115030 ISA LTO 01
SEH

25 May 2015

Linwood Downs Ltd
101 Ormsby Road
RD 6
Te Awamutu 3876

Attention: Linda Van Eyk

Dear Linda

INITIAL SEISMIC ASSESSMENT (ISA) OF BUILDING AT 52 MAIN STREET, PAHIATUA

We have, as requested, undertaken an Initial Seismic Assessment (ISA) of the building located at 52 Main Street, Pahiatua. The assessment was carried out after completing a site visit and reviewing the original structural drawings.

Executive Summary
The ISA of this building indicates the building can achieve 70%NBS in the longitudinal direction and 70%NBS in the transverse direction. The ISA assessment of this building therefore indicates an overall score of 70%NBS, corresponding to a 'Grade B' building as defined by the New Zealand Society for Earthquake Engineering (NZSEE) building grading scheme. This is above the thresholds for earthquake prone buildings (34%NBS), and for earthquake risk buildings (67%NBS) as recommended by the NZSEE.

The ISA is considered to provide a relatively quick, high level and qualitative measure of the building's performance.

Background to the ISA and its Limitations
The IEP (Initial Evaluation Procedure) is a tool used to undertake the assessment and was developed in 2006 by the New Zealand Society for Earthquake Engineering (NZSEE) and updated in 2013 to reflect experience with its application and as a result of experience in the Canterbury earthquakes. It is a tool to assign a percentage of New Building (%NBS) score and associated grade to a building as part of an initial seismic assessment of existing buildings.

An ISA enables territorial authorities, building owners and managers to review their building stock as part of an overall risk management process.

Characteristics and limitations of an ISA include:

- A tendency to be somewhat conservative, identifying some buildings as earthquake prone, or having a lower %NBS score, which subsequent detailed investigation may indicate is less than actual performance. However, there will be exceptions, particularly when critical structural weaknesses (CSWs) are present that have not been recognised from the level of investigation employed.

- They can be undertaken with variable levels of available information, eg exterior only inspection, structural drawings available or not, interior inspection, etc. The more information available the more representative the ISA result is likely to be. The ISA records the information that has formed the basis of the assessment and consideration of this is important when determining the likely reliability of the result.
- It is an initial, first stage review. Buildings or specific issues which the ISA process flags as being problematic or as potentially critical structural weaknesses, need further detailed investigation and evaluation. A Detailed Seismic Assessment is recommended if the seismic status of a building is critical to any decision making.
- An ISA assumes that the buildings have been designed and built in accordance with the building standard and good practice current at the time – leading to better than predicted performance. Conversely, some unidentified design or construction issues not picked up by the ISA process may result in the building performing not as well as predicted.
- It is a largely qualitative process, and should be undertaken or overseen by an experienced engineer. It involves considerable knowledge of the earthquake behaviour of buildings, and judgement as to key attributes and their effect on building performance. Consequently, it is possible that the %NBS derived for a building by independent experienced engineers may differ.
- An ISA may over-penalise some apparently critical features which could have been satisfactorily taken into account in the design.
- An ISA does not take into account the seismic performance of non-structural items such as ceiling, plant, services or glazing.

Experience to date is that the ISA is a useful tool to identify potential issues and expected overall performance of a building in an earthquake. However, the process and the associated %NBS and grade should be considered as only indicative of the building's compliance with current code requirements. A detailed investigation and analysis of the building will typically be required to provide a definitive assessment.

An ISA score above 34%NBS should be considered sufficient to classify the building as not earthquake prone. However, if further information comes available reassessment may be required.

Seismic Restraint of Non-Structural Items

During an earthquake, the safety of people can be put at risk due to non-structural items falling on them. These items should be adequately seismically restrained, where possible to the NZS4219:2009 "The Seismic Performance of Engineering Systems in Building:

An assessment has not been made of the bracing of the ceilings, in ceiling ducting, services and plant. We have also not checked whether the buildings fixtures and Fittings have been seismically restrained or not. These issues are outside the scope of this initial assessment but could be the subject of another investigation.

