

# **ATTACHMENTS**

## **Taupo Airport Authority Committee Meeting**

**1 May 2017**

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Taupo Airport Authority Committee Meeting Minutes

13 March 2017

**TAUPO DISTRICT COUNCIL  
MINUTES OF THE TAUPO AIRPORT AUTHORITY COMMITTEE MEETING  
HELD AT THE TAUPO AIRPORT, ANZAC MEMORIAL DRIVE, TAUPO  
ON MONDAY, 13 MARCH 2017 AT 11.00AM**

**PRESENT:** Mr Chris Johnston (in the Chair), Mr John Funnell, Ms Kathy Guy, Cr Christine Rankin

**IN ATTENDANCE:** Group Manager: Business & Technology, General Manager Taupō Airport, Airport Operations Manager, Executive Assistant

**MEDIA AND PUBLIC:** Nil

**1 APOLOGIES**

**TAA201703/01 RESOLUTION**

Moved: Ms Kathy Guy  
Seconded: Mr John Funnell

That the apology received from Mayor David Trewavas and Cr Jollands be accepted.

**CARRIED**

**2 CONFLICTS OF INTEREST**

Mr J Funnell declared a conflict of interest at the time of discussion on lease renewals in item 4.1.

**3 CONFIRMATION OF MINUTES**

**3.1 TAUPO AIRPORT AUTHORITY COMMITTEE MEETING - 13 FEBRUARY 2017**

Councillor Rankin requested a correction to attendees recorded in the present section, her apologies had been received in the meeting.

**TAA201703/02 RESOLUTION**

Moved: Ms Kathy Guy  
Seconded: Mr John Funnell

That the minutes of the Taupo Airport Authority Committee meeting held on Monday 13 February 2017 as amended be confirmed as a true and correct record.

**CARRIED**

**4 REPORTS**

**4.1 GENERAL MANAGER'S REPORT**

The General Manager – Taupō Airport spoke to his report and made the following comments:

- New dashboard being developed for reporting which would give a quick overview of statistics.
- Substantial increase to baggage handling during the Ironman period.
- CAA in public consultation stage on issuing "notices". TAA to submit as required.
- Car Park: in the short term road markings would be updated. At peak periods approximately 150-160 cars may utilise the parking area with the drop off and pick up area experiencing high usage.
- Concrete was the preferred option for Southern Apron Extension. Agreed the General Manager to engage with Crown on the matter.
- Leases were up for renewal, with two leasees having given notice to continue at this time. It was noted that tenants were required to give notice of their intention to renew.

Page 1

- Request to build a private hanger on leased site tabled [A1891771].

Members discussed the lease renewal process and having the sites assessed for market value.

#### **TAA201703/03 RESOLUTION**

Moved: Cr Christine Rankin

Seconded: Mr John Funnell

That the Taupo Airport Authority Committee receives the General Manager's report.

**CARRIED**

#### **4.2 FINANCIAL REPORT - JANUARY 2017**

In discussion members noted the following:

- High monthly rental cost associated with the baggage area tent.
- Landing fees were based on plane weight; recently there had been an increase in large planes landing.
- Cash positive with reserves growing.

#### **TAA201703/04 RESOLUTION**

Moved: Mr John Funnell

Seconded: Cr Christine Rankin

That the Taupo Airport Authority Committee receives the January 2017 Financial report.

**CARRIED**

#### **4.3 HEALTH AND SAFETY**

The General Manager provided the following update:

- No incidents had been reported.
- Risk Register was tabled [A1892471]. Members requested this information be provided as part of the item going forward.
- Public domain was the committee's concern, however private areas were not.
- Safety Management System [SMS] plan was being developed, due 2018. An external party had approached the General Manager to assist with writing the SMS.
- SMS and Health & Safety were separate matters.

#### **TAA201703/05 RESOLUTION**

Moved: Ms Kathy Guy

Seconded: Mr John Funnell

That the Taupo Airport Authority Committee receives the information relating to health and safety.

**CARRIED**

**5 CONFIDENTIAL BUSINESS****RESOLUTION TO EXCLUDE THE PUBLIC**

I move that the public be excluded from the following parts of the proceedings of this meeting.

The general subject of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48(1) of the local government official information and meetings act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under Section 48(1) for the passing of this resolution
<b>Agenda Item No: 5.1</b> Confirmation of Confidential Portion of Taupo Airport Authority Committee Minutes - 13 February 2017	Section 6(a) - the making available of the information would be likely to prejudice the maintenance of the law, including the prevention, investigation, and detection of offences, and the right to a fair trial	Section 48(1)(a)(i)- the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6
<b>Agenda Item No: 5.2</b> Receipt of Unconfirmed Minutes of the Taupo Airport Operational & Safety Committee - 18 January 2017	Section 7(2)(d) - the withholding of the information is necessary to avoid prejudice to measures protecting the health or safety of members of the public	Section 48(1)(a)(i)- the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 7
<b>Agenda Item No: 5.3</b> Receipt of Unconfirmed minutes of the 2015/2016 AGM Taupo Airport Users Group Incorporated	Section 7(2)(d) - the withholding of the information is necessary to avoid prejudice to measures protecting the health or safety of members of the public	Section 48(1)(a)(i)- the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 7

I also move that *[name of person or persons]* be permitted to remain at this meeting, after the public has been excluded, because of their knowledge of *[specify]*. This knowledge, which will be of assistance in relation to the matter to be discussed, is relevant to that matter because *[specify]*.

