



WILSMORE NELSON McDERMOTT
AMALGAMATED BUILDING SURVEYORS

31st March 2016

Mark O'Dwyer
H2o Architects
29 Northumberland Street
COLLINGWOOD VIC 3066

Dear Sir

RE Building Audit & Feasibility Study – April 2016

Property YARRA RANGES COUNCIL - LILYDALE

This statement of compliance relates to the development options presented as –

- a) Existing Building Rectification (\$6.53M)
- b) Base Redevelopment (\$18M)
- c) Partial Redevelopment (\$22.5M)
- d) Full Redevelopment (\$28M)

As project building surveying consultant I have completed review of the current Building Audit and Feasibility Study (Revision 11 / April 2016) and find that the document accurately reflects the brief to determine areas of non - compliance with the following legislation -

National Construction Code (NCC) - The Building Code of Australia (BCA) 2015
Relevant Australian Standards (specifically referenced by BCA)
The Building Act 1993
The Building Regulations 2006

The current findings are consistent with the Building Surveying – Compliance Assessment dated March 2016 where rectification of compliance items have been given a P1 high priority for life / occupant safety and P2 lower priority for amenity / end of life issues.

Summary of P1 priority items –

- Unprotected steel columns – no fire resistance level
- Fire wall / Fire door verification
- Carpet removal from fire isolated stair
- Balustrade rectification (fall protection)
- Exit door furniture rectification
- Vision strips to glazing
- Fire service deficiencies
- Fire detection system deficiencies

COMMERCIAL IN CONFIDENCE

Summary of P2 priority items –

Structural Engineering items
Termite management
Fire hazard properties of materials and linings
Service penetrations (ESM maintenance)
Roof access systems (OH&S)
Stair configuration upgrades (with exception to P1 balustrade issue)
Access and facilities for persons with disabilities (including passenger lift installation)
Upgrade to running man style exit light covers
Waterproofness of building envelope
Stormwater drainage
Mechanical ventilation

It is considered that the existing building rectification works cannot occur in isolation. The Building Regulations 2006 (Reg 608) nominate that if the Council undertakes works on 50% (or more) of the volume of the building, then the entire building is required to be brought into conformance with the Building Regulations.

In addition, due to the nature of the issues mentioned in this report, it is my view that the Council has a Duty of Care to undertake a process for resolution of the issues.

It is considered that the outstanding issues relevant to Certificates of Occupancy / Occupancy Permits can be suitably resolved by pursuing any of the development options listed above.

Should you have any queries with regard to the above please do not hesitate to contact the undersigned.

Yours faithfully



Len Nelson
Wilsmore Nelson McDermott Pty Ltd
Registration no. BSU 1330

Building Surveying – Compliance Assessment

NCC – Building Code of Australia 2015

Client Yarra Ranges Shire Council
c/o H2o Architects

Prepared by Len Nelson
Wilsmore Nelson Mc Dermott Pty. Ltd

Property **Yarra Ranges Shire Council – Flexible Futures Project**
Compliance Assessment for Existing Council Buildings – Lilydale

Executive Summary

The purpose of this report is to establish a preliminary level of compliance to -

NCC - The Building Code of Australia 2015
Relevant Australian Standards
The Building Act 1993
The Building Regulations 2006

Exclusions

This report does not consider the following except where specifically mentioned;

- a) Structural design
- b) The Disability & Discrimination Act 1992.

Rectification Priority Guideline

The rectification priority has been determined consistent with the provisions of the Building Regulations 2006 wherein Priority P1 relates to occupant / life safety items and Priority P2 relates to amenity and “livability” issues.

NCC - Building Code of Australia 2015 – Preliminary Compliance Assessment

BCA Clause	Description	Comment	Status / Rectification Priority
Part B	Structural Provisions		
B1.1	Resistance to actions	The integrity of building structure has been subject to review and comment from the project structural engineers in accordance with the standards required by this part.	Refer engineering findings / P2
B1.2	Determination of individual actions	The integrity of building structure has been subject to review and comment from the project structural engineers in accordance with the standards required by this part.	Refer engineering findings / P2
B1.3	Loads	The integrity of building structure has been subject to review and comment from the project structural engineers in accordance with the standards required by this part.	Refer engineering findings / P2
B1.4	Structural resistance of materials / forms of construction	Materials and forms of construction are to be designed and selected to comply with the required Australian Standards. Glazed assemblies shall comply with relevant Australian Standards AS 1288 and AS 2047	New works to comply / P2 New works to

