# The building at 120 The Terrace is not considered earthquake-prone under the current legislation.

This status comes as a result of an assessment process carried out under Council's previous earthquake-prone building policy 2009 which Council is reasonably satisfied qualifies as a previous assessment in terms of the current EPB Methodology. The original assessment process was part of a programme of assessments and subject to a moderation process and oversight by suitably qualified engineers.

As part of the previous assessment process an Initial Evaluation Procedure (IEP) was completed which indicated the building achieves 41%NBS.

The Initial Evaluation Procedure (IEP) assessment was a very basic and broad assessment carried out by engineers contracted to the Council. They visited the outside of the building to view the building in its environs and may have reviewed drawings held on file. Council initiated IEP's were carried out as a screening tool and should not be relied on by anyone for any other purpose and a detailed engineering inspection and/ or engineering calculations, may lead to a different result or seismic grade.

Ngā mihi Kind Regards

# Sharon Bennett

Resilience & Sustainability Team | Wellington City Council

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Absolutely Positively Wellington City Council

Me Heke Ki Pôneke

#### Table IEP-1 Initial Evaluation Procedure Step 1

Page 1

(Refer Table IEP - 2 for Step 2; Table IEP - 3 for Step 3, Table IEP - 4 for Steps 4, 5 and 6)

120 The Terrace, Quest Wellingtonian **Building Name: Wellington Central** By: Address:

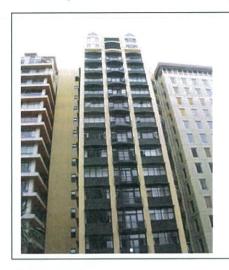
Date: 17/01/2007

WCC 4462 Lot#1

Beca - APG

#### Step 1 - General Information

#### 1.1 Photos (attach sufficient to describe building)

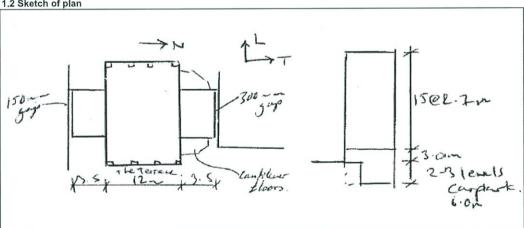




Front (bottom) - from The Terrace

<< Front (top) - from The Terrace NOTE: THERE ARE MORE PHOTOS ON PAGE IEP-1a

#### 1.2 Sketch of plan



## 1.3 List relevant features

- 1. The Quest Wellingtonian serviced appartments. Constructed in 1967.
- 2. RC frame.
- 3. Rectangular in plan with two wings (on both sides), Wings have RC walls. Carpark levels at rear.
- 4. 18-19 story high (16 storey above the terrace and 2-3 below). Slightly higher floor height at The Terrace level 5. Well maintained, no signs of significant deterioration observed
- 6. Potential pounding on each side in the longitudinal direction, buildings are similar heights, floors not aligned

#### 1.4 Note information sources

Visual Inspection of Exterior Visual Inspection of Interior Drawings (note type) **Specifications Geotechical Reports** Other (list)

tick as appropriate

WCC Summary, Aerial photomap, Cityscope property datasheet

# Table IEP-2

Page 2

Initial Evaluation Procedure Step 2
(Refer Table IEP - 1 for Step 1; Table IEP - 3 for Step 3; Table IEP - 4 for Steps 4, 5 and 6)

