

Sydney Newcastle Port Macquarie

building surveying fire engineering building codes assessments project management access assessments energy and Part J assessments

24 June 2019

Turnbull Planning International Pty Ltd Attention – Nic Najar, Assistant Town Planner 2301/4 Daydream Street WARRIEWOOD NSW 2102

Dear Sir,

By Email

Re: Premises – 19 Joseph Street, AVALON NSW 2107 BCA Compliance Inspection & Commentary

We refer to the above matter and to your instructions.

Background

We understand that the local council has issued a stop work notice to the owner to cease work to the construction of the free-standing carport. A building information certificate application is proposed to regularize the construction of the free-standing carport and dwelling additions.

Location of the premises

The premises are located on the southern side of Joseph Street between John and George Streets, Avalon. The dwelling is provided access to the street via an access driveway. The shape of the site represents an axe. A review of the council's website indicates that the premises are not located within bush fire prone land.



Photograph: Location plan – 19 Joseph Street, Avalon NSW 2107 single storey – Courtesy of Google Maps

All correspondence to PO Box 1492 DEE WHY NSW 2099 p. 0417 027 749 e. info@allstatebuildingsurveying.com.au

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ABN 12 096 483 439

All State Building Surveying Pty Ltd Building Surveying, Fire and Safety Engineering

Inspection

We completed an inspection of the site at 19 Joseph Street, Avalon on Saturday, 25 May 2019.

Existing Structures on Site

The site comprises an existing single storey dwelling and associated outbuildings including shed, inground swimming pool and free-standing carport - see attached, copy of the survey report. The dwelling is a single storey timber framed structure clad with weatherboard wall sheeting and provided with metal roof sheeting. The dwelling additions comprise a single room attached the western side of the dwelling.

Inspection of works

Our inspection revealed that two (2) separate projects had recently been constructed at the site. These projects comprised a single storey addition to the western side of the dwelling and a free-standing carport at the front of the site. We describe the projects as being -

1. <u>Free-standing Carport</u>

The free-standing carport is a timber structure. It is provided with a metal sheet roof. Construction had ceased at the time of the inspection and it is estimated that the structure is 90% completed. Works to complete structure would the fitting of gutters, fascia boards and lining the underside of the roof. It is located at the front of the premises – see attached, a copy of the survey report.

2. Additions to Dwelling

The additions to the dwelling were finished for some time prior to our inspection. The work comprises a single room and is attached to the western side of the dwelling. The works are timber framed and provided with weatherboard cladding and sheet metal roofing to match the existing dwelling.

Report Purpose

The purpose of this report is to identify the requirements of the BCA for the free-standing carport and dwelling additions. This report is a high-level document providing a commentary on any major areas of non-compliance with the BCA and presenting suitable strategies to ensure BCA compliance.

Reference Documents

Our reference document will be the Building Code of Australia 2019 (BCA), Volume 2-Construction for Class 1 and Class 10 Buildings including the NSW variations as applicable.

Plan Version

We are in receipt of a copy of architectural plans prepared by Blue Sky Building Designs, dated 27.05.2019, Project Number 2019030, Rev 1, Drawings Numbered A101 – A104 including – Site Plan, Ground Floor Plan, Elevations, Carport and Notification Plan

Building Code of Australia 2019 Assessment

For the purposes of BCA and this report, we would describe the buildings on the site as being classified as –

- 1. Class 1a building dwelling;
- 2. Class 10a buildings freestanding carport and freestanding shed;
- 3. Class 10b building inground swimming pool.

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It is noted that for the purposes of building control, it is a statutory condition that all new building works are to be completed to comply with the Performance Requirements of the BCA.

The comments below are a summary of the issues detailed in the attached BCA Compliance Table for the new work only (i.e. the dwelling addition and the free-standing carport), being –

1. Dwelling Additions

The additions are attached to the western side of the dwelling. The external wall of the additions is located greater than 3m to the western side boundary – see attached survey report.

We are in receipt of a copy of the engineer's report prepared by Taylor Consulting – Structural and Civil Engineers dated 20 June 2019.

We request that copies of the following certificates be obtained for BCA compliance purposes, including the following –

- a. a certificate from a suitable qualified pest controller detailing the termite protection measures provided to the additions, and
- b. a certificate from a suitably qualified electrician detailing the provision and placement of hard wire smoke alarms for the dwelling.

2. Separation between the dwelling and the shed

The dwelling is separated from the rear side shed by a distance of 870mm – see attached a copy of the survey report prepared by David Parsons.

The existing shed is situated along the western side boundary. The shed is classified by the BCA as a class 10a building. The shed is a timber framed structure, clad with compressed fibro cement sheeting for the walls and metal sheeting for the roof.

