



West Coast District Health Board

Te Poari Hauora a Rohe o Tai Poutini

Corporate Office
High Street, Greymouth 7840

Telephone 03 769-7400
Fax 03 769-7791

24 April 2019

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

RE Official Information Act request WCDHB 9296

I refer to your email dated 19 March 2019 requesting the following information under the Official Information Act from West Coast DHB regarding delays with the new hospital. Specifically:

The Ministry are not aware of the outcome of the DHB review of the risk associated with prolonged use of existing EQ prone buildings and have not, as yet, received any legal advice provided to the DHB. Jenny Black confirmed legal advice they had received was to have Opus review an earlier report they had provided and this review withheld under s9(2)(i) Private and Confidential - Circulation restricted to Hospital Redevelopment Partnership Group ONLY Page 2 was in progress. Jenny will follow up on this following the WCDHB meeting scheduled for later this week.

- Please may I see a copy of the latest DHB review of use of quake prone buildings?

We received a draft opinion from external solicitors on 26 September 2018 with respect to Greymouth Hospital's Emergency Department. That building remains earthquake-prone (being below 34% New Building Standard). Strengthening work has not commenced given the Emergency Department will be replaced by the new hospital. In the meantime, the West Coast DHB continues to monitor the risk to workers and other persons and, given the delays to completion of the new hospital, whether interim strengthening works should be undertaken.

The draft opinion (yet to be finalised) is withheld under section 9(2)(h) of the Official Information Act i.e. "...to maintain legal professional privilege".

In respect to West Coast DHB's other facilities we refer you to a previous response we provided to a requestor earlier this year (WCDHB 9256 attached as **Appendix 1**) which covers Rapid Assessments for the buildings at Buller, Grey and Reefton Hospitals that were carried out in November 2016.

If you disagree with our decision to withhold information you may, under section 28(3) of the Official Information Act, seek an investigation and review of our decision from the Ombudsman. Information about how to make a complaint is available at www.ombudsman.parliament.nz; or Freephone 0800 802 602.

Please note that this response, or an edited version of this response, may be published on the West Coast DHB website after your receipt of this response.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gullery', with a long, sweeping horizontal line extending to the right.

Carolyn Gullery
Executive Director
Planning, Funding & Decision Support



West Coast District Health Board

Te Poari Hauora a Rohe o Tai Poutini

Corporate Office
High Street, Greymouth 7840

Telephone 03 769-7400
Fax 03 769-7791

11 January 2019

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

RE Official information request WCDHB 9256

We refer to your email dated 28 November 2018 to Ministry of Health requesting the following information under the Official Information Act. I note that the Ministry of Health subsequently partially transferred this request (i.e. questions 1 and 3) to West Coast DHB on 6th December 2018.

1. Any District Health Board Seismic Report's for 2018

We have not obtained any seismic reports for 2018. We attach rapid assessments for the buildings at Buller, Grey and Reefton Hospitals that were obtained in 2016. The accompanying commentary from the structural engineer was *"I didn't see anything of concern structurally and there was no obvious structural damage observed"*.

3. Any information related to non-structural seismic restraints provided by DHBs

We have not obtained any specific reports related to non-structural seismic restraints

I trust that this satisfies your interest in this matter.

Please note that this response, or an edited version of this response, may be published on the West Coast DHB website after your receipt of this response.

Yours sincerely

Ralph La Salle
Acting Executive Director
Planning, Funding & Decision Support

23 November 2016

Opus International Consultants Ltd

P +64 3 769 9330

Craig Shaw
Maintenance Manager
West Coast District Health Board
P O Box 387
Greymouth

Greymouth Office
23 High Street
PO Box 365, Greymouth 7840
New Zealand

Ref: 6-WWESE.10

Property inspected – Buller Hospital Buildings (various)

Dear Craig,

This report confirms the verbal advice provided to you on 23 November 2016 in relation to the rapid structural assessments Opus undertook of the Buller Hospital Buildings listed below (on Tuesday 22 November 2016) following the M7.8 earthquake which occurred on 14 November 2016:

- Boiler House Building,
- Physiotherapy Building,
- Physiotherapy / Mental Health Link Building,
- Mental Health and East / West Wing Office Building,
- Redundant Kitchen / Cafeteria Building,
- Clinical Services Building,
- Foote Ward Building,
- Kitchen Building,
- Radiology Building,
- Dunsford Ward and Café Building,
- Linen Store,
- Electrical Substation Building,
- Mortuary Building.

The scope of our rapid structural assessments comprised of a brief visual inspection of the Buildings to ascertain the level of damage sustained to the primary structure and a brief external visual inspection of the neighbouring buildings and structures which we reasonably believe may impact the seismic performance of the Building. The scope of our inspection is further detailed in the Earthquake Rapid Assessment Forms, which are attached to this letter.

Inspection Summary

In summary, our inspections noted the following observed damage:

- Negligible damage noted to buildings. Some cracking may have anecdotally worsened but generally no evidence of new damage to building.

Unless noted otherwise on the Earthquake Rapid Assessment Forms, we have not inspected any non-structural hazards.

Based on our inspections, it is our assessment that the Building's seismic performance has not been significantly affected. The Buildings listed may therefore be occupied on the same basis as prior to the Earthquake. However, if you become aware of any changes in seismic performance of the neighbouring buildings or structures, please contact us immediately as the change may impact this assessment. In addition, aftershocks may cause more damage that may change this assessment and warrant further inspection of the building and/or neighbouring buildings or structures.

Although it is our assessment that the seismic performance of the buildings listed has not been significantly affected, if you are aware that a Building was Earthquake Prone or is subject to strengthening requirements, we recommend that you review the strengthening actions to ensure that they are still fit for purpose.

Do not hesitate to contact me if you require any further assistance.

Regards



Jason Davidson, Senior Structural Engineer, CPEng 229742

Encl.: Earthquake Rapid Assessment Forms



② Assessment Date* Assessment Time* A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

3 Building Name BOILERHOUSE
Unit / Number* /
Street*
City/Town* NESTPORT
GPS (Degree with 5 decimals after comma) South - East
Other ID or access Photo taken A ☐ No B ☐ Yes Photo ID.