|   |                                       | r - 3 for Step 3, Table           |               |                          |               |                       |
|---|---------------------------------------|-----------------------------------|---------------|--------------------------|---------------|-----------------------|
| Building Name:  | 120 The Terrace, Que                  | est Wellingtonian                 |               | Ref.                     | WCC 4462      |                       |
| Address:  | Wellington Central                    |                                   |               | Ву                       | Beca - APG    |                       |
| Direction Considered:   | a) Longitudinal b)                    |                                   |               |                          | 4710410007    |                       |
| ( Choose worse case if clear at start.                                      | Complete IEP-2 and I                  | EP-3 for each if in doul          | bt)           | Date:                    | : 17/01/2007  |                       |
| Step 2 - Determination of (%  | NBS),                                 |                                   |               |                          |               |                       |
| 2.1 Determine nominal (   | %NBS) = (%NBS),                       | om                                |               |                          |               |                       |
| (Baseline (%NBS) for particular   |                                       |                                   |               |                          |               |                       |
| a) Date of Design and Seisn   |                                       |                                   |               |                          |               |                       |
|   | Date of Design:                       | O Pre 1935                        | See Note 1, 3 |                          |               |                       |
|   |                                       | O 1935-1965                       |               |                          |               |                       |
|   |                                       | 1965-1976                         |               |                          |               |                       |
|   |                                       | O 1976-1992                       | See Note 2    |                          |               |                       |
|   |                                       |                                   |               |                          |               |                       |
|   |                                       | O 1992-2004                       |               |                          |               |                       |
|   | Building Category:                    | Others                            |               |                          | <b>*</b>      |                       |
|   | Seismic Zone:                         | Zone A                            | <b>-</b>      |                          |               |                       |
| b) Soil Type  |                                       | I                                 |               |                          |               |                       |
|   | 170.5:2004, CI 3.1.3 :                | NZS1170.5:2004                    | 1             |                          |               |                       |
|   |                                       | A or B Rock                       |               |                          |               |                       |
|   |                                       | C Shallow Soil                    |               |                          |               |                       |
|   |                                       | D Soft Soil                       |               |                          |               |                       |
|   |                                       | E Very Soft Soil                  |               |                          |               |                       |
|   |                                       | N704202 4002                      | J             |                          |               |                       |
|   | 203:1992, CI 4.6.2.2 :                | NZS4203:1992                      |               |                          |               |                       |
| (for 1992 to 2004 on  | ly and only if known)                 | Rigid                             |               |                          |               |                       |
|   |                                       | Intermediate or N                 | Not Known     |                          |               |                       |
| c) Estimate Period, T   |                                       |                                   |               | h <sub>n</sub> =         | 47            | 50 m                  |
|   | L-direction H= 50m,                   | T-direction H=47m                 |               | A <sub>c</sub> =         | 0.00          | 0.00 m <sup>2</sup>   |
|   |                                       |                                   |               | 17                       | ongitudinal   | Transverse            |
| Moment Resisting Concrete   | e Frames:                             | $T = 0.09h_{\rm p}^{0.75}$        |               | Constitution of the same | MRCF          | ☑ MRCF                |
| Moment Resisting Steel Fra  | ames:                                 | $T = 0.14h_n^{0.75}$              |               | CM                       |               | MRSF                  |
| <b>Eccentrically Braced Steel</b>   |                                       | $T = 0.08h_n^{0.75}$              |               | E                        |               | EBSF                  |
| All Other Frame Structures  |                                       | $T = 0.06h_n^{0.75}$              |               |                          | thers         | Others                |
| Concrete Shear Walls  |                                       | $T = 0.09h_n^{0.75}/A_c^{0.5}$    |               | CC                       |               | CSW                   |
| Masonry Shear Walls:  |                                       | <i>T</i> ≤ 0.4sec                 |               |                          |               | MSW                   |
| User Defined (input Period)   | ):                                    |                                   |               |                          | efined        | Defined               |
| Where $h_n$ = height in m from the  | base of the structure to the          | uppermost seismic weight o        | r mass.       |                          |               |                       |
| $A_c = \sum A_i (0.2 + L_w/h_n)^2$  |                                       |                                   |               | Lo                       | ongitudinal   | Transverse            |
|   |                                       | irst storey of the building, in   |               |                          | 1.62          | 1.69 Second           |
|   |                                       | ction parallel to the applied for | orces, in m   |                          |               |                       |
| with the restriction th   | at/wi/hn shall not exceed 0.          | 9                                 |               |                          |               |                       |
| d) (%NBS) <sub>nom</sub> determined fr                                      | om Figure 3.3                         |                                   | Longitudinal: | 23/359                   | 13.82         | (%NBS) <sub>nom</sub> |
|   |                                       |                                   | Transverse:   |                          | 14.48         | (%NBS) <sub>nom</sub> |
|   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                                   |               |                          |               |                       |
| Note 1: For buildings designed prior<br>public buildings in accordance      |                                       |                                   |               |                          |               |                       |
| (%NBS) <sub>nom</sub> by 1.25.  |                                       |                                   |               |                          |               |                       |
| For buildings designed 1965<br>public buildings in accordance               |                                       | - T                               |               |                          |               |                       |
| (%NBS) <sub>nom</sub> by 1.33 - Zone A                                      |                                       |                                   |               |                          |               |                       |
|   |                                       |                                   |               |                          |               |                       |
| Note 2: For reinforced concrete build multiply (%NBS) <sub>nom</sub> by 1.2 | ings designed between 1970            | 6-84 FALSE                        |               |                          |               |                       |
| Hiddepty (78/100 Joom by 1.2  |                                       |                                   |               |                          |               |                       |
| Note 3: For buildings designed prior  | to 1935 multiply (%NBS)               | by 0.8                            | Longitudinal: | Silip                    | 13.82         | (%NBS) <sub>nom</sub> |
| except for Wellington where   |                                       |                                   | Transverse:   |                          | 14.48         | (%NBS) <sub>nom</sub> |
|   |                                       |                                   |               | (Scale                   | ed as per Not |                       |
|   | Contiued over page                    |                                   |               |                          |               | 1                     |

| Table IEP-2 Initial Evaluation Pro  | cedure Step 2 continued  | Page 3   |
|---|--|--|
| 2.2 Near Fault Scaling Factor, I<br>If <i>T</i> ≤ 1.5sec, Factor A = 1  | Factor A   |  |
| a) Near Fault Factor, N(T,D)<br>(from NZS1170.5:2004, CI 3.1.6)   | Longitudinal: 1.03 Transverse: 1.05 Factor A   |  |
| b) Near Fault Scaling Factor  | = 1/N(T,D) Longitudinal: 0.9   | )7   |
| 2.3 Hazard Scaling Factor, Fac  | Transverse: 0.9  | 95   |
| zio nazara obamig rabioi, rab   |  |  |
| a) Hazard Factor, Z, for site<br>(from NZS1170.5:2004, Table 3.3)   | Site Area: Wellington CBD (north of Basin $Z = 0.4$ $Z_{1992} = 0.4$                           |  |
| b) Hazard Scaling Factor  | - 1/7  |  |
| For pre 1992<br>For 1992 onwards  | $=$ 1/Z $=$ $Z_{1992}/Z$   |  |
| 1 of 1932 offwards  |  |  |
| (Where $Z_{1992}$ is the NZS4203:1992 Z   | Cone Factor from accompanying Figure 3.5(b))  Factor B  2.5                                    | 50   |
| 2.4 Return Period Scaling Fact  | or, Factor C   |  |
| a) Building Importance Level<br>(from NZS1170.0:2004, Table 3.1 and 3.2)  | Choose Importance Level  1 E 2 3 C 4   |  |
| b) Return Period Scaling Factor fro   | om accompanying Table 3.1 Factor C 1.0   | 00   |
| 2.5 Ductility Scaling Factor, D   |  |  |
| <ul> <li>a) Assessed Ductility of Existing S         (shall be less than maximum given in accompanying Table 3.2)     </li> </ul> | itructure, $\mu$ $\mu = 2.00$ Longitudinal Direction $\mu = 2.00$ Transverse Direction max = 2 |  |
|   |  |  |
| b) Ductility Scaling Factor   | Longitudinal Transverse Factor D   |  |
| For pre 1976  | $= k_{\mu} k_{\mu} k_{\mu}$ = 2.00 2.00 Longitudinal: 2.0                                      | 00   |
| For 1976 onwards  | = 1 1  |  |
| (where $k_{\mu}$ is NZS1170.5:2004 accompanying Table 3.3)  | Ductility Factor, from Transverse: 2.0   | 00   |
| 2.6 Structural Performance Sca  | aling Factor, Factor E   |  |
| a) Structural Performance Factor, from accompanying Figure 3  |  |  |
| b) Structural Performance Scaling   | Factor = $1/S_p$ Factor E 1.4  | <b>1</b> 3   |
| 2.7 Baseline %NBS for Building<br>(equals (%NSB) <sub>nom</sub> x A x B x   |  | 84   |
|   | Transverse : 98.   | 53   |
|   |  | Manufacture (Manufacture (Manuf |