Conclusion

Our ISA assessment for this building carried out using the IEP indicates an overall score of 70%NBS which corresponds to a Grade B building, as defined by the NZSEE building grading scheme. This is above the thresholds for Earthquake Prone Buildings (34%NBS), and for Earthquake Risk Buildings (67%NBS) as defined by the NZSEE and the New Zealand Building Code. No further action is required.

We trust this letter and initial seismic assessment meets your current requirements. We would be pleased to discuss further with you any issues raised in this report.

Please do not hesitate to contact me if you would like clarification of any aspect of this letter.

COPY KOA

Engineering | Surveying | Planning | Shop Detailing

Limitations

This report has been prepared solely for the benefit of Linwood Downs Ltd, as our Client, with respect to the brief provided. The reliance by other parties on the information or opinions contained in the report shall, without our prior review and agreement in writing, will be at such parties' sole risk.

Yours faithfully

Ivan Govender
KEVIN O'CONNOR & ASSOCIATES LTD

Encl:

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INITIAL SEISMIC ASSESSMENT

Client	Linwood Downs Ltd
Job number	115030
Location address	52 Main Street
City	Pahiatua
Building Name	RD1

KOA

Engineering | Surveying | Planning | Shop Detailing

Introduction

Kevin O'Connor & Associates Ltd (KOA) has undertaken this Initial Evaluation Procedure (IEP) in accordance with the New Zealand Society for Earthquake Engineering (NZSEE) guidelines. An inspection was undertaken to ascertain that the building structure is as per the construction drawings. This is not a complete building survey of each floor and every element in the building to ensure compliance with the drawings nor does this warrant that the structural elements are as per the drawings or codes applicable at the time of its design or construction. Investigative work has included a walk through inspection of the building to ascertain that the structural seismic resisting elements are generally as per the drawings and review of the available records.

Building Inspection Report

Building Name	RD1	**Building Use**	Warehouse
Year of Construction	2003	**Importance Level**	IL2
General Building Shape	Rectangular	**No. of Storeys**	1
Longitudinal Lateral Load Resisting System	Shear walls & wall bracing	**Roof System**	Light weight
Transverse Lateral Load Resisting System	Cantilever action of tilt panels and portal action of steel frames	**Other Level Floor Systems**	Mezzanine
Foundation System	Strip and pad foundation system	**External Wall Cladding Type**	Concrete tilt panels, block masonry & metal clad
Subsoil Class	Class D		
Comments	Built circa 2003. Part of then existing structure was retained, which details are unknown. Archive plans do not fully match with the existing structure.		

Initial Evaluation Procedure

Our evaluation indicates that this building has **70%** NBS. Therefore in terms of NZSEE the building is:

Not Earthquake Prone nor An Earthquake Risk

	Longitudinal	Transverse
Baseline %NBS	69%	70%
Factors Influencing Baseline	Location of Building	Location of Building
Critical Structural Weaknesses	None	None
F Factor; F	1.0	1.0
Rationale for choice of F Factor	Refer IEP Step 3 (page 4)	Refer IEP Step 3 (page 5)
%NBS	**70%**	**70%**

Grade	A+	A	B	C	D	E
%NBS	>100	100-80	79-67	66-34	33-20	<20
	Not Earthquake Prone & Not Earthquake Risk			Earthquake Risk	Earthquake Prone	
	Low Risk			Moderate Risk	High Risk	

Prepared by	William Akepogu	**Authorised by**	Damian Linehan
Reviewed by	Ivan Govender	**CPEng no**	1004738
Date	13 May 2015	**Signature**	
Revision	A		

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Table IEP-1 Initial Evaluation Procedure Step 1