**The Meeting closed at 12.24pm.**

**The minutes of this meeting were confirmed at the Taupo Airport Authority Committee Meeting held on 1 May 2017.**

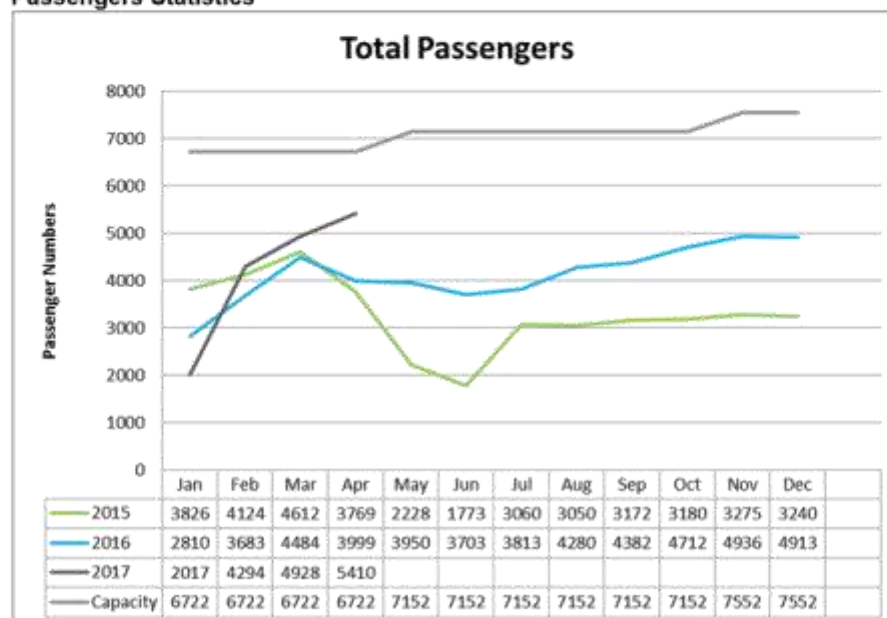
.....  
**CHAIRPERSON**

TO: TAUPŌ AIRPORT AUTHORITY COMMITTEE

FROM: Taupō Airport Manager

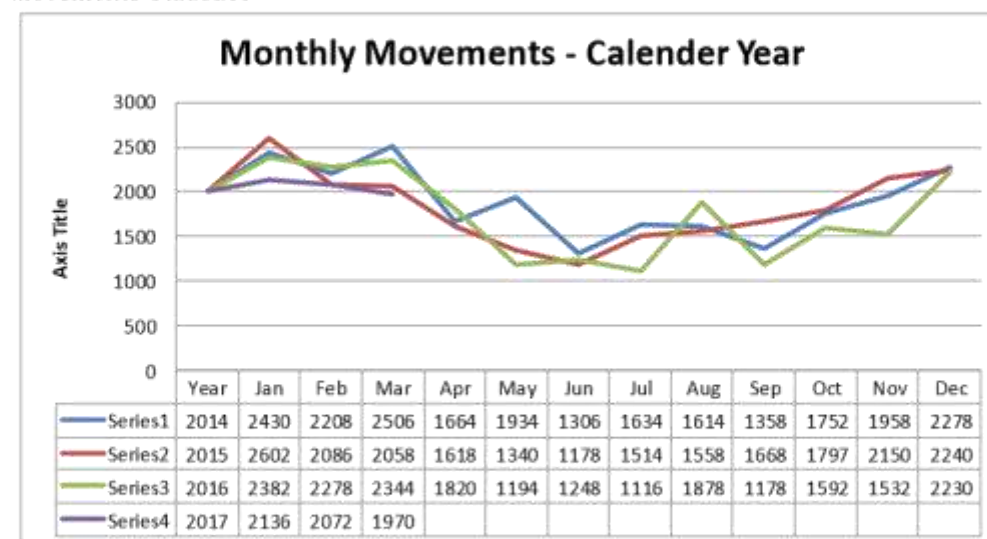
SUBJECT: General Manager's Report

### Passengers Statistics



A total of 14637 passengers passed through the terminal in the three months from January this year compared with 10977 for the same period last year, which is a 33% increase. If this trend continues it would mean that the Air NZ flights would be running at just over 100% capacity by the end of the year.

### Movements Statistics



**Apron/ Taxiways**

No issues with taxiways and the apron area.

**Airfield Maintenance**

In preparation for Cyclone Cook a contractor was used to clear drains and waterways to allow water to run off areas generally affected by heavy rain. This worked well and we had no issues with flooding which has been a problem in the past.

**Runway**

No issues to report.

**Civil Aviation Authority**

The CAA has recently announced their new Fees and Charges. There is a positive result to the TAA with these new charges, in that the CAA has removed the charges for Audits and Inspections. This means a saving of around \$3000.00 per annum to the TAA.

**Airways**

No issues to report.

**Roads and Car Park**

New road markings have been painted on the road next to the car park extension to delineate between the edge of the road and the car park. We have had cars being parked on the road causing traffic flow issues. The new markings appear to have reduced the problem so far.

**Security**

Air New Zealand reported that they had a passenger, who was late to board the aircraft, not go through the normal boarding procedure and tried to climb the fence rather than go through the boarding gate as he panicked and thought he would miss his flight. Air New Zealand staff handled the situation.

**Baggage Claim**

Work in progress. Prices are being sought for a temporary standalone building.

**The Southern Apron Extension**

The tender for the Southern Apron extension has been awarded to Deano's Earthmoving Ltd. Approval has been given by the Ministry of Transport for the work to proceed. The work is scheduled start at the end of April, and is being managed by Opus Consulting.

**Leases**

An application to assign the lease of Site 8 from Izard Investments to Nowell 2 Trustee Ltd has been received. Effectively this is assigning the lease from Richard Izard to his son. A valuation is being carried out at this time on the sites which are due for lease renewals. This valuation should be received next week.

**Master Plan**

The TAA have held Strategic Planning workshops, as a part of the master plan development and ongoing direction of the airport. This is work in progress.

Mike Groome

General Manager - Taupo Airport Authority

19-04-17:42 PM

## Taupo Airport Operational Landside Risk Register and Action Plan Overview

## Taupo Airport Operational Landside Risk Register and Action Plan Overview

Reference - Issue No.: and/or Issue 1st April 2017

Future Review date: 1st May 2017

Ref No	Hazards	Identified Risks	Analysis & Evaluation				Existing controls described & evaluated				Further Actions			
	Hazard Description (any condition, object or circumstance which could induce an accident)	Risk Description List the EVENT and the EFFECT(s) in the form of Risk Statement(s) below. For example: "There is a risk that <INSERT EVENT> will <INSERT IMPACT> initiate"	Consequence (1, 2, 3, 4 or 5 - see Sheet 1)	Exposure (A, B, C, D or E - see Sheet 1)	Risk Level (1, 2, 3, 4 or 5 - see Sheet 1)	Last Review Date	Next Review Date (based on frequency)	Existing Controls (if any)	Action Date	What we do now manage this risk, to	Acceptable Risk (Yes or No) Current Risk (Yes or No)	What we will do to reduce this risk	Assigned To	Review Date (based on frequency)
		<u>Conditional Risk Analysis</u>												
L81	Parachutist landing outside PLZ	Parachutist conflicting with vehicles, persons or property	3	C	High (H)	30-06-16	30-06-17	1/M	30-06-16	MOU procedure, Parachute Co has a system to advise traffic of location of parachutist.	E Y	Parachute Company will retrieve parachutist	KG	L
L82	Security Infringement - Fencing	Unauthorized inside access	3	D	Medium (M)	30-06-16	30-06-17	E	Daily	Daily Aerials/inspections	E Y	Advise airport users to keep gates closed and report any damaged fencing.	KJ	L
L83	Aircraft Noise	Damage to persons hearing and can increase stress levels	2	A	High (H)	30-06-16	30-06-17	1/M	30-06-16	Isolate by building/airport design, minimise by SOPs, banking, warning signage.	E Y	Continue to monitor	KJ/MG	L
L84	Slippery Surfaces	A slip or fall could occur causing injury to the recipient.	3	D	Medium (M)	30-06-16	30-06-17	1/M	30-06-16	Isolate by banking around hazardous areas, minimise by SOPs, signage.	E Y	Continue to monitor	KJ/MG	L
L85	Flooding	Surface slippery and damage to property	3	D	Medium (M)	30-06-16	30-06-17	1/M	30-06-16	Isolate by banking around hazardous areas, minimise by SOPs, signage.	E Y	Continue to monitor	KJ/MG	L
L86	Dealing With Difficult People	Uncertainty of how people are going to react.	2	D	Medium (M)	30-06-16	30-06-17	1/M	30-06-16	Isolate by ensuring access to counters and areas is controlled by barriers, simple security gates, building/airport design. Minimise by training staff on how to deal with difficult / aggressive people.	E Y	Continue to monitor and review.	KJ/MG	L
L87	Street lights an obstruction	Due to street lights positioned in car parking areas there is a risk of a vehicle hitting a post.	3	C	Medium (M)	30-06-16	30-06-17	M	30-06-16	Have installed high visibility bollards around street lights in car parking areas to identify hazard. Bollards also act as a buffer should a vehicle hit them.	E Y	Maintain bollards as part of airport maintenance plan.	KJ/MG	L
L88	Unauthorized contractors	Contractors operating landside without a permit and jeopardising their own safety and other persons.	4	D	High (H)	30-06-16	30-06-17	E/M	30-06-16	TAA SOP requires all contractors to obtain a work permit and inform prior to commencing A/D works	E Y	Advise contractors to report to TAA prior to works commencing.	KJ/MG	L
L89	Crack covers being damaged or removed.	Cracks exposed resulting in a hole that a vehicle could hit or person walk into.	3	B	High (H)	11-01-17	30-06-17	E	30-06-16	Paint the crack lids with reflective paint and mark.	NS Y	Investigate replacing lids with grates	KJ/MG	L



Taupo Airport Operational Terminal Risk Register and Action Plan Overview

Future Review date: 1st May 2017

Page 1 of 1

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

<b>Building Name:</b>	<b>Taupo Airport - Timber Office</b>	<b>Ref:</b> 130752
<b>Location:</b>	<b>Taupo, New Zealand</b>	<b>By:</b> LH
		<b>Date:</b> 30/08/2013

**Step 1 - General Information****1.1 Photos (attach sufficient to describe building)****1.2 Sketch of building plan****1.3 List relevant features**

The small office building located north of the main Terminal building at Taupo Airport is single level and constructed from lightweight materials, predominately timber. The building has a timber floor and foundations presumably consist of piles.