| ng Name:  |  | race, Quest Wellingt  |  | NCC 4462 Lot#1   |  |
|---|--|---|--|--|--|
| ss:<br>ion Considered:  | Wellington C   |   | By: "E   | Beca - APG   |  |
| n Considered:  a) Longitudinal & b) Transverse  worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)  |  |   |  | Date:  | 17/01/2007   |
|   |  |   |  |  |  |
| gitudinal Direction   |  |   |  |  |  |
| 3 - Assessment of Performance Achi<br>(Refer Appendix B - Section B3.2)   | evement Ra   | atio (PAR)  |  |  |  |
| Critical Structural Weakness  |  | Structural Perfo  |  | Bu   | ilding Score   |
| 3.1 Plan Irregularity  Effect on Structural Performance Commen  |  | ☐ Significant   | <b>⊡</b> Insignificant   | Factor A   | 1.0  |
|   |  |   |  | •  |  |
| 3.2 Vertical Irregularity  Effect on Structural Performance   |  | Significant   | ☐ Insignificant  | Factor B   | 0.7  |
| Commen  |  | storey by 10-15% t<br>soft storey effect  | herefore   |  |  |
| 3.3 Short Columns  Effect on Structural Performance   | Severve  | ☐ Significant   | [ Insignificant  | Factor C   | 1.0  |
| Commen  | t  |   |  | _  |  |
|   |  |   | ••••••   | •5   |  |
| 3.4 Pounding Potential (Estimate D1 and D2 and set D = th   | ne lower of the  | e two, or =1.0 if no  | potential for po   | unding)  |  |
|   | C. Potentia  | I for pounding  |  |  |  |
|   |  | ntial for pounding  |  |  |  |
|   |  |   |  |  |  |
|   |  |   |  |  |  |
| a) Factor D1: - Pounding Effect Select appropriate value from Table   |  |   |  |  |  |
| Select appropriate value from Table   |  |   | 2  |  |  |
| Select appropriate value from Table  Note:  Values given assume the building has  | a frame struc  |   |  |  |  |
| Select appropriate value from Table  Note:  | a frame struc  |   |  |  |  |
| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  | a frame struc  | ent to the right of th  | ne value applicat  | linal Direction:   | ings.  |
| Select appropriate value from Table  Note:  Values given assume the building has  | a frame struc  | ent to the right of th  | ne value applicat<br>11 For Longitud<br>Severe   | ble to frame build   |  |
| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  | a frame struc<br>the co-efficie  | ent to the right of the   | 1 For Longitud<br>Severe<br>0 <sep<.005h< td=""><td>linal Direction:</td><td>ings.  1 Insignificant</td></sep<.005h<>  | linal Direction:   | ings.  1 Insignificant   |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of I   | a frame struc<br>the co-efficient<br>Floors within 2   | Factor D Separation 0% of Storey Height   | 1 For Longitud<br>Severe<br>0 <sep<.005h< td=""><td>linal Direction: Significant .005<sep<.01h< td=""><td>ings.  Insignificant Sep&gt;.01H</td></sep<.01h<></td></sep<.005h<>  | linal Direction: Significant .005 <sep<.01h< td=""><td>ings.  Insignificant Sep&gt;.01H</td></sep<.01h<>   | ings.  Insignificant Sep>.01H  |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of I   | a frame struc<br>the co-efficient<br>the co-efficient  | Factor D Separation 0% of Storey Height   | 1 For Longitud<br>Severe<br>0 <sep<.005h< td=""><td>linal Direction: Significant .005<sep<.01h< td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h<></td></sep<.005h<>   | linal Direction: Significant .005 <sep<.01h< td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h<>  | Insignificant Sep>.01H   |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of I   | a frame struc<br>the co-efficie<br>Floors within 2<br>ors not within 2   | Factor D Separation 0% of Storey Height   | 1 For Longitud<br>Severe<br>0 <sep<.005h< td=""><td>linal Direction: Significant .005<sep<.01h< td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h<></td></sep<.005h<>   | linal Direction: Significant .005 <sep<.01h< td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h<>  | Insignificant Sep>.01H   |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Ion Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table   | a frame struc<br>the co-efficie<br>Floors within 2<br>ors not within 2   | Factor D Separation '0% of Storey Height '0% of Storey Height   | Severe 0 <pre>0<pre>0<pre>0<pre>1</pre> Severe 0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0<pre>0&lt;</pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre> | ble to frame build linal Direction: Significant .005 <sep<.01h .007<="" td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h>  | Insignificant Sep>.01H   |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of I  Alignment of Floc  Comment  b) Factor D2: - Height Difference Effect   | a frame struc<br>the co-efficie<br>Floors within 2<br>ors not within 2   | Factor D Separation '0% of Storey Height '0% of Storey Height   | ne value applicated ap   | ble to frame build linal Direction: Significant .005 <sep<.01h .008<="" td=""><td>Insignificant Sep&gt;.01H</td></sep<.01h>  | Insignificant Sep>.01H   |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Ion Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table   | a frame struc<br>the co-efficient<br>Floors within 2<br>ars not within 2<br>Freestandin  | Factor D Separation '0% of Storey Height '0% of Storey Height   | 11 For Longitude Severe 0 <sep<.005h< td=""><td>ble to frame build linal Direction: Significant .005<sep<.01h .0.7="" .0.8="" direction:="" linal="" significant<="" td=""><td>Insignificant</td></sep<.01h></td></sep<.005h<>   | ble to frame build linal Direction: Significant .005 <sep<.01h .0.7="" .0.8="" direction:="" linal="" significant<="" td=""><td>Insignificant</td></sep<.01h>  | Insignificant  |
