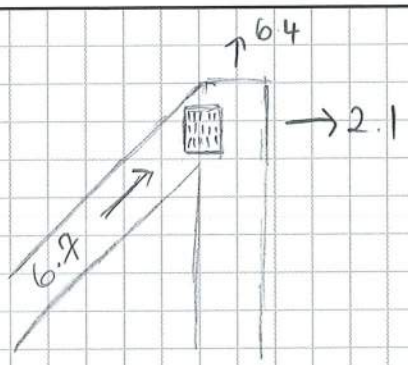
CALCULATION SHEET

Project/Task/File No: 5-C3970.00 | Sheet No 3.1 - 2 of

Project Description: Ad Court House, 13 Elizabeth Street, Petone, West Wall Propping - Section A | Office:

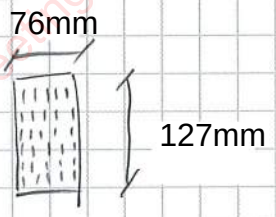
Computed: / /

Check: / /



approx. 250mm joint interface

Check nailplate - Try 2 Knuckle Nailplate MP4R10



$S^* = 6.4$ kN (T)

$\phi N_t = 0.8 \times 120$N/mm x 127mm so ✓OK

= 12.2kN > S*

$V^* = 2.1$ kN

$\phi V = 0.8 \times 220 \times 76 \times 10^{-3}$

= 13.4 kN > V^* so ✓OK

total # teeth = 6x5 = 30 per plate.

$S^*_{perp} = 2.1$ kN

$\phi Q = 0.8 \times 220$ N/tooth 30 teeth x 0.85 ← green timber.

= 4.5kN > S^* so ✓OK.

$S^*_{para} = 6.7$ kN

$\phi Q = 0.8 \times 290 \times 40 \times 0.85$

= 7.9 kN > S^* OK

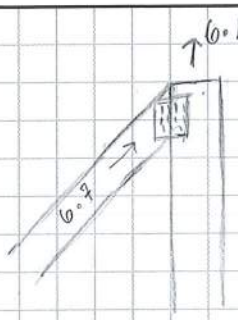
20 teeth on each plate

use MP4R10 knuckle plate both sides of brace

Released under the local Government Official Information and Meetings Act

CALCULATION SHEET

Project/Task/File No: 5-C3970.00 | Sheet No 3.1 - 3 of
Project Description: Old Court House, 13 Elizabeth Street, Petone, West Wall Propping - Section A | Office:
Computed: / /
Check: / /



approx 250mm available at joint.

Check nailplate - Try Nail-on plate NPA 75/190, 1mm thick

$S^* = 6.4kN\ (T)$

$\phi N_t = 0.8 \times 530 N/mm \times 75mm \times 10^{-3}$
$= 31.8\ kN > S^*$ so ✓OK 1plate = 15.9 ✓OK

$V^* = 2.1kN$

$\phi V_n = 0.8 \times 320 \times 190 \times 10^{-3}$
$= 48.6\ kN > V^*$ so ✓OK 1plate = 24.3 ✓OK

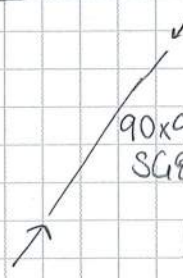
Adopt Pryda NPA 75/190 1mm thick nail-on plate

Nail Strength: Is timber ↙ green timber

→ $\phi Q_n = 0.8 \times 22.0kN \times 0.85$
$= 15\ kN > 6.7$ so ✓OK. → 1 plate will also work.

1plate = 7.5kN so ✓OK

Check Compression Struts



Length = 4.2m.

$N^* \leq \phi N_c$

$\phi = 0.8$

$N_c = k_1 k_8 f_c A$

$k_1 = 1.0$

k_8: $S_2 = 42/2.09 = 47$
→ $k_8 = 0.15$

$f_c = 12MPa$

$\phi N_c = 0.8 \times 1.0 \times 0.15 \times 12 \times 90 \times 90 \times 10^{-3}$
$= 11.7\ kN. > N^*$ so ✓OK.

Released under the local Government Official Information and Meetings Act

Check Compression Struts

7.8kN (N*)

90x90 SG8

Length = 1.9m.

$N^* \leq \phi N_c$

$\phi = 0.8$

$N_c = k_1 k_8 f_c A$

$k_1 = 1.0$

k_8: $S_2 = \frac{1.9}{0.09} = 21$

$\Rightarrow k_8 = 0.65$

$f_c = 12$ MPa

$\rightarrow \phi N_{cy} = 0.8 \times 1.0 \times 0.65 \times 12 \times 90 \times 90$

$= 49$ kN $>$ N* so OK

Adopt 2/90x45 SG8

bolted connection to post and brace, try M16 in double shear at both ends

$\phi V = \phi\ k_1\ k\ Q_{skp}\ n$

= 0.7 x 1.0 x 0.7 x 9.29kN x 2

= 9.1kN > 7.8kN OK

Horizontal strut along ground is in tension, try 90x 45 SG8

N* = 7.3kN

$\phi Nt = \phi\ k_1\ f_t\ A$

= 0.8 x 1.0 x 4MPa x 90 x 45

= 13kN > N* OK

bolted connection to brace, try M16 in single shear

$\phi V = \phi\ k_1\ k\ Q_{skl}\ n$

= 0.7 x 1.0 x 0.7 x 18.5kN

= 9kN > 7.3kN OK

bolted connection to bowmac bracket, try 2 M12 in single shear

$\phi V = \phi\ k_1\ k\ Q_{skl}\ n$

= 0.7 x 1.0 x 0.7 x 2 x 1.25 x 10.4kN

= 12.7kN > 7.3kN OK

Released under the Local Government Official Information and Meetings Act

CALCULATION SHEET

Project/Task/File No:	5-C3970.00	Sheet No 3.1 - 5	of
Project Description:	Old Court House	Office:	Wellington
	13 Elizabeth Street	Computed:	21/02/2020
	West Wall shoring - Section A	Check:	

At base of wall bolt shoring into brick wall to provide resistance against sliding and uplift

N* = 7.8 kN

V* = 12 kN

NZSEE Guidelines gives values for bolt strengths into brick

Table C8.10: Default anchor probable shear strength capacities for anchors into masonry units only[1]

Anchorage type	Rod size	Probable shear strength capacity[2] (kN)
Bolts/steel rods fixed through and bearing against a timber member[1,2]	M12	8.5
	M16	15
	M20	18.5
Bolts/steel rods fixed through a steel member (washer) having a thickness of 6 mm or greater	M16	20

Note:

1. Anchors into mortar bed joints will have significantly lower shear capacities
2. Timber member to be at least 50 mm thick and MSG8 grade or better
3. For adhesive connectors embedment should be at least 200 mm into solid masonry

Table C8.11: Default anchor probable tension pull-out capacities for 0 m, ≥0.3 m and ≥ 3 m of wall above the embedment[2]

Mortar hardness	Single-wythe wall (kN)			Embedment 160 mm[1] into two-wythe wall (kN)			Embedment 250 mm[1] into three-wythe wall (kN)		
	0	≥0.3 m[(3)]	≥3 m	0	≥0.3 m[(3)]	≥3 m	0	≥0.3 m[(3)]	≥3 m
Very soft	0.3	0.5	1	1	1.5	4	1.5	3	8
Soft	1	1.5	3	2.5	4	9	5	8	18
Medium	1.5	2.5	6	4	6.5	15	8	14	31
Hard	2.5	3.5	8	6	9	21	11	19	43
Very hard	>2.5[(4)]	>4[(4)]	>8[(4)]	>6[(4)]	>10[(4)]	>21	>11[(4)]	>20[(4)]	>43[(4)]

Use 1 M16 bolt

ϕN = 21kN > N* OK

ϕV = 20kN > V* OK

Wall weight resists uplift

0.9G = 18kN/m^3 x 0.11m x 2 x 1.5m x 4.1m x 0.9

= 21.9 kN

> V* OK

Released under the local Government Official Information and Meetings Act

Old Court House, Petone – Structural Calculations

3.2 Section B – Timber Propping to Parapet

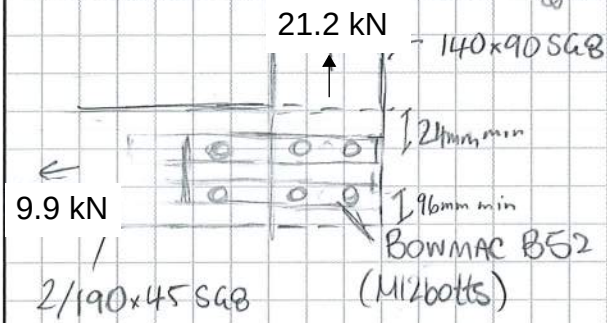
Released under the local Government Official Information and Meetings Act

150 YEARS IN AOTEAROA

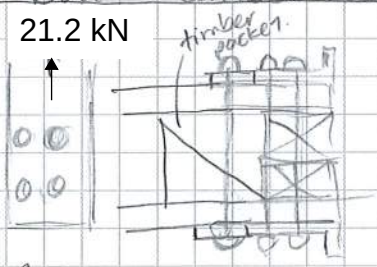
CALCULATION SHEET

Project/Task/File No: S-C3970.00 | Sheet No 3.2 - 1 of
Project Description: Ad Court House, 13 Elizabeth Street, Petone, West Wall Propping - Section B. | Office:
Computed: / /
Check: / /

Reduce to 50% earthquake loading.



Check bolt to timber connection - worst case



$S^* \le \phi Q_n$ parallel to grain into vertical post

$Q_n = n k_1 k_{12} k_{13} Q_{sk}$

$Q_{skl} = 1.25 \times Q_{kl} \times 2$

be = 90mm

$Q_{kl} = 10.4$ kN

$Q_{skl} = 1.25 \times 10.4 \times 2$

$= 26$ kN

Adopt BOWMAC B52 bracket w/ M12 bolts

$n = 2.0$ → 2 bolts

$k_1 = 1.0$ → eq loading, short term

$k_{12} = 0.7$ → green timber

$k_{13} = 1.0$ → < 4 bolts

$\phi = 0.7$ → for bolts.

$\phi Q_n = 0.7 \times 2.0 \times 1.0 \times 0.7 \times 1.0 \times 26$

$= 26$ kN $> S^*$ so ✓OK

uplift force from post (21.2kN) is transferred through bowmac bracket into brick footing.

Two additional M12s are bolted to horizontal strut which transfers the 9.9kN force into the footing through the bowmac bracket as well.

Tensile strength of brackets:

ϕNt = 0.9 x 250MPa x 5 x (50-14) x 2
= 82kN > N* = 9.9kN OK

Shear strength of brackets:

ϕV = 0.9 x 0.62 x 250MPa x 5 x (50-14) x 2
= 50kN > V* = 21.2kN OK

Uplift force causes minor bending of brackets due to bolt offset.

M* = 21.2kN x 0.045m
= 0.95 kNm

ϕM = 0.9 x 250MPa x 5 x 50^2 / 6 x 1.5 x 2
= 1.4kNm > M* OK

Released under the Official Information and Meetings Act

CALCULATION SHEET

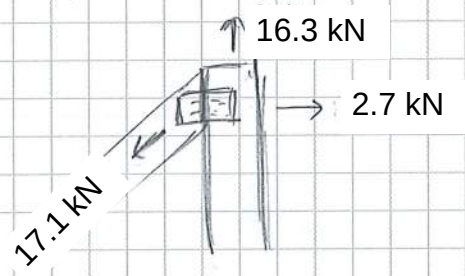
Project/Task/File No: 5-C3970.00 | Sheet No 3.2 - 2 of

Project Description: Old Court House, 13 Elizabeth Street, Petone, West Wall Propping - Section B. | Office:

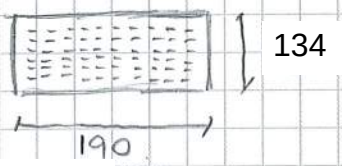
Computed: / /

Check: / /

Nailplate Checks



Try Knuckle Nailplate MP6R 16 both sides.



$S^* = 2.7$ kN (T)

$\phi N_t = 0.8 \times 52.3 = 41.8$ kN $> S^*$ so ✓OK

$V^* = 16.3$ kN

$\phi V_n = 0.8 \times 120\,N/mm \times 190mm \times 10^{-3}$

$= 18.2$ kN $> V^*$ so ✓OK

total # teeth = 6 x 16 = 96 each plate.

$S^*_{perp} = 2.7$ kN

$\phi N_n = 0.8 \times 220\,N/tooth \times 96\ teeth \times 0.85$ ← green timber

$= 14.4$ kN $> S^*_{perp}$ so ✓OK

$S^*_{para} = 17.1$ kN

$\phi N_n = 0.8 \times 290 \times 96 \times 0.85$

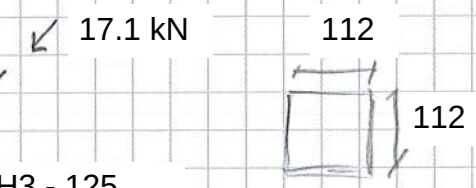
$= 18.9$ kN $> S^*$ so ✓OK.

Adopt Pryda MP6R16 knuckle nailplate both sides

Released under the local Government Official Information and Meetings Act

Compression Strut Checks

17.1 kN



PLPH3 - 125

Length = 4.2m

17.1 kN

$N^* \leq \phi N_c$

$\phi = 0.8$

$N_c = k_1 k_8 f_c A$

$k_1 = 1.0$

k_8: $S_2 = \frac{4.2}{0.112} = 37.5$

$\rightarrow k_8 = 0.24$

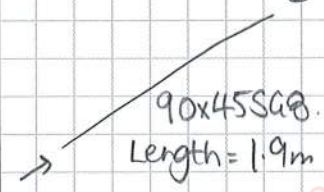
Adopt PLPH3-125

$f_c = 19.2$ MPa

$\phi N_c = 0.8 \times 1.0 \times 0.24 \times 19.2 \times 112^2 \times 10^{-3}$

$= 46$ kN $> N^*$ so ✓OK

6.7 kN



$N^* \leq \phi N_c$

$\phi = 0.8$

$N_c = k_1 k_8 f_c A$

$k_1 = 1.0$

k_8: $S_2 = \frac{1.9}{0.09} = 21$

$\rightarrow k_8 = 0.67$

Adopt 2/90x45 SG8

$f_c = 12$ MPa

$\phi N_c = 0.8 \times 1.0 \times 0.67 \times 12 \times 90^2 \times 10^{-3}$

$= 52$ kN $> N^*$ so ✓OK

bolted connection to post and brace, try M12 in double shear at both ends

$\phi V = \phi\ k_1\ k\ Q_{skp}\ n$

$= 0.7 \times 1.0 \times 0.7 \times 6.97\text{kN} \times 2$

$= 6.8\text{kN} > 6.7\text{kN}$ OK

Horizontal strut along ground is in tension, try 2/190x 45 SG8

$N^* = 9.9\text{kN}$

$\phi N_t = \phi\ k_1\ f_t\ A$

$= 0.8 \times 1.0 \times 4\text{MPa} \times 2 \times 190 \times 45$

$= 54.7\text{kN} > N^*$ OK

Released under the local Government Official Information and Meetings Act

bolted connection to brace, try M12 in double shear

$\phi V = \phi\ k_1\ k\ Q_{skl}\ n$

= 0.7 x 1.0 x 0.7 x 2 x 10.4kN

= 10.2kN > 6.7kN OK

bolted connection to horizontal strut, try 2 M12 in double shear

$\phi V = \phi\ k_1\ k\ Q_{skl}\ n$

= 0.7 x 1.0 x 0.7 x 2 x 6.97kN x 2

= 13.7kN > 9.9kN OK

bolted connection to bowmac bracket, try 2 M12 in single shear

$\phi V = \phi\ k_1\ k\ Q_{skl}\ n$

= 0.7 x 1.0 x 0.7 x 2 x 1.25 x 10.4kN

= 12.7kN > 9.9kN OK

Released under the local Government Official Information and Meetings Act

CALCULATION SHEET

Project/Task/File No:	5-C3970.00	Sheet No 3.2 - 4	of
Project Description:	Old Court House	Office:	Wellington
	13 Elizabeth Street	Computed:	21/02/2020
	West Wall shoring - Section B	Check:	

At base of wall bolt shoring into brick wall to provide resistance against sliding and uplift

N* = 9.9 kN

V* = 21.2 kN

NZSEE Guidelines gives values for bolt strengths into brick

Table C8.10: Default anchor probable shear strength capacities for anchors into masonry units only[1]

Anchorage type	Rod size	Probable shear strength capacity[2] (kN)
Bolts/steel rods fixed through and bearing against a timber member[1,2]	M12	8.5
	M16	15
	M20	18.5
Bolts/steel rods fixed through a steel member (washer) having a thickness of 6 mm or greater	M16	20

Note:

1. Anchors into mortar bed joints will have significantly lower shear capacities
2. Timber member to be at least 50 mm thick and MSG8 grade or better
3. For adhesive connectors embedment should be at least 200 mm into solid masonry

Table C8.11: Default anchor probable tension pull-out capacities for 0 m, ≥0.3 m and ≥ 3 m of wall above the embedment[2]

Mortar hardness	Single-wythe wall (kN)			Embedment 160 mm[1] into two-wythe wall (kN)			Embedment 250 mm[1] into three-wythe wall (kN)		
	0	≥0.3 m[(3)]	≥3 m	0	≥0.3 m[(3)]	≥3 m	0	≥0.3 m[(3)]	≥3 m
Very soft	0.3	0.5	1	1	1.5	4	1.5	3	8
Soft	1	1.5	3	2.5	4	9	5	8	18
Medium	1.5	2.5	6	4	6.5	15	8	14	31
Hard	2.5	3.5	8	6	9	21	11	19	43
Very hard	>2.5[(4)]	>4[(4)]	>8[(4)]	>6[(4)]	>10[(4)]	>21	>11[(4)]	>20[(4)]	>43[(4)]

Use 2 M16 bolts

ϕN = 42 kN > N* OK

ϕV = 40 kN > V* OK

Wall weight resists uplift

0.9G = 18kN/m^3 x (1.5m x 0.11m x 4.4m + 0.8m^2 x 4.8m) x 0.9

= 74kN kN

> V* OK

Released under the local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Tuesday, 8 October 2019 12:07 pm
To: s7(2)(a) Claire Stevens
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

Thanks for the feedback. I'll wait to hear back from Heritage NZ and pass on their response to you.
Providing they have no objections to the wall propping proposal we can look at the building consent exemption for that work

Kind regards,

Chris

From: s7(2)(a)
Sent: Tuesday, 8 October 2019 11:28 AM
To: Chris Hoddinott; Claire Stevens
Subject: FW: Old Courthouse, Petone

Hi Chris / Claire,

Please see below response from Opus re the fence option.