		Termite management in accordance with AS 3660.1 will be required for any relevant building element deemed subject to attack.	comply / P2 Termite rectification necessary / P2
Part C1	Fire resistance & Stability		
C1.1	Type of Construction	The building is required to comply with Type B provisions of BCA 2015 Unprotected steel columns at ground floor level (main building) require 2 hour FRL.	Rectification to achieve 2 hour FRL or alternate solution through fire engineering needed / P1
C1.2	Rise in storeys	Rise in storeys = 3	
C1.3	Buildings of multiple classification	Building BCA Classification is 5	Existing Condition to remain
C1.4	Mixed types of construction	Not applicable	Not applicable
C1.5	Tow storey class 2, 3 & 9c buildings	Not applicable	Not applicable
C1.6	Class 4 parts of buildings	Not applicable	Not applicable
C1.7	Open spectator stands / indoor sports stadiums	Not applicable	Not applicable
C1.8	Lightweight construction	Any lightweight fire resisting construction is required to maintain integrity from mechanical damage in accordance with this clause	Existing Condition to remain
C1.9	***** ***** ***		
C1.10	Fire Hazard Properties	Properties of materials such as floor coverings etc... are unknown at this stage. Material Specifications are requested for review and compliance (if available)	New works to comply / P2
C1.11	Performance of external walls in fire	Any precast concrete elements to façade shall be designed to comply with this clause	Existing condition to remain
C1.12	Non combustible materials	Materials are expected to comply with relevant non combustible criteria where applicable.	Existing conditions to remain
Part C2	Compartmentation & Separation		
C2.2	Floor area & volume limitations	Floor area and volume limitations of BCA fire compartment appear to be acceptable given the fire separation between floors and through central stair area	Existing Condition to remain
C2.3	Large Isolated buildings	Not applicable	Not applicable
C2.4	Open space / vehicle access	Not applicable	Not applicable
C2.5	Class 9a / 9c	Not applicable	Not applicable

	buildings		
C2.6	Spandrels	Spandrels not required due to type B construction	Existing Condition to remain
C2.7	Separation by fire walls	Full understanding of the integrity of fire resistance level through central wall / stair area is unknown from visual inspection. Concealed spaces not accessible	Existing Condition to remain subject to verification of fire door assemblies / P1
C2.8	Separation of classes (same storey)	Not applicable	Not applicable
C2.9	Separation of classes (different storey)	Not applicable	Not applicable
C2.10	Separation of lifts	Not applicable – no lift present (refer Part E3.6)	Not applicable
C2.11	Stairways & lifts in one shaft	Not applicable	Not applicable
C2.12	Separation of equipment	Lift motor room, boilers, batteries etc... shall be suitable fire separated from the remainder of the building by construction achieving a fire resistance level of 120 minutes	Existing Condition to remain
C2.13	Electricity supply system	Electricity substation and/or main switchroom shall be suitable fire separated from the remainder of the building by construction achieving a fire resistance level of 120 minutes (if they sustain equipment required to operate in the emergency mode)	Existing Condition to remain
C2.14	Public corridors / class 2 & 3	Not applicable	Not applicable
Part C3	Protection of Openings		
C3.2	Protection of openings in external walls	Not applicable	Not applicable
C3.3	Separation of external walls / openings	Not applicable	Not applicable
C3.4	Methods of protection / openings	Not applicable	Not applicable
C3.5	Doorways in fire walls	Tagging of fire doors unknown from visual inspection	Verification of fire door assemblies needed / P1
C3.6	Sliding fire doors	Not applicable	Not applicable
C3.7	Doors in horizontal exits	Not applicable	Not applicable
C3.8	Openings in fire isolated exits	Tagging of fire doors unknown from visual inspection	Verification of fire door assemblies needed / P1
C3.9	Service penetrations in fire isolated exits	Integrity of FRL unknown due to concealed spaces not being accessible	Existing maintenance program to control / P2
C3.10	Openings in fire isolated lift shafts	Not applicable	Not applicable