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

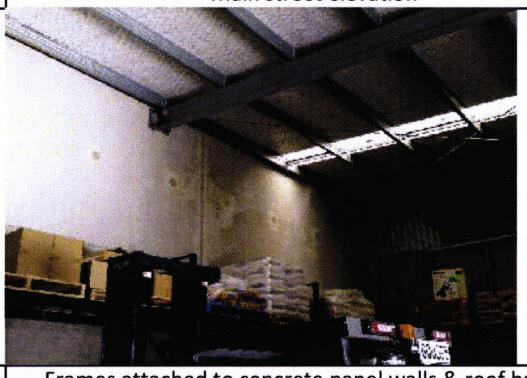
Street Number & Name:	52 Main Street	Job No.:	115030
AKA:	0	By:	William Akepogu
Name of building:	RD1	Date:	13/05/2015
City:	Pahiatua	Revision No.:	A

Photos

North entrance

Main street elevation

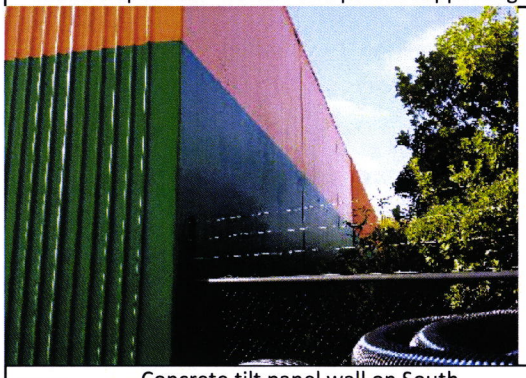
Roof and wall bracings



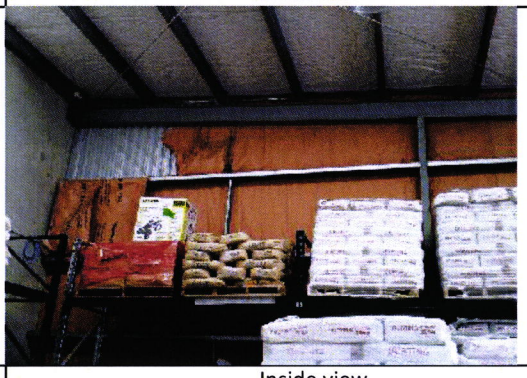
Frames attached to concrete panel walls & roof bracing

Mono sloped roof - rafters and purlins supporting roof

Inside view



Concrete tilt panel wall on South



Inside view

Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

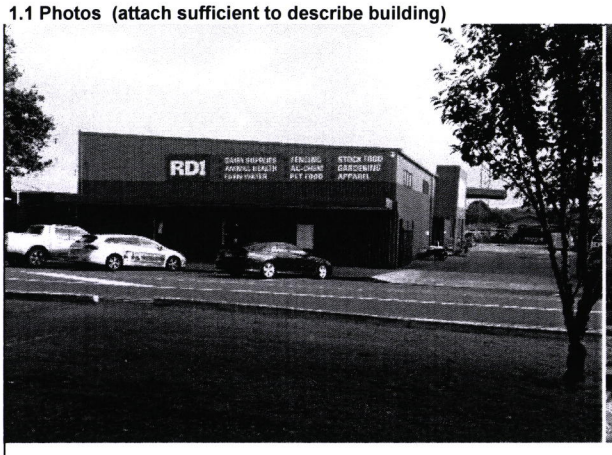
WARNING!! *This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in the New Zealand Society for Earthquake Engineering document "Assessment and Improvement of the Structural Performance of Buildings in Earthquakes, June 2006". This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.*

Street Number & Name:	**52 Main Street**	**Job No.:**	**115030**
AKA:		**By:**	**William Akepogu**
Name of building:	**RD1**	**Date:**	**13/05/2015**
City:	**Pahiatua**	**Revision No.:**	**A**