Certainly an alternative, but not the preferred option at this point.

Regards,

s7(2)(a)

s7(2)(a)

From: Murray, Robyn s7(2)(a)
Sent: Monday, 7 October 2019 4:43 PM
To: s7(2)(a)
Subject: RE: Old Courthouse, Petone

Hi s7(2)(a)

We looked into the option of putting a mesh fence above the existing timber fence to catch the bricks as the wall collapses. The fence still needs to be propped back to the ground in a similar manner to what has been shown for the wall, as it needs to take the horizontal impact of the bricks. We concluded that the same amount of propping attached to the wall would achieve the same result and no mesh would be required.

I will wait to hear on how you would like to proceed with the procurement.

Released under the local Government Official Information and Meetings Act

Regards,

Robyn Murray
Senior Structural Engineer

WSP | OPUS

[redacted]

WSP Opus
L8 Majestic Centre
100 Willis St
Wellington 6011
New Zealand

wsp-opus.co.nz

From: [redacted]
Sent: Monday, 7 October 2019 10:21 AM
To: Murray, Robyn [redacted]
Subject: Old Courthouse, Petone

Hi Robyn,

As discussed last week, I have asked my procurement team if a sole source procurement is acceptable under the circumstances.

I will let you know the outcome.

The following is just a thought aimed at reducing cost.

Your scheme looks as though it will not only control the spread of rubble, but significantly reduce the likelihood of the building collapsing. As our objective is simply to control the spread of rubble, would a suitably designed wire mesh fence along the boundaries in question be a more cost effective solution?

Your thoughts please.

Thanks,

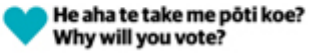
[redacted]

Released under the Local Government Official Information and Meetings Act

NOTICE: This communication and any attachments ("this message") may contain information which is privileged, confidential, proprietary or otherwise subject to restricted disclosure under applicable law. This message is for the sole use of the intended recipient(s). Any unauthorized use, disclosure, viewing, copying, alteration, dissemination or distribution of, or reliance on, this message is strictly prohibited. If you have received this message in error, or you are not an authorized or intended recipient, please notify the sender immediately by replying to this message, delete this message and all copies from your e-mail system and destroy any printed copies.

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz



IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Released under the local Government Official Information and Meetings Act

Susan Sales

From: Chris Hoddinott
Sent: Monday, 5 August 2019 9:04 am
To: [redacted]
Cc: Claire Stevens
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi [redacted]

The criteria considered when assessing an exemption application is the risk to people both within and outside the property boundary.

Yes, the risk of the building collapsing beyond the boundaries or debris spilling beyond the boundaries is what we'd like some information about from a structural engineer.
We'd like some assessment/commentary as to the likely risk, and if any risk is considered to exist a proposal to mitigate this risk. As you mention this may include a suitably designed chain metal fence. If any barrier/s are required an engineer would need to verify the design of the barrier is adequate.

Hopefully that answers your question. Let me know if you need any more information.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

Released under the Local Government Official Information and Meetings Act

---

From: [redacted]
Sent: Friday, 2 August 2019 4:17 PM
To: Chris Hoddinott
Cc: Claire Stevens
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Thanks Chris.

I have one question coming out of my visit this morning.

I am not a structural engineer, but I am hypothesizing that should the building collapse during an earthquake debris could spill outside three of the four section boundaries. I will have this checked, but talking hypothetically.

In order to mitigate this risk, I would see a suitably designed and located chain metal fence as an appropriate countermeasure.

Talking entirely hypothetically, is that the sought of measure that Council would look favourably on when considering an exemption request?

Thanks,

[redacted]

From: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Sent: Thursday, 1 August 2019 1:43 PM
To: [redacted]
Cc: Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi [redacted]

Thanks for the update about the two buildings. We look forward to receiving your application for an exemption for 13 Elizabeth street, Petone.
Feel free to call me if you require any additional info or if you wish to discuss.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, **W** www.huttcity.govt.nz **F** huttcitycouncil

---

From: [redacted]
Sent: Thursday, 1 August 2019 11:23 AM

Released under the local Government Official Information and Meetings Act

To: Chris Hoddinott
Cc: Claire Stevens
Subject: RE: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi Chris,

I am very happy to work with you and Claire on this as there are obvious benefits to all involved.

[redacted] Out of Scope

In regard to 13 Elizabeth St, I am in Petone tomorrow and will get the information I need to submit the application.

Thanks again for your help.

Regards,

[redacted] s7(2)(a)

From: Chris Hoddinott <Chris.Hoddinott@huttcity.govt.nz>
Sent: Thursday, 1 August 2019 7:19 AM
To: [redacted] s7(2)(a)
Cc: Claire Stevens <Claire.Stevens@huttcity.govt.nz>
Subject: 13 Elizabeth Street. Petone - Proposed Application for Exemption From Requirement To Carry Out Seismic Work

Hi [redacted] s7(2)(a)

Thanks for calling in to see us a few weeks ago to discuss two of the building owned by [redacted] s7(2)(a)

[redacted] Out of Scope

- 13 Elizabeth street, Petone

  During our meeting the possibility of applying for an exemption from the requirement to carry out seismic work was discussed. Section 133AN of the Building Act 2004 outlines that owners of buildings subject to an earthquake-prone building notice may make an application in relation to this. An exemption provides a means for a building to remain in an earthquake-prone state while the options for remediating the building are worked through without the owner being subject to possible enforcement action due to an expired earthquake-prone building notice.

Released under the local Government Official Information and Meetings Act

The eligibility criteria for exemptions is based around the level of risk a building poses to people. If the risk is perceived to be low enough an exemption may be granted. In considering the level of risk to people the number and frequency of people occupying and in close proximity to a building are considered. Buildings in close proximity to footpaths or other public thoroughfares would not be eligible for an exemption.

If an exemption is granted the details of the exemption will be recorded in the national earthquake-prone building register and an exemption notice affixed to the building.
If an exemption is granted and the number and frequency of people occupying or in close proximity to a building changes the legislation allows the exemption may be revoked at any time.

To apply for an exemption the building owner or their representative will need to:

1. Apply to Hutt City Council in writing (this may be by letter or email format). Once we receive the application we will send an invoice for the application fee of $160. This fee will need to be paid before the application is processed. Please note, this application fee allows for 1 hour of our time processing the application. If additional time is required beyond this initial hour additonal charges may be incurred.

2. Provide with the application a brief statement to outline the occupancy of the building. Please state:
    a. How many people occupy the building
    b. How frequently the building is occupied
    c. The proximity of passers-by to the building (note the approximate distance of the building to the boundaries and any fencing to prevent passers-by entering the property). An aerial photograph may be useful to include to respond to this enquiry along with a written explanation.

3. I am aware that parts of this unreinforced masonry building are in poor repair and as such some temporary propping has been added to provide some support to some of the brick wall sections. We would expect to have written advice from a structural engineer included with your application advising if there is any expected risk to neighbouring properties or passers-by in the event of an earthquake if the building failed and collapsed. Particularly with regard to the childcare centre next door.

Note: I acknowledge this building has previously been issued with a notice stating no person may use or occupy the building. However the information requested in question 2 is required to be stated as a formal part of the exemption application process.

Please let me know if you require any additional information.

Kind regards,

Chris Hoddinott
Seismic Assessment Officer

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz F huttcitycouncil

Chris Hoddinott
Seismic Assessment Officer

Released under the local Government Official Information and Meetings Act

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6804, W www.huttcity.govt.nz

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

Released under the local Government Official Information and Meetings Act

Share Copy link Download ··· REPORTS-File note - 1....MSG 17 / 18

Copy to
Version history

From:
To:
Subject: File note - 13 Elizabeth street - Discussion with Heritage NZ (Alison Dangerfield) regarding proposed temporary propping of walls

RE: Proposed temporary propping of walls at 13 Elizabeth Street, Petone – Feedback from Heritage NZ on proposal for work to be carried out under Schedule 1 exemption 2 of the Building Act (Territorial Discretionary Exemption)

I received a call from Alison Dangerfield from Heritage NZ on 10/10/2019 @ 12:49pm in response to the e-mail I sent her – TRIM reference DIV/19/7370-8.

Alison said that:

- Overall Heritage New Zealand (HNZ) were supportive of the proposal to install temporary propping although they did have some concerns about the proposal for the work to be carried out under Schedule 1 exemption 2 of the Building Act (Territorial Discretionary Exemption).
- Alison stated that a building consent and/or resource consent process is what allows HNZ to have some input/control over a project.
- Alison also had concern if an exemption is granted that has no end date.
- Alison also stated that the project should be carried out under the control of a conservation architect.
- Archaeology may need to be considered depending on what work they propose to do on site.

I enquired with Alison if HNZ would be prepared to work with the building owners/applicants on a voluntary basis if they do proceed with a building consent exemption application. She said that they most definitely would.

Chris Hoddinott
25/11/2019

Released under the Local Government Official Information and Meetings Act

Share Copy link Download ··· REPORTS-File note - 1....MSG 17 / 18

Copy to
Version history

From:
To:
Subject: File note - 13 Elizabeth street - Discussion with Heritage NZ (Alison Dangerfield) regarding proposed temporary propping of walls

RE: Proposed temporary propping of walls at 13 Elizabeth Street, Petone – Feedback from Heritage NZ on proposal for work to be carried out under Schedule 1 exemption 2 of the Building Act (Territorial Discretionary Exemption)

I received a call from [redacted s7(2)(a)] Heritage NZ on 10/10/2019 @ 12:49pm in response to the e-mail I sent her – TRIM reference DIV/19/7370-8.

Alison said that:

- Overall Heritage New Zealand (HNZ) were supportive of the proposal to install temporary propping although they did have some concerns about the proposal for the work to be carried out under Schedule 1 exemption 2 of the Building Act (Territorial Discretionary Exemption).

[redacted s7(2)(a)] stated that a building consent and/or resource consent process is what allows HNZ to have some input/control over a project.

[redacted s7(2)(a)] also had concern if an exemption is granted that has no end date.

[redacted s7(2)(a)] also stated that the project should be carried out under the control of a conservation architect.

- Archaeology may need to be considered depending on what work they propose to do on site.

I enquired wit [redacted s7(2)(a)] if HNZ would be prepared to work with the building owners/applicants on a voluntary basis if they do proceed with a building consent exemption application. She said that they most definitely would.

Chris Hoddinott
25/11/2019

Released under the Local Government Official Information and Meetings Act

From: s7(2)(a)
To:
Cc: Chris Hoddinott; Claire Stevens
Subject: Old Courthouse, Elisabeth St, Petone - FAO Alison Dangerfield
Date: Wednesday, 1 April 2020 1:37:06 pm
Attachments: 13 Elizabeth Street Report 19 09 18 rev1.pdf
Propping Drawing 2020 03 27.pdf

Hi s7(2)(a)

Hutt City Council (HCC) have recommended that I talk to you about the above property, which is earthquake prone.

You may recall that Chris Hoddinott spoke to you last year about our plans to provide additional support to some external walls. This was required to reduce the likelihood of collapse during an earthquake. It is in support of our request for an exemption from strengthening with work being undertaken via a discretionary exemption from building consent.

I attach details of the proposed supporting structures and would appreciate your feedback before I formally submit to HCC for approval.

Please let me know if you need anything else and I look forward to hearing from you.

Regards,

s7(2)(a)

Released under the local Government Official Information and Meetings Act

NORTH

PT LOT 142
DP1232

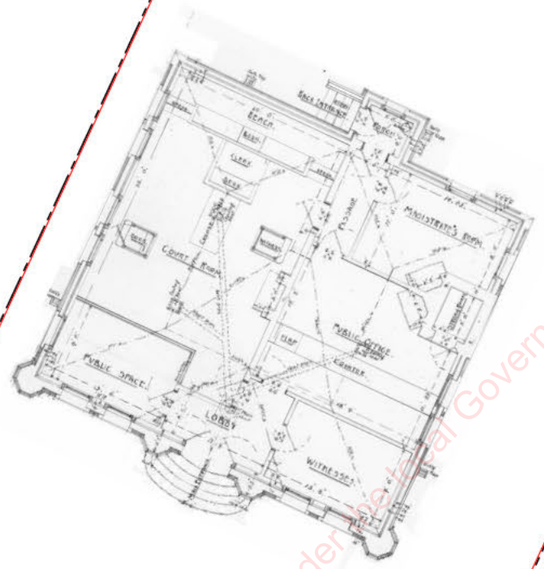
PT LOT 143
DP1232

LOT 149
DP1232

No. 51

LOT 148
DP1232

No. 49



No. 9 - 11

No. 13

LOT 144
DP1232

LOT 145
DP1232

LOT 146
DP1232

ELIZABETH STREET

No. 15

No. 17

Released under the Official Information and Meetings Act
Released under the National Government Official

