Hunter Structural Pty Ltd,
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Maitland Business Central
Maitland NSW 2320

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Consulting Structural and Civil Engineers

Ref: 20230773

Mr Criag Favelle
245 Station Lane
Lochinvar
NSW 2321

19 June 2024

Project Address: 8245 Station Lane, Lochinvar
Subject: Building Reclassification Report

1 BACKGROUND

Thankyou for engaging Hunter Structural to undertake a preliminary assessment on the Old Coach House building that is in the process of being reclassified to a Class 1 building under the National Construction Code (NCC) incorporating the Building Code of Australia (BCA). The building as inspected by Hunter Structural in 10 May 2024 had been substantially fitted to a Class 1 building level. Also constructed on site was a steel garage that was detached from het main building.

This brief report summarises the changes that have occurred to the building along with some recommendations to allow an assessment on the structure to be completed

2 PRIMARY BUILDING

Based on the information that was provided by Mr Craig Favelle and verified by way of site inspection, the flowing scope of works was undertaken on the building and steel framed shed:

2.1 Structural Works

1. New concrete floor for main building
2. New partition wall between bedroom and main open plan living area
3. New decking boards on covered patio area
4. New timbers for roof of covered patio area
5. New fit-out of bathroom and WC area
6. New slab for 6x6m steel shed
7. Structure for 6x6m steel shed

2.2 Building Services

1. New plumbing for WC and shower into house septic system
2. Fitout including sanity fixtures and tiling of WC and shower area
3. Full electrical wiring replacement
4. HVAC system to main areas of living areas
5. New kitchen including benchtops and cupboards

The inspection of the building indicated that work has been completed to a good standard and appeared to comply with the requirements of the NCC. However for the works covered in 2.1 Structural Works above, the primary elements that would need to be considered as part of the design were not visible as the critical stage inspections that would normally form part of the design and construction verification process were not undertaken. Hence based on the initial inspection that was undertaken, we are not able to ascertain if the works would meet the requirements of the NCC deemed to comply standards for a Class 1 building.

Subsequently, the following information was requested to be provided in order for to give due consideration to these elements and inform the appraisal process for compliance with NCC requirements in relation to a Class 1 building.

Item	Building Element	Additional Information	Comments (refer to Annexure 1 for evidence provided)
1.	New concrete floor for main building	Slab design. Slab thickness that was adopted : 110-120mm Type of slab: Floating slab on prepared base Steel reinforcement: SL82. Vapour barrier present: Confirmed Concrete grade used: N25 min	The following information was provided in relation to this item: Invoice from building contractor stating items used, images during construction showing vapour barrier. Letter from building contractor stating slab dept and reinforcement used.
2.	New partition wall between bedroom and main open plan living area	Whilst this partition wall does not appear to support the roof system, it is important that the wall was properly secured to ensure that there will be no long term stability issues. Hence if the following could be provided to assist the verification: Images of the construction prior to the wall being sealed off Details of the timbers used in the construction and method of joinery	The following information was provided in relation to this item: Images during construction showing timber framing used during construction. This shows the nominally 70x30mm stud wall with noggins and fixing to the ceiling joists.
3.	New decking boards on covered patio area	Images and or details of the support joists and bearers.	The following information was provided in relation to this item: Images during construction showing light steel deck bearers and joists at nominal 450 centres.
4.	New timbers for roof of covered patio area	Images and or details of the support joists and bearers	No additional information was provided in regard to this however timbers were not sagging and a preliminary checked indicated they complied with AS1684 Timber Framing Code.
5.	New fit-out of bathroom and WC area	Verification that the area has been waterproofed in accordance with NCC: *Compliance with AS 3740 or Part 10.2 of the ABCB Housing Provisions satisfies Performance Requirement H4P1 for wet areas provided the wet areas are protected in accordance with the appropriate requirements of 10.2.1 to 10.2.6 and 10.2.12 of the ABCB Housing Provisions* The person that undertook the work should of held the appropriate licences and should be able to provide you with a Certificate of Conformance stating compliance with the above extract from the NCC	The following information was provided in relation to this item: Images showing the water proofing system adopted including the underfloor heating system.
6.	New slab for 6x6m steel shed	Slab design If a slab design was not undertaken, provide details including the following: a. Details on the sub-base preparation b. Slab thickness that was adopted c. Type of slab, eg floating slab on fill, stiffened raft, waffle pod d. Steel reinforcement that was used, eg SL82 e. Confirmation that a vapour barrier was used under the reinforcement	The following information was provided in relation to this item: Images showing the excavation and placement of reinforcement. Full drawings on the shed system including piers, slabs and structural members. We note that the drawings are stamped preliminary however our experience with the company is that the plans have bee prepared