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| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  | a frame struct the co-efficient Floors within 2 ars not within 2 ir Freestandin t Height Differ Height Differ  | Factor D Separation 0% of Storey Height 09 Factor D erence > 4 Storeys rence 2 to 4 Storeys fference < 2 Storeys  | Severe 0 <sep<.005h 0.4="" 0.4<="" 0.7="" 0<sep<.005h="" 1="" 2="" for="" longitud="" severe="" td=""><td>ble to frame build linal Direction: Significant .005<sep<.01h .0.7="" .005="" sep<.01h="" sep<.01h<="" significant="" td=""><td>Insignificant Sep&gt;.01H  C 0.8  Insignificant Sep&gt;.01H  L 1  Insignificant Sep&gt;.01H  L 1</td></sep<.01h></td></sep<.005h>  | ble to frame build linal Direction: Significant .005 <sep<.01h .0.7="" .005="" sep<.01h="" sep<.01h<="" significant="" td=""><td>Insignificant Sep&gt;.01H  C 0.8  Insignificant Sep&gt;.01H  L 1  Insignificant Sep&gt;.01H  L 1</td></sep<.01h>  | Insignificant Sep>.01H  C 0.8  Insignificant Sep>.01H  L 1  Insignificant Sep>.01H  L 1  |
| Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  | a frame struct the co-efficient Floors within 2 ors not within 2 Freestandin t Height Differ Height Differ   | Factor D Separation 0% of Storey Height 09 Factor D erence > 4 Storeys rence 2 to 4 Storeys fference < 2 Storeys  | Severe 0 <sep<.005h 0.4="" 0.4<="" 0.7="" 0<sep<.005h="" 1="" 2="" for="" longitud="" severe="" td=""><td>ble to frame build linal Direction: Significant .005<sep<.01h .0.07="" .0.7="" .0.9<="" td=""><td>Insignificant Sep&gt;.01H  1 0.8  1 Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H</td></sep<.01h></td></sep<.005h>   | ble to frame build linal Direction: Significant .005 <sep<.01h .0.07="" .0.7="" .0.9<="" td=""><td>Insignificant Sep&gt;.01H  1 0.8  1 Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H</td></sep<.01h>   | Insignificant Sep>.01H  1 0.8  1 Insignificant Sep>.01H  1 Insignificant Sep>.01H  1 Insignificant Sep>.01H  |
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| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  Comment          | a frame struct the co-efficient the co-e | Factor D Separation 0% of Storey Height 0% of Storey Height 0% of Storey Height 0 Factor D erence > 4 Storeys rence 2 to 4 Storeys fference < 2 Storeys 19 Factor   | Per value application of the value application of the value application of the value of the valu   | ble to frame build linal Direction: Significant .005 <sep<.01h .0.7="" .0.8="" .0.9="" .1="" .1<="" td=""><td>Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H  2 Insignificant Sep&gt;.01H  2 Insignificant Sep&gt;.01H  2 Insignificant Sep&gt;.01H  3 Insignificant Sep&gt;.01H  4 Insignificant Sep&gt;.01H  5 Insignificant Sep&gt;.01H  5 Insignificant Sep&gt;.01H  6 Insignificant Sep&gt;</td></sep<.01h>          | Insignificant Sep>.01H  1 Insignificant Sep>.01H  2 Insignificant Sep>.01H  2 Insignificant Sep>.01H  2 Insignificant Sep>.01H  3 Insignificant Sep>.01H  4 Insignificant Sep>.01H  5 Insignificant Sep>.01H  5 Insignificant Sep>.01H  6 Insignificant Sep> |
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| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  Comment          | a frame struct the co-efficient the co-e | Factor D Separation 0% of Storey Height 0% of Storey Height 0% of Storey Height 0 Factor D erence > 4 Storeys rence 2 to 4 Storeys fference < 2 Storeys 19 Factor   | Property of the property of th   | ble to frame build linal Direction: Significant .005 <sep<.01h .0.1="" .0.7="" .0.8="" .0.9="" .0.<="" .1="" td=""><td>Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H  2 Insignificant Sep&gt;.01H  3 Insignificant Sep&gt;.01H  3 Insignificant Sep&gt;.01H  4 Insignificant Sep&gt;.01H  5 Insignificant Sep&gt;</td></sep<.01h> | Insignificant Sep>.01H  1 Insignificant Sep>.01H  2 Insignificant Sep>.01H  3 Insignificant Sep>.01H  3 Insignificant Sep>.01H  4 Insignificant Sep>.01H  5 Insignificant Sep> |
| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  Comment  Comment | a frame struct the co-efficient the co-e | Factor D Separation 0% of Storey Height 0% of Storey Height 0% of Storey Height 0 Factor D erence > 4 Storeys rence 2 to 4 Storeys fference < 2 Storeys 19 Factor   | Property of the value application of the value application of the value application of the value application of the value  | ble to frame build linal Direction: Significant .005 <sep<.01h< td=""><td>Insignificant Sep&gt;.01H  1 Insignificant Sep&gt;.01H  Insignificant Sep&gt;.01H  Insignificant Sep&gt;.01H  Insignificant</td></sep<.01h<>   | Insignificant Sep>.01H  1 Insignificant Sep>.01H  Insignificant Sep>.01H  Insignificant Sep>.01H  Insignificant  |