To comply with the terms of the BCA, it is recommended that the rear facing wall of the shed (to the dwelling and the additions) be upgraded to achieve a fire resistance level (FRL) of not less 60/60/60 where the separation between the dwelling and the shed is less than 900mm.

To achieve the necessary FRL, a possible solution would be to over clad the external cladding of the shed with a product such as Hebel Power Panel.

3. Free-standing Carport

The free-standing carport structure was nearing completion when we attended the site. We estimate that the outstanding work amounts to the fixing of fascia, gutters, downpipes and drainage and the lining of the underside of the roof structure.

The carport is setback from the existing dwelling (on the same allotment) by more than 1.8m – see attached, a copy of the survey report. No additional fire safety upgrade works are required for BCA compliance purposes.

We are in receipt of a copy of the engineer's report prepared by Taylor Consulting – Structural and Civil Engineers dated 20 June 2019.

Should the underside of the carport roof be lined, it should be lining with non-combustible materials only, such as 9mm compressed cement sheeting and screw fixed to the existing rafters.

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BCA Compliance Summary

The upgrade issues can be summarised in the following manner, being –

1. Dwelling Additions

That copies of the following certificates be obtained for BCA compliance purposes, including thee following –

- a. a certificate from a suitable qualified pest controller detailing the termite protection measures provided to the additions, and
- b. a certificate from a suitably qualified electrician detailing the provision and placement of hard wire smoke alarms for the dwelling.

2. Shed Wall

That the northern side wall of the shed (facing the dwelling and the studio additions) is upgraded to achieve a fire resistance level of 60/60/60. It is suggested that a product like Hebel Power Panel be used to achieve this requirement.

At completion of the works, the installer issues a certificate to indicate the product used and that compliance with the manufacture's installation requirements has been achieved.

3. Free-standing Carport

That building works to the carport be completed to address the following matters, being –

- a. fixing of fascia, gutters, downpipes and drainage:
- b. the lining of the underside of the roof structure.

Summary

In terms of BCA compliance, several issues have been identified as requiring further and additional actions for the building to become compliant with the BCA. Once these actions are satisfied, both the dwelling additions and the free-standing carport structure will be ready able to demonstrate compliance with the requirements of the BCA.

For any additional information, please contact the undersigned.

Yours faithfully,

All State Building Surveying Pty Ltd

Sean O'Brien, Principal Building Surveyor

AIBS National Accreditored Building Surveyor

sean@allstatebuildingsurveying.com.au

0417 027 749.

Attachments

- 1. Surveyors Report Dated 20 May 2019
- Clause by Clause BCA Compliance Table
 Engineering Certificates issued by Taylor Consulting (carport and dwelling additions)



A.B.N. 78 895 636 114

Land & Engineering Surveys

David Parsons, B.Surv. M.I.S. (Aust)

46 John Street, Avalon 2107 Phone: (02) 9918-3359 Mobile: 0414 183 220 Email: david@dpsurveying.com.au

REPORT

Our Ref: 3226 Your Ref: DDD

20 May, 2019

DAVID DJURIC 19 JOSEPH STREET AVALON BEACH NSW 2107

Re: 19 Joseph Street, Avalon Beach.

<u>I HAVE SURVEYED</u> the land comprised in Folio Identifier 4/710440 being Lot 4 as shown in Deposited Plan Number 710440 and having a total curved frontage of 5.53 metres to Joseph Street, Avalon Beach.