Item	Building Element	Additional Information	Comments (refer to Annexure 1 for evidence provided)
		f. Confirmation that the reinforcement was fully supported on bar chairs and in the correct position at the time of pouring g. Concrete grade used	by a practicing structural engineering and the review of the parameters used indicates that the minimum requirements of the NCC have been met.
7.	Structure for 6x6m steel shed	Certified engineering details prepared by the shed supplier which would have been provided to the building contractor by the Shed Kit supplier	Refer above point 6
8	Plumbing fit out	Evidence that the pluming was installed as per NCC requirements	A certificate of conformance has been provided to that certifies the sanity installation was in accordance with AS3500
9	Electrical installation	Evidence that the electrical installation was installed and tested in accordance with regulation requirements	A certificate has been provided that certifies the electrical installation meets the requirements of AS/NZS 3000 Electrical Installations, and the works have been tested to the Electricity (Consumer Safety) regulation 2006.

Based on the site inspection that was undertaken on the property in May 2024 and the subsequent supporting information that has been provided in relation to earlier requests, I am satisfied that the building works have been carried out in a professional manner and generally in accordance with the National Construction Code.

On the above basis, I support the change from a Class 10 to a Class 1 building in accordance with the NCC Housing Provision in relation to the items listed herein. Please note that it is our understanding that shed will remain a Class 10 Building, and the information provided is primarily to support the structural integrity of the shed as part of the approvals process.

Should there be any issues in relation to the information provided, please contact the undersigned on (02) 4934 6404 during business hours.

Regards

Hunter Structural Pty Ltd

Michael Flynn
BE [Hons], MIEAust, CPEng, NPER No: 455945 (Structural, Civil)
Principal Engineer

Mr Michael Flynn
MIEAust C.PENG NER
National Engineering Register
Signature _____ Date 19 / 06 / 2024
Registered on the NER in the areas(s) of practice of **Civil/Structural**

ANNEXURE 1 – SUPPORTING DOCUMENTATION

Bathroom Wet Area – Placement of Waterproof Membrane

Slab for Main Living Area

TAX INVOICE

Craig And Sean
Clifton, 245 Station Ln
LOCHINVAR NSW 2321
AUSTRALIA

Invoice Date
31 Jan 2022

Invoice Number
INV-0134

Reference
QU-0252

ABN
20 646 739 102

D.N.C Concreting
0402378645
3 Cadillac Cl
COORANBONG NSW
2265
AUSTRALIA
Lic. No 262676C
ABN 20 646 739 102

Description	Quantity	Unit Price	GST	Amount AUD
Removal and disposal off concrete.	1.00	3,900.00	10%	3,900.00
Concrete floor inside both buildings with compacted gravel base installed with a plastic membrain underlay. Concrete will be 110mm thick and 25mpa.	1.00	12,500.00	10%	12,500.00
Shed slab at 7.5 x 8.	1.00	7,250.00	10%	7,250.00
Concrete pump for shed slab.	1.00	650.00	10%	650.00
Sika sealing around edge of slab to stop moisture transfer from ground to internal area.	1.00	650.00	10%	650.00
			INCLUDES GST	2,268.18
			TOTAL AUD	**24,950.00**