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:200 @ A3
ORIGINAL SIZE: A3

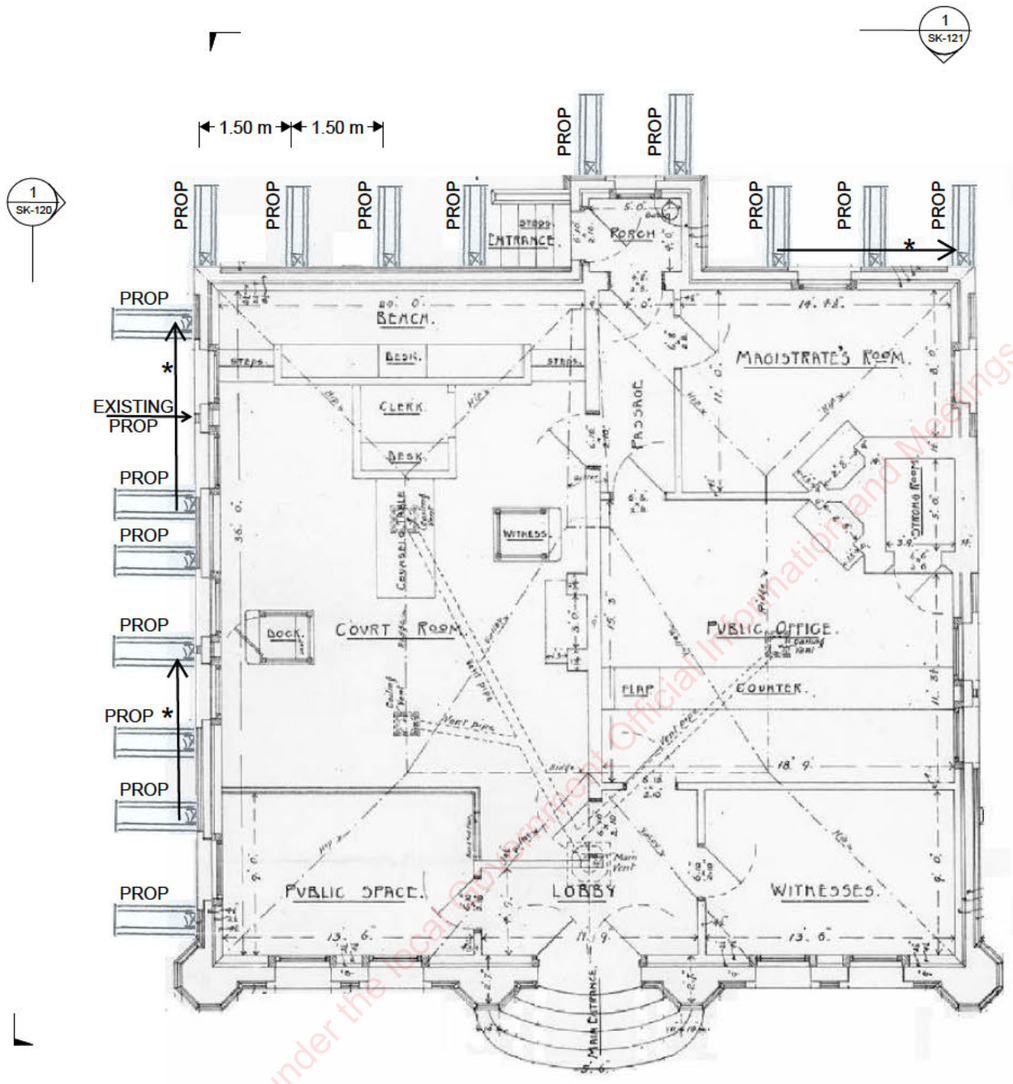
DRAWN	DESIGNED □ Y	APPROVED
R. MURRAY	E. BROWN	J. BEHAN
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
J. BEHAN	J. BEHAN	27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
SITE PLAN

WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C3970.00		SK-100	A

Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM



KEY

* - 90 x 90 SG8 BRACE

1 PROPOSED FLOOR PLAN
SCALE 1:100

Released under the Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

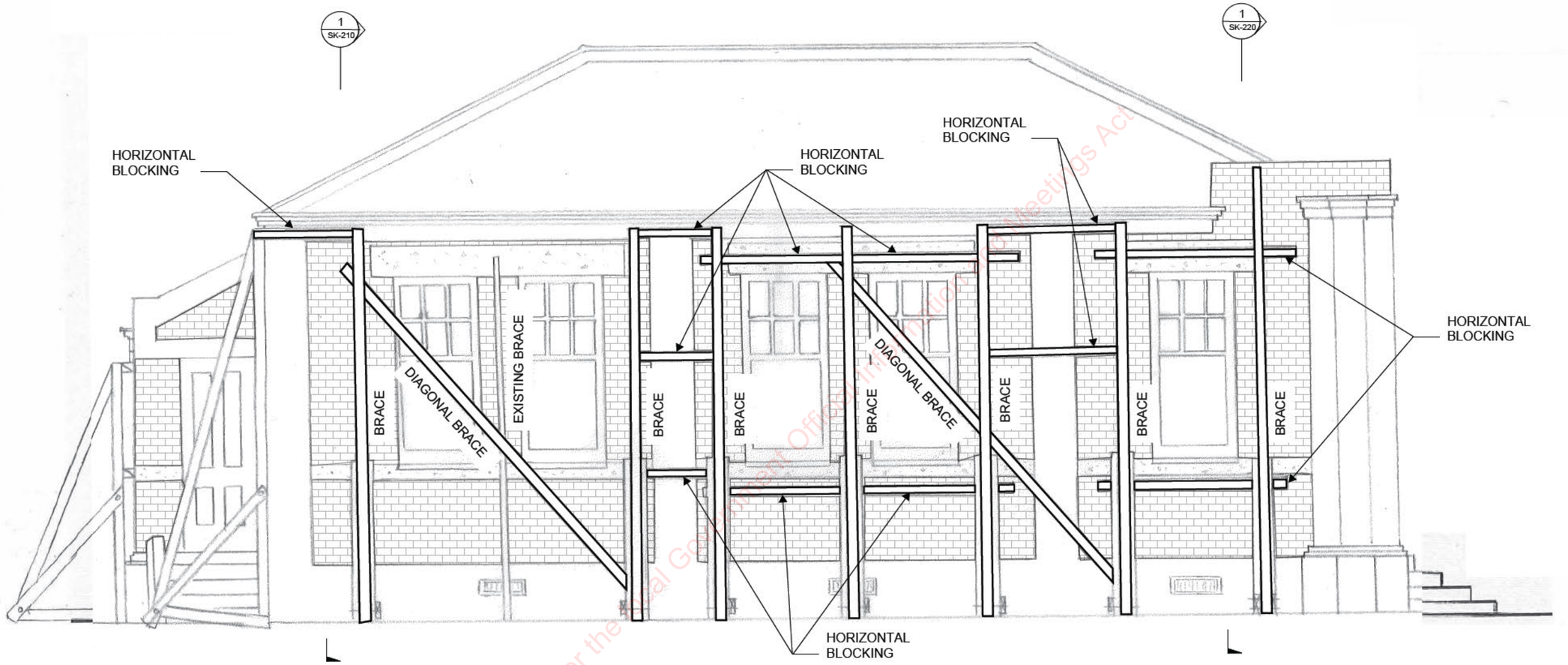
wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:100 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
PROPOSED FLOOR PLAN

WSP PROJECT NO.: 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE:
SHEET NO.: SK-110
REVISION: A



1 WEST WALL ELEVATION
SCALE 1:50

Released under the Official Information Act 1982 Local Government Official Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

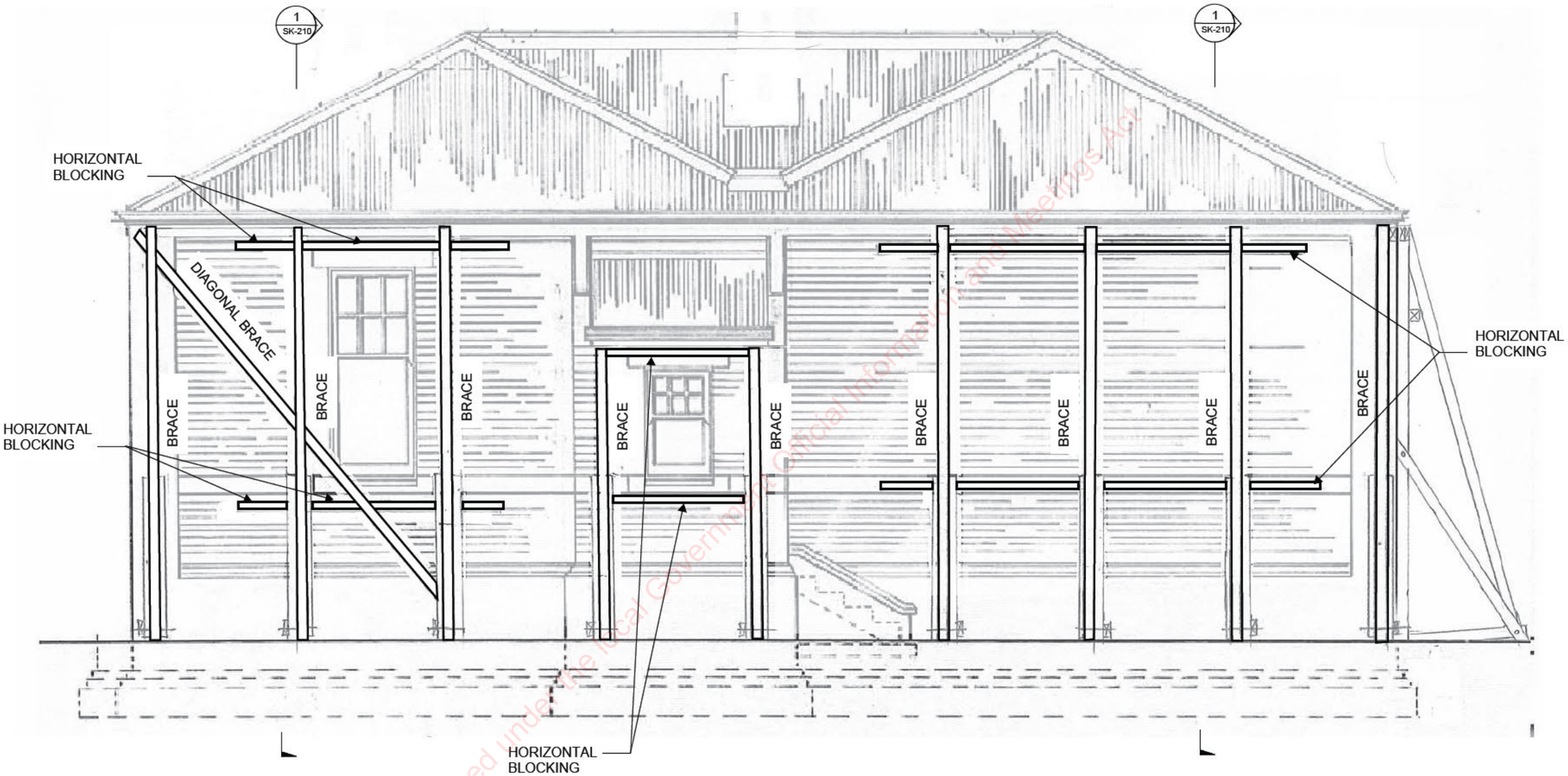
SCALES: 1:50 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
WEST WALL ELEVATION

WSP PROJECT NO.: 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE:
SHEET NO.: SK-120
REVISION: A

Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM



1 NORTH WALL ELEVATION
SCALE 1:50

Released under the Local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

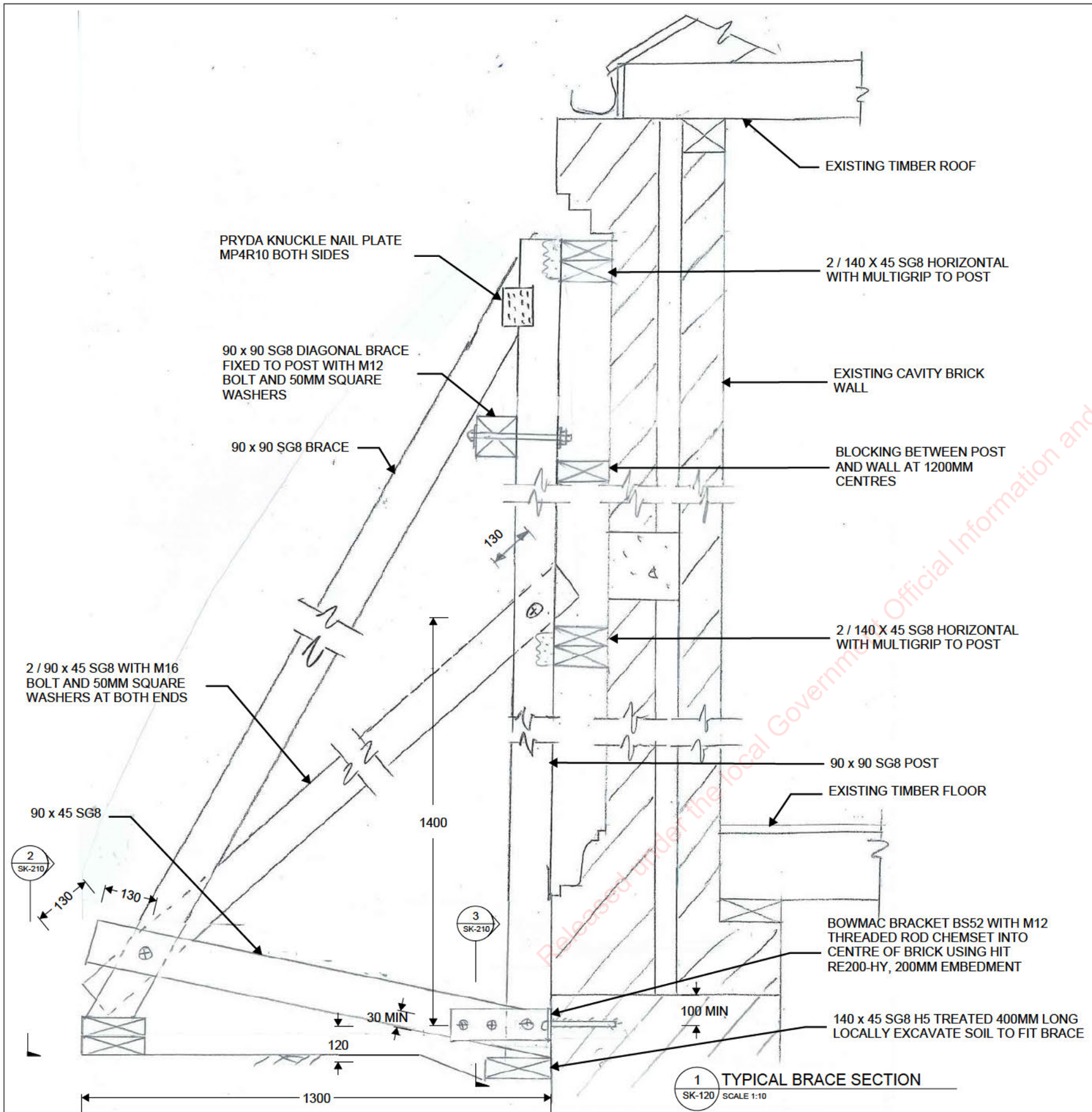
SCALES			ORIGINAL SIZE
1:50 @ A3			A3
DRAWN	DESIGNED BY	APPROVED	
R. MURRAY	E. BROWN	J. BEHAN	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
J. BEHAN	J. BEHAN	27/03/2020	

PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

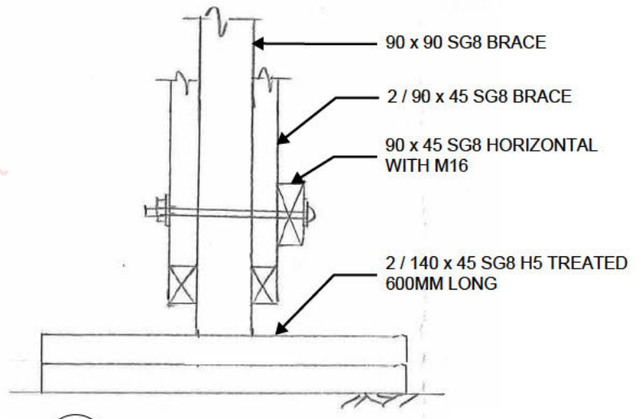
TITLE
NORTH WALL ELEVATION

WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C3970.00		SK-121	A

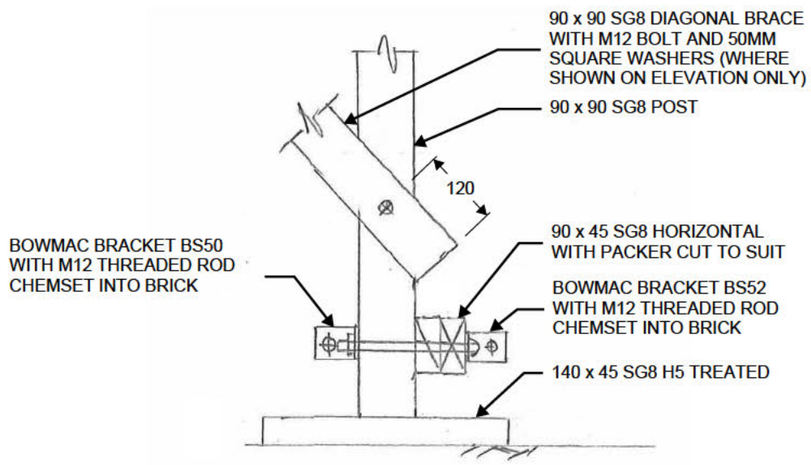
NOTES:
ALL FIXINGS TO BE STAINLESS STEEL.
ALL TIMBER TO BE TREATED TO H3.2 UNLESS NOTED OTHERWISE.
SKEW NAIL TIMBER MEMBERS TOGETHER WHERE NO FIXING SHOWN.