| Select appropriate value from Table  Note: Values given assume the building has of pounding may be reduced by taking  Table for Selection of Factor D1  Alignment of Floc Comment  b) Factor D2: - Height Difference Effect Select appropriate value from Table  Table for Selection of Factor D2  Comment          | a frame struct the co-efficient the co-e | Factor D Separation 0% of Storey Height 0% of | To value applicate value applicate value applicate value applicate value applicate value   | linal Direction: Significant .005 <sep<.01h .005="" .007="" .007<="" td=""><td>Insignificant Sep&gt;.01H  Insignificant In</td></sep<.01h>   | Insignificant Sep>.01H  Insignificant In |
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|   |  |  |  |  | Page 5  |
|---|--|--|--|--|---|
| Step 3 - Assessment of Performance Achi<br>(Refer Appendix B - Section B3.2)  | evement R  | atio (PAR)   |  |  |   |
| Critical Structural Weakness  |  | Structural Per<br>value - Do not inte  |  | В  | uilding Score   |
| 3.1 Plan Irregularity  Effect on Structural Performance  Comment  |  | ☐ Significant  | Insignificant     ■ Company of the least of the | Factor A   | 1;0   |
| 3.2 Vertical Irregularity  Effect on Structural Performance  Comment  | t Higher first   | Significant<br>storey by 10-15%<br>soft storey effect  |  | Factor B   | 0.7   |
| 3.3 Short Columns  Effect on Structural Performance Commen  | t Possible sh  | Significant<br>fort columns but<br>nificant effect.  | <b>⊡</b> tnsignificant<br>RC walls will  | Factor C   | 1.0   |
| 3.4 Pounding Potential  | Januar a <b>f</b> Alb  | - +··· 0 //  |  | dluml  |   |
| (Estimate D1 and D2 and set D = th  |  | e two, or =1.0 ii ii<br>For pounding   | o poteman for po   | anang)   |   |
|   |  | tial for pounding  | 7  |  |   |
|   |  |  |  |  |   |
| <ul> <li>a) Factor D1: - Pounding Effect<br/>Select appropriate value from Table</li> </ul>   | ,  |  |  |  |   |
| Values given assume the building has of pounding may be reduced by taking   | a frame struc<br>the co-effici   | ent to the right of  | ildings ( eg with s<br>the value applica<br>or D1 For Transv   | ble to frame build   | dings.  |
| Table for Selection of Factor D1  |  |  | Severe   | Significant  |   |
|   |  |  |  |  | Insignificant   |
| Alignment of I  | Floors within 2  | Separation<br>O% of Storey Heig  | on 0 <sep<.005h< td=""><td></td><td>Sep&gt;.01H</td></sep<.005h<>  |  | Sep>.01H  |
| Alignment of Floo   | rs not within 2  | 0% of Storey Heig<br>10% of Storey Heig  | on 0 <sep<.005h td="" th<=""><td>.005<sep<.01h<br>C 0,8</sep<.01h<br></td><td>Sep&gt;.01H<br/>☐ 1<br/>☐ 0.8</td></sep<.005h>   | .005 <sep<.01h<br>C 0,8</sep<.01h<br>  | Sep>.01H<br>☐ 1<br>☐ 0.8  |
| Alignment of Floo<br>Comment  | rs not within 2<br>: Gap=150mr   | 0% of Storey Heig<br>10% of Storey Heig  | on 0 <sep<.005h< td=""><td>.005<sep<.01h<br>C 0,8</sep<.01h<br></td><td>Sep&gt;.01H<br/>☐ 1<br/>☐ 0.8</td></sep<.005h<>  | .005 <sep<.01h<br>C 0,8</sep<.01h<br>  | Sep>.01H<br>☐ 1<br>☐ 0.8  |
| Alignment of Floo   | rs not within 2<br>: Gap=150mr   | 00% of Storey Heig<br>10% of Storey Heig<br>n/44m=0.0034<0.  | on 0 <sep<.005h 0.05h,="" 0.4="" 0.7="" a<="" floors="" not="" on="" td="" that=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H<br/>C 1<br/>C 0.8</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H<br/>C 1<br/>C 0.8</td></sep<.01h<>   | Sep>.01H<br>C 1<br>C 0.8  |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table   | rs not within 2<br>: Gap=150mr   | 00% of Storey Heig<br>10% of Storey Heig<br>n/44m=0.0034<0.  | on 0 <sep<.005h 0="" 0<="" 0<7="" on="" td=""><td>.005<sep<.01h 0.7="" 0.8="" 209="" c="" direction:<="" erse="" ilgned="" td="" within=""><td>Sep&gt;.01H<br/>C1<br/>C0.8</td></sep<.01h></td></sep<.005h>  | .005 <sep<.01h 0.7="" 0.8="" 209="" c="" direction:<="" erse="" ilgned="" td="" within=""><td>Sep&gt;.01H<br/>C1<br/>C0.8</td></sep<.01h>  | Sep>.01H<br>C1<br>C0.8  |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect  | rs not within 2<br>: Gap=150mr   | 00% of Storey Heig<br>10% of Storey Heig<br>n/44m=0.0034<0.  | on 0 <sep<.005h 0.05h,="" 0.4="" 0.7="" a<="" floors="" not="" on="" td="" that=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H</td></sep<.01h<>   | Sep>.01H  C 1  C 0.8  4  Insignificant Sep>.01H                                       |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table   | ors not within 2<br>: Gap=150mr  | 00% of Storey Heig<br>10% of Storey Heig<br>n/44m=0.0034<0.  | on 0 <sep<.005h 0.4="" 005h,="" 0<sep<.005h<="" a="" d2="" floors="" for="" not="" or="" severe="" td="" that="" transv="" ©=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  D 0.8  4  Insignificant Sep&gt;.01H  C 1</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  D 0.8  4  Insignificant Sep&gt;.01H  C 1</td></sep<.01h<>  | Sep>.01H  C 1  D 0.8  4  Insignificant Sep>.01H  C 1                                  |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table   | rs not within 2<br>: Gap=150mr<br>t<br>Height Diffe<br>Height Diffe                                | 20% of Storey Heig<br>20% of Storey Heig<br>n/44m=0.0034<0.