A search of TDC archives did not reveal any documentation relating to the building. The age of the building was conservatively estimated as pre 1935.

The building is well maintained and in tidy condition.

**1.4 Note information sources**

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

tick as appropriate

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

Table IEP-2 Initial Evaluation Procedure - Step 2

Page 2

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

Building Name:	Taupo Airport - Timber Office	Ref: 130752
Location:	Taupo, New Zealand	By: LH
Direction Considered:	a) Longitudinal & b) Transverse	Date: 30/08/2013

(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)

Step 2 - Determination of  $(\%NBS)_b$ 2.1 Determine nominal  $(\%NBS)_{nom}$ 

## a) Date of Design and Seismic Zone

Note: Only periods between 1965-1992 require seismic zone to be chosen

- ☐ Pre 1935 see notes 1, 3  
☒ 1935-1965  
☐ 1965-1976  
☐ 1976-1992 see note 2  
☐ 1992-2004

Seismic Zone:

N/A

## b) Soil Type

From NZS1170.5:2004, C13.1.3

- NZS1170.5:2004  
☐ A or B Rock  
☐ C Shallow Soil  
☒ D Soft Soil  
☐ E Very Soft Soil

From NZS4203:1992, C1 4.6.2.2  
(for 1992-2004 only, and only if known)

- NZS4203:1992  
☒ Rigid  
☐ Intermediate

## c) Estimate Period, T

can use following:

- $T = 0.09h_n^{0.75}$  for moment resisting concrete frame  
 $T = 0.14h_n^{0.75}$  for moment resisting steel frame  
 $T = 0.08h_n^{0.75}$  for eccentrically braced frame  
 $T = 0.06h_n^{0.75}$  for all other frame structures  
 $T = 0.09h_n^{0.75}/A_c^{0.5}$  for concrete shear walls  
 $T = 0.4sec$  for masonry shear walls

period, T

0.170 0.170 seconds

- | Longitudinal                           | Transverse                             |
|--|--|
| <input type="radio"/> MRCF             | <input type="radio"/> MRCF             |
| <input type="radio"/> MRSF             | <input type="radio"/> MRSF             |
| <input type="radio"/> EBF              | <input type="radio"/> EBF              |
| <input checked="" type="radio"/> Other | <input checked="" type="radio"/> Other |
| <input type="radio"/> CSW              | <input type="radio"/> CSW              |
| <input type="radio"/> MSW              | <input type="radio"/> MSW              |

Where  $h_n$  = height from base of structure to uppermost seismic weightor mass,  $A_c = \sum A_i / (0.2 + L_{ei}/h_n)^2$  $A_i$  = cross-sectional shear area of shear wall  $i$  in the first storey of building (m<sup>2</sup>) $L_{ei}$  = length of shear wall  $i$  in the first storey in the direction parallel to the applied forces (m)with the restriction that  $L_{ei} / h_n$  shall not exceed 0.9

$h_n = 4$

$A_c = 0.0$

d)  $(\%NBS)_{nom}$  determined from Figure 3.3

Longitudinal 3.0  $(\%NBS)_{nom}$

Transverse 3.0  $(\%NBS)_{nom}$

Add specific value from figure 3.3

**Note 1:** For buildings designed prior to 1965 and known to be designed as a public building in accordance with the code, multiply  $(\%NBS)_{nom}$  by 1.25

For buildings designed 1965-1976 and known to be designed as public buildings in accordance with the code of the time, multiply  $(\%NBS)_{nom}$  by 1.33-Zone A, or by 1.2 - Zone B

1.25

**Note 2:** For reinforced concrete buildings designed between 1976-84 multiply  $(\%NBS)_{nom}$  by 1.2

1

**Note 3:** For buildings designed prior to 1935 multiply  $(\%NBS)_{nom}$  by 0.8 except for Wellington when the factor may be taken as 1

1

Longitudinal 3.75  $(\%NBS)_{nom}$


Transverse 3.75  $(\%NBS)_{nom}$

Table IEP-2 Initial Evaluation Procedure Step 2 continued		Page 3				
<b>2.2 Near Fault Scaling Factor, Factor A</b> If TS1.5 sec, Factor A=1						
a) Near fault factor, N(T,D) (from NZS1170.5:2004, Cl 3.1.6)	Longitudinal: <input type="text" value="1"/> Transverse: <input type="text" value="1"/>					
b) Near fault Scaling Factor =	1/N(T,D)	Factor A Longitudinal: <input type="text" value="1"/> Transverse: <input type="text" value="1"/>				
<b>2.3 Hazard Scaling Factor, Factor B</b>						
a) Hazard Factor, Z for site (from NZS1170.5:2004, Table 3.3)	Site Area: <input type="text" value="Taupo"/> Z = 0.28 Z <sub>1992</sub> = 0.9 Refer to Figure 3.5(b) (NZS 4203: 1992)					
b) Hazard Scaling Factor For pre 1992 = 1/Z For 1992 onwards = Z <sub>1992</sub> /Z		Factor B <input type="text" value="3.57"/>				
(where Z <sub>1992</sub> is the NZS4203:1992 Zone Factor from accompanying figure 3.5(b))						
<b>2.4 Return Period Scaling Factor, Factor C</b> Choose Importance Level a) Building Importance Level (from NZS1170.0:2004, Table 3.1 and 3.2) <input type="radio"/> 1 <input checked="" type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4						
b) Return Period Scaling factor from accompanying Table 3.1		Factor C <input type="text" value="1"/>				
<b>2.5 Ductility Scaling Factor, Factor D</b>						
a) Assessed Ductility of Existing Structure, $\mu$ (shall be less than maximum given in accompanying Table 3.2)	$\mu$ = <input type="text" value="2"/> $\mu$ = <input type="text" value="2"/>	Longitudinal Direction Transverse Direction				
b) Ductility Scaling factor For pre 1976 = For 1976 onwards = (where $k_d$ is NZS1170.5:2004 Ductility Factor, from accompanying Table 3.3)	Longitudinal Transverse $k_d$ $k_d$ <table border="1"><tr><td>1.12</td><td>1.12</td></tr><tr><td>1</td><td>1</td></tr></table>	1.12	1.12	1	1	Factor D Longitudinal: <input type="text" value="1.57"/> Transverse: <input type="text" value="1.57"/>
1.12	1.12					
1	1					
<b>2.6 Structural Performance Factor, Factor E</b>						
a) Structural Performance Factor, $S_p$ (from accompanying Figure 3.4)	<table border="1"><tr><td>0.7</td></tr><tr><td>0.7</td></tr></table> Longitudinal Direction Transverse Direction	0.7	0.7			
0.7						
0.7						
b) Structural Performance Scaling Factor =	1/ $S_p$	Factor E Longitudinal: <input type="text" value="1.43"/> Transverse: <input type="text" value="1.43"/>				
<b>2.7 Baseline %NBS for Building, (%NBS)<sub>b</sub></b> (equals (%NBS) <sub>nom</sub> x AxBxCxDxE)						
		Longitudinal: <input type="text" value="30"/> Transverse: <input type="text" value="30"/>				