1 SK-120 TYPICAL BRACE SECTION SCALE 1:10



2 SK-210 BRACE DETAIL SCALE 1:10



3 SK-210 BRACE DETAIL SCALE 1:10

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES			ORIGINAL SIZE
1:10 @ A3			A3
DRAWN	DESIGNED BY	APPROVED	
R. MURRAY	E. BROWN	J. BEHAN	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
J. BEHAN	J. BEHAN	27/03/2020	

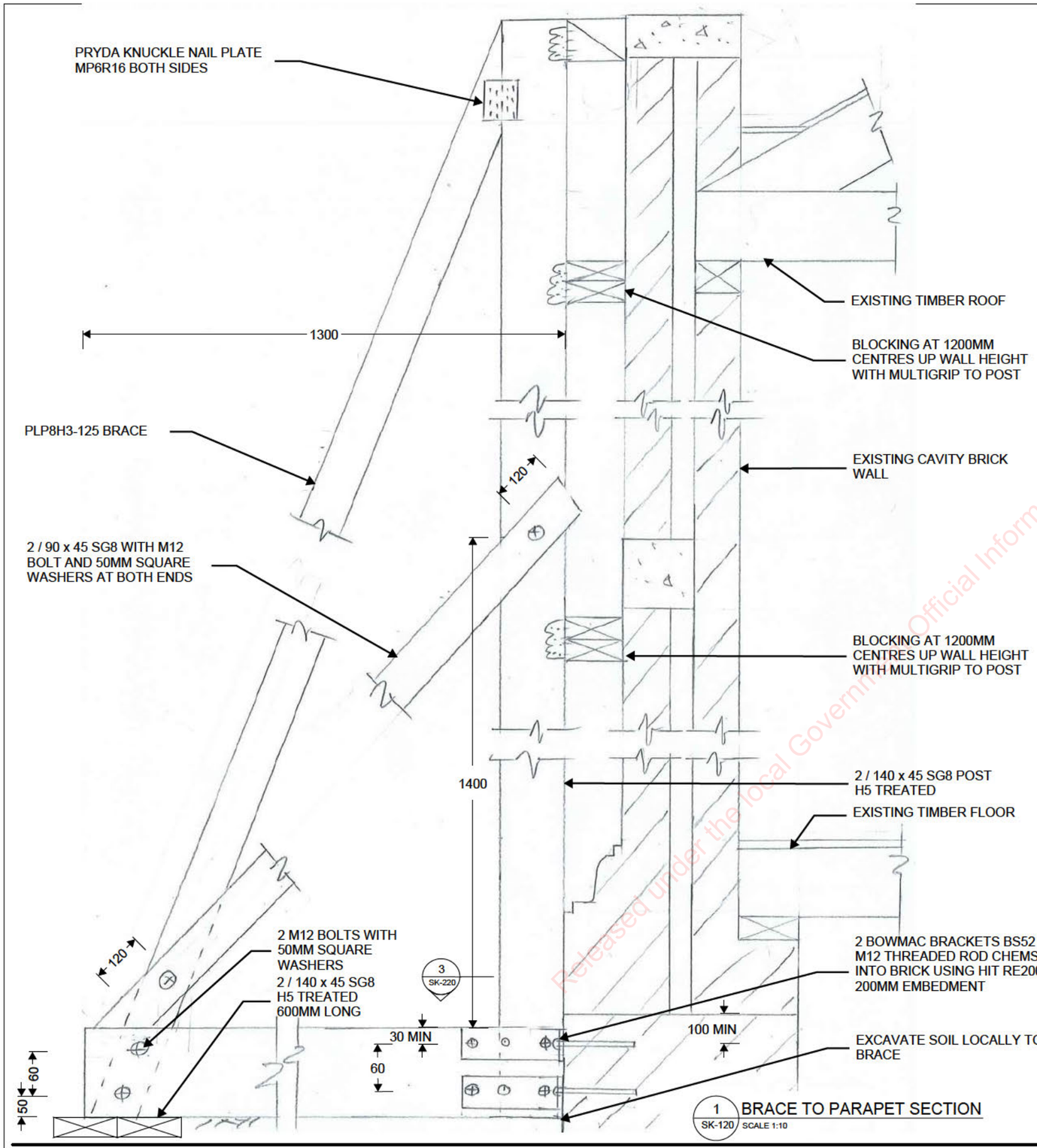
PROJECT
TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE
BRACE SECTION

WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C3970.00		SK-210	A

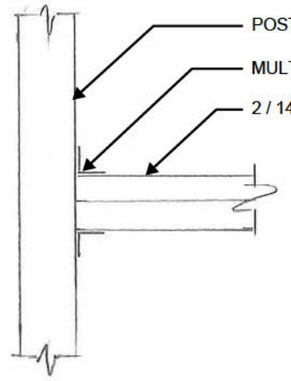
Original sheet size A3 (420x297) Plot Date 2020-03-13 at 3:36:20 PM

Released under the local Government Official Information and Meetings Act

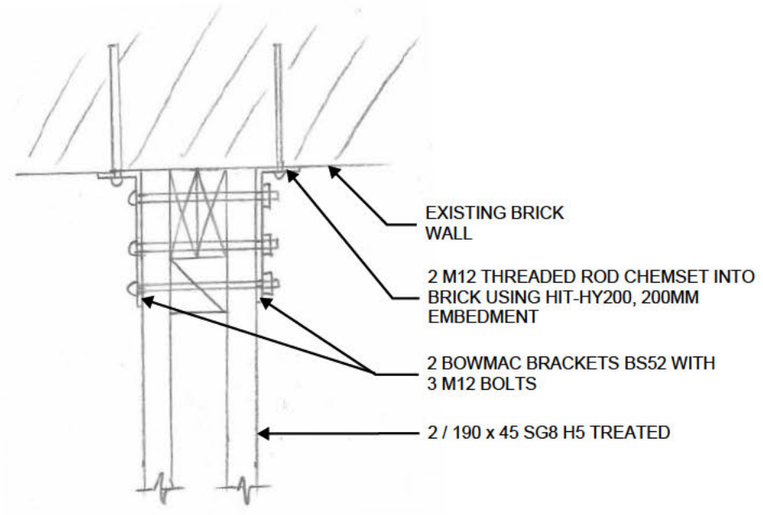


1 SK-120 BRACE TO PARAPET SECTION
SCALE 1:10

NOTES:
ALL FIXINGS TO BE STAINLESS STEEL.
ALL TIMBER TO BE TREATED TO H3.2 UNLESS NOTED OTHERWISE.
SKEW NAIL TIMBER MEMBERS TOGETHER WHERE NO FIXING SHOWN.



2 SK-120 BLOCKING TO POST DETAIL
SCALE 1:10



3 SK-220 POST TO BRICK WALL DETAIL
SCALE 1:10

Released under the local Government Official Information and Meetings Act

REVISION	AMENDMENT	APPROVED	DATE

wsp
Wellington Office
64 4 471 7000
PO Box 12-003
Wellington 6144
New Zealand

SCALES: 1:10 @ A3
ORIGINAL SIZE: A3
DRAWN: R. MURRAY
DESIGNED BY: E. BROWN
APPROVED: J. BEHAN
DRAWING VERIFIED: J. BEHAN
DESIGN VERIFIED: J. BEHAN
APPROVED DATE: 27/03/2020

PROJECT: TEMPORARY SEISMIC SUPPORT
13 ELIZABETH STREET, PETONE, LOWER HUTT 5012

TITLE: BRACE TO PARAPET SECTION

WSP PROJECT NO.: 5-C3970.00
PROJ-ORIG-VOL-LOC-TYPE:
SHEET NO.: SK-220
REVISION: A

DLA Piper New Zealand
Chartered Accountants House
50-64 Customhouse Quay
PO Box 2791
Wellington 6140
New Zealand
DX SP20002 WGTN
T +64 4 472 6289
F +64 4 472 7429
W www.dlapiper.com

Our reference: 1412666

4 August 2017

s7(2)(a)
[redacted]

Released under the local Government Official Information and Meetings Act

EARTHQUAKE PRONE BUILDING NOTICE - 13 ELIZABETH STREET, PETONE

1 We act for the Hutt City Council (**Council**).

2 You are the owner of 13 Elizabeth Street, Petone[1] which was issued with an earthquake prone building notice under section 124(2)(c) of the Building Act 2004 (**Act**) in 1984 (**notice**). This notice required you (as the building owner) to strengthen the building to a sufficient degree so that it is not earthquake-prone; or demolish all or part of the building, so that the remainder of the building (if any) is not earthquake prone, by 1993.

3 Despite the extended timeframes, the notice has not been complied with. This raises important public safety issues.

4 The Council has statutory obligations under the Act to address outstanding earthquake prone buildings. It has accordingly instructed us to take further legal action within the Council's powers under the Act in relation to the building. This may include a prosecution of you as the owner of the building for the offence of failing to comply with the notice by the deadline required (which is punishable by a fine of up to $200,000), or imposition of further safety measures to prevent the public from entering the building. The Council also has the power to seek an order from the District Court allowing it to carry out seismic building works (including demolition). If such an order was granted, you would be liable for the costs of those works which the Council would undertake.

---

[1] Legal Description: Pt Lot 143, DP 1232.

DLA Piper New Zealand is a partnership governed by New Zealand law, which is part of DLA Piper, a global law firm operating through various separate and distinct legal entities.

A list of offices and regulatory information can be found at www.dlapiper.com.

5 Please outline how you intend to comply with the notice, and when compliance will be achieved by. Please also advise us of any other relevant matters to take into account before we initiate proceedings. If you do not reply then we will initiate action without further notice to you.

6 We note that any decision to address the notice under the Act (by way of demolition or strengthening) does not remove the need to obtain the necessary resource consents under the Resource Management Act 1991. Resource consent may be required in order to comply with notice (particularly if your building is a heritage building).

Yours sincerely

s7(2)(a)

Released under the local Government Official Information and Meetings Act

From: Claire Stevens
To: s7(2)(a)
Cc: s7(2)(a) Stephen Dennis; Derek Kerite; Chris Hoddinott
Subject: 13 Elizabeth Street
Date: Thursday, 19 November 2020 4:31:29 pm
Attachments: image001.png
hccsmalllogo_12fb0640-f486-4c5a-a775-f4ab1b1dfb5d.jpg
12153HaHEmailSignatureFINAL_3cd6181d-2156-4dde-9fbd-b6f7f302ed05.JPG

Hi s7(2)(a)

It was great to meet you and find out about your proposal for this building

We would strongly recommend once you are a bit further on in the process coming back and having a pre-application meeting with us with your design team

As discussed today contacting the following people may be useful for this project

- Heritage New Zealand- s7(2)(a) - Heritage New Zealand
s7(2)(a)

- Heritage EQUIP- heritageequip.govt.nz/apply
s7(2)(a)
Manatū Taonga, Ministry for Culture and Heritage
s7(2)(a)

- Councils Heritage Funding information is available at http://www.huttcity.govt.nz/Services/Funding/Built-heritage-incentive-fund/Applying-for-heritage-funding
I believe this funding closes in February

I have cced Stephen in so you have his contact details for any resource consent issues

We look forward to hearing you as this project progresses through the consent processes

Claire

Claire Stevens
Building and Quality Assurance Manager

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6666, **W** www.huttcity.govt.nz

Claire Stevens
Principal Technical Specialist

Released under the local Government Official Information and Meetings Act

From: Claire Stevens
To: [redacted]
Cc: Paul Duffin
Subject: FW: 13 Elizabeth St
Date: Monday, 1 February 2021 4:34:24 pm
Attachments: Red Notice 13 Elizabeth Street.pdf
image001.png
hccsmalllogo_12fb0640-f486-4c5a-a775-f4ab1b1dfb5d.jpg
12153HaHEmailSignatureFINAL_3cd6181d-2156-4dde-9fbd-b6f7f302ed05.JPG
BTHemailsignatures-01_f368e1b9-1943-4700-beee-a910940be134.jpg

---

Hi [redacted]

Here is the latest notice issued on this building – this was issued in 2016 due to the previous notice not being complied with

Regards

Claire

Claire Stevens
Building and Quality Assurance Manager

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6666, **W** www.huttcity.govt.nz

Claire Stevens
Building Quality Assurance Manager

Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
T 04 570 6870, **M** 027 241 6365, **W** www.huttcity.govt.nz

IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distr bution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: [redacted]
Sent: Monday, 1 February 2021 3:29 PM
To: Paul Duffin
Subject: Re: 13 Elizabeth St

Paul

I am in the process of formaising remediation/strengthening works to 13 Elizabeth Street to Heritage NZ. Could you please forward to me an S124 (earthquake prone notice)

Released under the Local Government Official Information and Meetings Act

document as i need to include this in the documents.

The 1960's verandah was beyond repair and not part of the Protected facade. However i will confirm this in writing with heritage NZ and forward to you.

[redacted]

On Mon, Feb 1, 2021 at 1:39 PM Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:

> HI [redacted]
>
> We are concerned that the veranda was part of the building, albeit possibly added in the 60's as you mention below, and should not have been removed. That being so we now require you to consult with Heritage NZ and request confirmation from them that they have no issue with the veranda's removal.
>
> Paul
>
> Paul Duffin
> Senior Environmental Investigations Officer
>
> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>
> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
> -----Original Message-----
> From: [redacted]
> Sent: Thursday, 28 January 2021 6:21 PM
> To: Paul Duffin
> Subject: Re: 13 Elizabeth St
>
> Hi Paul
>
> No, not in writing. Clearly the old veranda was built in 60's and not in keeping and unsafe.
>
> Sent from my iPhone
>
> > On 28/01/2021, at 3:21 PM, Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:
> >
> > Thanks for that. Was that in writing??
> >
> >
> > Paul Duffin
> > Senior Environmental Investigations Officer
> >
> > Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New

Released under the Local Government Official Information and Meetings Act

Zealand
> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>
>
> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
> -----Original Message-----
> From: s7(2)(a)
> Sent: Thursday, 28 January 2021 3:12 PM
> To: Paul Duffin
> Subject: Re: 13 Elizabeth St
>
> Hi Paul
>
> Yes, in my discussion with s7(2)(a) it was confirmed the veranda was a recent addition. The old curved front steps were buried within the concrete porch added. These steps will be exposed and remediated as it's felt they are an original feature and to a large extent part of the facade.
>
> Kind regards

s7(2)(a)

>
> Sent from my iPhone
>
>> On 28/01/2021, at 2:47 PM, Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:
>>
>> HI s7(2)(a)
>>
>> Thanks for your e-mail. Was there any communication with Heritage NZ regarding the removal of the porch? If there was can you please send it through to me.
>>
>> Thanks
>>
>>
>> Paul Duffin
>> Senior Environmental Investigations Officer
>>
>> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
>> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>>
>>
>> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
>> -----Original Message-----

Released under the Local Government Official Information and Meetings Act

>> From [redacted] s7(2)(a)
>> Sent: Thursday, 28 January 2021 12:07 PM
>> To: Paul Duffin
>> Subject: 13 Elizabeth St
>>
>> FYI
>>

Released under the local Government Official Information and Meetings Act

From: Paul Duffin
To: Claire Stevens
Subject: FW: Petone Courthouse
Date: Tuesday, 30 August 2022 11:19:41 am
Attachments: ATT00001.png

Hope this helps

Paul Duffin
Senior Monitoring & Enforcement Officer

Hutt City Council, 30 Laings Road, Lower Hutt 5040
P: **M:** 027 285 7154 **W:** www.huttcity.govt.nz

From: [redacted]
Sent: Friday, 9 April 2021 9:41 am
To: Paul Duffin <Paul.Duffin@huttcity.govt.nz>
Subject: Fwd: Petone Courthouse

Hi Paul

Finally I have here response as required

Sent from my iPhone

Begin forwarded message:

> **From:** [redacted]
> **Date:** 9 April 2021 at 9:25:57 AM NZST
> **To:** [redacted]
> **Subject: Petone Courthouse**
>
> [redacted]
>
> Thank you for consulting with Heritage New Zealand about your plans and current work with the Petone Courthouse. I was pleased to visit recently.
>
> Specifically about the small enclosure or vernadah that sat at the front entrance, I noted at the time our last photos were taken in 2017 that it was in a state of severe deterioration and could collapse.
>
> In response to Mr Duffin's request for Heritage New Zealand's view of the removal of the verandah, I can confirm that Heritage New Zealand has no issue with the removal of the verandah structure. It was part of the building that was non-historic and negatively impacted on the heritage values. Any conservation proposals for the

Released under the Local Government Official Information and Meetings Act

courthouse would have included the removal of the verandah for this reason.