Table IEP-1 Initial Evaluation Procedure Step 1

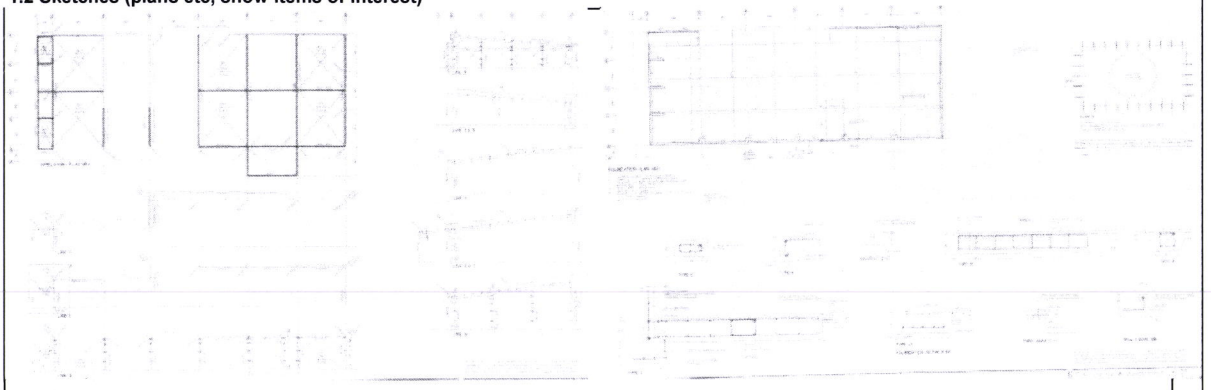
Step 1 - General Information

1.1 Photos (attach sufficient to describe building)



NOTE: THERE ARE MORE PHOTOS ON PAGE 1a ATTACHED

1.2 Sketches (plans etc, show items of interest)



NOTE: THERE ARE MORE SKETCHES ON PAGE 1a ATTACHED

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

Archive plans obtained from Tararua District Council. Plans are dated 2003 and do not match fully with the building. During 2003 construction, part of an existing structure was retained, which details are unknown.
Building is a single storey structure predominantly comprises of steel and concrete construction. South boundary has concrete tilt panel/ masonry walls and the rest of the walls are metal clad. Mono sloped lightweight metal roofing is supported by purlins and steel rafters.
Approximate plan dimension of the building is 39.6m x 16.29m. There are two canopies - one on street front approximately 2.0m wide for full width of the building and on north wall, approximately 4m wide x 6m long.
The lateral seismic forces in the longitudinal direction are resisted by concrete/masonry shear wall on south boundary and by steel cross bracings on north face wall. And the lateral seismic forces in transverse direction are resisted by the cantilever action of the concrete tilt panel wall and frame action of the steel portal frames. No significant damages to the structural elements or foundation settlements were observed.

1.4 Note information sources Tick as appropriate

Visual Inspection of Exterior	☑	**Specifications**	☐
Visual Inspection of Interior	☑	**Geotechnical Reports**	☐
Drawings (note type)	☑	**Other (list)**	☐

Architectural and structural drawings

Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

Street Number & Name:	**52 Main Street**	**Job No.:**	**115030**
AKA:		**By:**	**William Akepogu**
Name of building:	**RD1**	**Date:**	**13/05/2015**
City:	**Pahiatua**	**Revision No.:**	**A**