4 Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (0 27) 2248312

5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor <input type="text" value="0"/> <input type="text" value="1"/> + mezzanine	<input type="radio"/> A <1935 <input checked="" type="radio"/> B 1935-1976 1955 <input type="radio"/> C 1977-1984 <input type="radio"/> D 1985-2000 <input type="radio"/> E >2000 <input type="radio"/> F Unknown	<input type="radio"/> A Complex residential <input type="radio"/> B School <input type="radio"/> C Commercial/Office <input type="radio"/> D Industrial <input checked="" type="radio"/> E Critical facility <input type="radio"/> F Public assembly <input type="radio"/> G Other:	<input type="radio"/> A Timber frame <input checked="" type="radio"/> B Steel frame <input checked="" type="radio"/> C Concrete frame <input checked="" type="radio"/> D Concrete shear wall <input type="radio"/> E Tilt-up concrete <input type="radio"/> F Reinforced masonry <input type="radio"/> G Unreinforced masonry <input type="radio"/> H Other:	<input checked="" type="radio"/> A Brick veneer <input checked="" type="radio"/> B Concrete panels <input type="radio"/> C Steel <input type="radio"/> D Glass <input type="radio"/> E Lightweight <input type="radio"/> F Other:
	Storeys below ground <input type="text" value="0"/> <input type="text" value="0"/>				
	Footprint (m²) <input type="text" value="~"/> <input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="0"/>				

7 Potential Cause*		A Yes	B No
1	Objects falling from adjacent buildings. Adjacent building ID or address: <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3	Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4	Other <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

NOTES

13

Some historical cracking in external walls. some cracking may have opened up under but difficult to determine.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

- ① Assessor Name* JASON DAVISON
Assessor ID* Authority* NCOHB
- ② Assessment Date* 22/1/16 Assessment Time* 0900
Day Month Year Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

- ③ Building Name PHYSIOTHERAPY
Unit / Number* Street*
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☐ Yes Photo ID.
- ④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (0 27) 2248312
- ⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1
☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

- ⑥
- | Dimensions | Constr. Age | Building Type | Structure Type | Cladding Type |
|---|--|---|---|---|
| Storeys above ground incl. ground floor
01 | A <input type="radio"/> <1935
B <input checked="" type="radio"/> 1935-1976 1959
C <input type="radio"/> 1977-1984
D <input type="radio"/> 1985-2000
E <input type="radio"/> >2000
F <input type="radio"/> Unknown | A <input type="radio"/> Complex residential
B <input type="radio"/> School
C <input type="radio"/> Commercial/Office
D <input type="radio"/> Industrial
E <input checked="" type="radio"/> Critical facility
F <input type="radio"/> Public assembly
G <input type="radio"/> Other: | A <input checked="" type="radio"/> Timber frame
B <input type="radio"/> Steel frame
C <input type="radio"/> Concrete frame
D <input type="radio"/> Concrete shear wall
E <input type="radio"/> Tilt-up concrete
F <input type="radio"/> Reinforced masonry
G <input type="radio"/> Unreinforced masonry
H <input type="radio"/> Other: | A <input checked="" type="radio"/> Brick veneer
B <input type="radio"/> Concrete panels
C <input type="radio"/> Steel
D <input type="radio"/> Glass
E <input type="radio"/> Lightweight
F <input type="radio"/> Other: |
| Storeys below ground
00 | | | | |
| Footprint (m ²) | | | | |

EXTERNAL RISKS

- ⑦ Potential Cause*
- | | A Yes | B No |
|---|-----------------------|----------------------------------|
| 1 Objects falling from adjacent buildings. Adjacent building ID or address: | <input type="radio"/> | <input checked="" type="radio"/> |
| 2 Land instability above | <input type="radio"/> | <input checked="" type="radio"/> |
| 3 Land instability below | <input type="radio"/> | <input checked="" type="radio"/> |
| 4 Other | <input type="radio"/> | <input checked="" type="radio"/> |

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Non-structural Hazards*	N/A	A	B	C	D
11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments: *Some historical settlement may have worsened as a result of EQ. Difficult to determine.*

9

Estimated Damage

A ☐ None

B ☒ 0-10%

C ☐ 11-30%

D ☐ 31-60%

E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage

Light or no damage

Level 2 Rapid Assessment Outcome*

W ☒ CAN BE USED (From assessment no known dangers)

Y1 ☐ RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY

Moderate damage

Y2 ☐ RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision

Access to be supervised A ☐ Yes B ☐ No

Heavy damage

R1 ☐ ENTRY PROHIBITED (At risk from external factors)

R2 ☐ ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*

Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

[Signature]

NOTES

13

Historical settlement of ground around piers to western end up to 300mm. Cracking in veneer on northern wall may be worse. Eastern wing of physio (extension) with pool settling away from building.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No



If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Non-structural Hazards*	N/A	A	B	C	D
11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments: *Some cracking in ceiling (historic). Crack of junction with old kitchen (pre-existing) may have worsened.*

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input checked="" type="radio"/> Complete

Assessor Signature* *[Signature]*

NOTES

13

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



- ② Assessment Date*
Day Month Year
- Assessment Time*
Hour Minute
(to nearest half hour)
- A ☒ AM B ☐ PM

(3) Building Name MENTAL HEALTH & EAST WEST WING
Unit / Number* [] [] / [] [] OFFICE BUILDING
Street* [] [] [] [] [] [] [] [] [] []
City/Town* WESTPORT [] [] [] [] [] [] [] [] [] []
GPS (Degree with 5 decimals after comma) South - [] [] , [] [] [] East [] [] , [] []
Other ID or access [] Photo taken A ☐ No B ☒ Yes Photo ID. [] [] []

(4) Contact Name TONY ROBERTS [] [] [] [] [] [] [] [] [] []
Type A ☐ Owner B ☐ Tenant C ☒ Other [] [] [] []
Phone (with area code) (0 27) 2248312

(5) Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* [] [] [] Day Month Year Team ID* [] [] [] []

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor 01	A <input checked="" type="radio"/> <1935	A <input type="radio"/> Complex residential	A <input type="radio"/> Timber frame	A <input type="radio"/> Brick veneer
	Storeys below ground 00	B <input type="radio"/> 1935-1976	B <input type="radio"/> School	B <input type="radio"/> Steel frame	B <input type="radio"/> Concrete panels
	Footprint (m²) 800	C <input type="radio"/> 1977-1984	C <input type="radio"/> Commercial/Office	C <input type="radio"/> Concrete frame	C <input type="radio"/> Steel
		D <input type="radio"/> 1985-2000	D <input type="radio"/> Industrial	D <input type="radio"/> Concrete shear wall	D <input type="radio"/> Glass
		E <input type="radio"/> >2000	E <input type="radio"/> Critical facility	E <input type="radio"/> Tilt-up concrete	E <input type="radio"/> Lightweight
		F <input type="radio"/> Unknown	F <input type="radio"/> Public assembly	F <input type="radio"/> Reinforced masonry	F <input type="radio"/> Other:
		G <input checked="" type="radio"/> Other: Non essential Hospital	G <input checked="" type="radio"/> Unreinforced masonry	G <input checked="" type="radio"/> Other:	
				H <input type="radio"/> Other:	