Table IEP-2 Initial Evaluation Procedure - Step 3 (Refer Table IEP - 1 for Step 1; Table IEP - 3 for Steps 3; Table IEP - 4 for Steps 4, 5 and 6))		Page 4																
Building Name:	Taupo Airport - Timber Office	Ref: 130752																
Location:	Taupo, New Zealand	By: LH																
Direction Considered:	a) Longitudinal & b) Transverse	Date: 30/08/2013																
<small>(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)</small>																		
<b>a) Longitudinal Direction</b>																		
<b>Step 3 - Assessment of Performance Achievement Ratio (PAR)</b> <small>(Refer Appendix B - Section B3.2)</small>																		
Critical Structural Weakness	Building Score	Effect on Structural Performance <small>(Choose a value - Do not interpolate)</small>																
<b>3.1 Plan Irregularity</b> <small>Effect on Structural Performance</small>	Factor A <input style="width: 50px;" type="text" value="1"/>	Plan Irregularity _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant Comment _____																
<b>3.2 Vertical Irregularity</b> <small>Effect on Structural Performance</small>	Factor B <input style="width: 50px;" type="text" value="1"/>	Vertical Irregularity _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant Comment _____																
<b>3.3 Short Columns</b> <small>Effect on Structural Performance</small>	Factor C <input style="width: 50px;" type="text" value="1"/>	Short Columns _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant Comment _____																
<b>3.4 Pounding Potential</b> <small>(Estimate D1 and D2 and set D = the lower of the two, or =1.0 if no potential for pounding)</small>																		
<b>a) Factor D1: - Pounding Effect</b> <small>Select appropriate value from Table</small>																		
<div style="border: 1px solid black; padding: 5px;"> <small>Note:</small>            Values given assume the building has a frame structure. For stiff buildings (eg with shear walls), the effect of pounding may be reduced by taking the co-efficient to the right of the value applicable to frame buildings.         </div>																		
		Factor D1= <input style="width: 50px;" type="text" value="1"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Table for Selection of Factor D1</th> <th style="text-align: center;">Severe <small>0 &lt; Sep &lt; .005H</small></th> <th style="text-align: center;">Significant <small>.005 &lt; Sep &lt; .01H</small></th> <th style="text-align: center;">Insignificant <small>Sep &gt; .01H</small></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Separation</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">Alignment of Floors within 20% of Storey Height</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.8</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Alignment of Floors not within 20% of Storey Height</td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.8</td> </tr> </tbody> </table>			Table for Selection of Factor D1	Severe <small>0 &lt; Sep &lt; .005H</small>	Significant <small>.005 &lt; Sep &lt; .01H</small>	Insignificant <small>Sep &gt; .01H</small>	Separation				Alignment of Floors within 20% of Storey Height	<input type="radio"/> 0.7	<input type="radio"/> 0.8	<input checked="" type="radio"/> 1	Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8
Table for Selection of Factor D1	Severe <small>0 &lt; Sep &lt; .005H</small>	Significant <small>.005 &lt; Sep &lt; .01H</small>	Insignificant <small>Sep &gt; .01H</small>															
Separation																		
Alignment of Floors within 20% of Storey Height	<input type="radio"/> 0.7	<input type="radio"/> 0.8	<input checked="" type="radio"/> 1															
Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8															
<b>b) Factor D2: - Height Difference Effect</b> <small>Select appropriate value from Table</small>																		
		Factor D2= <input style="width: 50px;" type="text" value="1"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Table for Selection of Factor D2</th> <th style="text-align: center;">Severe <small>0 &lt; Sep &lt; .005H</small></th> <th style="text-align: center;">Significant <small>.005 &lt; Sep &lt; .01H</small></th> <th style="text-align: center;">Insignificant <small>Sep &gt; .01H</small></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Height Difference &gt; 4 Storeys</td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Height Difference 2 to 4 Storeys</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.9</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Height Difference &lt; 2 Storeys</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> </tbody> </table>			Table for Selection of Factor D2	Severe <small>0 &lt; Sep &lt; .005H</small>	Significant <small>.005 &lt; Sep &lt; .01H</small>	Insignificant <small>Sep &gt; .01H</small>	Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1	Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1	Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
Table for Selection of Factor D2	Severe <small>0 &lt; Sep &lt; .005H</small>	Significant <small>.005 &lt; Sep &lt; .01H</small>	Insignificant <small>Sep &gt; .01H</small>															
Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1															
Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1															
Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1															
Factor D <input style="width: 50px;" type="text" value="1"/>		<small>(Set D = lesser of D1 and D2 or.. set D = 1.0 if no prospect of pounding)</small>																
<b>3.5 Site Characteristics - (Stability, landslide threat, liquefaction etc)</b> <small>Effect on Structural Performance</small>	Factor E <input style="width: 50px;" type="text" value="1"/>	Severe    Significant    Insignificant <input type="radio"/> 0.5 max <input type="radio"/> 0.7 <input checked="" type="radio"/> 1																
<b>3.6 Other Factors</b>	Factor F <input style="width: 50px;" type="text" value="2.5"/> for 3 storeys - maximum value 2.5, otherwise - maximum value 1.5. No minimum																	
<small>Record rationale for choice of Factor F:</small>																		
<small>Timber structure, single level.</small>																		
<b>2.7 Performance Achievement Ratio (PAR)</b> <small>(equals AxBxCxDxExF)</small>		PAR <input style="width: 50px;" type="text" value="2.50"/>																

Table IEP-2 Initial Evaluation Procedure - Step 3 <small>(Refer Table IEP - 1 for Step 1; Table IEP - 3 for Steps 3; Table IEP - 4 for Steps 4, 5 and 6)</small>			Page 5
<b>Building Name:</b>	Taupo Airport - Timber Office	<b>Ref:</b>	130752
<b>Location:</b>	Taupo, New Zealand	<b>By:</b>	LH
<b>Direction Considered:</b>	a) Longitudinal & b) Transverse <small>(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)</small>	<b>Date:</b>	30/08/2013
b) Transverse Direction			
<b>Step 3 - Assessment of Performance Achievement Ratio (PAR)</b> <small>(Refer Appendix B - Section B3.2)</small>			
<b>Critical Structural Weakness</b>	<b>Building Score</b>	<b>Effect on Structural Performance</b> <small>(Choose a value - Do not interpolate)</small>	
3.1 Plan Irregularity <small>Effect on Structural Performance</small>	Factor A <span style="border: 1px solid black; padding: 2px 10px;">1</span>	Plan Irregularity _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	
		Comment _____	
3.2 Vertical Irregularity <small>Effect on Structural Performance</small>	Factor B <span style="border: 1px solid black; padding: 2px 10px;">1</span>	Vertical Irregularity _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	
		Comment _____	
3.3 Short Columns <small>Effect on Structural Performance</small>	Factor C <span style="border: 1px solid black; padding: 2px 10px;">1</span>	Short Columns _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant	
		Comment _____	
3.4 Pounding Potential <small>(Estimate D1 and D2 and set D = the lower of the two, or =1.0 if no potential for pounding)</small>			
a) Factor D1: - Pounding Effect <small>Select appropriate value from Table</small>			
<b>Note:</b> Values given assume the building has a frame structure. For stiff buildings (eg with shear walls), the effect of pounding may be reduced by taking the co-efficient to the right of the value applicable to frame buildings.			
<b>Table for Selection of Factor D1</b>		Factor D1= <span style="border: 1px solid black; padding: 2px 10px;">1</span>	
	Severe Separation 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Alignment of Floors within 20% of Storey Height	<input type="radio"/> 0.7	<input type="radio"/> 0.8	<input checked="" type="radio"/> 1
Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8
b) Factor D2: - Height Difference Effect <small>Select appropriate value from Table</small>			
<b>Table for Selection of Factor D2</b>		Factor D2= <span style="border: 1px solid black; padding: 2px 10px;">1</span>	
	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H
Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1
Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1
Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
Factor D <span style="border: 1px solid black; padding: 2px 10px;">1</span>		<small>(Set D = lesser of D1 and D2 or... set D = 1.0 if no prospect of pounding)</small>	
3.5 Site Characteristics - (Stability, landslide threat, liquefaction etc) <small>Effect on Structural Performance</small>	Factor E <span style="border: 1px solid black; padding: 2px 10px;">1</span>	Severe    Significant    Insignificant <input type="radio"/> 0.5 max <input type="radio"/> 0.7 <input checked="" type="radio"/> 1	
3.6 Other Factors			
Factor F <span style="border: 1px solid black; padding: 2px 10px;">2.5</span>		<small>for ≤ 3 storeys - maximum value 2.5, otherwise - maximum value 1.5. No minimum</small>	
<b>Record rationale for choice of Factor F:</b> Timber structure, single level.			
2.7 Performance Achievement Ratio (PAR) <small>(equals AxBxCxDxExF)</small>		PAR	<span style="border: 1px solid black; padding: 2px 10px;">2.50</span>