Table IEP-2 Initial Evaluation Procedure Step 2

Step 2 - Determination of *(%NBS)*$_b$

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

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

	Longitudinal	Transverse
a) Building Strengthening Data		
Tick if building is known to have been strengthened in this direction	☐	☐
If strengthened, enter percentage of code the building has been strengthened to	N/A	N/A
b) Year of Design/Strengthening, Building Type and Seismic Zone		
Pre 1935	○	○
1935-1965	○	○
1965-1976	○	○
1976-1984	○	○
1984-1992	○	○
1992-2004	◉	◉
2004-2011	○	○
Post Aug 2011	○	○
Building Type:		
Seismic Zone:		
c) Soil Type		
From NZS1170.5:2004, Cl 3.1.3 :	D Soft Soil	D Soft Soil
From NZS4203:1992, Cl 4.6.2.2 : (for 1992 to 2004 and only if known)	Flexible	Intermediate/Not Known
d) Estimate Period, *T*		
Comment: Concrete shear walls & cantilever concrete wall/moment resisting steel frames	h_n = 5.6 m; A_c = 1.00 m^2	h_n = 5.6 m; A_c = 1.00 m^2
Moment Resisting Concrete Frames: $T = \max\{0.09h_n^{0.75}, 0.4\}$	○	○
Moment Resisting Steel Frames: $T = \max\{0.14h_n^{0.75}, 0.4\}$	○	○
Eccentrically Braced Steel Frames: $T = \max\{0.08h_n^{0.75}, 0.4\}$	○	○
All Other Frame Structures: $T = \max\{0.06h_n^{0.75}, 0.4\}$	◉	◉
Concrete Shear Walls $T = \max\{0.09h_n^{0.75}/A_c^{0.5}, 0.4\}$	○	○
Masonry Shear Walls: $T \leq 0.4$sec	○	○
User Defined (input Period):	○	○
Where h_n = height in metres from the base of the structure to the uppermost seismic weight or mass.	T: 0.40	0.40
e) Factor A: Strengthening factor determined using result from (a) above (set to 1.0 if not strengthened)	**Factor A:** 1.00	1.00
f) Factor B: Determined from NZSEE Guidelines Figure 3A.1 using results (a) to (e) above	**Factor B:** 0.22	0.23
g) Factor C: For reinforced concrete buildings designed between 1976-84 Factor C = 1.2, otherwise take as 1.0.	**Factor C:** 1.00	1.00
h) Factor D: For buildings designed prior to 1935 Factor D = 0.8 except for Wellington where Factor D may be taken as 1, otherwise take as 1.0.	**Factor D:** 1.00	1.00
***(%NBS)*$_{nom}$ = AxBxCxD**	***(%NBS)*$_{nom}$** 22%	23%

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Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

Street Number & Name:	52 Main Street	Job No.:	115030
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Table IEP-2 Initial Evaluation Procedure Step 2 continued

2.2 Near Fault Scaling Factor, Factor E

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

		Longitudinal	Transverse
a) Near Fault Factor, *N(T,D)* (from NZS1170.5:2004, Cl 3.1.6)	N(T,D):	1	1
b) Factor E = 1/N(T,D)	Factor E:	1.00	1.00

2.3 Hazard Scaling Factor, Factor F

a) Hazard Factor, *Z*, for site

Location: Pahiatua

Z =	0.42	(from NZS1170.5:2004, Table 3.3)
Z_{1992} =	1.2	(NZS4203:1992 Zone Factor from accompanying Figure 3.5(b))
Z_{2004} =	0.42	(from NZS1170.5:2004, Table 3.3)

b) Factor F

For pre 1992	=	$1/Z$
For 1992-2011	=	Z_{1992}/Z
For post 2011	=	Z_{2004}/Z

	Longitudinal	Transverse
Factor F:	2.86	2.86

2.4 Return Period Scaling Factor, Factor G

a) Design Importance Level, I

(Set to 1 if not known. For buildings designed prior to 1965 and known to be designed as a public building set to 1.25. For buildings designed 1965-1976 and known to be designed as a public building set to 1.33 for Zone A or 1.2 for Zone B. For 1976-1984 set I value.)