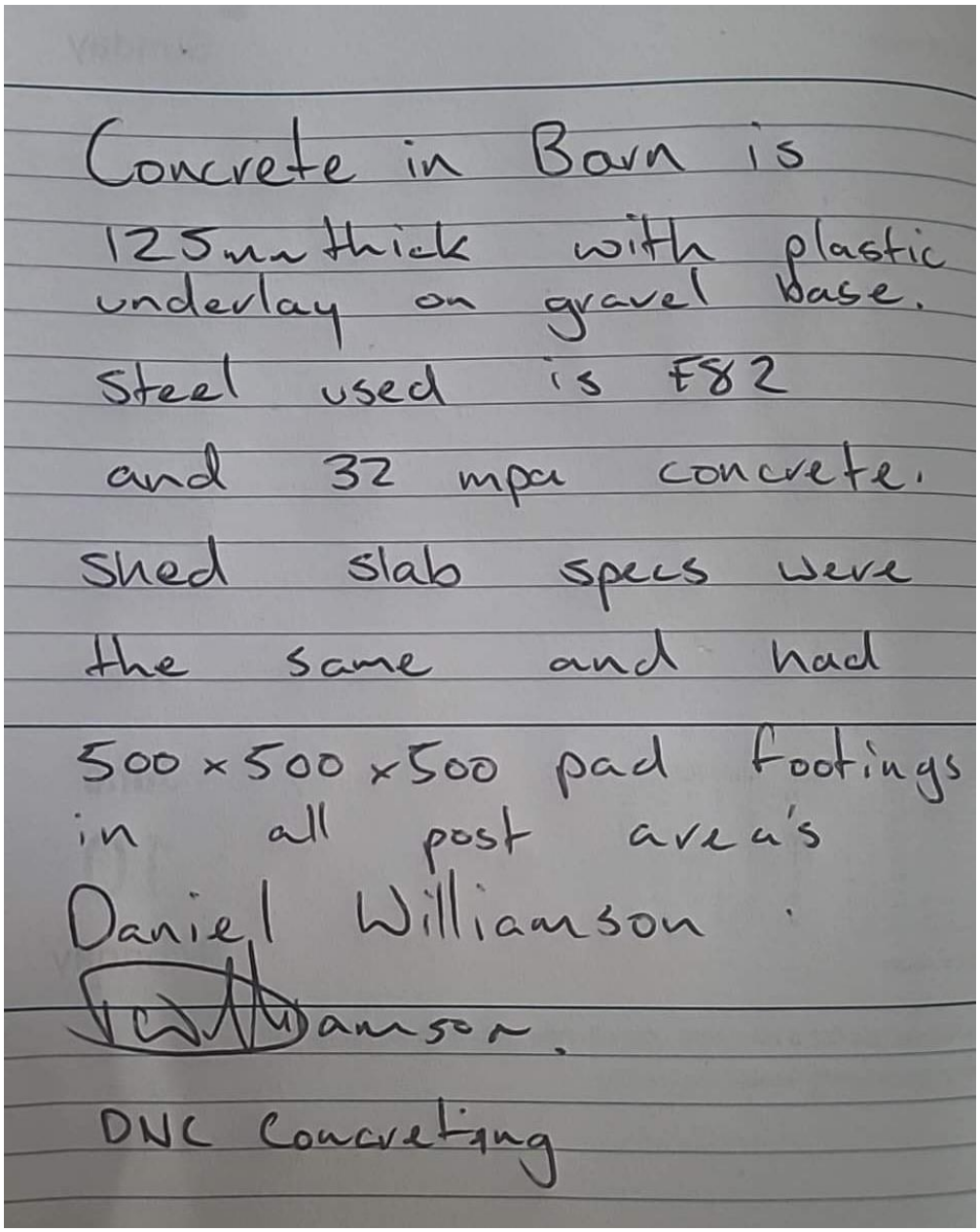
Due Date: 31 Jan 2022
ACC. NO. 10333068
BSB. 062 832
DNC Conreting

PAYMENT ADVICE

Customer	Craig And Sean
Invoice Number	INV-0134
Amount Due	**24,950.00**
Due Date	31 Jan 2022
Amount Enclosed	

Enter the amount you are paying above

To: D.N.C Concreting
0402378645
3 Cadillac Cl
COORANBONG NSW 2265
AUSTRALIA
Lic. No 262676C
ABN 20 646 739 102