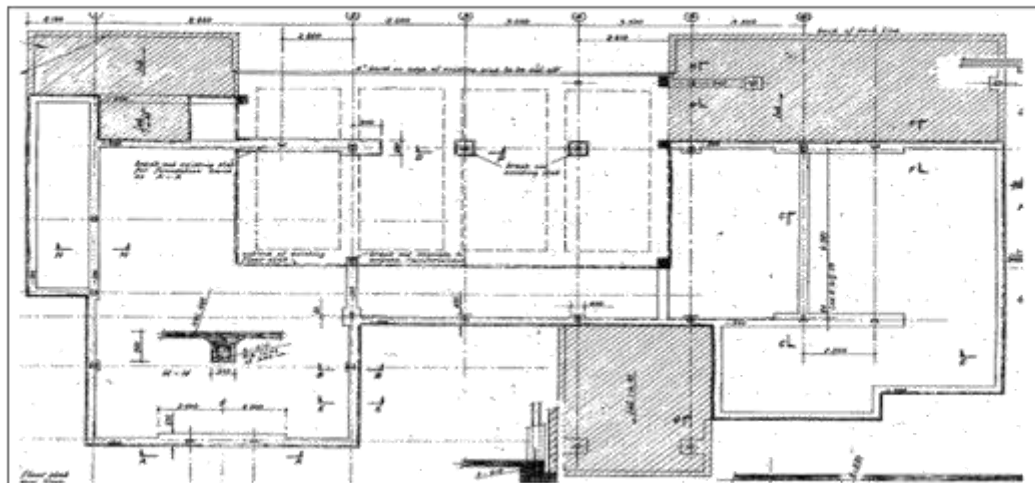


Table IEP- 4 Initial Evaluation Procedure Steps 4, 5 and 6 <small>(Refer Table IEP - 1 for Step 1; Table IEP - 2 for Step 2; Table IEP - 3 for step 3)</small>		Page 6
Building Name:	Taupo Airport - Timber Office	Ref: 130752
Location:	Taupo, New Zealand	By: LH
		Date: 30/08/2013
 <b>Step 4 - Percentage of New Building Standard (%NBS)</b>		
	Longitudinal	Transverse
4.1 Assessed Baseline ( %NBS) <sub>a</sub> <small>(from Table IEP - 1)</small>	30	30
4.2 Performance Achievement Ratio (PAR) <small>(from Table IEP - 2)</small>	2.50	2.50
4.3 PAR x Baseline (%NBS) <sub>b</sub>	75	75
4.4 Percentage New Building Standard (%NBS) <small>( Use lower of two values from Step 3.3)</small>		75
 <b>Step 5 - Potentially earthquake Prone?</b> <small>(Mark as appropriate)</small>		
	%NBS ≤ 33	NO
 <b>Step 6 - Potentially Earthquake Risk?</b>		
	%NBS < 67	NO
 <b>Step 7 - Provisional Grading for Seismic Risk based on IEP</b>		
	Seismic Grade	B
Evaluation Confirmed by...		Signature 
		Name Ian C. Smith
		CPEng. No 27179
 <b>Relationship between Grade and SPS:</b>		
Grade:	A+	A
SPS:	> 100	100 to 80
	80 to 67	67 to 33
	33 to 20	< 20

**Table IEP-1 Initial Evaluation Procedure Step 1****Page 1**

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

<b>Building Name:</b>	Taupo Airport Terminal	<b>Ref:</b>	130752
<b>Location:</b>	Taupo, New Zealand	<b>By:</b>	LH
		<b>Date:</b>	30/08/2013

**Step 1 - General Information****1.1 Photos (attach sufficient to describe building)****1.2 Sketch of building plan****1.3 List relevant features**

Structural drawings indicate that Taupo Airport terminal was designed and constructed circa 1979 for its intended use as the airport terminal building. The building is single level and irregularly shaped vertically and also horizontally.

Foundations consist of reinforced concrete strip footings around the perimeter and below internal load bearing walls. There are reinforced concrete pads below frame column positions. The foundation layout is included above.

The main super-structure of the building is constructed from a series of structural steel frames the columns of which are concrete encased. Longitudinal steel beams are also concrete encased. The building has large openings on the runway side to allow observation of aircraft. Other than windows and doors the balance of the building is clad in brick veneer. The roof is pitched steeply with a number of hips and has timber trusses spanning across the building. Above the trusses is timber sarking. The roof structure is braced further with rod style

**1.4 Note information sources**

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

tick as appropriate

☒  
☒  
☐  
☐  
☐  
☒

Property File from TDC



Table IEP-2 Initial Evaluation Procedure - Step 2

Page 2

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

Building Name:	Taupo Airport Terminal	Ref: 130752
Location:	Taupo, New Zealand	By: LH
Direction Considered:	a) Longitudinal & b) Transverse	Date: 30/08/2013

(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)

Step 2 - Determination of  $(\%NBS)_b$ 2.1 Determine nominal  $(\%NBS)_{nom}$ 

## a) Date of Design and Seismic Zone

Note: Only periods between 1965-1992 require seismic zone to be chosen

- ☐ Pre 1935 see notes 1, 3  
☐ 1935-1965  
☐ 1965-1976  
☒ 1976-1992 see note 2  
☐ 1992-2004

Seismic Zone:

Zone A

## b) Soil Type

From NZS1170.5:2004, C13.1.3

- NZS1170.5:2004  
☐ A or B Rock  
☐ C Shallow Soil  
☒ D Soft Soil  
☐ E Very Soft Soil

From NZS4203:1992, C1 4.6.2.2  
(for 1992-2004 only, and only if known)

- NZS4203:1992  
☒ Rigid  
☐ Intermediate

## c) Estimate Period, T

can use following:

- $T = 0.09h_n^{0.75}$  for moment resisting concrete frame  
 $T = 0.14h_n^{0.75}$  for moment resisting steel frame  
 $T = 0.08h_n^{0.75}$  for eccentrically braced frame  
 $T = 0.06h_n^{0.75}$  for all other frame structures  
 $T = 0.09h_n^{0.75}/A_c^{0.5}$  for concrete shear walls  
 $T = 0.4sec$  for masonry shear walls

period, T

0.602 0.502 seconds

- | Longitudinal                          | Transverse                            |
|---------------------------------------|---------------------------------------|
| <input type="radio"/> MRCF            | <input type="radio"/> MRCF            |
| <input checked="" type="radio"/> MRSF | <input checked="" type="radio"/> MRSF |
| <input type="radio"/> EBF             | <input type="radio"/> EBF             |
| <input type="radio"/> Other           | <input type="radio"/> Other           |
| <input type="radio"/> CSW             | <input type="radio"/> CSW             |
| <input type="radio"/> MSW             | <input type="radio"/> MSW             |

Where  $h_n$  = height from base of structure to uppermost seismic weightor mass,  $A_c = \sum A_i / (0.2 + L_{ei}/h_n)^2$  $A_i$  = cross-sectional shear area of shear wall  $i$  in the first storey of building (m<sup>2</sup>) $L_{ei}$  = length of shear wall  $i$  in the first storey in the direction parallel to the applied forces (m)with the restriction that  $L_{ei} / h_n$  shall not exceed 0.9

$h_n = 7$

$A_c = 0.0$

d)  $(\%NBS)_{nom}$  determined from Figure 3.3

Longitudinal 20.0  $(\%NBS)_{nom}$

Transverse 20.0  $(\%NBS)_{nom}$

Add specific value from figure 3.3

**Note 1:** For buildings designed prior to 1965 and known to be designed as a public building in accordance with the code, multiply  $(\%NBS)_{nom}$  by 1.25  
For buildings designed 1965-1976 and known to be designed as public buildings in accordance with the code of the time, multiply  $(\%NBS)_{nom}$  by 1.33-Zone A, or by 1.2 - Zone B

1

**Note 2:** For reinforced concrete buildings designed between 1976-84 multiply  $(\%NBS)_{nom}$  by 1.2

1

**Note 3:** For buildings designed prior to 1935 multiply  $(\%NBS)_{nom}$  by 0.8 except for Wellington when the factor may be taken as 1