<br>Facto<br>erence > 4 Store<br>rence 2 to 4 Store   | on 0 <sep<.005h 0.4="" 0.7<="" 005h,="" 0<sep<.005h="" a="" d2="" floors="" for="" not="" or="" severe="" td="" that="" transv="" vs="" ©=""><td>.005<sep<.01h .005<sep<.01h="" 0.7="" 0.8="" 0.9<="" 20°="" c="" direction:="" erse="" ilgned="" significant="" td="" within=""><td>Sep&gt;.01H  C 1  0.8  4  Insignificant Sep&gt;.01H  C 1  C 1</td></sep<.01h></td></sep<.005h>  | .005 <sep<.01h .005<sep<.01h="" 0.7="" 0.8="" 0.9<="" 20°="" c="" direction:="" erse="" ilgned="" significant="" td="" within=""><td>Sep&gt;.01H  C 1  0.8  4  Insignificant Sep&gt;.01H  C 1  C 1</td></sep<.01h> | Sep>.01H  C 1  0.8  4  Insignificant Sep>.01H  C 1  C 1                               |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table<br>Table for Selection of Factor D2   | rs not within 2<br>: Gap=150mr<br>t<br>Height Diffe<br>Height Diffe                                | 10% of Storey Heig<br>10% of Storey Heig<br>10/40 = 0.0034<0.<br>Factor<br>Factor<br>erence > 4 Store<br>rence 2 to 4 Store<br>fference < 2 Store  | on 0 <sep<.005h 0.4="" 0.7<="" 005h,="" 0<sep<.005h="" a="" d2="" floors="" for="" not="" or="" severe="" td="" that="" transv="" vs="" ©=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  D 0.8  4  Insignificant Sep&gt;.01H  C 1</td></sep<.01h<></td></sep<.005h>   | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  D 0.8  4  Insignificant Sep&gt;.01H  C 1</td></sep<.01h<>  | Sep>.01H  C 1  D 0.8  4  Insignificant Sep>.01H  C 1                                  |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table<br>Table for Selection of Factor D2   | rs not within 2<br>: Gap=150mr<br>t<br>Height Diffe<br>Height Diffe                                | 20% of Storey Heig<br>20% of Storey Heig<br>n/44m=0,0034<0.<br>Facto<br>erence > 4 Store<br>rence 2 to 4 Store<br>fference < 2 Store<br>imilar height.   | on 0 <sep<.005h (set="" 0.4="" 0.7="" 005h,="" 0<sep<.005h="" 100="" a="" d="" d2="" d:<="" floors="" for="" not="" or="" severe="" td="" that="" transv="" vs="" ©=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<>   | Sep>.01H  C 1  C 0.8  4  Insignificant Sep>.01H  C 1  C 1  C 1  C 1  d D2 or.         |
| Alignment of Floo Comment b) Factor D2: - Height Difference Effect Select appropriate value from Table Table for Selection of Factor D2  Comment  | rs not within 2<br>: Gap=150mr<br>t<br>Height Diffe<br>Height Diffe<br>Height Dif<br>: Buildings s | 20% of Storey Heig<br>20% of Storey Heig<br>n/44m=0.0034<0.<br>Facto<br>erence > 4 Store<br>rence 2 to 4 Store<br>fference < 2 Store<br>imilar height.   | on 0 <sep<.005h (set="" 0.4="" 0.7="" 005h,="" 0<sep<.005h="" 1="" a="" d="1.0&lt;/td" d2="" d:="" floors="" for="" not="" or="" set="" severe="" that="" transv="" vs="" ©=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<>   | Sep>.01H  C 1  C 0.8  4  Insignificant Sep>.01H  C 1  C 1  C 1  C 1  d D2 or.         |
| Alignment of Floo<br>Comment<br>b) Factor D2: - Height Difference Effect<br>Select appropriate value from Table<br>Table for Selection of Factor D2   | rs not within 2<br>: Gap=150mr<br>t<br>Height Diffe<br>Height Diffe<br>Height Dif<br>: Buildings s | 20% of Storey Heig<br>20% of Storey Heig<br>n/44m=0.0034<0.<br>Facto<br>erence > 4 Store<br>rence 2 to 4 Store<br>fference < 2 Store<br>imilar height.   | on 0 <sep<.005h (set="" 0.4="" 0.7="" 005h,="" 0<sep<.005h="" 1="" a="" d="1.0&lt;/td" d2="" d:="" floors="" for="" not="" or="" set="" severe="" that="" transv="" vs="" ©=""><td>.005<sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<></td></sep<.005h>  | .005 <sep<.01h< td=""><td>Sep&gt;.01H  C 1  C 0.8  4  Insignificant Sep&gt;.01H  C 1  C 1  C 1  C 1  d D2 or.</td></sep<.01h<>   | Sep>.01H  C 1  C 0.8  4  Insignificant Sep>.01H  C 1  C 1  C 1  C 1  d D2 or.         |
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Page 6 Table IEP-4 Initial Evaluation Procedure Steps 4, 5 and 6 (Refer Table IEP - 1 for Step 1; Table IEP - 2 for Step 2; Table IEP - 3 for Step 3) WCC 4462 Lot#1 **Building Name:** Ref. 120 The Terrace, Quest Wellingtonian Ву: Beca - APG Address: Wellington Central Date: 17/01/2007 Step 4 - Percentage of New Building Standard (%NBS) Longitudinal Transverse 4.1 Assessed Baseline (%NBS), 95.8% 98.5% (from Table IEP - 1) 4.2 Performance Achievement Ratio (PAR) 1.05 0.42 (from Table IEP - 2) 4.3 PAR x Baseline (%NBS)b 101% 41% 41% 4.4 Percentage New Building Standard (%NBS) ( Use lower of two values from Step 3.3) Step 5 - Potentially Earthquake Prone? (Mark as appropriate) NO %NBS ≤ 33 Step 6 - Potentially Earthquake Risk? (Mark as appropriate) %NBS < 67 YES Step 7 - Provisional Grading for Seismic Risk based on IEP Seismic Grade Signature Evaluation Confirmed by Beca Name On behalf of WCC CPEng. No Relationship between Grade and SPS: Grade: A÷ В C D Ε %NBS: > 100 100 to 80 80 to 67 67 to 33 33 to 20