Thank you for being in touch.

Ngā mihi

s7(2)(a)

Te Tari o te Takiwā o Te Pūtahi a Māui | Heritage New Zealand Pouhere Taonga | P O Box 2629 | Level 1, 79 Boulcott St | Wellington 6140 | s7(2)(a) | s7(2)(a)

Tairangahia ā tua whakarere; Tātakihia ngā reanga o āmuri ake nei – Honouring the past; Inspiring the future

This communication may be a privileged communication. If you are not the intended recipient, then you are not authorised to retain, copy or distribute it. Please notify the sender and delete the message in its entirety.

Released under the local Government Official Information and Meetings Act

From: Claire Stevens
To: Paul Duffin; Stephen Dennis
Cc: Derek Kerite; Helen Oram
Subject: RE: 13 Elizabeth St
Date: Thursday, 28 January 2021 3:07:00 pm

Hi all

I think this really a planning issue rather than building one- one could make the case that it is more original without it but up to you

Claire

-----Original Message-----
From: Paul Duffin
Sent: Thursday, 28 January 2021 2:31 PM
To: Stephen Dennis
Cc: Claire Stevens; Derek Kerite; Helen Oram
Subject: FW: 13 Elizabeth St

Hi.

The third photo shows the porch that was pulled down recently. I must say it looks as if it had seen better days. Does anyone have an issue with it coming down (seeing as the building is a heritage??) building?

-----Original Message-----
From: s7(2)(a) s7(2)(a)
Sent: Thursday, 28 January 2021 12:07 PM
To: Paul Duffin
Subject: 13 Elizabeth St

FYI

Released under the local Government Official Information and Meetings Act

From: s7(2)(a)
To: Claire Stevens
Subject: Re: 13 Elizabeth St
Date: Monday, 1 February 2021 4:50:27 pm

Thank you Claire

Just an update on progress.

The full DSA has been completed by Seismic Consulting. They are now in the process of doing strengthening design and expect this to be completed in coming weeks. I have engaged a draftsman to draw plans and incorporate structural design when done. Expect to talk with you and team late February.

Kind regards

s7(2)(a)

Sent from my iPhone

On 1/02/2021, at 4:34 PM, Claire Stevens <Claire.Stevens@huttcity.govt.nz> wrote:

> Hi s7(2)(a)
>
> Here is the latest notice issued on this building – this was issued in 2016 due to the previous notice not being complied with
>
> Regards
>
> Claire
>
> **Claire Stevens**
> Building and Quality Assurance Manager
>
> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
> T 04 570 6666, W www.huttcity.govt.nz
>
> <image001.png>
>
> **Claire Stevens**
> Building Quality Assurance Manager
>
> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
> T 04 570 6870, M 027 241 6365, W www.huttcity.govt.nz
>
> <hccsmalllogo_12fb0640-f486-4c5a-a775-f4ab1b1dfb5d.jpg>
> <12153HaHEmailSignatureFINAL_3cd6181d-2156-4dde-9fbd-b6f7f302ed05.JPG>
>
> <BTHemailsignatures-01_f368e1b9-1943-4700-beee-a910940be134.jpg>
>
> IMPORTANT: The information contained in this e-mail message may be legally privileged or

Released under the local Government Official Information and Meetings Act

confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distr bution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.

From: [redacted] s7(2)(a)
Sent: Monday, 1 February 2021 3:29 PM
To: Paul Duffin
Subject: Re: 13 Elizabeth St

Paul

I am in the process of formaising remediation/strengthening works to 13 Elizabeth Street to Heritage NZ. Could you please forward to me an S124 (earthquake prone notice) document as i need to include this in the documents.

The 1960's verandah was beyond repair and not part of the Protected facade. However i will confirm this in writing with heritage NZ and forward to you.

[redacted] s7(2)(a)

On Mon, Feb 1, 2021 at 1:39 PM Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:

> HI [redacted] s7(2)(a)
>
> We are concerned that the veranda was part of the building, albeit possibly added in the 60's as you mention below, and should not have been removed. That being so we now require you to consult with Heritage NZ and request confirmation from them that they have no issue with the veranda's removal.
>
> Paul
>
> Paul Duffin
> Senior Environmental Investigations Officer
>
> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>
> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
> -----O
> From: [redacted] s7(2)(a)
> Sent: T
> To: Paul Duffin
> Subject: Re: 13 Elizabeth St

Released under the Local Government Official Information and Meetings Act

Hi Paul

No, not in writing. Clearly the old veranda was built in 60's and not in keeping and unsafe.

Sent from my iPhone

> On 28/01/2021, at 3:21 PM, Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:
>
> Thanks for that. Was that in writing??
>
>
> Paul Duffin
> Senior Environmental Investigations Officer
>
> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>
>
> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
> -----Original Message-----
> Fro [redacted]
> Sent: Thursday, 28 January 2021 3:12 PM
> To: Paul Duffin
> Subject: Re: 13 Elizabeth St
>
> Hi Paul
>
> Yes, in my discussion with [redacted] it was confirmed the veranda was a recent addition. The old curved front steps were buried within the concrete porch added. These steps will be exposed and remediated as it's felt they are an original feature and to a large extent part of the facade.
>
> Kind regards
>
> [redacted]
>
> Sent from my iPhone
>
>> On 28/01/2021, at 2:47 PM, Paul Duffin <Paul.Duffin@huttcity.govt.nz> wrote:
>>
>> HI [redacted]
>>
>> Thanks for your e-mail. Was there any communication with Heritage NZ regarding the removal of the porch? If there was can you please send it

Released under the local Government Official Information and Meetings Act

through to me.
>>
>> Thanks
>>
>>
>> Paul Duffin
>> Senior Environmental Investigations Officer
>>
>> Hutt City Council, 30 Laings Road, Private Bag 31912, Lower Hutt 5040, New Zealand
>> T , M 027 285 7154, W www.huttcity.govt.nz, F www.facebook.com/huttcitycouncil
>>
>>
>> IMPORTANT: The information contained in this e-mail message may be legally privileged or confidential. The information is intended only for the recipient named in the e-mail message. If the reader of this e-mail message is not the intended recipient, you are notified that any use, copying or distribution of this e-mail message is prohibited. If you have received this e-mail message in error, please notify the sender immediately. Thank you.
>> -----Original Message-----
>> From: [redacted] s7(2)(a)
>> Sent: Thursday, 28 January 2021 12:07 PM
>> To: Paul Duffin
>> Subject: 13 Elizabeth St
>>
>> FYI
>>

<Red Notice 13 Elizabeth Street.pdf>

Released under the local Government Official Information and Meetings Act

From: [redacted]
To: Claire Stevens
Subject: Re: 13 Elizabeth Street
Date: Thursday, 19 November 2020 6:30:40 pm

Hi Claire

Thank you so much and to Stephen and Derek for your kind support. Also for the contacts you have forwarded. I will certainly make a time for a pre application meeting and would include the engineer.

Kind regards

[redacted]

Sent from my iPhone

Released under the local Government Official Information and Meetings Act

From: [redacted]
To: Derek Kerite; Helen Oram
Cc: Chris Hoddinott; Patrick Sweetensen; [redacted]
Subject: RE: 13 Elizabeth Street Petone - Property Files [DLANZ-CLIENT.FID572017]
Date: Wednesday, 28 March 2018 12:20:40 pm
Attachments: Prosecution Analysis - 13 Elizabeth Street.DOCX

Derek and Helen

I attach our prosecution analysis on this matter. Happy to discuss further.

Regards

[redacted]

[redacted]

From: Patrick.Sweetensen@huttcity.govt.nz [mailto:Patrick.sweetensen@huttcity.govt.nz]
Sent: Thursday, 22 March 2018 10:43 a.m.
To: [redacted]
Cc: Derek.Kerite@huttcity.govt.nz; Chris.Hoddinott@huttcity.govt.nz; [redacted]
Subject: 13 Elizabeth Street Petone - Property Files

You have received 1 secure file from Patrick.sweetensen@huttcity.govt.nz.
Use the secure link below to download.

Hi [redacted]

Please find attached all the relevant property files on 13 Elizabeth Street, Petone. Hopefully this is enough to put together a prosecution analysis.

EQ7810105 - All earthquake related files
RM140239 - Resource consent for partial demolition of a Heritage Building
RM080326 - Resource consent for demolition of building at 13 Elizabeth Street, Petone
RM030772 - Resouce consent for boundary adjusment at 11-13 Elizabeth Street
RCNRN16112001 - Resource consent for redevelopment of WelTecPetone Campus

Let me know if you require any further clarification, or if you have difficulty opening the files.

Many thanks,

Patrick

Secure File Downloads:
Available until: **21 April 2018**

Click link to download:

13 Elizabeth Street PETONE.zip
234.61 MB

You have received links within this email sent via Hutt City Council File Sharing. To retrieve he files, please click on the links above.
Thank you for using the Hutt City Council file transfer services.

Released under the Local Government Official Information and Meetings Act

From:	Helen Oram
To:	Stephen Dennis
Cc:	Chris Hoddinott; Derek Kerite; Patrick Sweetensen; Craig Ewart; Jekkie Suwanposee; Hazel McColl
Subject:	RE: 13 Elizabeth Street, Petone
Date:	Tuesday, 26 June 2018 3:32:35 pm

Thank you for letting me know.

It is an earthquake prone building, out of time for earthquake re-strengthening – any enquiries should be relayed also to either Chris Hoddinott or Patrick Sweetensen (or Derek or I) also.

Thanks
Helen

From: Stephen Dennis
Sent: Tuesday, 26 June 2018 3:25 PM
To: __Resource Consents Team
Subject: 13 Elizabeth Street, Petone

Hi Team,

It looks like s7(2)(a) are selling 13 Elizabeth Street (the old Petone courthouse) – or trying to - as I have had a couple of calls about it. If you have any queries about this just put them through to me as I have dealt with it in the previously.

Cheers,
Stephen.

Released under the local Government Official Information and Meetings Act

wsp | OPUS

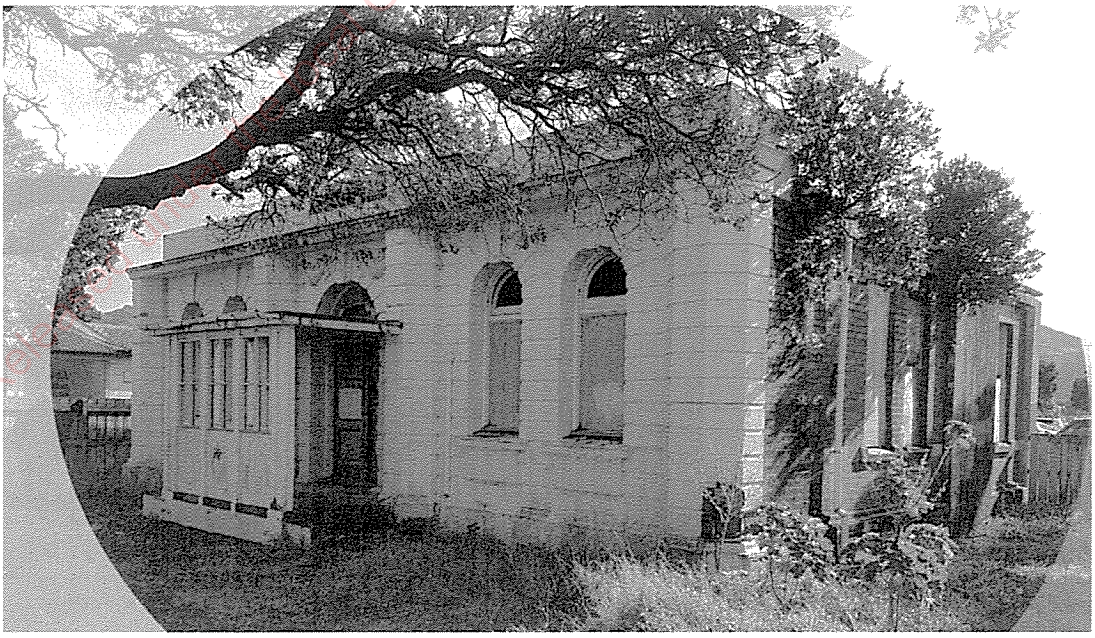
Risk Assessment

Old Court House

13 Elizabeth Street, Petone

Wellington Institute of Technology
Private Bag 39803
Lower Hutt 5045 New Zealand

Released under the Official Information and Meetings Act



Contact Details

Robyn Murray
L8, Majestic Centre, 100 Willis St
PO Box 12 003, Wellington 6144
New Zealand

s7(2)(a)

Document Details:
Date: 18/09/2019
Reference: 5-C3970.00
Status: Rev 1

Prepared By

2019.09.18 09:51:29+12'00'

Robyn Murray
Senior Structural Engineer

Reviewed By

Stanley Chung
Senior Structural Engineer

Approved for Release By

Brendon Cornell
Principal Structural Engineer

Released under the local Government Official Information and Meetings Act

Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status
0	13/09/2019	Robyn Murray	Stanley Chung	Brendon Cornell	Draft
1	18/09/2019	Robyn Murray	Stanley Chung	Brendon Cornell	Final

Revision Details

Revision	Details
0	Draft issued for client review
1	Final

Released under the local Government Official Information and Meetings Act

Executive Summary

WSP Opus has been engaged by Wellington Institute of Technology (WelTec) to carry out a high-level risk assessment of the Old Court House, located at 13 Elizabeth Street, Petone, Lower Hutt, and to propose some conceptual measures for restraining the existing structure. The terms and conditions of our scope of work are set out in our Offer of Service dated 28th August 2019.

The building has been assessed by Hutt City Council as Potentially Earthquake Prone. The building is also listed as a Heritage 2 Building in the Lower Hutt District Plan. The owner is required to strengthen the building within 15 years from the building being identified as Earthquake-Prone under the Buildings (Earthquake-prone Buildings) Amendment Act 2016. WelTec are planning to apply to Hutt City Council for an exemption from strengthening as they intend to sell the property. In lieu of strengthening, WelTec wish to safeguard the public by constructing temporary restraints around the high-risk areas of the building. At present the building is unoccupied, and has been so since 1991.

The original building was constructed around 1911 as a single storey structure with brick perimeter and internal partition walls. A timber roof supporting light metal roofing sheets spans onto the brick walls. Along the front wall the brick external wall continues up past the roof line to create a parapet. Shallow concrete pad foundations support the brick walls and shallow concrete piles support the internal timber floor.

Risk Assessment

WSP Opus engineers noted numerous cracks to the external brick walls which is evidence of past earthquake damage. The north-east and north-west corner of the building has the most damage with bricks bowing outwards and diagonal stepped cracks through the brick work. We expect that the brick perimeter walls are likely to fail out of plane when subject to a 1 in 250 year seismic event.

The area of highest risk is along the west side of the building where there is a walkway which provides access to WelTec campus off Elizabeth Street. There is a narrow distance between this walkway and the building. If the external brick wall collapses outwards, then it can topple onto and over the boundary fence into the walkway. We recommend that timber props are installed at regular centres along this side of the building between the fence and the wall.

Failure of the brick walls poses a moderate risk to persons outside the property boundary on the north side. There is a large grass area beside the building to catch the fallen bricks however there is still a chance they could extend past the fence. Therefore, we recommend that propping is installed to this side of the building as well. A conceptual seismic restraint scheme is provided in Appendix A.

Seismic damage to the building is unlikely to create a hazard to people outside the property on the east and south side. If these two sides of the building are left unrestrained then we recommend that steps are taken to deter people from entering the property. This could be achieved by securing the entrance gate off Elizabeth Street and modifying the fence to the north of the property so that is cannot be mounted.

Released under the Local Government Official Information and Meetings Act

Contents

Released under the local Government Official Information and Meetings Act

1 Scope

WSP Opus has been engaged by WelTec to assess the risk that the Old Court House building at 13 Elizabeth Street in Petone, Lower Hutt poses on neighbouring properties and the public in the event of a low intensity earthquake. We have also provided conceptual measures for restraining the existing structure in the short term (less than 5 years). Our assessment has been completed with reference to the following seismic assessment guidelines.

- The Seismic Assessment of Existing Buildings: Technical Guidelines for Engineering Assessments, July 2017, Version 1.

The Guidelines have been produced by the New Zealand Society of Earthquake Engineering (NZSEE) in conjunction with the Ministry of Business, Innovation and Employment (MBIE) and the Earthquake Commission.