1

Longitudinal 20.00  $(\%NBS)_{nom}$

Transverse 20.00  $(\%NBS)_{nom}$

Table IEP-2 Initial Evaluation Procedure Step 2 continued				Page 3								
<b>2.2 Near Fault Scaling Factor, Factor A</b> If TS1.5 sec, Factor A=1												
a) Near fault factor, N(T,D) <small>(from NZS1170.5:2004, Cl 3.1.6)</small>	Longitudinal: <input style="width: 50px;" type="text" value="1"/> Transverse: <input style="width: 50px;" type="text" value="1"/>	Factor A Longitudinal: <input style="width: 50px;" type="text" value="1"/> Transverse: <input style="width: 50px;" type="text" value="1"/>										
b) Near fault Scaling Factor =	$1/N(T,D)$											
<b>2.3 Hazard Scaling Factor, Factor B</b>												
a) Hazard Factor, Z for site <small>(from NZS1170.5:2004, Table 3.3)</small>	Site Area: <input style="width: 150px;" type="text" value="Taupo"/>	Z = 0.28 Z <sub>1992</sub> = 0.9 Refer to Figure 3.5(b) (NZS 4203: 1992)										
b) Hazard Scaling Factor For pre 1992 = $1/Z$ For 1992 onwards = $Z_{1992}/Z$	(where Z <sub>1992</sub> is the NZS4203:1992 Zone Factor from accompanying figure 3.5(b))											
		Factor B <input style="width: 50px;" type="text" value="3.57"/>										
<b>2.4 Return Period Scaling Factor, Factor C</b>												
a) Building Importance Level <small>(from NZS1170.0:2004, Table 3.1 and 3.2)</small>	Choose Importance Level <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4											
b) Return Period Scaling factor from accompanying Table 3.1	Factor C <input style="width: 50px;" type="text" value="1.1"/>											
<b>2.5 Ductility Scaling Factor, Factor D</b>												
a) Assessed Ductility of Existing Structure, $\mu$ <small>(shall be less than maximum given in accompanying Table 3.2)</small>	$\mu = $ <input style="width: 50px;" type="text" value="2"/> Longitudinal Direction $\mu = $ <input style="width: 50px;" type="text" value="2"/> Transverse Direction											
b) Ductility Scaling factor For pre 1976 = For 1976 onwards = <small>(where <math>k_d</math> is NZS1170.5:2004 Ductility Factor, from accompanying Table 3.3)</small>	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Longitudinal</th> <th style="padding: 5px;">Transverse</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><math>k_d</math></td> <td style="text-align: center; padding: 5px;"><math>k_d</math></td> </tr> <tr> <td style="text-align: center; padding: 5px;">1.43</td> <td style="text-align: center; padding: 5px;">1.43</td> </tr> <tr> <td style="text-align: center; padding: 5px;">1</td> <td style="text-align: center; padding: 5px;">1</td> </tr> </tbody> </table>		Longitudinal	Transverse	$k_d$	$k_d$	1.43	1.43	1	1	Factor D Longitudinal: <input style="width: 50px;" type="text" value="1.00"/> Transverse: <input style="width: 50px;" type="text" value="1.00"/>	
Longitudinal	Transverse											
$k_d$	$k_d$											
1.43	1.43											
1	1											
<b>2.6 Structural Performance Factor, Factor E</b>												
a) Structural Performance Factor, $S_p$ <small>(from accompanying Figure 3.4)</small>	<table border="1" style="margin: auto; border-collapse: collapse;"> <tbody> <tr> <td style="text-align: center; padding: 5px;">0.7</td> <td style="padding: 5px;">Longitudinal Direction</td> </tr> <tr> <td style="text-align: center; padding: 5px;">0.7</td> <td style="padding: 5px;">Transverse Direction</td> </tr> </tbody> </table>				0.7	Longitudinal Direction	0.7	Transverse Direction				
0.7	Longitudinal Direction											
0.7	Transverse Direction											
b) Structural Performance Scaling Factor =	$1/S_p$											
		Factor E Longitudinal: <input style="width: 50px;" type="text" value="1.43"/> Transverse: <input style="width: 50px;" type="text" value="1.43"/>										
<b>2.7 Baseline %NBS for Building, (%NBS)<sub>b</sub></b> <small>(equals (%NBS)<sub>nom</sub> x AxBxCxDxE)</small>												
		Longitudinal: <input style="width: 50px;" type="text" value="112"/> Transverse: <input style="width: 50px;" type="text" value="112"/>										

Table IEP-2 Initial Evaluation Procedure - Step 3 (Refer Table IEP - 1 for Step 1; Table IEP - 3 for Steps 3; Table IEP - 4 for Steps 4, 5 and 6))		Page 4																
Building Name:	Taupo Airport Terminal	Ref: 130752																
Location:	Taupo, New Zealand	By: LH																
Direction Considered:	a) Longitudinal & b) Transverse	Date: 30/08/2013																
<small>(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)</small>																		
<b>a) Longitudinal Direction</b>																		
<b>Step 3 - Assessment of Performance Achievement Ratio (PAR)</b> <small>(Refer Appendix B - Section B3.2)</small>																		
Critical Structural Weakness	Building Score	Effect on Structural Performance <small>(Choose a value - Do not interpolate)</small>																
<b>3.1 Plan Irregularity</b> <small>Effect on Structural Performance</small>	Factor A <input type="text" value="0.7"/>	Plan Irregularity _____ <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant																
		Comment _____																
<b>3.2 Vertical Irregularity</b> <small>Effect on Structural Performance</small>	Factor B <input type="text" value="0.7"/>	Vertical Irregularity _____ <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant																
		Comment _____																
<b>3.3 Short Columns</b> <small>Effect on Structural Performance</small>	Factor C <input type="text" value="1"/>	Short Columns _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant																
		Comment _____																
<b>3.4 Pounding Potential</b> <small>(Estimate D1 and D2 and set D = the lower of the two, or =1.0 if no potential for pounding)</small>																		
<b>a) Factor D1: - Pounding Effect</b> <small>Select appropriate value from Table</small>																		
<div style="border: 1px solid black; padding: 5px;"> <p><b>Note:</b> Values given assume the building has a frame structure. For stiff buildings (eg with shear walls), the effect of pounding may be reduced by taking the co-efficient to the right of the value applicable to frame buildings.</p> </div>																		
		Factor D1= <input type="text" value="1"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Severe 0 &lt; Sep &lt; .005H</th> <th style="text-align: center;">Significant .005 &lt; Sep &lt; .01H</th> <th style="text-align: center;">Insignificant Sep &gt; .01H</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Alignment of Floors within 20% of Storey Height</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.8</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Alignment of Floors not within 20% of Storey Height</td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.8</td> </tr> </tbody> </table>				Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H	Alignment of Floors within 20% of Storey Height	<input type="radio"/> 0.7	<input type="radio"/> 0.8	<input checked="" type="radio"/> 1	Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8				
	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H															
Alignment of Floors within 20% of Storey Height	<input type="radio"/> 0.7	<input type="radio"/> 0.8	<input checked="" type="radio"/> 1															
Alignment of Floors not within 20% of Storey Height	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 0.8															
<b>b) Factor D2: - Height Difference Effect</b> <small>Select appropriate value from Table</small>																		
		Factor D2= <input type="text" value="1"/>																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Severe 0 &lt; Sep &lt; .005H</th> <th style="text-align: center;">Significant .005 &lt; Sep &lt; .01H</th> <th style="text-align: center;">Insignificant Sep &gt; .01H</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Height Difference &gt; 4 Storeys</td> <td style="text-align: center;"><input type="radio"/> 0.4</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Height Difference 2 to 4 Storeys</td> <td style="text-align: center;"><input type="radio"/> 0.7</td> <td style="text-align: center;"><input type="radio"/> 0.9</td> <td style="text-align: center;"><input type="radio"/> 1</td> </tr> <tr> <td style="text-align: center;">Height Difference &lt; 2 Storeys</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input type="radio"/> 1</td> <td style="text-align: center;"><input checked="" type="radio"/> 1</td> </tr> </tbody> </table>				Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H	Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1	Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1	Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1
	Severe 0 < Sep < .005H	Significant .005 < Sep < .01H	Insignificant Sep > .01H															
Height Difference > 4 Storeys	<input type="radio"/> 0.4	<input type="radio"/> 0.7	<input type="radio"/> 1															
Height Difference 2 to 4 Storeys	<input type="radio"/> 0.7	<input type="radio"/> 0.9	<input type="radio"/> 1															
Height Difference < 2 Storeys	<input type="radio"/> 1	<input type="radio"/> 1	<input checked="" type="radio"/> 1															
Factor D <input type="text" value="1"/>		<small>(Set D = lesser of D1 and D2 or.. set D = 1.0 if no prospect of pounding)</small>																
<b>3.5 Site Characteristics - (Stability, landslide threat, liquefaction etc)</b> <small>Effect on Structural Performance</small>	Factor E <input type="text" value="1"/>	<input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant <input type="radio"/> 0.5 max <input type="radio"/> 0.7 <input type="radio"/> 1																
<b>3.6 Other Factors</b>	Factor F <input type="text" value="2"/> for 3 storeys - maximum value 2.5, otherwise - maximum value 1.5. No minimum																	
<small>Record rationale for choice of Factor F: Has concrete encased steel frame elements, sarking etc</small>																		
<b>2.7 Performance Achievement Ratio (PAR)</b> <small>(equals AxBxCxDxExF)</small>		PAR <input type="text" value="0.98"/>																