7 Potential Cause*		A Yes	B No
1	Objects falling from adjacent buildings. Adjacent building ID or address: <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3	Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4	Other <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/> <input type="text"/> <input type="text"/>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						


9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

Observed Damage	Level 2 Rapid Assessment Outcome*	Survey Extent*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)	Exterior A <input type="radio"/> Partial B <input checked="" type="radio"/> Complete
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No	Interior C <input type="radio"/> Not accessed D <input checked="" type="radio"/> Partial E <input type="radio"/> Complete
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors) R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)	

Assessor Signature* 

NOTES

13 Pre-existing cracking in foundations. Ext. brick walls have been strengthened.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVIDSON
Assessor ID* [] Authority* WLOHB

② Assessment Date* 22/1/16 Assessment Time* 09:40
Day Month Year Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name REDUNDANT KITCHEN/CAFETERIA
Unit / Number* [] / []
Street* []
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - [] East []
Other ID or access [] Photo taken A ☐ No B ☐ Yes Photo ID. []

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other []
Phone (with area code) (0 27) 2248312

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1
☐ Y2 ☐ R2 Date* [] Day [] Month [] Year Team ID* []

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor []	A <input checked="" type="radio"/> <1935	A <input type="radio"/> Complex residential	A <input type="radio"/> Timber frame	A <input checked="" type="radio"/> Brick veneer
Storeys below ground []	B <input type="radio"/> 1935-1976	B <input type="radio"/> School	B <input type="radio"/> Steel frame	B <input type="radio"/> Concrete panels
Footprint (m²) []	C <input type="radio"/> 1977-1984	C <input type="radio"/> Commercial/Office	C <input type="radio"/> Concrete frame	C <input type="radio"/> Steel
	D <input type="radio"/> 1985-2000	D <input type="radio"/> Industrial	D <input type="radio"/> Concrete shear wall	D <input type="radio"/> Glass
	E <input type="radio"/> >2000	E <input checked="" type="radio"/> Critical facility	E <input type="radio"/> Tilt-up concrete	E <input type="radio"/> Lightweight
	F <input type="radio"/> Unknown	F <input type="radio"/> Public assembly	F <input type="radio"/> Reinforced masonry	F <input type="radio"/> Other: []
		G <input type="radio"/> Other: []	G <input checked="" type="radio"/> Unreinforced masonry	
			H <input type="radio"/> Other: []	

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: []	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other []	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT


8		Damage					Damage						
		N/A	Unknown	Minor or None	Moderate	Severe			N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*		N/A	A	B	C	D	Non-structural Hazards*		N/A	A	B	C	D
1	Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11	Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13	Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*		N/A	A	B	C	D	14	Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17	Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18	Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>						
9	Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>						
10	Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>						

9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10 Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11 Observed Damage	Level 2 Rapid Assessment Outcome*	12 Survey Extent*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)	Exterior A <input checked="" type="radio"/> Partial
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY	B <input type="radio"/> Complete
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision	Interior C <input type="radio"/> Not accessed
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No	D <input checked="" type="radio"/> Partial
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)	E <input type="radio"/> Complete
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)	
Assessor Signature: 		

NOTES

13 *crack on western wall alongside corridor may have worsened. Difficult to tell.*

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



② Assessment Date* Assessment Time* A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

3 Building Name CLINICAL SERVICES

Unit / Number* /

Street*

City/Town* NESPORT

GPS (Degree with 5 decimals after comma) South - , East ,

Other ID or access Photo taken A ☐ No B ☐ Yes Photo ID.

4 Contact Name TONY ROBERTS

Type A ☐ Owner B ☐ Tenant C ☒ Other

Phone (with area code) (0 27) 2248312

5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2

Date* / / Day Month Year Team ID*

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor <input type="text" value="0"/> <input type="text" value="1"/>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other: <input type="text"/>	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <input type="text"/>	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <input type="text"/>
	Storeys below ground <input type="text" value="0"/> <input type="text" value="0"/>				
	Footprint (m²) <input type="text" value="4"/> <input type="text" value="0"/> <input type="text" value="0"/>				

7 Potential Cause*		A Yes	B No
1	Objects falling from adjacent buildings. Adjacent building ID or address: <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3	Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4	Other <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

[Signature]

NOTES

13

Two minor cracks noted in veneer on north + east walls. Most likely pre-existing. Nails (x2) sitting proud of ceiling in treatment room. Recommend check on ceiling by maintenance staff to look @ cause & repair as required.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVIDSON
Assessor ID* Authority* WCOHB

② Assessment Date* 22/11/16 Assessment Time* 10:15
Day Month Year Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name FOOTE NARD
Unit / Number*
Street*
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☐ Yes Photo ID.

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (0 27) 2248312

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1
☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor 01	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other:	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other:	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input checked="" type="radio"/> Lightweight F <input type="radio"/> Other:
Storeys below ground 00				
Footprint (m²) 500				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address:	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

NOTES

13

No evidence of EQ. damage. Inspected foundations through tunnels. No evidence of movement around foundations.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON OAVINSON
Assessor ID* Authority* WCOHB

② Assessment Date* 22/1/16 Assessment Time* 10:45
Day Month Year Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name KITCHEN
Unit / Number*
Street*
City/Town* NESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☐ Yes Photo ID.