2 Building Description

2.1 Building History

The Old Court House was originally constructed circa 1911 and is listed in the Lower Hutt District Plan as a Heritage 2 building. It served as the Magistrate's Court for the first 40 years after it was built and was then turned into the Petone Police Station. The building has been unoccupied since 1991 when the police station was relocated to Jackson Street. In 2002 the site was purchased by Wellington Institute of Technology (WelTec) who also own the campus to the North of the property. An Initial Evaluation Procedure (IEP) has been completed by others and determined that the building is Potentially Earthquake Prone. WelTec now intend to sell the property and apply for an exemption from Hutt City Council for strengthening the building.

2.2 Site

The properties to the North and West of the Old Court House are also owned by WelTec. There is about a 1.5m clearance between the west side of the building and the boundary fence. A public access way ~2m wide runs parallel to this boundary fence to connect the WelTec campus facilities with Elizabeth Street. Beyond this access route is a preschool and directly to the north of the building is carparking. To the east there is a residential property and there is about a 4.5m distance between the Old Court House and the eastern boundary fence.

Released under the Local Government Official Information and Meetings Act

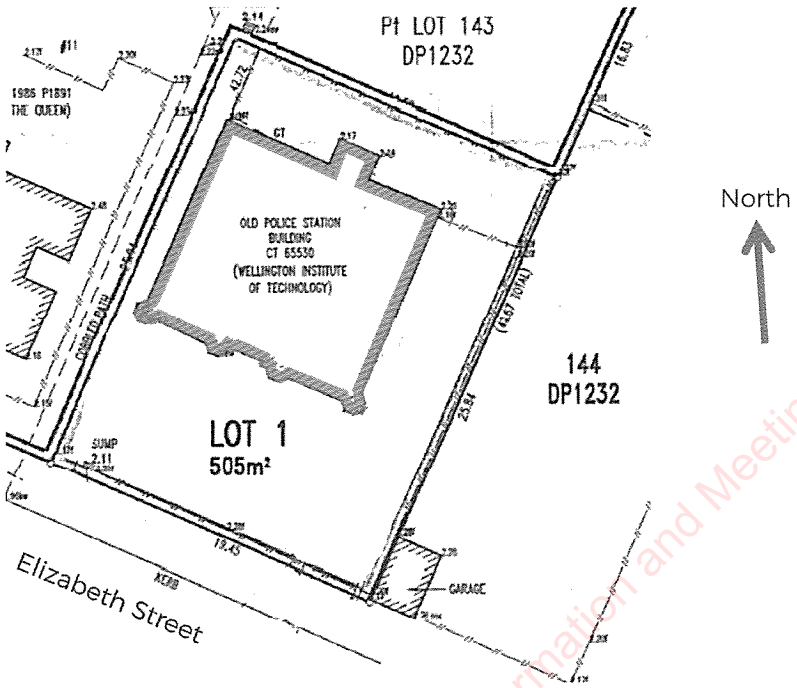


Figure 1: Site Plan of Old Court House Building at 13 Elizabeth Street, Petone

2.3 Building Structure

The building was constructed in the Edwardian Baroque style which is typical for buildings of its era. Perimeter walls are unreinforced masonry (brick) which extend up past the roof line to form a parapet at the building's frontage off Elizabeth Street. The front wall has been heavily plastered with ornate features while on the other three sides is exposed brickwork. A double hip roof has been formed over the square plan area of the building and supports corrugated metal sheet roofing. There is a small timber canopy over the front of the door on the south side and a small lean to entrance at the rear of the building.

Based on our visual assessment of the building and the information provided on the original archive drawings we infer that the building has the following structure:

- Cavity brick walls.
- Perimeter brick walls supported on shallow concrete pad foundations with a DPC layer in between the brick and concrete.
- A continuous unreinforced concrete beam at sill level around the building's perimeter within the width of the wall.
- Reinforced concrete lintel above all windows and doors.
- Timber framed roof.
- Internal timber floor spanning onto the perimeter concrete foundations and supported at internally by shallow concrete piles.
- Remains of a brick chimney on the east side of the building.

The original drawings show that a 2.5m high parapet the building was constructed over the building's frontage. The height of this parapet has since been reduced to about 0.7m above roof level and was likely done in response to the 1947 earthquake in Gisborne.

Released under the Local Government Official Information and Meetings Act

Figure 2: East elevation of Old Court House Building

Released under the Local Government Official Information and Meetings Act

3 Information Sources

3.1 Drawings

Original drawings for the structure were located from Archives New Zealand. Refer to Appendix B.

3.2 Site Geotechnical Information

The site is located within Petone town centre and is generally flat. Research by GNS Science et al. has indicated that the subsoils in this area are Class D – Deep or Soft Soil Site in accordance with NZS1170.5[1]. Previous geotechnical investigations along Jackson Street have indicated that there is a high chance of liquefaction for a seismic event with an annual probability of exceedance of 1 in 200 years. Given this information, it is likely that there will also be liquefaction at 13 Elizabeth Street for the same scale seismic event.

The close proximity of the Petone foreshore and Hutt River to the site indicates that the ground water table is fairly close to the ground surface. These factors also lead to the area being identified by the Hutt City Council as part of the tsunami risk zone. The site is classed by the Greater Wellington Regional Council as having a 2% AEP (Annual Exceedance Probability) risk of flooding. There is no risk of falling rocks or debris from nearby hills.

3.3 Site Visit and Investigations

A site visit was conducted by WSP Opus structural engineers on the 22nd August 2019 to view the building's exterior. It was not possible to view the interior of the building safely. Rough order of magnitude measurements were taken of the building exterior and we took note of any visible damage to the exterior walls.

[1] Refer to the paper *"NZS1170.5:2004 Site Subsoil Classification of Lower Hutt,"* published April 2011

4 Existing Building Condition

The building is showing a number of signs of earthquake damage due to the presence of cracking through the brick walls. The worst area of damage is at the northern end of the building. Very little cracking was observed on the front wall (south side).

At the two corners of the building on the north side there is severe cracking around the window lintels and through the brickwork. The walls and corner columns are leaning outwards and diagonal cracks have formed though the brick wall beside the windows. The brick beam along the top of the wall at these two corners has a vertical crack about 5-10mm wide. Refer to Figure 3 and Figure 4 for the extent of damage.

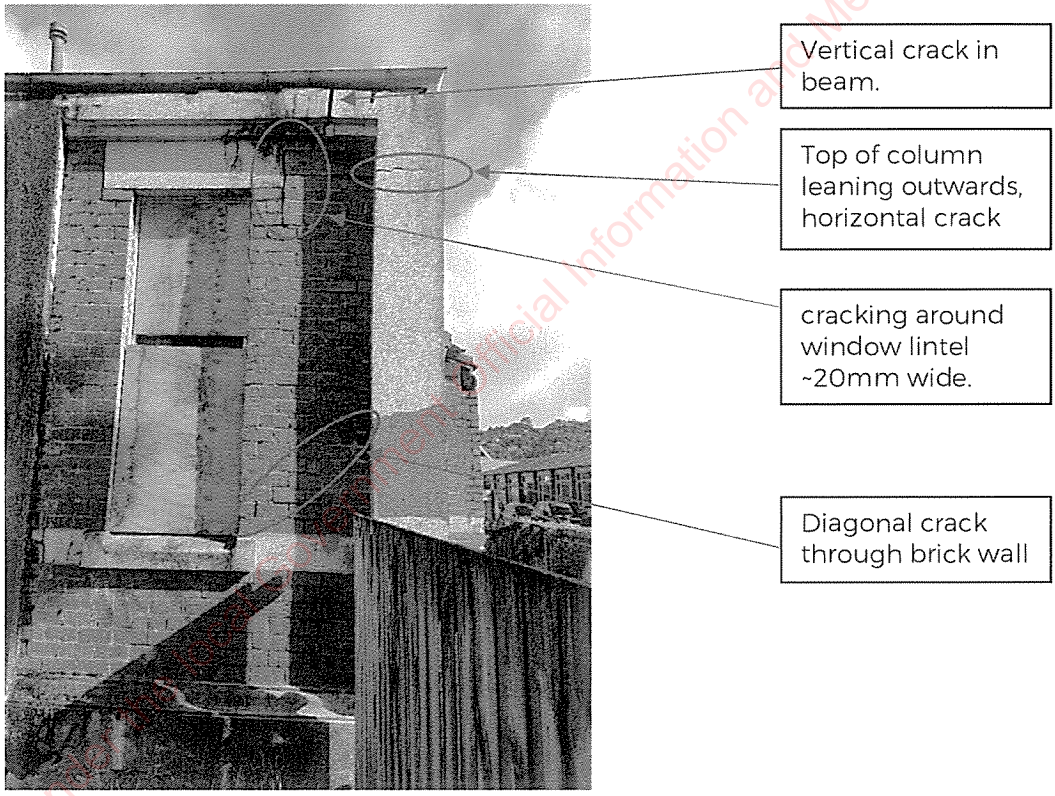


Figure 3: North-East corner of Old Court House showing damage to brick walls

Released under the Official Information Act

Some bricks have fallen away at the top of the wall which forms the lean to on the north side of the building. All the brick columns around the building have minor horizontal cracks (1-2mm wide).

On the west side of the building there is a portion of brick wall between the windows which is bowing outwards. Shoring has already been installed between the wall and the fence to support this section of brick wall. Mortar between the bricks in other areas of the wall on this side has been dislodged/or is missing.

Figure 4: North-West corner of Old Court House showing damage to brick walls

The concrete lintel over two windows on the east side of the building has a horizontal crack along its entire length. This crack has likely been caused by rusting of the reinforcing inside the concrete. The sheet metal roofing is also showing severe signs of rust.

Figure 5 East wall of Old Court House with horizontal crack through concrete lintel

5 Risk Assessment

WSP Opus have carried out a high-level assessment of the likely building damage in a 1 in 250 year seismic event as defined in NZS1170.5. Our assessment is based on sound engineering judgement given the temporary nature of the proposed restraining works. The building is considered as a normal structure with no special requirements for post disaster functionality and is therefore classed as 'Importance Level 2' (IL2) as per Table 3.3 of AS/NZS 1170.0. New Zealand Standards require a new IL2 structure with a design life of 5 years to have enough strength and stability to withstand a 1 in 250 year seismic event.

5.1 Earthquake Return Period

Risk level is proportional to how frequent an event occurs and the scale of impact from that event. The New Zealand Standards have quantified the acceptable risk level for new buildings by setting minimum requirements for the structure when subject to a certain level of ground shaking that is expected to occur at the site. The primary objective is to ensure the life safety of the building occupants by avoiding collapse of the structural system during a large seismic event.

The level of ground shaking used for the design of a new building is described in the New Zealand Standard, NZS1170.5 in terms of 'Earthquake Return Period'. An earthquake with a small return period, such as a 1 in 25 year event, is an earthquake which occurs frequently and with a low intensity of ground shaking. An earthquake of this size is expected to occur at least twice during the 50 year design life of a structure. A large return period corresponds to a very rare earthquake, which is estimated to occur possibly once during the design life of the structure and cause severe ground shaking. An Importance Level 2 building is required to withstand an earthquake with a return period of 1 in 500 years.

5.2 Relative Earthquake Risk

An Earthquake Rating is given to a building as a whole to indicate the seismic standard achieved in regard to human life safety compared with the minimum seismic standard required of a similar new building on the same site. The rating is expressed in terms of percentage of new building standard achieved (XXX%NBS). The earthquake rating for a building as a whole takes account of, and may be governed by, the earthquake scores for individual building elements.

Table A3.1 taken from the NZSEE Guidelines gives a proposed grading system for existing buildings, as one way of interpreting the %NBS score. The risk description for a certain %NBS is the risk to occupants or to neighbouring buildings relative to a building that just meets the minimum performance standard indicated by clause B1 of the Building Code.

Building Grade	%NBS	Approximate Relative Risk to a New Building	Life-Safety Risk Description
A +	>100	<1	Low risk
A	80 to 100	1 to 2 times	Low risk
B	67 to 79	2-5 times	Low or medium risk
C	34 to 66	5-10 times	Medium Risk
D	20 to 33	10-25 times	High Risk
E	<20	More than 25 times	Very High Risk

Released under the Local Government Official Information and Meetings Act

5.3 Seismic Resisting System

The brick perimeter walls are the main structural elements in the building which resist seismic loads. These walls are perforated with windows and doors so their in-plane strength is quite low. Seismic load is transferred into the ground through friction between the concrete foundations under the brick walls and the soil. Diagonal cracking through the brick walls is evidence of where the seismic demand on the walls has exceeded their in-plane strength.

The brick walls do not provide any seismic resistance for the building when seismic load acts across their weak axis. The brick walls rely on the connection to the roof to provide support in this case, which in turn transfers the seismic load into the return brick walls. The outer leaf of the brick wall on the west side of the building is already showing signs of failing about its weak axis.

The existing damage noted on site indicates that the brick walls on the east and west side of the building have tried to resist seismic load from previous earthquakes and consequently failed. The remaining strength of these elements is dubious and therefore they are unlikely to be able to withstand another large earthquake.

5.4 High Risk Areas

The building is classified as Potentially Earthquake Prone by Hutt City Council which means that the structure meets less than 34%NBS. The NZSEE Grading system indicates that the building poses a High to Very High risk when compared with a new building which has been designed to meet current New Zealand Standards. In rough terms, it means the building may not be able to withstand an earthquake with a return period of 1 in 25 years.

The most high risk elements of the building are the brick perimeter walls should they topple outwards. The West side of the building is of particular concern to the public as they are within close proximity to the existing building (about 1.5m away). The stability of the brick perimeter walls, calculated in accordance with MBIE Guidelines, does not meet the likely seismic demand from a 1 in 250 year seismic event which then designates it as a high risk element. Falling bricks will collide with the timber fence which runs along the property boundary beside the walkway. The upper most part of the brick wall could pass over the top of the fence and become a severe hazard to pedestrians using the walkway. The risk area is illustrated in Figure 6. The fence may have enough strength to withstand the impact of the bricks and therefore contain some of the bricks within the property. The possibility of bricks falling onto the walkway is a life safety risk and we have suggested a method for restraining the bricks in Appendix A.

Released under the Local Government Official Information and Meetings Act

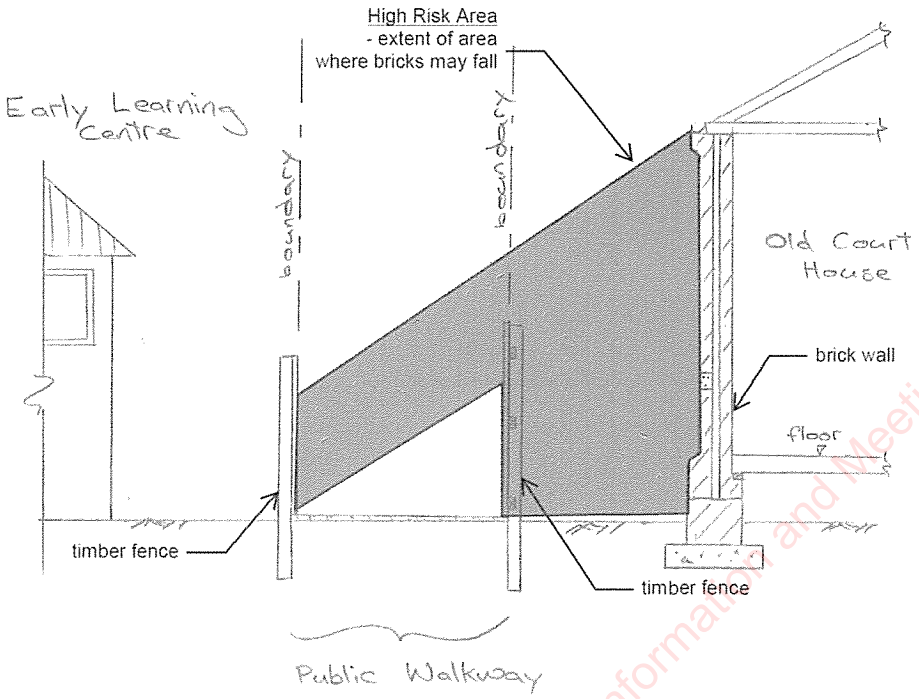


Figure 6 Section through Old Court House west wall showing extent of High Risk Area

The brick walls along the front of the building (south side) are thicker than the other sides so they perform mildly better. There is a medium risk that the front brick walls will collapse outwards. Failure of the front wall is likely be contained within the property due to the large distance between the existing building and the boundary fence. This side of the building is therefore unlikely to pose a risk to persons beyond the property boundary. A site plan showing the extent of falling bricks is given in Figure 7.