(Refer Table IEP - 2 for Step 2; Table IEP - 3 for Step 3, Table IEP - 4 for Steps 4, 5 and 6)

Street Number & Name:

120 The Terrace, Quest Wellingtonian

Location:

Wellington Central

Ref. WCC 4462 Lot#1

By: Beca - APG

Date: 17/01/2007

# Add any additional photographs, notes or sketches required below:

Note: print this page separately



Rear



Rear (bottom)



# LEVEL 1 RAPID SEISMIC ASSESSMENT REPORT

JOB:

120 The Terrace, Wellington

JOB NO:

216233

TO:

Your Property Matters

ATTENTION:

Carl Coetzee

INSPECTOR:

Anthony Taylor & Cale Wood

**INSPECTION DATE:** 

14/11/16

**ISSUE DATE** 

25/11/16

This Rapid Seismic Assessment Report has been prepared at the request of the Your Property Matters (YPM) to be used for their purposes only, and neither Clendon Burns & Park Ltd nor any of its employees accept any responsibility on any ground whatsoever to any other party or person who relies upon it.

The report is based only on a visual walk-through inspection of the buildings unless noted otherwise below. No destructive tests or invasive investigations have been undertaken.

This report is limited to inspection of the building structure only, it does not cover other services or other aspects of the New Zealand Building Code compliance including water tightness envelope to the building.

Our inspection was carried out at the date and time noted on the attached Rapid Assessment form. If there has been any significant seismic activity since then, the building's status may have changed and a re-inspection should be carried out.

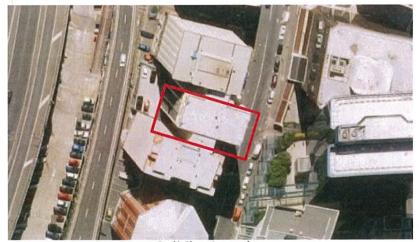
Any decision made to re-occupy the building should be based on the findings of this report together with any prior knowledge of the seismic risk of the building and any relevant legislative obligations such as the Health and Safety in Employment Act.

### Purpose of Inspection:

Anthony Taylor and Cale Wood of Clendon Burns & Park Ltd completed a level 1 inspections of the structural damage to the concrete shear wall building located at 120 The Terrace. Anthony and Cale were advised by a member of staff who had previously been through the building and found very little evidence of damage.

Your Building Matters requested an inspection to identify possible structural damage to building, which is located at 120 The Terrace, Wellington, following the 14<sup>th</sup> November 2016 magnitude 7.8 earthquake centred 15 kilometres north-east of Culverden in the Canterbury region, referred to as the Kaikoura Earthquake.

Clendon Burns & Park Ltd was also previously engaged to carry out post-earthquake rapid assessments following both the 21<sup>st</sup> July 2013 Cook Strait and 16<sup>th</sup> August 2013 Lake Grassmere earthquakes.







**Building Street View** 

# Extent of Inspection:

This structural inspection has been undertaken generally in accordance with the Level 1 Rapid Assessment method that was established from the Canterbury Earthquakes and in the New Zealand National Society of Earthquake Engineering (NZSEE) Guidelines for Building Safety Evaluations.

It should be noted that not all rooms or surfaces were inspected. Inspection was undertaken to the external areas front and from the rear carpark deck, and to the common stairwell and hallway areas.

#### General:

The year the building was constructed is unknown. The building main lateral load resisting system seems to consist of reinforced concrete shear walls. The building consists of 11 levels above ground and a single sub-ground level basement.

A blow out of plaster where a steel rod had pierce through was observed, it was deemed that this was pre-existing and had just been pushed through more. Also some damage was observed to the rear corner of the stair core which seems to have pounded with the adjacent building. This was difficult to observe in detail the extent of the damage.

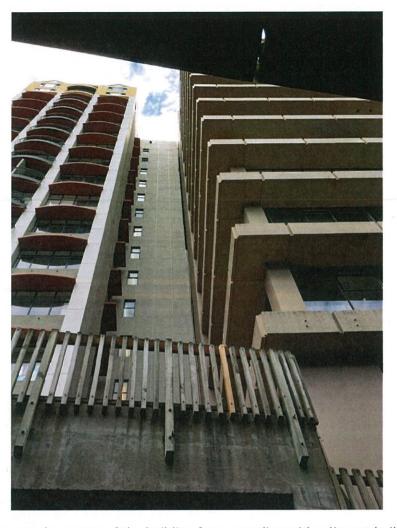
#### Additional photos of items of concern:



Steel connection rod penetrating through concrete wall

e cbp@cbp.co.nz w www.cbp.co.nz a 15a Everton Terrace P O Box 10 348 Wellington New Zealand





Damage to the corner of the building from pounding with adjacent building

# Conclusions:

A structural inspection was undertaken following the 14<sup>th</sup> November 2016 magnitude 7.8 earthquake centred near Culverden. No structural damage was observed to the primary structure of the reinforced concrete building.