C3.11	Bounding Construction / Class 2, 3 & 4	Not applicable	Not applicable
C3.12	Service openings floors / ceilings	Not applicable	Not applicable
C3.13	Openings in shafts	Not applicable	Not applicable
C3.14	***** ***** ***		
C3.15	Openings for service installations	Service penetrations through any fire resisting construction are required to be protected. Integrity of FRL unknown due to concealed spaces not being accessible at visual inspection	Existing maintenance program to control / P2
C3.16	Construction joints	Not applicable	Not applicable
C3.17	Lightweight column protection / FRL	Not applicable	Not applicable
Part D1	Provision for Escape		
D1.2	No. exits required	The building design incorporates suitable required exits from all areas to achieve compliance	Existing Condition to remain
D1.3	Fire isolated exits	Central stair intended to be a fire isolated exit that discharges within building at road level in lieu of directly to open space	Existing Condition to remain
D1.4	Exit travel distances	Travel distances appear to be in accordance with BCA deemed to satisfy provisions.	Existing Condition to remain
D1.5	Distance between alternate exits	Design considered compliant with BCA	Existing Condition to remain
D1.6	Dimensions of exits / paths of travel	At this stage the dimensions of exit paths appears suitable for the expected population of the building	Existing Condition to remain
D1.7	Travel via fire isolated exits	Central stair intended to be a fire isolated exit that discharges within building at road level in lieu of directly to open space	Existing Condition to remain
D1.8	External stairways in lieu of fire isolated exits	Not applicable	Not applicable
D1.9	Travel via non fire isolated exits	Compliant	Existing Condition to remain
D1.10	Discharge from exits	Central stair intended to be a fire isolated exit that discharges within building at road level in lieu of directly to open space	Existing condition to remain subject to verification of fire door assemblies needed / P1
D1.11	Horizontal exits	Not applicable	Not applicable
D1.12	Non required stairways / ramps	Not applicable	Not applicable
D1.13	No. persons accommodated	Population not considered in breach of regulatory requirements	Existing Condition to remain

D1.14	Measurement of distances	Compliance with this clause will be achieved	Existing Condition to remain
D1.15	Method of measurement	Noted	
D1.16	Plant rooms / LMR	Access ladders and platforms etc... to plant areas shall comply with AS 1657 and relevant OH&S guidelines	Roof access systems to be upgraded as per mechanical engineering report findings / P2
D1.17	Access to lift pits	Not applicable	Not applicable
Part D2	Construction of Exits		
D2.2	Fire isolated stairs / ramps	Non compliant carpet observed within fire isolated exit	Upgrade to floor surface required within fire isolated exit / P1
D2.3	Non fire isolated stairs / ramps	Compliant	Existing condition to remain
D2.4	Separation of rising / descending	Not applicable	Not applicable
D2.5	Open access ramps / balconies	Not applicable	Not applicable
D2.6	Smoke lobbies	Not applicable	
D2.7	Installations in exits paths	Electrical / communications cupboards shall be smoke sealed (main entry)	Upgrade necessary / P1
D2.8	Enclosure under stairs	Not applicable	Not applicable
D2.9	Widths of stairways	Adequate exit width available for expected population of building	Existing condition to remain
D2.10	Pedestrian ramps	Not applicable	Not applicable
D2.11	Fire isolated passageways	Not applicable	Not applicable
D2.12	Roof as open space	Not applicable	Not applicable
D2.13	Goings & risers	Consistent riser and going dimensions to be maintained over any steps. Numerous examples of inconsistent dimensions present over the site (internally and externally)	Upgrade necessary / P2
D2.14	Landings	Compliant	
D2.15	Thresholds	Access must be available at grade for persons with disabilities. Numerous examples of non compliant arrangements exist throughout site	Upgrade necessary / P2
D2.16	Balustrading	Fall protection issues to be addressed where compliance with this clause needs to be met. Balustrade heights observed less than 1.0 m minimum height	Upgrade necessary / P1
D2.17	Handrails	Handrails shall be provided to <u>all</u> stair and ramps and shall comply with this clause & AS 1428.1	Upgrade necessary / P2
D2.18	Fixed platforms, walkways, ladders etc	All access ladders and platforms shall comply with AS 1657 and relevant OH&S guidelines. Roof access systems to be reviewed	Upgrade necessary / P2