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

**Page 5**

Building Name:	Taupo Airport Terminal	Ref:	130752
Location:	Taupo, New Zealand	By:	LH
Direction Considered:	a) Longitudinal & b) Transverse	Date:	30/08/2013
<i>(Choose worse case if clear at start. Complete IEP-2 and IEP-3 for each if in doubt)</i>			

**b) Transverse Direction**

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

Critical Structural Weakness	Building Score	Effect on Structural Performance (Choose a value - Do not interpolate)
<b>3.1 Plan Irregularity</b> <i>Effect on Structural Performance</i>	<b>Factor A</b> <input type="text" value="0.7"/>	Plan Irregularity _____ <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant Comment: _____
<b>3.2 Vertical Irregularity</b> <i>Effect on Structural Performance</i>	<b>Factor B</b> <input type="text" value="0.7"/>	Vertical Irregularity _____ <input type="radio"/> Severe <input checked="" type="radio"/> Significant <input type="radio"/> Insignificant Comment: _____
<b>3.3 Short Columns</b> <i>Effect on Structural Performance</i>	<b>Factor C</b> <input type="text" value="1"/>	Short Columns _____ <input type="radio"/> Severe <input type="radio"/> Significant <input checked="" type="radio"/> Insignificant Comment: _____
<b>3.4 Pounding Potential</b> <i>(Estimate D1 and D2 and set D = the lower of the two, or =1.0 if no potential for pounding)</i>		

**a) Factor D1: - Pounding Effect**  
*Select appropriate value from Table*

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

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

**b) Factor D2: - Height Difference Effect**  
*Select appropriate value from Table*

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

**Factor D**  **Factor D1=**  **Factor D2=**

*(Set D = lesser of D1 and D2 or... set D = 1.0 if no prospect of pounding)*

**3.5 Site Characteristics - (Stability, landslide threat, liquefaction etc)**  
*Effect on Structural Performance*

**Factor E**  Severe ☐ 0.5 max    Significant ☐ 0.7    Insignificant ☒ 1


**3.6 Other Factors**

**Factor F**  *for ≤ 3 storeys - maximum value 2.5, otherwise - maximum value 1.5. No minimum*

*Record rationale for choice of Factor F:*  
Concrete encased steel frames in this direction. Timber roof structure including sarking.

**2.7 Performance Achievement Ratio (PAR)**  
(equals  $A \times B \times C \times D \times E \times F$ )

**PAR**

Table IEP- 4 Initial Evaluation Procedure Steps 4, 5 and 6 <small>(Refer Table IEP - 1 for Step 1; Table IEP - 2 for Step 2; Table IEP - 3 for step 3)</small>		Page 6
Building Name:	Taupo Airport Terminal	Ref: 130752
Location:	Taupo, New Zealand	By: LH
		Date: 30/08/2013
 <b>Step 4 - Percentage of New Building Standard (%NBS)</b>		
	Longitudinal	Transverse
4.1 Assessed Baseline ( %NBS) <sub>a</sub> <small>(from Table IEP - 1)</small>	112	112
4.2 Performance Achievement Ratio (PAR) <small>(from Table IEP - 2)</small>	0.98	0.98
4.3 PAR x Baseline (%NBS) <sub>b</sub>	110	110
4.4 Percentage New Building Standard (%NBS) <small>( Use lower of two values from Step 3.3)</small>		110
 <b>Step 5 - Potentially earthquake Prone?</b> <small>(Mark as appropriate)</small>		
	%NBS ≤ 33	NO
 <b>Step 6 - Potentially Earthquake Risk?</b>		
	%NBS < 67	NO
 <b>Step 7 - Provisional Grading for Seismic Risk based on IEP</b>		
	Seismic Grade	A+
Evaluation Confirmed by...		Signature 
		Name Ian C. Smith
		CPEng. No 27179
 <b>Relationship between Grade and SPS:</b>		
Grade:	A+	A
SPS:	> 100	100 to 80
	80 to 67	67 to 33
	33 to 20	< 20