Previous earthquakes have already damaged the porch at the rear of the building and caused some of the brick parapet to fall off. These walls are at high risk of collapsing further. The boundary fence on the north side of the property is lower than the other sides so there is a chance that the bricks will fall over the top of the fence. This could then become a hazard to persons who are standing near the north boundary fence.

The residential section to the East of the property is unlikely to be affected by seismic damage to the Old Court House. There is adequate distance between the timber boundary fence and the building that fallen bricks will be contained within the property. At most, the bricks will hit the base of the timber fence, but go no further.

Released under the Local Government Official Information and Meetings Act

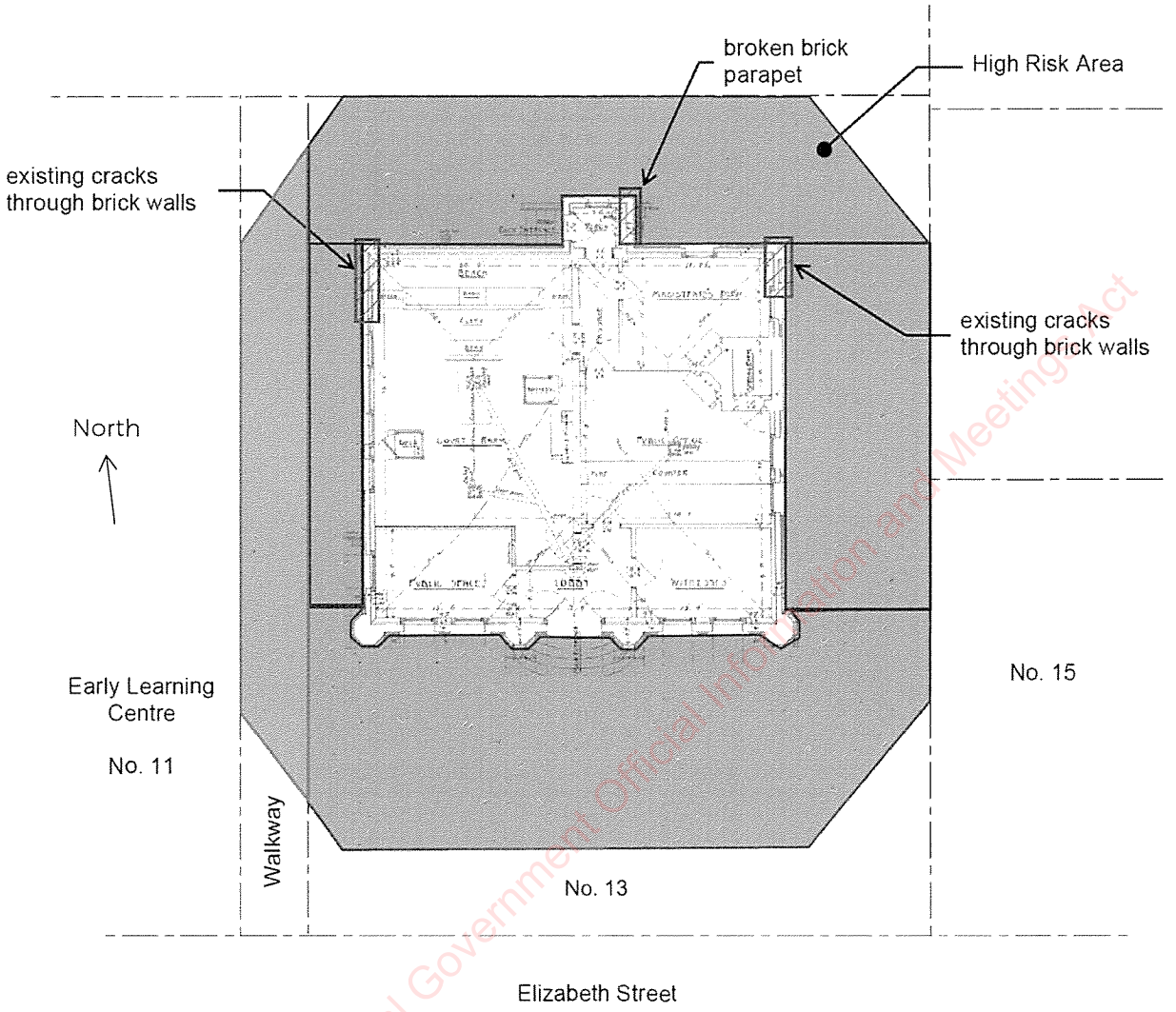


Figure 7 Site Plan of 13 Elizabeth Street, Petone showing extent of High Risk Area

Released under the local Government Official Information and Meetings Act

6 Temporary Seismic Restraint

Based on our risk assessment, WSP Opus propose the following measures to restrain the existing building in the short term and reduce the risk to occupants outside the property boundary. Illustrative sketches are provided in Appendix A.

- Install timber props beside the west and north wall between the boundary fence and the wall. Refer to sketch 1 and 2 for the location of these props and general arrangement.
- Secure the property with a locked gate. Place warning/hazard signs on the boundary fence to deter people from entering the property.
- Increase the height of the timber fence on the north and west side of the property to prevent people from climbing over the boundary and catch any loose bricks.

The proposed restraint system is a conceptual scheme and is limited to the high risk areas which are exposed to the public. Before commencing the detailed design of the restraint system, a general measurement should be made of the existing structure and co-ordination with a contractor.

7 Limitations and Assumptions

Below are the limitations and assumptions made during the assessment of all structures.

a. The opinions in this document are based on the conditions and information available at the time the document was published and assume that the structure was built as per the materials, reinforcement sizes, etc. shown on the drawings that were available to us.

b. The assessment does not cover any non-structural components within the buildings.

8 Conclusion

The Old Court House Building achieves a rating of <34%NBS and is considered a High to Very High to neighbouring buildings when compared with a new building which has been designed to meet current New Zealand Standards. A building with an earthquake rating less than 34 %NBS fulfils one of the requirements for the Territorial Authority to consider it to be an Earthquake-Prone Building (EPB) in terms of the Building Act 2004. Conceptual seismic restraint for the building is provided in Appendix A of this report.

The brick perimeter walls on all but the south side of the building have a high chance of collapsing outwards in a 1 in 250 year seismic event. The area of highest risk is along the west side of the building where there is a walkway which provides access to WelTec campus off Elizabeth Street. There is a narrow distance between this walkway and the building. If the external brick wall collapses outwards, then it can topple onto and over the boundary fence into the walkway. We recommend that timber props are installed at regular centres along this side of the building between the fence and the wall.

Failure of the brick walls poses a moderate risk to persons outside the property boundary on the north side. There is a large grass area beside the building to catch the fallen bricks however there is still a chance they could extend past the fence. Therefore, we recommend that propping is installed to this side of the building as well.

Seismic damage to the building is unlikely to create a hazard to people outside the property on the east and south side. If these two sides of the building are left unrestrained then we recommend that steps are taken to deter people from entering the property. This could be achieved by securing the entrance gate off Elizabeth Street and modifying the fence to the north of the property so that is cannot be mounted.

9 Disclaimer

This report and the conclusions within are prepared for Wellington Institute of Technology in accordance with the clients brief and should not be relied on by other parties for any other purpose or use without written confirmation from WSP Opus of the purpose and suitability.

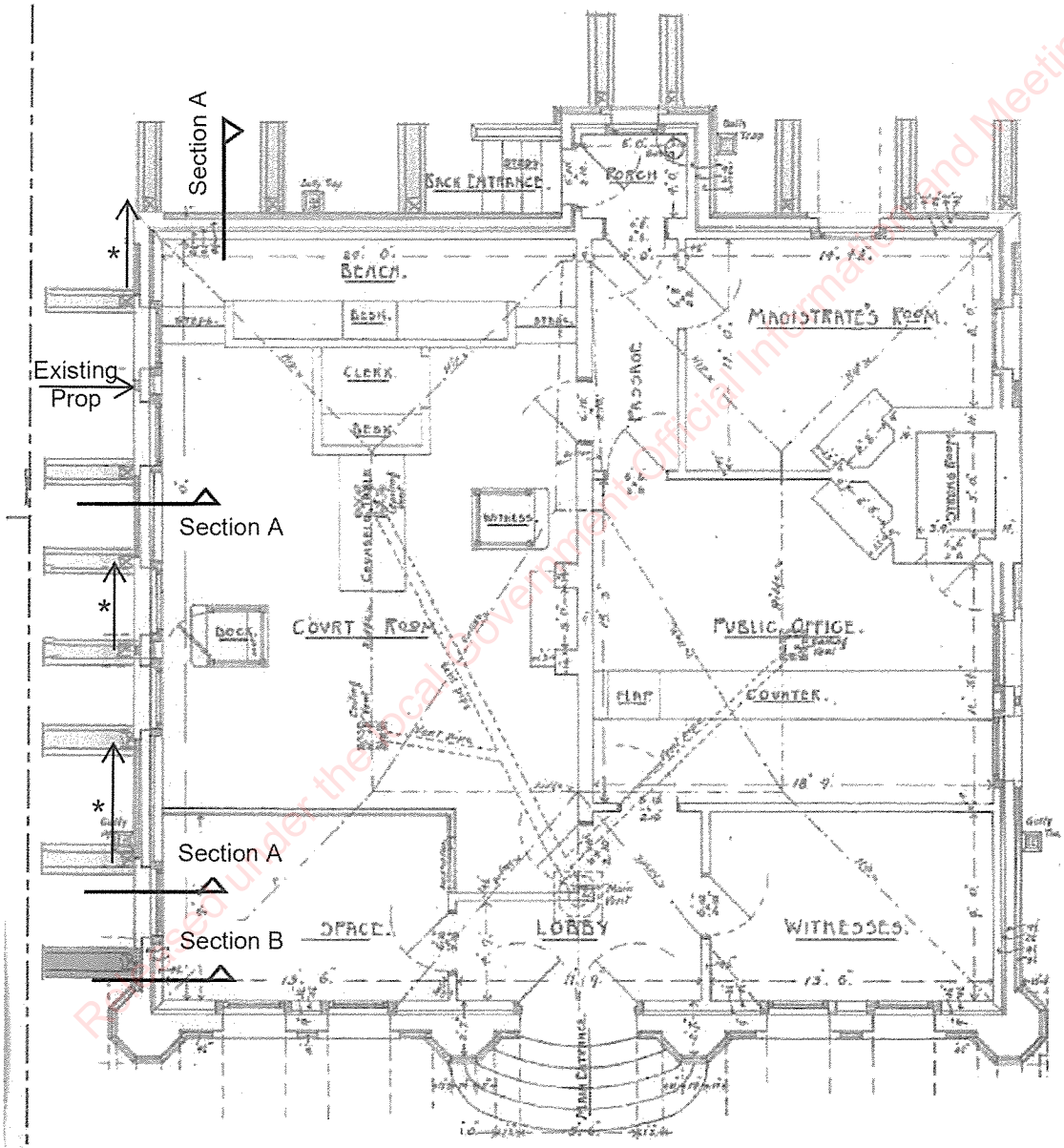
Released under the Local Government Official Information and Meetings Act

Appendix A
Conceptual Restraint Sketches

Released under the local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	1 of 3
Project Description:	Old Court House	Office:	Wellington
	13 Elizabeth Street, Petone	Computed:	5/09/2019
	Floor Plan	Check:	