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (027) 2248312

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1
☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor 1	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other:	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other:	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other:
Storeys below ground 0				
Footprint (m²) 300				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address:	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Non-structural Hazards*	N/A	A	B	C	D
11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage

Light or no damage

Level 2 Rapid Assessment Outcome*

W ☒ CAN BE USED (From assessment no known dangers)

Moderate damage

Y1 ☐ RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY

Y2 ☐ RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision

Access to be supervised A ☐ Yes B ☐ No

Heavy damage

R1 ☐ ENTRY PROHIBITED (At risk from external factors)

R2 ☐ ENTRY PROHIBITED (Severe damage to building)

Assessor Signature*

[Signature]

12

Survey Extent*

Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

NOTES

13

No evidence of any EQ. related damage. Did not assess main kitchen area.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVISON
Assessor ID* Authority* WCOHB

② Assessment Date* 22/1/16 Assessment Time* 1055
Day Month Year Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name RADIOLOGY
Unit / Number*
Street*
City/Town* NESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (0 27) 2248312

⑤ Existing Placard* ☐ None ☐ W ☐ Y1 ☐ R1
☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor 01	A <input checked="" type="radio"/> <1935 B <input type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other:	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input checked="" type="radio"/> Unreinforced masonry H <input type="radio"/> Other:	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other:
Storeys below ground 00				
Footprint (m²) 130				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address:	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/> <input type="text"/> <input type="text"/>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	


SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature: 

NOTES

13

No damage noted.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVIDSON
Assessor ID* [] Authority* WCOHB

② Assessment Date* 22/11/16 Assessment Time* 11:05
Day Month Year Hour Minute (to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name DUNSFORD WARD & CAFE
Unit / Number* [] / []
Street* []
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - [] , [] East [] , []
Other ID or access [] Photo taken A ☐ No B ☐ Yes Photo ID. []

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other []
Phone (with area code) (0 27) 2248312

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* [] [] [] [] [] [] Team ID* [] [] [] [] [] []
Day Month Year

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor 01	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other: []	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: []	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: []
Storeys below ground 00				
Footprint (m²) [] [] []				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: []	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other []	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/> <input type="text"/> <input type="text"/>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

[Signature]

NOTES

13

No obvious EQ. Damage

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



VERSION 01 - APRIL 2014

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature* 

NOTES

13

Historic cracking in perimeter foundation.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



② Assessment Date* Assessment Time* A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

3 Building Name ELECTRICAL SUBSTATION
Unit / Number*
Street*
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.
4 Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other
Phone (with area code) (027) 2248312
5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2
Date* Day Month Year Team ID*

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor <input type="text" value="0"/> <input type="text" value="1"/>	<input type="radio"/> A <1935 <input checked="" type="radio"/> B 1935-1976 <input type="radio"/> C 1977-1984	<input type="radio"/> A Complex residential <input type="radio"/> B School <input type="radio"/> C Commercial/Office	<input type="radio"/> A Timber frame <input type="radio"/> B Steel frame <input type="radio"/> C Concrete frame	<input type="radio"/> A Brick veneer <input checked="" type="radio"/> B Concrete panels <input type="radio"/> C Steel
	Storeys below ground <input type="text" value="0"/> <input type="text" value="0"/>	<input type="radio"/> D 1985-2000 <input type="radio"/> E >2000 <input type="radio"/> F Unknown	<input type="radio"/> D Industrial <input checked="" type="radio"/> E Critical facility <input type="radio"/> F Public assembly <input type="radio"/> G Other:	<input checked="" type="radio"/> D Concrete shear wall <input type="radio"/> E Tilt-up concrete <input type="radio"/> F Reinforced masonry <input type="radio"/> G Unreinforced masonry <input type="radio"/> H Other:	<input type="radio"/> D Glass <input type="radio"/> E Lightweight <input type="radio"/> F Other:
	Footprint (m ²) <input type="text" value=""/> <input type="text" value=""/> <input type="text" value="3"/> <input type="text" value="0"/>		<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>

7 Potential Cause*		A Yes	B No
1	Objects falling from adjacent buildings. Adjacent building ID or address: <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3	Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4	Other <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D	Non-structural Hazards*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input checked="" type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

NOTES

13

No obvious EQ. damage. Substation is a very robust looking building.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON OAVENDSON
Assessor ID* Authority* NCAHB

② Assessment Date* 22/11/16 Assessment Time* 11:40 A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name MORTUARY
Unit / Number* /
Street*
City/Town* WESTPORT
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name TONY ROBERTS
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE
Phone (with area code) (0 27) 2 248312

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*
Day Month Year

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>01</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: <u>Mortuary</u>	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input checked="" type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <u> </u>	A <input checked="" type="radio"/> Brick veneer B <input checked="" type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u> </u>
Storeys below ground <u>00</u>				
Footprint (m²) <u> 50 </u>				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		13 Ceilings, light fixtures	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D		14 Interior walls, partitions	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		16 Significant fire safety concerns	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		18 Other: <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		Comments: <i>Vertical crack in northern wall, possibly due to settlement. Existing but may have widened?</i>				
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9 Estimated Damage A ☐ None B ☒ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11 **Observed Damage** **Level 2 Rapid Assessment Outcome***

Light or no damage W ☒ **CAN BE USED** (From assessment no known dangers)


Moderate damage Y1 ☐ **RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY**

Y2 ☐ **RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision**

Access to be supervised A ☐ Yes B ☐ No

Heavy damage R1 ☐ **ENTRY PROHIBITED (At risk from external factors)**

R2 ☐ **ENTRY PROHIBITED (Severe damage to building)**

Assessor Signature* 

12 **Survey Extent***

Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input checked="" type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input type="radio"/> Complete

NOTES

13

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No

23 November 2016

Opus International Consultants Ltd

P +64 3 769 9330

Craig Shaw
Maintenance Manager
West Coast District Health Board
P O Box 387
Greymouth

Greymouth Office
23 High Street
PO Box 365, Greymouth 7840
New Zealand

Ref: 6-WWESE.10

Property inspected – Reefton Hospital Buildings (various)

Dear Craig,

This report confirms the verbal advice provided to you on 23 November 2016 in relation to the rapid structural assessment Opus undertook of the Reefton Hospital Buildings listed below (on Tuesday 22 November 2016) following the M7.8 earthquake which occurred on 14 November 2016:

- Concrete Water Tanks,
- Chimney Stack,
- Boiler House Building,
- Workshop Building

The scope of our rapid structural assessment comprised of a brief visual inspection of the Buildings listed to ascertain the level of damage sustained to the primary structure and a brief external visual inspection of the neighbouring buildings and structures which we reasonably believe may impact the seismic performance of the Building. The scope of our inspection is further detailed in the Earthquake Rapid Assessment Forms, which are attached to this letter.

Inspection Summary

In summary, our inspections noted the following observed damage:

- No earthquake damage noted to buildings.
- Although not earthquake related, it was observed that the concrete roof of the workshop is in a very poor state. Water is leaking through cracks in the concrete and there is significant calcification of the concrete evident. This water will also lead to deterioration of the steel reinforcing and we recommend that this leaking be addressed before it becomes a structural issue.
- In addition to the above buildings which were inspected, we completed a walk around of the main timber framed hospital building. We did not observe any earthquake damage in this additional inspection.