D2.19	Doorways & doors	Compliant	
D2.20	Swinging doors	Required exit doors to social room need to swing in the direction of egress (ie: outwards)	Upgrade necessary / P2
D2.21	Operation of escape latch	Compliance with this clause shall be adhered to where required exit doors operate with a suitable level or pushing action on a single device located between 900 mm and 1.2 m above floor level. Some furniture heights observed outside this range	Upgrade necessary / P1
D2.22	Re – entry from fire isolated exits	Not applicable	Not applicable
D2.23	Signs on doors	Not applicable	Not applicable
Part D3	Access for People with Disabilities		
D3.2	General access	Access is required throughout the building and shall be available through the main public entrance of building and throughout all areas. Numerous examples of accessible features that require upgrade to comply with AS 1428.1 and Premises Standard	Upgrade necessary / P2
D3.3	Parts of buildings to be accessible	The building shall comply with AS 1428.1 – 2009 Numerous issues with accessibility and amenities for persons with disabilities including passenger lift, trafficable surfaces, signage, gradients of access ways and ramps, threshold steps, door widths and circulation, 1540 mm turning circles, handrails, tactile ground surface indicators, nosing treatments, hearing augmentation systems, provision of suitable accessible and ambulant sanitary facilities etc...	Upgrade necessary / P2
D3.4	Concessions	NIL	
D3.5	Carparking	Required	Upgrade necessary / P2
D3.6	Identification	Signage required for accessible features	Upgrade necessary / P2
D3.7	Hearing augmentation	Required throughout	Upgrade necessary / P2
D3.8	Tactile indicators	Required throughout	Upgrade necessary / P2
D3.9	Wheelchair seating spaces in Class 9B assembly buildings	Not applicable	Not applicable
D3.10	Swimming Pools	Not applicable	Not applicable
D3.11	Ramps	Compliance to be achieved if connected ramps apply (in future)	Existing condition to remain
D3.12	Glazing on an accessway	All required glazing to be clearly marked in accordance with AS 1428.1	Upgrade necessary / P1
Part E1	Fire Fighting Equipment		
E1.3	Fire hydrants	Fire hydrants do not satisfy requirements of NCC - BCA in terms of pipe material and locations of equipment Pressure & Flow design data required for review together with any relevant approval history with Council and or Country Fire Authority	Upgrade necessary / P1

E1.4	Fire hose reels	Fire hose reels need also to meet DTS requirements of NCC - BCA	Upgrade necessary / P1
E1.5	Fire sprinklers	Not applicable	
E1.6	Portable fire extinguishers	Suitable portable fire extinguishers shall be provided throughout the building at appropriate mounting heights and locations (minimum 2.0 m from electrical hazards and maximum 1.2 m mounting heights)	Upgrade necessary / P1
E1.7	***** ***** ***		
E1.8	Fire control centres	Not applicable	Not applicable
E1.9	Fire precautions during construction	Not applicable	Not applicable
E1.10	Provisions for special hazards	At this stage there appears to be no defined special hazards within the building.	Existing condition to remain
Part E2	Smoke Hazard Management		
E2.2	General requirements	AS 1670 smoke detection system observed The integrity of the system has been subject to review and comment from the project service engineers in accordance with the standards required by this part. Upgrade required to existing system as part of future redevelopment	Existing maintenance program to control / P1
E2.3	Provisions for special hazards	Not applicable	Not applicable
Part E3	Lift Installations		
E3.2	Stretcher facility in lifts	Not applicable	Not applicable
E3.3	Warning against use of lifts in fire	Not applicable	Not applicable
E3.4	Emergency lifts	Not applicable	Not applicable
E3.5	Landings	Not applicable	Not applicable
E3.6	Facilities for persons with disabilities	Required to first floor office area (main building)	Upgrade necessary / P2
E3.7	Fire service controls	Not applicable	Not applicable
E3.8	Aged care buildings	Not applicable	Not applicable
Part E4	Emergency lighting, Exit Signs & Warning Systems		
E4.2	Emergency	It appears that suitable provision for emergency lighting has	Existing condition

	lighting	been provided throughout the buildings.	to remain
E4.3	Measurement of distance	Refer to clause E4.2 above	
E4.4	Design / Operation of emergency lighting	Compliance with AS 2293.1 shall be achieved	Existing condition to remain
E4.5	Exit signs	Suitable provision of illuminated exit lighting has been provided throughout to facilitate egress from building. Running man style exit signs shall be adopted throughout	Upgrade necessary / P2
E4.6	Directional signs	Refer clause above	
E4.7	Class 2, 3 & 4 exemptions	Not applicable	Not applicable
E4.8	Design / Operation of exit signs	Compliance with AS 2293.1 shall be achieved	
E4.9	EWIS	Not applicable	Not applicable
Part F1	Damp & Weatherproofing		
F1.0	DTS provisions	Roof, external walls and openings must prevent the penetration of water, this item is understood to be subject to ongoing maintenance regime	Subject to ongoing maintenance regime / P2
F1.1	Stormwater drainage	Stormwater drainage must comply with AS / NZS 3500.3 The integrity of system has been subject to review and comment from the project service engineers in accordance with the standards required by this part.	Subject to ongoing maintenance regime / P2
F1.2	***** ***** ***		
F1.3	***** ***** ***		
F1.4	***** ***** ***		
F1.5	Roof coverings	The proposed roof coverings shall provide weatherproofing and comply with the appropriate Australian Standards. Integrity of roof lining unknown from visual inspection	Subject to ongoing maintenance regime / P2
F1.6	Sarking	Sarking is to comply with AS / NZS 4200 Parts 1 & 2	Subject to ongoing maintenance regime – any new material to comply / P2
F1.7	Waterproofing wet areas	All wet areas to satisfy the provisions of AS 3740	Subject to ongoing maintenance regime – any new material to comply / P2
F1.8	***** ***** ***		
F1.9	Damp proofing	Damp proofing protection required where relevant to structural engineering requirements	Note
F1.10	Damp proofing of floors on ground	Damp proofing protection required where relevant to structural engineering requirements	Note