Statement of Financial Performance  
for the period ending 31 March 2017

## Taupo Airport Authority

	YTD Actual 31/03/17 \$	YTD Budget 31/03/17 \$	YTD Variance \$	Full Year Budget (as per SOI) 30/06/17 \$	Full Year Forecast 30/06/17
<b>Income</b>					
Landing charges - Bulk	3,547	3,753	(206)	5,004	5,000
Landing charges - General Aviation	195,806	196,170	(2,364)	263,900	240,000
Landing charges - Charters	2,175	2,000	175	2,000	3,500
Aircraft Parking	3,000	-	3,000	-	3,500
Leases	142,346	142,335	11	190,710	190,000
Terminal Rent	19,841	23,460	(3,559)	31,200	26,900
Advertising	617	1,000	(383)	1,000	1,000
Fuel Commission	3,955	2,500	1,455	4,000	5,000
Hay Sales	4,600	-	4,600	-	4,600
Other income	4,492	5,654	(1,162)	6,140	5,000
Interest	1,517	5,450	(3,933)	7,250	2,000
<b>Total operating revenue</b>	<b>381,896</b>	<b>384,262</b>	<b>(2,366)</b>	<b>511,254</b>	<b>486,500</b>
<b>Expenditure</b>					
<b>Employee Expenses</b>					
Employee expenses	119,885	116,263	(3,602)	151,200	163,155
Training & associated costs	1,175	3,000	(1,825)	3,000	2,000
	<b>121,060</b>	<b>119,263</b>	<b>(8,427)</b>	<b>154,200</b>	<b>165,000</b>
<b>Management and Administration Expenses</b>					
Accountancy & Business Services - Taupo District Council	9,375	9,378	3	12,504	12,500
Audit fees - Audit NZ	9,783	10,425	642	13,800	13,500
CAA Audit fees	-	300	300	300	300
Taxation / Revaluation Fees	6,050	8,500	1,850	8,500	8,500
Directors fees and expenses	-	2,000	2,000	2,000	1,500
Bad and doubtful debts	30	-	(33)	-	-
Administration	3,100	2,161	(949)	2,868	4,000
	<b>28,941</b>	<b>32,754</b>	<b>3,813</b>	<b>40,072</b>	<b>40,300</b>
<b>Other Operating Expenditure</b>					
Cleaning	12,793	14,290	1,457	16,700	18,500
Catering	469	-	(469)	-	1,000
Entertainment	78	-	(78)	-	100
Telecommunications	1,409	1,360	(59)	1,800	2,000
WIFI costs	1,628	1,360	(278)	1,800	2,000
Travel	2,956	3,250	294	4,000	4,500
Contractors	2,877	3,490	573	4,500	4,000
Consultants fees	6,036	-	(6,036)	-	10,000
Electricity	8,699	11,175	2,516	16,480	13,000
Equipment hire	23,394	12,942	(10,452)	17,256	30,000
Ground maintenance - Airside	5,991	2,336	(3,655)	8,000	8,000
Ground maintenance - Other	7,222	10,312	3,090	8,200	8,000
Runway maintenance	3,296	5,500	2,204	7,000	5,000
Building maintenance	6,069	3,000	(3,069)	4,000	7,000
Software maintenance	185	2,250	2,065	3,000	1,000
Vehicle Maintenance	2,611	1,500	(1,111)	1,500	3,000
Roading maintenance	-	6,375	6,375	8,500	1,000
Other maintenance	821	2,662	1,841	3,450	1,500
Software Licences	9,224	6,345	(2,879)	8,460	13,000
Aerodrome Inspections & Bird Control	7,329	7,632	303	10,176	9,500
Rates	9,735	3,517	(6,218)	14,068	13,000
Stationery and supplies	7,498	6,725	(773)	8,500	8,500
Subscriptions	2,578	2,250	(328)	3,000	3,500
Insurance	5,546	5,310	(236)	7,000	7,000
Rubbish Disposal	1,783	1,662	(121)	2,228	2,500
Security	1,420	1,500	80	2,000	2,000
Vehicle running costs	620	2,270	1,650	2,750	1,000
Loss on disposal of intangible assets	-	-	-	-	-
<b>Total operating expenditure</b>	<b>132,167</b>	<b>118,913</b>	<b>(13,254)</b>	<b>166,448</b>	<b>179,600</b>
<b>Operating surplus/(deficit) before depreciation &amp; taxation</b>	<b>99,728</b>	<b>113,312</b>	<b>(17,234)</b>	<b>150,486</b>	<b>106,600</b>
<b>Depreciation &amp; Amortisation</b>					
Depreciation	211,037	204,278	(6,759)	271,878	272,000
	<b>211,037</b>	<b>204,278</b>	<b>(6,759)</b>	<b>271,878</b>	<b>272,000</b>
<b>Operating surplus/(deficit) before taxation</b>	<b>(111,309)</b>	<b>(90,966)</b>	<b>(23,993)</b>	<b>(121,392)</b>	<b>(165,400)</b>
<b>Items Capitalised in this period</b>					
<b>Items Capitalised this financial year</b>					
Ramp area around new fuel pumps	46,236.00				
Cabinet for Server	1,210.00				
Carpet For Airport Office	2,913.00				
Fridge for Corporate Catering	945.00				

Statement of Financial Performance  
for the period ending 31 March 2017

	January Actual	February Actual	March Actual	YTD Actual \$
<b>Income</b>				
Landing charges	31,542	18,544	25,264	199,353
Landing charges - Charters	-	441	423	2,175
Aircraft Parking	240	-	360	3,000
Leases	15,816	15,816	15,816	142,346
Terminal Rent	2,205	2,205	2,205	19,841
Advertising	-	309	-	617
Fuel Commission	-	2,691	1,264	3,955
May Sales	-	-	-	4,600
Other Income	58	952	2,241	4,492
Interest	136	124	142	1,517
<b>Total operating revenue</b>	<b>49,997</b>	<b>41,082</b>	<b>47,716</b>	<b>381,896</b>
<b>Expenditure</b>				
<b>Employee Expenses</b>				
Employee expenses	10,605	13,049	11,115	119,885
Training & associated costs	-	-	-	5,175
	<b>10,605</b>	<b>13,049</b>	<b>11,115</b>	<b>121,860</b>
<b>Management and Administration Expenses</b>				
Accountancy & Business Services - Taupo District Council	1,042	1,042	1,042	9,375
Audit fees - Audit NZ	991	991	991	9,783
CAA Audit fees	-	-	-	-
Taxation / Revaluation Fees	-	-	-	6,650
Directors fees and expenses	-	-	-	-
Bad and doubtful debts	-	-	33	33
Administration	55	288	894	3,100
	<b>2,088</b>	<b>2,301</b>	<b>2,760</b>	<b>28,941</b>
<b>Other Operating Expenditure</b>				
Cleaning	1,377	1,370	1,375	12,793
Catering	-	-	-	409
Entertainment	-	-	-	78
Telecommunications	155	149	149	1,409
WiFi costs	181	181	181	1,628
Travel	-	-	-	2,956
Contractors	443	286	383	2,877
Consultants fees	-	-	2,827	6,036
Electricity	592	1,000	141	8,859
Equipment hire	2,264	3,121	2,497	23,394
Ground maintenance - Airside	1,138	(59)	182	5,991
Ground maintenance - Other	536	662	1,521	7,222
Runway maintenance	-	-	1,316	3,296
Building maintenance	250	1,075	478	6,069
Software maintenance	-	130	-	185
Vehicle Maintenance	-	1,786	825	2,611
Other maintenance	-	178	-	821
Software Licences	1,032	1,011	1,002	9,224
Aerodrome Inspections & Bird Control	428	560	1,039	7,329
Rates	-	3,012	-	9,735
Stationery and supplies	(9)	556	1,596	7,498
Subscriptions	251	433	400	2,578
Insurance	855	552	855	5,546
Rubbish Disposal	220	224	220	1,783
Security	85	85	85	1,420
Vehicle running costs	14	(1,606)	57	520
<b>Total operating expenditure</b>	<b>9,612</b>	<b>14,788</b>	<b>16,909</b>	<b>132,167</b>
<b>Operating surplus/(deficit) before depreciation &amp; taxation</b>	<b>27,692</b>	<b>16,944</b>	<b>16,931</b>	<b>99,728</b>
<b>Depreciation &amp; Amortisation</b>				
Depreciation	23,899	21,575	23,873	211,037
	<b>23,899</b>	<b>21,575</b>	<b>23,873</b>	<b>211,037</b>
<b>Operating surplus/(deficit) before taxation</b>	<b>3,793</b>	<b>(10,631)</b>	<b>(6,942)</b>	<b>(111,309)</b>

**Balance Sheet**  
**as at 31 March 2017**

	<b>31/03/2017</b>	<b>Full Yr 30/06/2015</b>
<b>Equity</b>	<b>\$</b>	<b>\$</b>
Equity Interest of Joint Venture Partners	4,071,587	4,071,587
Appropriation Accounts	2,214,603	2,325,910
Asset Revaluation Reserves	3,971,980	3,971,980
<b>Total Equity</b>	<b>10,258,170</b>	<b>10,369,477</b>
<b>Assets</b>		
<b>Current Assets</b>		
Cash & Cash Equivalents	502,899	472,067
Other Financial Assets	-	-
Trade & Other Receivables	69,712	54,632
Provision for income tax	-	-
<b>Total current assets</b>	<b>572,611</b>	<b>526,699</b>
<b>Non-Current Assets</b>		
Intangible Assets	1,772	2,670
Property, Plant and Equipment	10,764,568	10,914,530
<b>Total non-current assets</b>	<b>10,766,340</b>	<b>10,917,200</b>
<b>Total Assets</b>	<b>11,338,951</b>	<b>11,443,899</b>
<b>Liabilities</b>		
<b>Current Liabilities</b>		
Trade & Other Payables	48,597	61,228
Income in Advance	44,541	25,937
Employee Entitlements	35,463	34,135
<b>Total current liabilities</b>	<b>128,601</b>	<b>121,300</b>
<b>Non-Current Liabilities</b>		
Borrowings	-	-
Employee Entitlements	-	942
Deferred Tax Liability	952,180	952,180
<b>Total non-current liabilities</b>	<b>952,180</b>	<b>953,122</b>
<b>Total Liabilities</b>	<b>1,080,781</b>	<b>1,074,422</b>
<b>Net Assets</b>	<b>10,258,170</b>	<b>10,369,477</b>