Unless noted otherwise on the Earthquake Rapid Assessment Forms, we have not inspected any non-structural hazards.

Based on our inspections, it is our assessment that the Building's seismic performance has not been significantly affected. The Buildings listed may therefore be occupied on the same basis as prior to the Earthquake. However, if you become aware of any changes in seismic performance of the neighbouring buildings or structures, please contact us immediately as the change may impact this assessment. In addition, aftershocks may cause more damage that may change this assessment and warrant further inspection of the building and/or neighbouring buildings or structures.

Although it is our assessment that the seismic performance of the buildings listed has not been significantly affected, if you are aware that a Building was Earthquake Prone or is subject to strengthening requirements, we recommend that you review the strengthening actions to ensure that they are still fit for purpose.

Do not hesitate to contact me if you require any further assistance.

Regards



Jason Davidson, Senior Structural Engineer, CPEng 229742

Encl.: Earthquake Rapid Assessment Forms – Reefton Hospital



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVISON
Assessor ID* Authority* NC04B
② Assessment Date* 22 11 16 Assessment Time* 01 43 A ☐ AM B ☒ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name WATER TANKS
Unit / Number* /
Street* BROADWAY
City/Town* REEFTON
GPS (Degree with 5 decimals after comma) South - East
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.
④ Contact Name ALLY CAODIE
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE.
Phone (with area code) (0 27) 2458166
⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*
Day Month Year

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>01</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other: <u>WATER TANKS</u>	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input checked="" type="radio"/> Other: <u>CONCRETE PRECAST TANKS.</u>	A <input type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u>CONCRETE</u>
Storeys below ground <u>00</u>				
Footprint (m²) <u> 15</u>				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D	Non-structural Hazards*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>No leaking of tanks since EQ.</i>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input checked="" type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

NOTES

13

concrete water tanks. No evidence of movement around tanks at ground level.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVISON
Assessor ID* Authority* WCOMB

② Assessment Date* 22/11/16 Assessment Time* 02:00 A ☐ AM B ☒ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name CHIMNEY STACK
Unit / Number* /
Street* BROADWAY STREET
City/Town* REEFTON
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name ALLY CAODIE
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE
Phone (with area code) (0 27) 2458166

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* / / Team ID*
Day Month Year

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>—</u> <u>N/A</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: <u>CHIMNEY STACK</u>	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input checked="" type="radio"/> Unreinforced masonry H <input checked="" type="radio"/> Other: <u>CONCRETE</u>	A <input type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u>N/A</u>
Storeys below ground <u>—</u> <u>0</u>				
Footprint (m²) <u> </u> <u>3</u>				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

Comments: *old cracking and spalling of concrete evident. No fresh looking cracks near ground level. Ally has checked verifiability of stilt.*

9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors) R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

Assessor Signature* *[Signature]*

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input checked="" type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input type="radio"/> Complete

NOTES

13 *some cracking around chimney but does not appear flexural. More along cold joints in concrete pours. No evidence of foundation movement. some concrete spalling due to reinforcing corrosion. (~70' tall)*

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVIDSON
Assessor ID* Authority* WCOHB

② Assessment Date* 22 11 16 Assessment Time* 02 10 A ☐ AM B ☒ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name BOILER HOUSE
Unit / Number* /
Street* BROADWAY
City/Town* KEEFTON
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name ALLY CAODIE
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE
Phone (with area code) (027) 2458166

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*
Day Month Year

BUILDING DESCRIPTION

⑥ Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>01</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other: <u>Boiler House</u>	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <u> </u>	A <input type="radio"/> Brick veneer B <input checked="" type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u> </u>
Storeys below ground <u>00</u>				
Footprint (m²) <u>200</u>				

EXTERNAL RISKS

⑦ Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D	Non-structural Hazards*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage

A ☒ None

B ☐ 0-10%

C ☐ 11-30%

D ☐ 31-60%

E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage

Light or no damage

Level 2 Rapid Assessment Outcome*

W ☒ CAN BE USED (From assessment no known dangers)

Moderate damage

Y1 ☐ RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY

Y2 ☐ RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision

Access to be supervised A ☐ Yes B ☐ No

Heavy damage

R1 ☐ ENTRY PROHIBITED (At risk from external factors)

R2 ☐ ENTRY PROHIBITED (Severe damage to building)

Assessor Signature*

[Signature]

12

Survey Extent*

Exterior

A ☒ Partial

B ☐ Complete

Interior

C ☐ Not accessed

D ☐ Partial

E ☒ Complete

NOTES

13

No evidence of EQ. Damage. Ad cracking etc. appears old.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No



BUILDING IDENTIFICATION

BUILDING DESCRIPTION

EXTERNAL RISKS

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D	Non-structural Hazards*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>Roof of workshop building is in a very poor state.</i>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

[Signature]

NOTES

13

Large number of old cracks throughout building. Flat concrete roof is leaking, likely leading to deterioration of reinforcing steel. Recommend addressing leaking roof

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No

23 November 2016

Opus International Consultants Ltd

P +64 3 769 9330

Craig Shaw
Maintenance Manager
West Coast District Health Board
P O Box 387
Greymouth

Greymouth Office
23 High Street
PO Box 365, Greymouth 7840
New Zealand

Ref: 6-WWESE.10

Property inspected – Grey Hospital Buildings (various)

Dear Craig,

This report confirms the verbal advice provided to you on 23 November 2016 in relation to the rapid structural assessments Opus undertook of the Grey Hospital Buildings listed below (on Wednesday 23 November 2016) following the M7.8 earthquake which occurred on 14 November 2016:

- Boiler House Building,
- Acute and Community Mental Health Building,
- Laboratory Building,
- ED / Clinical Services Building,
- Morice Ward Building (Wards 1 and 2 North Building),
- Hannan Ward Building (Wards 3 and 4 Building),
- Kitchen Block Building,
- Child and Adolescent Mental Health Services (CAMHS).

The scope of our rapid structural assessments comprised of a brief visual inspection of the Buildings to ascertain the level of damage sustained to the primary structure and a brief external visual inspection of the neighbouring buildings and structures which we reasonably believe may impact the seismic performance of the Building.