F1.11	Floor wastes	Not applicable	Not applicable
F1.12	Sub floor ventilation	Not applicable - slab on ground	Not applicable
F1.13	Glazed assemblies	Compliance with AS 2047 shall be maintained for resistance to water penetration	Subject to ongoing maintenance regime / P2
Part F2	Sanitary & Other facilities		
F2.1	Facilities in residential buildings	Not applicable	Not applicable
F2.2	Calculations of occupants / fixtures	Noted	Noted
F2.3	Facilities in class 3 to 9 buildings	Upgrade necessary to confirm provision of adequate facilities (accessible and ambulant facilities)	Upgrade necessary / P2
F2.4	Facilities for persons with disabilities	Upgrade necessary to confirm provision of adequate facilities (accessible and ambulant facilities)	Upgrade necessary / P2
F2.5	Construction of sanitary compartments	Compliance achieved	Existing condition to remain
F2.6	Interpretation / urinals & washbasins	Noted	Noted
F2.7	Microbial (Legionella) control	Not applicable	Not applicable
F2.8	Waste management	Not applicable	Not applicable
Part F3	Room Sizes		
F3.1	Room heights	The <u>minimum</u> floor to ceiling heights appears to satisfy regulatory requirements	Existing condition to remain
Part F4	Light & Ventilation		
F4.1	Provision of natural light	Not applicable (but good practice achieved)	Not applicable
F4.2	Methods & extent of natural lighting	Refer to BCA clause F4.1 above	Not applicable
F4.3	Borrowed natural light	Refer to BCA clause F4.1 above	Not applicable
F4.4	Artificial lighting	Artificial lighting to comply with AS / NZS 1680	Existing condition to remain
F4.5	Ventilation of rooms	Natural or mechanical ventilation to be provided to all habitable areas. The integrity of building ventilation system has been subject to review and comment from the project services engineers in accordance with the standards required by this part.	Upgrade necessary / P2
F4.6	Natural ventilation	Refer to Clause F4.5 above	Upgrade necessary / P2
F4.7	Borrowed ventilation	Not applicable	Upgrade necessary / P2
F4.8	Positions of WC & urinals	Design appears to comply	Existing condition to remain
F4.9	Airlocks	Design appears to comply	Existing condition

			to remain
F4.10	***** ***** ***		
F4.11	Carparks	Not applicable	
F4.12	Kitchen & local exhausts	Compliance to be achieved with AS 1668.2	Existing condition to remain
Part F5	Sound Transmission & Insulation		
F5.1	Application of part	Not applicable by BCA	Not applicable
Part J	Energy Efficiency		
J1	Building fabric	ESD principles for project expected to achieve compliance with Section J of BCA – existing fabric can be subject to modification determination from Building Appeals Board	Existing condition to remain / verification through BAB for any major refurbishment
J2	External Glazing	ESD principles for project expected to achieve compliance with Section J of BCA - existing glazing can be subject to modification determination from Building Appeals Board	Existing condition to remain / verification through BAB for any major refurbishment
J3	Building Sealing	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain
J4	Air movement	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain
J5	Air conditioning and ventilation systems	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain
J6	Artificial lighting and power	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain
J7	Hot water supply	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain
J8	Access or maintenance	ESD principles for project expected to achieve compliance with Section J of BCA	Existing condition to remain

Conclusion

The building is capable of complying with the NCC - Building Code of Australia 2015 and will be subject to further development to demonstrate compliance.

Report Authorization

Relevant Building Surveyor

Name Len Nelson
Registration no. BSU 1330
Date 31st March 2016

No responsibility will be assumed and all liability disclaimed for any loss or damage that may result through the use of any information contained in any relevant reports or other documents provided to Wilsmore Nelson Mc Dermott Pty. Ltd which are referred to in this report.

No responsibility or liability to any third party is accepted for any loss or damage arising from the use of this report by any third party. Any third party wishing to act on any matter of this report shall contact Wilsmore Nelson Mc Dermott Pty. Ltd for detailed advice which will consider that third party's particular requirements.

Information contained within this report is current at the time and all future alterations to the design or use of the building shall be subject to further study and report.