Concrete in Barn is
125mm thick with plastic
underlay on gravel base.
Steel used is F82
and 32 mpa concrete.
Shed slab specs were
the same and had
500 x 500 x 500 pad footings
in all post area's
Daniel Williamson.
Williamson.
DNC Concreting


DNC
CONCRETING

Partition Wall Main Living Area

Images Deck Area Construction

Certificate of Conformance – AS/NZS 3500 Plumbing and Drainage

Lambs Valley Plumbing

50 Lambs Valley Road, Lambs Valley NSW 2335

P. 0402 529 209

ABN 85 079 300 762

To Whom It May Concern,

The plumbing works carried out on The Coach House at 245 Station Lane were all done in accordance to AS3500.

Regards,

Barney McEnroe

Plumber

Lic. No. 237507C

Certificate of Conformance – AS/NZS 3000 Electrical Installations

CERTIFICATE OF COMPLIANCE – ELECTRICAL WORK

Customer COPY

CERTIFICATE NO: 2993309

CUSTOMER DETAILS

Name: Craig Faville

Telephone Contact: 0415 174 221

Site Address: 245A Station Lane Lochinvar

Meter No:

Cross Street: Old North Road Postcode: 2321

NMI (Mandatory):

INSTALLATION WORK DETAILS Indicate the type of installation and types of work performed under this Notice

Type of Installation	☑ Residential	☐ Commercial	☐ Industrial	☐ Rural	☐ Other
Special Conditions	☐ over 100 amps	☐ High Voltage	☐ Hazardous Area	☐ Generator	☐ Unmetered Supply

CERTIFICATE MUST BE ISSUED TO THE CUSTOMER FOR ALL ELECTRICAL WORK

Work of the following type must ALSO be notified to the **ELECTRICITY DISTRIBUTOR (DNSP)**

☐ New Installation
☑ Additions or alterations to a switchboard or associated equipment
☐ Network connection or metering
☐ Defect Rectification No:

DETAILS OF EQUIPMENT *Describe the equipment and estimate load increase of the work affected by this Notice. If insufficient space attach separate sheets.*

EQUIPMENT	RATING	No.	PARTICULARS OF WORK
☑ Switchboards	40A.	1	New Sub board in cottage.
☑ Circuits	40A.	1	New Sub Main to cottage.
☑ Lighting	10A.	1	Lighting circuit
☑ Socket-outlets	10A.	1	GPO circuit
☑ Appliances	10A	1	Oven & Stove.
Estimated increase in load A/ph		10	☐ Increased load is within capacity of installation/service mains
☑ Work is connected to supply			☐ Work is not connected to supply pending inspection by DNSP

The work has been carried out or supervised by: David Drinkwater Licence No: 178263C

TEST REPORT *Indicate the relevant tests and checks that have been performed on the work. If test records are provided attach as separate sheets.*

☑ Earthing system integrity Ω 0.4Ω.	☑ Residual current device operation
☑ Insulation resistance MΩ ∞	☑ Visual check that installation is suitable for connection to supply
☑ Polarity	☐ Stand-alone power system complies with AS 4509
☑ Correct circuit connections	☑ Fault loop impedance (if necessary)

I confirm that I have carried out the above tests and visually checked that the installation work described in this Certificate complies with AS/NZS 3000 and is suitable for its intended use.

Name: David Drinkwater Licence No: 178263C

Signature: D.Drinkwat Date of Testing: 14-18-22

CERTIFICATION

I, the Electrical Contractor give notice to the Customer and _____ (Name of DNSP or OFT), that the work described in this Certificate has been completed in accordance with the Electricity (Consumer Safety) Regulation 2006

Name: David Drinkwater Licence No: 178263C.

Signature: D.Drinkwat. Date of Notice: 14-8-22

Address: 38 Sandstone Drive Anambah. Telephone No. or Other Contact: 0407282394

ELECTRICITY DISTRIBUTOR (DNSP) REMARKS

Inspected by: Date

Comments:

neca national electrical and communications association

Shed Plans including Slab Details