Prior to carrying out these inspections we reviewed the original Opus Detailed Seismic Assessment Reports completed for these buildings (c2012-c2013) to confirm weaknesses identified in the assessments so that we could pay particular attention to these items in our inspection. We also reviewed previous photos of the Boiler House to assess whether there had been any increase in cracking at the junction between the Boiler House and Generator Buildings, and along the eastern wall of the Boiler House building.

The scope of our inspection is further detailed in the Earthquake Rapid Assessment Forms, which are attached to this letter.

Inspection Summary

In summary, our inspections noted the following observed damage:

- Negligible damage noted to buildings. Some cracking may have anecdotally worsened but generally no evidence of new damage to building.

Unless noted otherwise on the Earthquake Rapid Assessment Forms, we have not inspected any non-structural hazards.

Based on our inspections, it is our assessment that the Building's seismic performance has not been significantly affected. The Buildings listed may therefore be occupied on the same basis as prior to the Earthquake. However, if you become aware of any changes in seismic performance of the neighbouring buildings or structures, please contact us immediately as the change may impact this assessment. In addition, aftershocks may cause more damage that may change this assessment and warrant further inspection of the building and/or neighbouring buildings or structures.

Although it is our assessment that the seismic performance of the buildings listed has not been significantly affected, if you are aware that a Building was Earthquake Prone or is subject to strengthening requirements, we recommend that you review the strengthening actions to ensure that they are still fit for purpose.

We also recommend building maintenance staff carry out a full walk through of the entire hospital to identify any loose / damaged ceiling tiles so that these can be immediately repaired or replaced.

Do not hesitate to contact me if you require any further assistance.

Regards



Jason Davidson, Senior Structural Engineer, CPEng 229742

Encl.: Earthquake Rapid Assessment Forms



Fields with asterisks (*) are mandatory, others are optional.

② Assessment Date* Assessment Time* A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor <input type="text" value="0"/> <input type="text" value="1"/>	<input type="radio"/> <1935 <input checked="" type="radio"/> 1935-1976 <input type="radio"/> 1977-1984 <input type="radio"/> 1985-2000 <input type="radio"/> >2000 <input type="radio"/> Unknown	<input type="radio"/> Complex residential <input type="radio"/> School <input type="radio"/> Commercial/Office <input type="radio"/> Industrial <input type="radio"/> Critical facility <input type="radio"/> Public assembly <input checked="" type="radio"/> Other: <input type="text" value="Hospital Boiler House."/>	<input type="radio"/> Timber frame <input type="radio"/> Steel frame <input checked="" type="radio"/> Concrete frame <input type="radio"/> Concrete shear wall <input type="radio"/> Tilt-up concrete <input type="radio"/> Reinforced masonry <input checked="" type="radio"/> Unreinforced masonry <input type="radio"/> Other: <input type="text"/>	<input checked="" type="radio"/> Brick veneer <input type="radio"/> Concrete panels <input type="radio"/> Steel <input type="radio"/> Glass <input type="radio"/> Lightweight <input type="radio"/> Other: <input type="text"/>
	Storeys below ground <input type="text" value="0"/> <input type="text" value="1"/>				
	Footprint (m²) <input type="text" value=""/> <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="0"/>				

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>Cracking in walls appears pre-existing</i>					
9 Precast connections	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input type="radio"/> Partial
	B <input checked="" type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature* *[Signature]*

NOTES

13

Crack in northern wall of generator shed. Reviewed March 2012 photos and cracking in generator shed and back wall of boiler house appears the same.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVIDSON
Assessor ID* Authority* NCDHB

② Assessment Date* 23 11 16 Assessment Time* 10 30 A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name ACUTE & COMMUNITY MENTAL HEALTH
Unit / Number* /
Street*
City/Town* GREYMOUTH
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name CRAIG SHAW
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE MANAGER
Phone (with area code) (027) 7687004

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*
Day Month Year

BUILDING DESCRIPTION

⑥ Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>02</u> + plant room	A <input type="radio"/> <1935 B <input type="radio"/> 1935-1976 C <input checked="" type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: <u>Hospital, non-essential</u>	A <input checked="" type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <u> </u>	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u> </u>
Storeys below ground <u>01</u>				
Footprint (m ²) <u>1240</u>				

EXTERNAL RISKS

⑦ Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>Recommend walkover by WCDMS to check ceiling tiles</i>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9

Estimated Damage

A ☒ None

B ☐ 0-10%

C ☐ 11-30%

D ☐ 31-60%

E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature

[Signature]

NOTES

13

Inspected timber framed walls @ First Floor Level Critical elements - refer DSA. No evidence of movement/damage.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page?

☐ Yes

☒ No



① Assessor Name* JASON DAVISON
Assessor ID* Authority* WCOHB

② Assessment Date* Day Month Year

Assessment Time* Hour Minute
(to nearest half hour)

A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

(3) Building Name LABORATORY

Unit / Number*

Street*

City/Town* GREYMOUTH

GPS (Degree with 5 decimals after comma) South - , East ,

Other ID or access

Photo taken A No B Yes Photo ID.

④ Contact Name CRAIG SHAW

Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE MANAGER

Phone (with area code) (0 27) 768 700 4

5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

6	Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
	Storeys above ground incl. ground floor <div><input type="text" value=""/></div> <div><input type="text" value=""/></div>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: <div>Hospital - non-essential</div>	A <input checked="" type="radio"/> Timber frame B <input checked="" type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <div></div>	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <div></div>
	Storeys below ground <div><input type="text" value=""/></div> <div><input type="text" value=""/></div>				
	Footprint (m ²) <div><input type="text" value=""/></div> <div><input type="text" value="8"/></div> <div><input type="text" value="3"/></div> <div><input type="text" value="0"/></div>				

EXTERNAL RISKS

7 Potential Cause*		A Yes	B No
1	Objects falling from adjacent buildings. Adjacent building ID or address: <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3	Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4	Other <input type="text"/>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

Overall Hazard*	Damage					Non-structural Hazards*	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>checked trusses + connections in roof. No signs of damage.</i>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

Observed Damage	Level 2 Rapid Assessment Outcome*	Survey Extent*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)	Exterior A <input checked="" type="radio"/> Partial
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY	B <input type="radio"/> Complete
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision	Interior C <input type="radio"/> Not accessed
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No	D <input checked="" type="radio"/> Partial
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)	E <input type="radio"/> Complete
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)	
Assessor Signature* <i>[Signature]</i>		

NOTES

13 *Inspected short column on southern wall and roof trusses + connection near mid span of ext. wall. No evidence of damage/movement.*