Based on our observations the seismic strength of the building has not altered as a result of this earthquake. Hence the risk remains the same as it was prior to the seismic event on the 14th November 2016.

Report Prepared by: **CLENDON BURNS & PARK LTD** 

Cale Wood BE(Hons) GIPENZ **DESIGN ENGINEER** 

Reviewed By: **CLENDON BURNS & PARK LTD** 

A G Taylor BE (Hons), MIPENZ, CPEng, IntPE ASSOCIATE DIRECTOR CPEng No. 228777



# EARTHQUAKE RAPID ASSESSMENT FORM

Complex Residential and all Non-Residential Buildings Level 1

| A S | SESSMENT  |  |  | Fields with asterisks (*) ar   | re mandatory, o  | thers are optional. |
|-----|---|--|--|--|--|---------------------|
| 1   | Assessor Name* Assessor ID*   | 1  | RENG Authority*  |  |  |                     |
| 2   | Assessment Date*  | Day Month Year   | Assessment Time*   | Hour Minute (to nearest half hour)   | <b>А</b> М ВО  | РМ                  |
| В   | JILDING IDENTII   | FICATION   | <b>"时间来在</b> "的特性的   |  |  |                     |
| 4   | GPS (Degree with 5 decimal Other ID or access                                 | ellangt  als after comma) South  Owner BO Tena             | Photo ta  Photo ta  OR1  Date*   | East ken A No B Yes P  | Photo ID.  |                     |
| BU  | ILDING DESCRI   | PTION  |  |  | 76   |                     |
| 6   | Dimensions  | Constr. Age  | Building Type  | Structure Type   | Cladding   | Туре                |
|     | Storeys above ground incl. ground floor  Storeys below ground  Footprint (m²) | A <1935 B  | A Complex residential  B School  C Commercial/Office  D Industrial  E Critical facility  F Public assembly  G Other:   | A Timber frame  B Steel frame  C Concrete frame  D Concrete shear wall  E Tilt-up concrete  F Reinforced masonry  G Unreinforced masonry  H Other:   | A Brick venue B Concrete C Steel D Glass E Lightweig F Other:  | panels              |
|     |   |  | and distribute as a major department of the second of the  |  | Mark-Salaton & State - Salaton |                     |
| ΕX  | TERNAL RISKS  |  |  |  |  |                     |
| (7) | Potential Cause*  | r maniferentia tramponer applicações que perfir ple-ablant | Managarity (a. 1800), processor processor and a second an | A Paradian and Administration of the Control of the | A Yes  | в No                |
|     |   | ent buildings. Adjacent buildin                            | g ID or address:   |  |  |                     |

Land instability above

Land instability below

4 Other

0

0

0

|  |  |        | Obse    | erved Co   | ndition  |          | Comments:   |                             |
|--|--|--------|---------|--|----------|----------|---|-----------------------------|
|  |  | N/A    | Unknown | Minor or<br>None   | Moderate | Severe   |   |                             |
| Structural Component*  |  | N/A    | А       | ŝ  | С        | D        |   |                             |
| 1 Collapse, partial collapse, off fou  | undation   | 0      | 0       | 0  | O        | 0        |   |                             |
| 2 Building or storey leaning   |  | 0      | 0       | 0  | 0        | 0        |   |                             |
| 3 Structural damage to vertical sys  | stem   | 0      | 0       | 0/   | 0        | 0        |   |                             |
| 4 Structural damage to lateral syst  | tem  | 0      | 0       | 9  | 0        | 0        |   |                             |
| 5 Chimney, parapet or other falling  | g hazard   | 0      | 0       | 0  | 0        | 0        |   |                             |
| 5 Ground slope movement or crac  | king   | 0      | 0       | 0  | 0        | 0        |   |                             |
| 6 Other  |  | 0      | 0       | 0  | 0        | 0        |   |                             |
| Estimated Damage   |  | A () 1 |         | в 🔾 8-   | 10%      | c 🔾 11-  | 30% D○31-60% s  | 61-100%                     |
| Recommended further  | Assessme   | nt*    | Saf     | ety Cor  | don*     |          | Barricades*   | Urgency of suggested action |
| B Level 2 Rapid Assessment (tick below if particular expertise is required)  B1 Structural Engineer  B2 Geotechnical Engineer  B3 Other:  Further evaluation to be arranged by building owner:   |  |        | Desi    | B Cardon required  Describe extent (add diagram on separate sheet if required) |          |          | Barricades already in place C Barricades required Describe extent (add diagram on seperate sheet if required) | action required             |
| Observed Damage  | Level 1 R  |        |         |  |          |          | -   | vey Extent*                 |
|  | Y1 O REST  | RICTE  | D ACCES | S TO PAF   | RT(S) OF | THE BUIL | DING ONLY Exte  |                             |
| Moderate damage  | Y2 RESTRICTED ACCESS – SHORT TERM ENTRY with or without supervision Access to be supervised A Yes B No |        |         |  |          |          | DNLY  | C Not accesse               |
| Heavy damage   | R1 ENTRY PROHIBITED (At risk from external factors)  R2 ENTRY PROHIBITED (Severe damage to building)   |        |         |  |          |          | E Complete  |                             |
| Assessor Signature*  | 4  | 1      |         |  |          |          | Make  | 30 259                      |
| OTES   |  |        |         |  |          |          |   |                             |
| No Endi  | ivide  | al     |         | Apav   | time     | nts      | were a  | ssessed                     |
| The second secon |  |        |         |  |          |          |   |                             |
|  |  |        |         |  |          |          |   |                             |

VERSION OF - APRIL 2016

Sketch included on separate page?