	Longitudinal	Transverse
I =	1	1

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

	Longitudinal	Transverse
	Category IV	Category IV
R_o =	1	1

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

	Longitudinal	Transverse
Choose Importance Level	○1 ◉2 ○3 ○4	○1 ◉2 ○3 ○4
R =	1.0	1.0

d) Factor G = IR_o/R

	Longitudinal	Transverse
Factor G:	1.00	1.00

2.5 Ductility Scaling Factor, Factor H

a) Available Displacement Ductility Within Existing Structure

Comment:
Concrete/masonry shear walls & cantilever wall

	Longitudinal	Transverse
μ =	1.25	1.25

b) Factor H

		k_μ Longitudinal	k_μ Transverse
For pre 1976 (maximum of 2)	=	1.14	1.14
For 1976 onwards	=	1	1
Factor H:		1.00	1.00

(where k_μ is NZS1170.5:2004 Inelastic Spectrum Scaling Factor, from accompanying Table 3.3)

2.6 Structural Performance Scaling Factor, Factor I

a) Structural Performance Factor, S_p (from accompanying Figure 3.4)

Tick if light timber-framed construction in this direction

	Longitudinal	Transverse
	☐	☐
S_p =	0.93	0.93

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

	Longitudinal	Transverse
Factor I:	1.08	1.08

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

2.7 Baseline %NBS for Building, *(%NBS)*$_b$

(equals $(\%NBS)_{nom}$ x E x F x G x H x I)

	Longitudinal	Transverse
	69%	70%

Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

Street Number & Name:	52 Main Street	Job No.:	115030
AKA:		By:	William Akepogu
Name of building:	RD1	Date:	13/05/2015
City:	Pahiatua	Revision No.:	A

Table IEP-3 Initial Evaluation Procedure Step 3

Step 3 - Assessment of Performance Achievement Ratio (PAR)

(Refer Appendix B - Section B3.2)

a) Longitudinal Direction

Critical Structural Weakness	Effect on Structural Performance (Choose a value - Do not interpolate)			Factors
3.1 Plan Irregularity				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	Factor A 1.0
Not observed - Insignificant				
3.2 Vertical Irregularity				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	Factor B 1.0
Not observed - Insignificant				
3.3 Short Columns				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	Factor C 1.0
Not observed - Insignificant				

3.4 Pounding Potential

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

a) Factor D1: - Pounding Effect

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

Factor D1 For Longitudinal Direction: 1.0

Table for Selection of Factor D1	Severe	Significant	Insignificant
Separation	0<Sep<.005H	.005<Sep<.01H	Sep>.01H
Alignment of Floors within 20% of Storey Height	○ 0.7	○ 0.8	◉ 1
Alignment of Floors not within 20% of Storey Height	○ 0.4	○ 0.7	○ 0.8

Comment

b) Factor D2: - Height Difference Effect

Factor D2 For Longitudinal Direction: 1.0

Table for Selection of Factor D2	Severe	Significant	Insignificant
	0<Sep<.005H	.005<Sep<.01H	Sep>.01H
Height Difference > 4 Storeys	○ 0.4	○ 0.7	○ 1
Height Difference 2 to 4 Storeys	○ 0.7	○ 0.9	○ 1
Height Difference < 2 Storeys	○ 1	○ 1	◉ 1

Comment

Factor D 1.0

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

Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	Factor E 1.0

Source: Tararua District Council - Faulting and Liquefaction map

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

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

Factor F 1.0

Record rationale for choice of Factor F:

Unknown details of the part of the old building that was retained. Archive drawings do not fully match with structure. Roof bracing was observed. No bracing was observed on north canopy. No significant damages to structural elements or foundation settlements were observed.

3.7 Performance Achievement Ratio (PAR)

(equals **A x B x C x D x E x F**)

	PAR
Longitudinal	**1.01**

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Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

Street Number & Name:	52 Main Street	Job No.:	115030
AKA:		By:	William Akepogu
Name of building:	RD1	Date:	13/05/2015
City:	Pahiatua	Revision No.:	A

Table IEP-3 Initial Evaluation Procedure Step 3

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

Critical Structural Weakness	Effect on Structural Performance (Choose a value - Do not interpolate)			Factors
3.1 Plan Irregularity				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	**Factor A** 1.0
Not observed - Insignificant				
3.2 Vertical Irregularity				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	**Factor B** 1.0
Not observed - Insignificant				
3.3 Short Columns				
Effect on Structural Performance	○ *Severe*	○ *Significant*	◉ *Insignificant*	**Factor C** 1.0
Not observed - Insignificant				