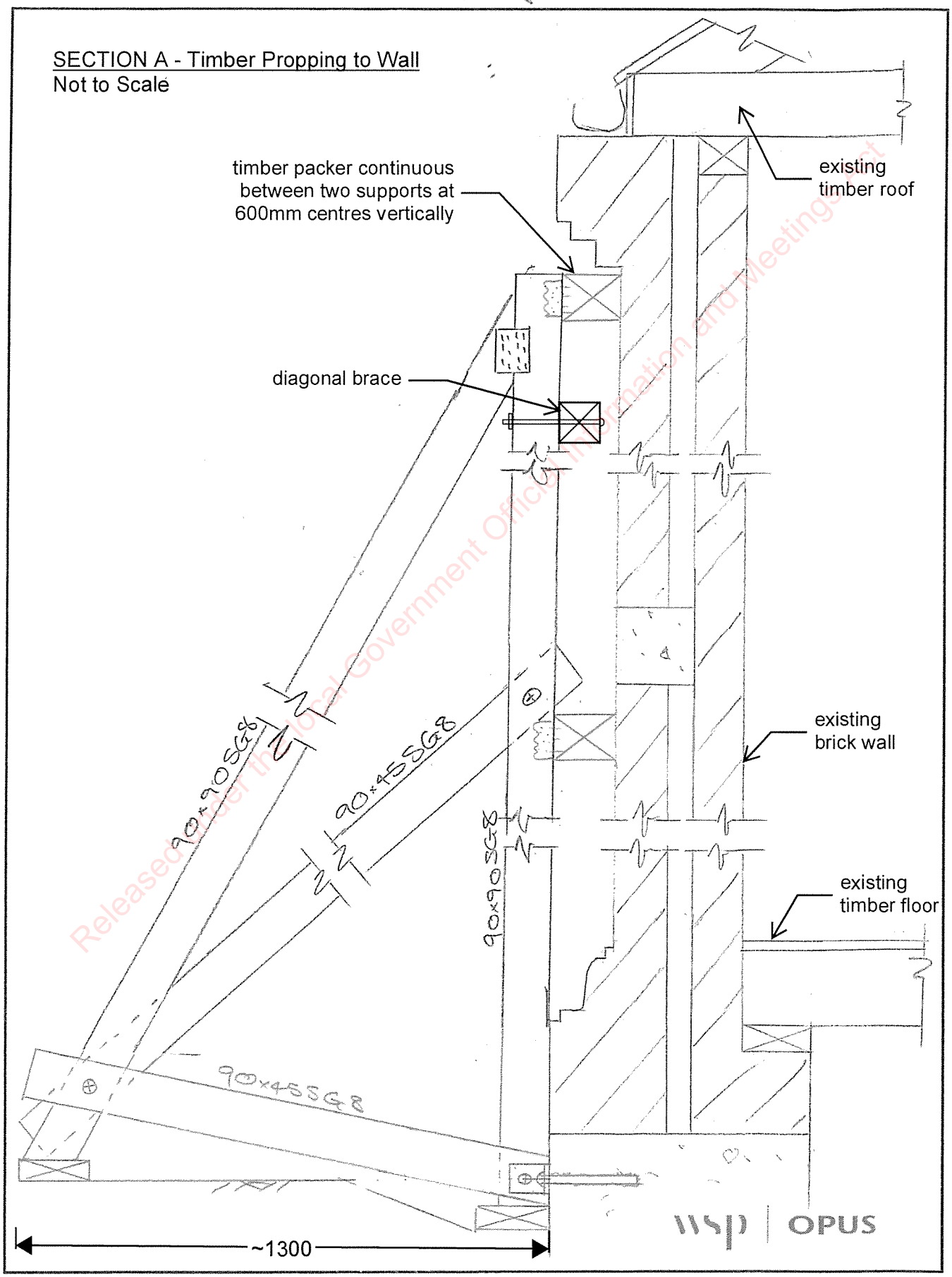


* - Diagonal 90x90 brace between propping

Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

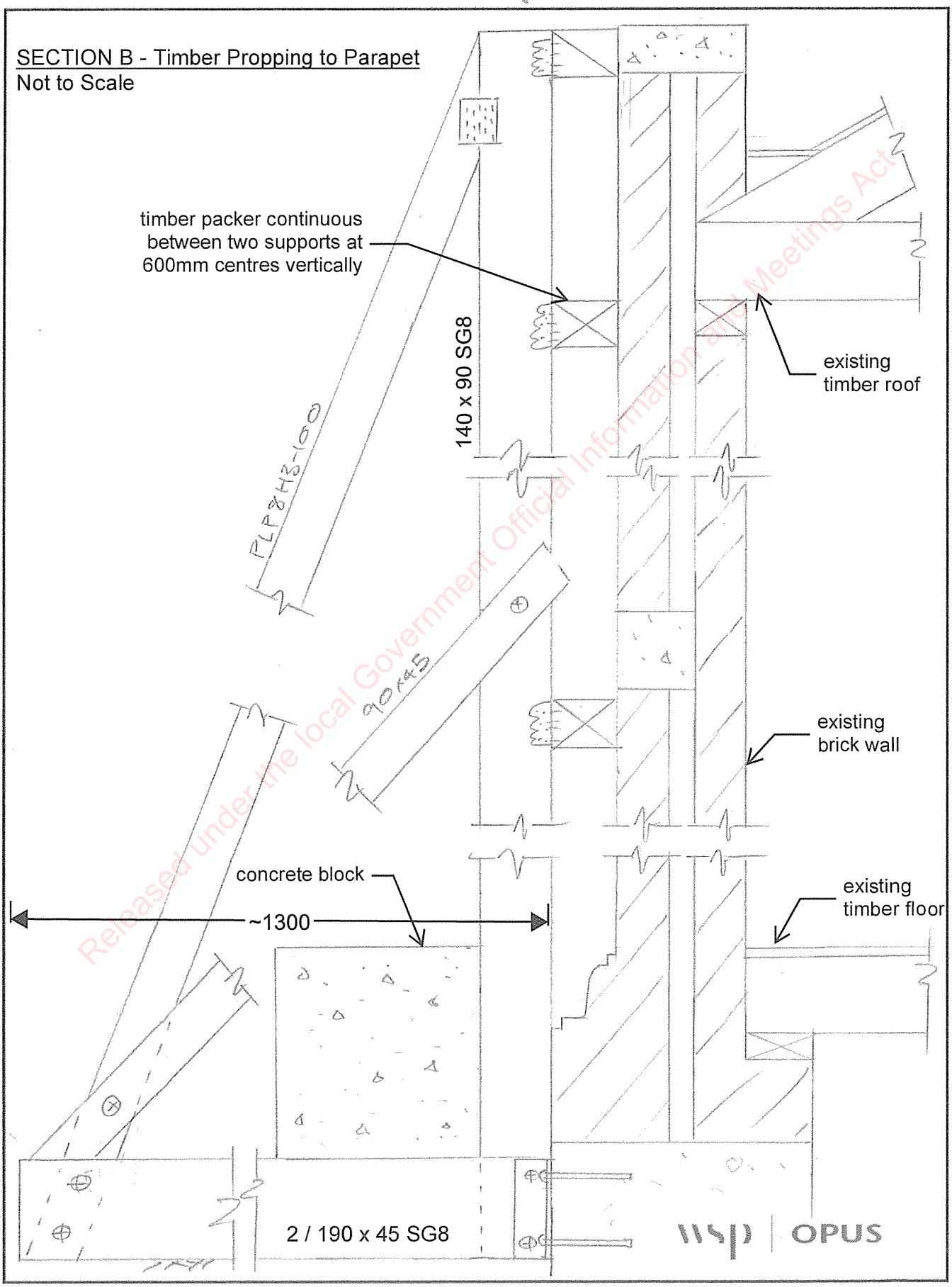
Project/Task/File No:	5-C3970.00	Sheet No	2 of 3
Project Description:	Old Court House (3 Elizabeth St, Petone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	



Released under the Local Government Official Information and Meetings Act

SKETCH SHEET

Project/Task/File No:	5-C3970.00	Sheet No	3 of 3
Project Description:	Old Court House 13 Elizabeth St Pelone Temporary Propping	Office:	Wellington
		Computed:	5/09/2019
		Check:	

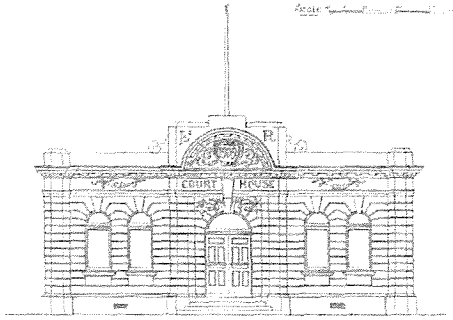


Released under the local Government Official Information and Meetings Act

Appendix B
Original Building Drawings

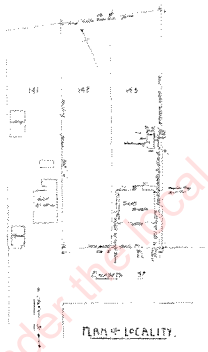
Released under the local Government Official Information and Meetings Act

PETONE COURT HOUSE



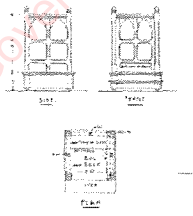
FRONT ELEVATION.

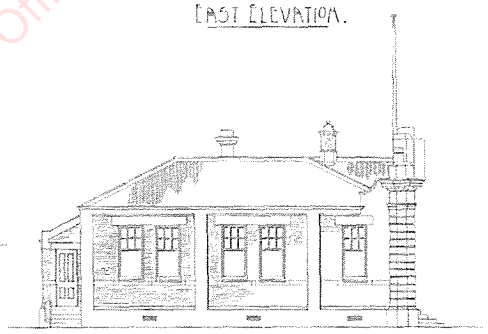
EAST ELEVATION.



PLAN OF LOCALITY.

WITNESS BOX AND DESK.



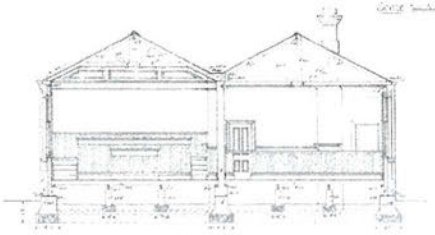


WEST ELEVATION.

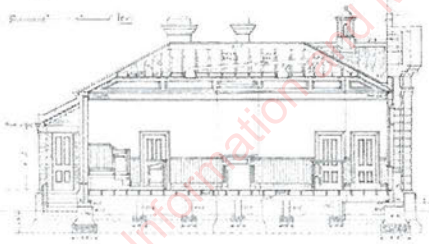
P.W.D. 25462

Released under the Official Information Act

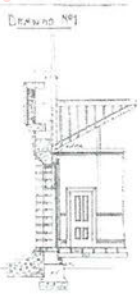
PETONE COURT HOUSE



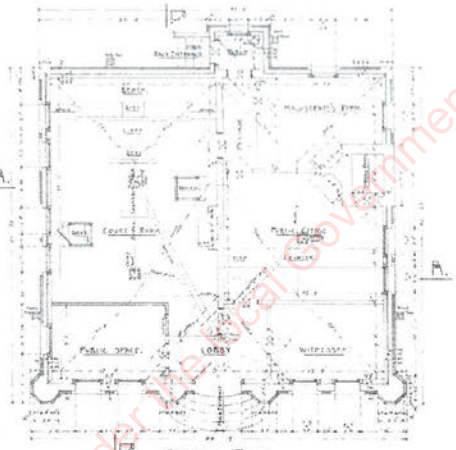
SECTION. A.A.



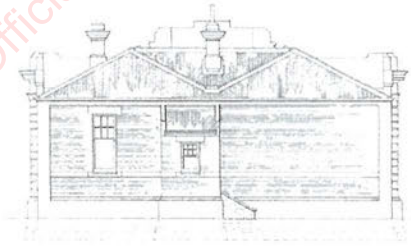
LONGITUDINAL SECTION. B.B.



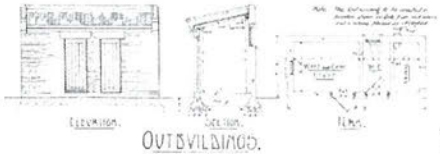
SECTION.



GROUND PLAN.



BACK ELEVATION.



OUTBUILDINGS.

1909

P.W.D. 25462

Released under the Local Government Official Information and Meetings Act

EARTHQUAKE PRONE BUILDING - DO NOT APPROACH

HUTT CITY
TE AWA KAIRANGI

Notice pursuant to S124(2)(b) & S128 of the Building Act 2004

EQP Number: EQ7810105

To:
- **the owners of the building;**
- **the occupiers of the building; and**
- **every person who has an interest in the land on which the building is situated, under a mortgage or other encumbrance registered under the Land Transfer Act 1952; and every person claiming an interest in the land that is protected by a caveat lodged and in force under section 137 of the Land Transfer Act 1952.**

This notice is for the building situated at 13 Elizabeth Street, Petone, more particularly being described as Pt.Lot 143, DP1232, and being all the land comprised in Certificate of Title CT 65530.

The above building has been classified by the Hutt City Council as earthquake-prone under the Building Act 2004.

The meaning of earthquake-prone is defined by section 122 of the Building Act 2004 in conjunction with clause 7 of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005.

For further information please refer to the Hutt City Council's Earthquake-prone Buildings Policy. View the policy at: www.huttcity.govt.nz/earthquake-strength

This notice is issued under section 124(2)(b) of the Building Act 2004. Council advises that people should not approach the building. In accordance with section 128(2) of the Building Act 2004, as a result of this notice:-

No person may:

a) **use or occupy the building; or**
b) **permit another person to use or occupy the building.**

A failure to comply with these restrictions is an offence under the Building Act 2004. In relation to such an offence, section 128A of the Building Act 2004 states:

A person who fails to comply with section 128(2) commits an offence is liable on conviction to a fine not exceeding $200,000 and, in the case of a continuing offence, to a further fine not exceeding $20,000 for every day or part of a day during which the offence has continued.

This notice will remain in effect until a Code Compliance Certificate is issued for building work that strengthens the building to a sufficient degree that it is not earthquake-prone or for the demolition of all or part of the building (so that the remainder of the building, if any, is not earthquake-prone). A building consent must be obtained prior to strengthening or demolition work being undertaken. A Resource Consent may also be required.

If you disagree with the classification of this building as earthquake-prone you may apply for a determination from the Department of Building and Housing under section 177(3)(f)of the Building Act 2004.

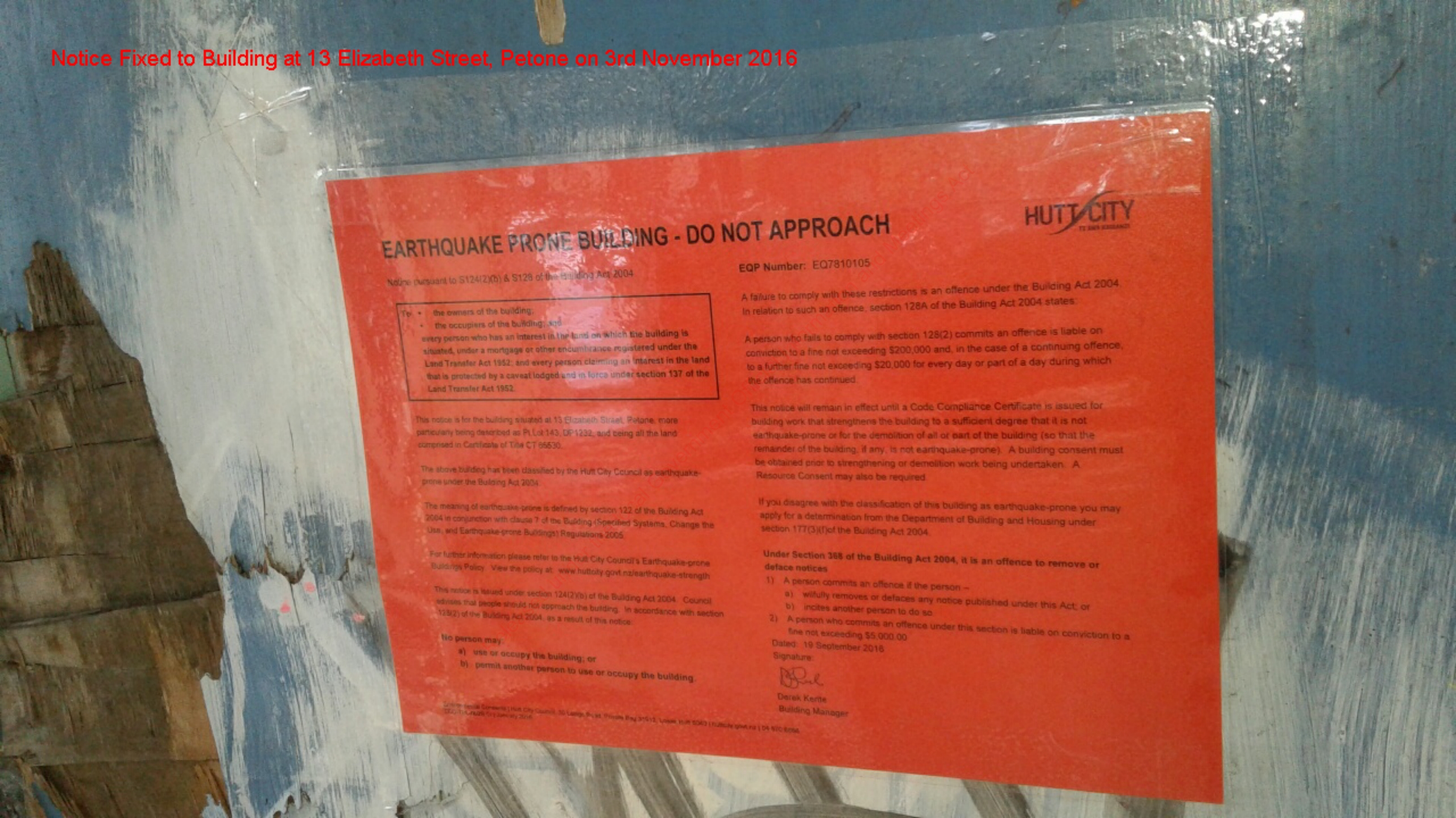
Under Section 368 of the Building Act 2004, it is an offence to remove or deface notices

1) A person commits an offence if the person –
   a) wilfully removes or defaces any notice published under this Act; or
   b) incites another person to do so.
2) A person who commits an offence under this section is liable on conviction to a fine not exceeding $5,000.00

Dated: 19 September 2016
Signature:

Derek Kerite
Building Manager

Notice Fixed to Building at 13 Elizabeth Street, Petone on 3rd November 2016



EARTHQUAKE PRONE BUILDING - DO NOT APPROACH

HUTT CITY

Notice pursuant to S124(2)(b) & S129 of the Building Act 2004

EQP Number: EQ7810105

To:
- the owners of the building;
- the occupiers of the building; and

every person who has an interest in the land on which the building is situated, under a mortgage or other encumbrance registered under the Land Transfer Act 1952; and every person claiming an interest in the land that is protected by a caveat lodged and in force under section 137 of the Land Transfer Act 1952.

This notice is for the building situated at 13 Elizabeth Street, Petone, more particularly being described as Pt Lot 143, DP1232, and being all the land comprised in Certificate of Title CT 66530.

The above building has been classified by the Hutt City Council as earthquake-prone under the Building Act 2004.

The meaning of earthquake-prone is defined by section 122 of the Building Act 2004 in conjunction with clause 7 of the Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005.

For further information please refer to the Hutt City Council's Earthquake-prone Buildings Policy. View the policy at: www.huttcity.govt.nz/earthquake-strength

This notice is issued under section 124(2)(b) of the Building Act 2004. Council advises that people should not approach the building. In accordance with section 128(2) of the Building Act 2004, as a result of this notice:

No person may:

a) **use or occupy the building; or**

b) **permit another person to use or occupy the building.**

A failure to comply with these restrictions is an offence under the Building Act 2004. In relation to such an offence, section 128A of the Building Act 2004 states:

A person who fails to comply with section 128(2) commits an offence is liable on conviction to a fine not exceeding $200,000 and, in the case of a continuing offence, to a further fine not exceeding $20,000 for every day or part of a day during which the offence has continued.

This notice will remain in effect until a Code Compliance Certificate is issued for building work that strengthens the building to a sufficient degree that it is not earthquake-prone or for the demolition of all or part of the building (so that the remainder of the building, if any, is not earthquake-prone). A building consent must be obtained prior to strengthening or demolition work being undertaken. A Resource Consent may also be required.

If you disagree with the classification of this building as earthquake-prone you may apply for a determination from the Department of Building and Housing under section 177(3)(f)of the Building Act 2004.

Under Section 368 of the Building Act 2004, it is an offence to remove or deface notices

1) A person commits an offence if the person –
   a) wilfully removes or defaces any notice published under this Act; or
   b) incites another person to do so.
2) A person who commits an offence under this section is liable on conviction to a fine not exceeding $5,000.00.

Dated: 19 September 2016

Signature:

Derek Kerrie
Building Manager

Civic Square, Queensgate | Hutt City Council, 30 Laings Rd, Private Bag 31912, Lower Hutt 5040 | huttcity.govt.nz | 04 570 6666

Issued 19 September 2016

Released under the local Government Official Information and Meetings Act

Released under the local Government Official Information and Meetings Act

Released under the local Government Official Information and Meetings Act