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVISON
Assessor ID* Authority* NCOHB

② Assessment Date* 23 11 16 Assessment Time* 11 15 A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name EO / CLINICAL SERVICES BUILDING.
Unit / Number* /
Street*
City/Town* UK EY MOUTH
GPS (Degree with 5 decimals after comma) South - , East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name CRAIG SHAW
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE MANAGER
Phone (with area code) (027) 7687004

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*

BUILDING DESCRIPTION

⑥ Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>01</u> <u>plum + room</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input checked="" type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input type="radio"/> Other: <u> </u>	A <input type="radio"/> Timber frame B <input checked="" type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <u> </u>	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input checked="" type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u> </u>
Storeys below ground <u>00</u>				
Footprint (m²) <u>1500</u>				

EXTERNAL RISKS

⑦ Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9

Estimated Damage

A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

[Signature]

NOTES

13

Inspected external columns. No evidence of cracking

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No



- VERSION 01 - APRIL 2014

DAMAGE ASSESSMENT

Overall Hazard*	Damage					Non-structural Hazards*	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	14 Interior walls, partitions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <i>No evidence of movement</i>					
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<i>2 seismic separation between buildings</i>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						

9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

Observed Damage	Level 2 Rapid Assessment Outcome*	Survey Extent*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)	Exterior A <input checked="" type="radio"/> Partial
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY	B <input type="radio"/> Complete
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision	Interior C <input type="radio"/> Not accessed
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No	D <input checked="" type="radio"/> Partial
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)	E <input type="radio"/> Complete
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)	
Assessor Signature* <i>[Signature]</i>		

NOTES

13 *Building now vacant.*

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* **JASON DAVIDSON**
Assessor ID* **WCOHB** Authority* **WCOHB**

② Assessment Date* **23/11/16** Day Month Year
Assessment Time* **11:40** Hour Minute
(to nearest half hour) A ☒ AM B ☐ PM

BUILDING IDENTIFICATION

③ Building Name **HANNAN WARD (WARDS 3 & 4)**
Unit / Number* **1/1**
Street* **GREYMOUTH**
City/Town* **GREYMOUTH**
GPS (Degree with 5 decimals after comma) South **-**, **1**, **1** East **1**, **1**
Other ID or access **1** Photo taken A ☐ No B ☐ Yes Photo ID. **1**

④ Contact Name **CRAIG SHAW**
Type A ☐ Owner B ☐ Tenant C ☒ Other **MAINTENANCE MANAGER**
Phone (with area code) **(027) 7687004**

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* **11/11/16** Day Month Year Team ID* **1**

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor 02	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: hospital, non-essential	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other:	A <input checked="" type="radio"/> Brick veneer B <input type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: 1
Storeys below ground 01				
Footprint (m²) 1200				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: 1	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other 1	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Non-structural Hazards*	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D	13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Comments: <input type="text"/>					
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>					

9 Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required) B1 <input type="radio"/> Structural Engineer B2 <input type="radio"/> Geotechnical Engineer B3 <input type="radio"/> Other: <input type="text"/> C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	A <input checked="" type="radio"/> None required B <input type="radio"/> Cordon required Describe extent (add diagram on separate sheet if required)	A <input checked="" type="radio"/> None required B <input type="radio"/> Barricades already in place C <input type="radio"/> Barricades required Describe extent (add diagram on separate sheet if required)	A <input type="radio"/> Standard B <input type="radio"/> Immediate action required

SUMMARY

11 Observed Damage Light or no damage <div style="background-color: yellow; padding: 5px;"> Moderate damage </div> <div style="background-color: red; padding: 5px;"> Heavy damage </div>	Level 2 Rapid Assessment Outcome* W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers) <div style="background-color: yellow; padding: 5px;"> Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No </div> <div style="background-color: red; padding: 5px;"> R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors) R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building) </div>	12 Survey Extent* <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2">Exterior</td> <td>A <input checked="" type="radio"/> Partial</td> </tr> <tr> <td>B <input type="radio"/> Complete</td> </tr> <tr> <td rowspan="3">Interior</td> <td>C <input type="radio"/> Not accessed</td> </tr> <tr> <td>D <input checked="" type="radio"/> Partial</td> </tr> <tr> <td>E <input type="radio"/> Complete</td> </tr> </table>	Exterior	A <input checked="" type="radio"/> Partial	B <input type="radio"/> Complete	Interior	C <input type="radio"/> Not accessed	D <input checked="" type="radio"/> Partial	E <input type="radio"/> Complete
Exterior	A <input checked="" type="radio"/> Partial								
	B <input type="radio"/> Complete								
Interior	C <input type="radio"/> Not accessed								
	D <input checked="" type="radio"/> Partial								
	E <input type="radio"/> Complete								
Assessor Signature*									

NOTES

13 *Fine cracking in strengthened walls @ LG Level. Appears shrinkage related.*

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No



Fields with asterisks (*) are mandatory, others are optional.

② Assessment Date* Assessment Time* A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

5 Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* Team ID*

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Damage				
	N/A	Unknown	Minor or None	Moderate	Severe
Non-structural Hazards*	N/A	A	B	C	D
11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
13 Ceilings, light fixtures	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
14 Interior walls, partitions	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
15 Access/egress (elevators, stairs, exits)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
16 Significant fire safety concerns	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments: *Some pre-existing cracking around doors to corridor. Small crack opposite external doorway*

9 Estimated Damage A ☐ None B ☒ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required) B1 <input type="radio"/> Structural Engineer B2 <input type="radio"/> Geotechnical Engineer B3 <input type="radio"/> Other: <input type="text"/> C <input type="radio"/> Further evaluation to be arranged by building owner: <input type="text"/>	A <input checked="" type="radio"/> None required B <input type="radio"/> Cordon required Describe extent (add diagram on separate sheet if required) <input type="text"/> <input type="text"/> <input type="text"/>	A <input checked="" type="radio"/> None required B <input type="radio"/> Barricades already in place C <input type="radio"/> Barricades required Describe extent (add diagram on separate sheet if required) <input type="text"/> <input type="text"/> <input type="text"/>	A <input type="radio"/> Standard B <input type="radio"/> Immediate action required

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY Y2 <input type="radio"/> RESTRICTED ACCESS - SHORT TERM ENTRY ONLY with or without supervision Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors) R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

Assessor Signature* *[Signature]*

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input type="radio"/> Not accessed
	D <input checked="" type="radio"/> Partial
	E <input type="radio"/> Complete

NOTES

13

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☐ No



EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all
Non-Residential Buildings
Level 2

ASSESSMENT

Fields with asterisks (*) are mandatory, others are optional.