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

a) Factor D1: - Pounding Effect

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

Factor D1 For Transverse Direction: 1.0

Table for Selection of Factor D1	Severe	Significant	Insignificant
Separation	0<Sep<.005H	.005<Sep<.01H	Sep>.01H
Alignment of Floors within 20% of Storey Height	○ 0.7	○ 0.8	◉ 1
Alignment of Floors not within 20% of Storey Height	○ 0.4	○ 0.7	○ 0.8

Comment

b) Factor D2: - Height Difference Effect

Factor D2 For Transverse Direction: 1.0

Table for Selection of Factor D2	Severe	Significant	Insignificant
	0<Sep<.005H	.005<Sep<.01H	Sep>.01H
Height Difference > 4 Storeys	○ 0.4	○ 0.7	○ 1
Height Difference 2 to 4 Storeys	○ 0.7	○ 0.9	○ 1
Height Difference < 2 Storeys	○ 1	○ 1	◉ 1

Comment

Factor D 1.0

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

Effect on Structural Performance ○ *Severe* ○ *Significant* ◉ *Insignificant* **Factor E** 1.0

Source: Tararua District Council - Faulting and Liquefaction map

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

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

Factor F 1.00

Record rationale for choice of Factor F:
Unknown details of the part of the old building that was retained. Archive drawings do not fully match with the existing structure. No significant damages to structural elements or foundation settlements were observed.

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

PAR
Transverse 1.00

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Initial Evaluation Procedure (IEP) Assessment – completed for Linwood Downs Ltd

Street Number & Name:	52 Main Street	Job No.:	115030
AKA:		By:	William Akepogu
Name of building:	RD1	Date:	13/05/2015
City:	Pahiatua	Revision No.:	A

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

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

		Longitudinal	Transverse
4.1	**Assessed Baseline *(%NBS)*$_b$** (from Table IEP - 1)	69%	70%
4.2	**Performance Achievement Ratio (PAR)** (from Table IEP - 2)	1.01	1.00
4.3	**PAR x Baseline *(%NBS)*$_b$**	70%	70%
4.4	**Percentage New Building Standard *(%NBS)*** (Use lower of two values from Step 4.3)		70%

Step 5 - Potentially Earthquake Prone? (Mark as appropriate) ***%NBS*** ≤ 34 NO

Step 6 - Potentially Earthquake Risk? (Mark as appropriate) ***%NBS*** < 67 NO

Step 7 - Provisional Grading for Seismic Risk based on IEP

Seismic Grade B

Additional Comments (items of note affecting IEP score)

Assumed 'Site subsoil class D' as per NZS1170.5:2004

Evaluation Confirmed by _____ **Signature**

Damian Linehan **Name**

1004738 **CPEng. No**

Relationship between Grade and *%NBS*:

Grade:	A+	A	B	C	D	E
%NBS:	> 100	100 to 80	79 to 67	66 to 34	33 to 20	< 20

WARNING!! *This initial evaluation has been carried out solely as an initial seismic assessment of the building following the procedure set out in the New Zealand Society for Earthquake Engineering document "Assessment and Improvement of the Structural Performance of Buildings in Earthquakes, June 2006". This spreadsheet must be read in conjunction with the limitations set out in the accompanying report, and should not be relied on by any party for any other purpose. Detailed inspections and engineering calculations, or engineering judgements based on them, have not been undertaken, and these may lead to a different result or seismic grade.*

DISCLOSURE STATEMENT

1. The following information has been supplied to Capital Commercial (2013) Limited ("Bayleys") to be made available for distribution on the vendor's behalf to potential purchasers to assist purchasers with their due diligence and to use at the purchaser's discretion.
2. Bayleys and the Vendor do not warrant the accuracy or completeness of the information and recommends that all recipients undertake their own due diligence, obtain their own reports to their satisfaction and seek independent advice prior to committing to purchaser.