① Assessor Name* JASON DAVENSON
Assessor ID* Authority* NCOHB

② Assessment Date* 23/11/16 Assessment Time* 12:25 A ☒ AM B ☐ PM
Day Month Year Hour Minute
(to nearest half hour)

BUILDING IDENTIFICATION

③ Building Name CHILD & ADOLESCENT MENTAL HEALTH SERVICES (CAMHS)
Unit / Number* 107,
Street* LOWDER STREET
City/Town* GREYMOUTH
GPS (Degree with 5 decimals after comma) South -, East ,
Other ID or access Photo taken A ☐ No B ☒ Yes Photo ID.

④ Contact Name CRAIG SHAW
Type A ☐ Owner B ☐ Tenant C ☒ Other MAINTENANCE MANAGER
Phone (with area code) (027) 7687004

⑤ Existing Placard* ☒ None ☐ W ☐ Y1 ☐ R1 ☐ Y2 ☐ R2 Date* / / Team ID*
Day Month Year

BUILDING DESCRIPTION

Dimensions	Constr. Age	Building Type	Structure Type	Cladding Type
Storeys above ground incl. ground floor <u>02</u>	A <input type="radio"/> <1935 B <input checked="" type="radio"/> 1935-1976 C <input type="radio"/> 1977-1984 D <input type="radio"/> 1985-2000 E <input type="radio"/> >2000 F <input type="radio"/> Unknown	A <input type="radio"/> Complex residential B <input type="radio"/> School C <input type="radio"/> Commercial/Office D <input type="radio"/> Industrial E <input type="radio"/> Critical facility F <input type="radio"/> Public assembly G <input checked="" type="radio"/> Other: <u>Hospital non-essential</u>	A <input type="radio"/> Timber frame B <input type="radio"/> Steel frame C <input checked="" type="radio"/> Concrete frame D <input checked="" type="radio"/> Concrete shear wall E <input type="radio"/> Tilt-up concrete F <input type="radio"/> Reinforced masonry G <input type="radio"/> Unreinforced masonry H <input type="radio"/> Other: <u> </u>	A <input type="radio"/> Brick veneer B <input checked="" type="radio"/> Concrete panels C <input type="radio"/> Steel D <input type="radio"/> Glass E <input type="radio"/> Lightweight F <input type="radio"/> Other: <u> </u>
Storeys below ground <u>00</u>				
Footprint (m²) <u>180</u>				

EXTERNAL RISKS

Potential Cause*	A Yes	B No
1 Objects falling from adjacent buildings. Adjacent building ID or address: <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>
2 Land instability above	<input type="radio"/>	<input checked="" type="radio"/>
3 Land instability below	<input type="radio"/>	<input checked="" type="radio"/>
4 Other <u> </u>	<input type="radio"/>	<input checked="" type="radio"/>

If required add sketch on separate page showing extent and nature of the external risk factors.

DAMAGE ASSESSMENT

8

	Damage						Damage				
	N/A	Unknown	Minor or None	Moderate	Severe		N/A	Unknown	Minor or None	Moderate	Severe
Overall Hazard*	N/A	A	B	C	D		N/A	A	B	C	D
1 Collapse or partial collapse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		11 Parapets, ornamentation, chimneys	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2 Building or storey leaning	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		12 Cladding, glazing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
3 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		13 Ceilings, light fixtures	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Structural Hazards*	N/A	A	B	C	D		14 Interior walls, partitions	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4 Foundations	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		15 Access/egress (elevators, stairs, exits)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5 Roofs, floors	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		16 Significant fire safety concerns	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6 Gravity systems (columns, beams, etc)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		17 Utilities (e.g. gas, electricity, waste water, plumbing)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7 Lateral systems (walls, frames, braces)	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		18 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8 Diaphragms, horizontal bracing	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>		Comments: <input type="text"/>				
9 Precast connections	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="text"/>				
10 Other: <input type="text"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="text"/>				

9

Estimated Damage A ☒ None B ☐ 0-10% C ☐ 11-30% D ☐ 31-60% E ☐ 61-100%

SUGGESTED FURTHER ACTIONS

10

Recommended further Assessment*	Safety Cordon*	Barricades*	Urgency of suggested action*
A <input checked="" type="radio"/> None	A <input checked="" type="radio"/> None required	A <input checked="" type="radio"/> None required	A <input type="radio"/> Standard
B <input type="radio"/> Level 2 Rapid Assessment (tick below if particular expertise is required)	B <input type="radio"/> Cordon required	B <input type="radio"/> Barricades already in place	B <input type="radio"/> Immediate action required
B1 <input type="radio"/> Structural Engineer	Describe extent (add diagram on separate sheet if required)	C <input type="radio"/> Barricades required	
B2 <input type="radio"/> Geotechnical Engineer	<input type="text"/>	Describe extent (add diagram on separate sheet if required)	
B3 <input type="radio"/> Other: <input type="text"/>	<input type="text"/>	<input type="text"/>	
C <input type="radio"/> Further evaluation to be arranged by building owner:	<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

SUMMARY

11

Observed Damage	Level 2 Rapid Assessment Outcome*
Light or no damage	W <input checked="" type="radio"/> CAN BE USED (From assessment no known dangers)
Moderate damage	Y1 <input type="radio"/> RESTRICTED ACCESS TO PART(S) OF THE BUILDING ONLY
	Y2 <input type="radio"/> RESTRICTED ACCESS – SHORT TERM ENTRY ONLY with or without supervision
	Access to be supervised A <input type="radio"/> Yes B <input type="radio"/> No
Heavy damage	R1 <input type="radio"/> ENTRY PROHIBITED (At risk from external factors)
	R2 <input type="radio"/> ENTRY PROHIBITED (Severe damage to building)

12

Survey Extent*	
Exterior	A <input checked="" type="radio"/> Partial
	B <input type="radio"/> Complete
Interior	C <input checked="" type="radio"/> Not accessed
	D <input type="radio"/> Partial
	E <input type="radio"/> Complete

Assessor Signature*

NOTES

13

checked connection between original build + extension.
No evidence of movement.

If required add a sketch on a separate sheet of paper showing building damage, access restrictions or cordoning areas. Identify the building on the sketch and staple the sheet to this assessment form.

Sketch included on separate page? ☐ Yes ☒ No