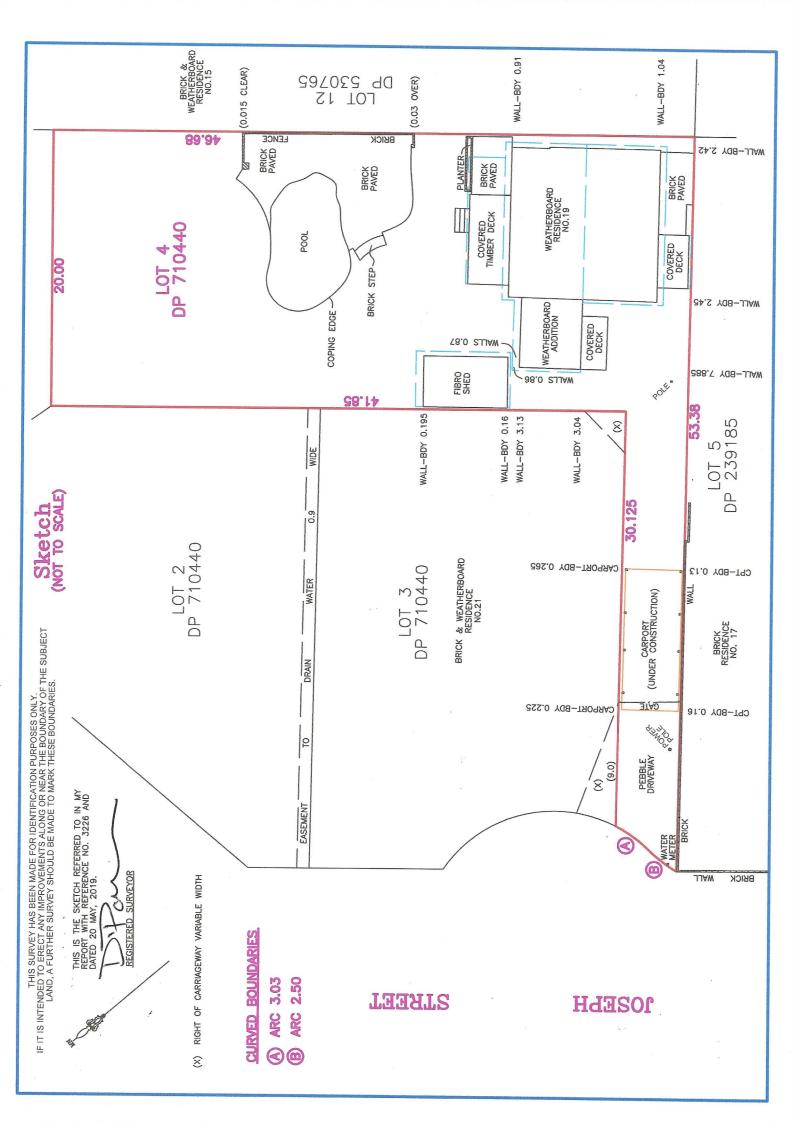
A weatherboard residence known as No.19 stands upon and wholly within the boundaries of the subject land in the position indicated in the accompanying sketch.

Subject land has an appurtenant Right of Carriageway and Easement to Drain Water as shown in the accompanying sketch.

There are no apparent Building Covenants endorsed upon the Folio Identifier.

Other than fencing irregularities there are no visible encroachments on or by the subject land.

Differ



	BCA 2019 – Volume 2						
	PART 1 - GENERAL REQUIREMENTS						
BCA	Description	DTS	Performance	Comments			
Clause		Compliance	Solution				
	Section 1 Governing Requirements						
Part A1	Interpreting the NCC						
A2.0	Compliance with the N						
A2.1	Areas which meet DTS			fully comply			
A2.2	A Performance Solution		•				
	(a) Compliance with a (b) The solution is at l						
A2.3	A solution that compliant have met the Performation			ovisions is deemed to			
A2.4	Performance Requirem						
D 4 4 2	Performance Solutions			S.			
Part A3	Application of the NCC in States and Territories						
Part A4	NCC Reference Documents						
Part A5	Documentation of Design and Construction						
Part A6	Building Classification	1					
A6.1	Classifications	Class 1 Buildings	Existing Class 1	a – single dwelling			
A6.10	Classifications	Class 10 buildings and structures	Existing Class 1 carport	0a – freestanding			
Section 2	Performance Provisions		L				
Section 3	Acceptance Construction	ns					
	PART 3.0 - 9	STRUCTURAL	PROVISIONS				
3.0.1	Application Application	Noted		Structural Engineers			
	11		_	Certificate attached			
			Performance				
			Requirement P2.1	1			
	PART 3.1 – SITE PREPARATION						
Parts 3.				e not applicable to			
Parts 3.1.1 (Earthworks) and 3.1.2 (Earth retaining structures) are not applicable to this proposal.							
Part 3.1.3 – Drainage							
3.1.3.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.1.1	Details to be supplied			

BCA	Description	DTS	Performance	Comments
Clause		Complian	Solution	
Part 3.1.4	– Termite risk ma	nagement		
3.1.4.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.1.1	Details to be supplied
and	.2.2 Preparation, 3.2	.3 (Concrete & R ab Construction)	rings & SLABS einforcing), 3.2.4 (Sare not applicable to	
3.2.0	Application Application	Noted	-	Structural Engineers Certificate Attached

PART 3.3 – MASONRY

Requirement P2.1.1 and P2.2.3

Parts 3.3.1 (Unreinforced Masonry), 3.3.2 (Reinforced Masonry), 3.3.3 (Masonry Accessories), 3.3.4 (Weather Proofing of Masonry and 3.3.5 (Earth wall construction) are not applicable to this proposal.

PART 3.4 – FRAMING

Parts 3.4.0 (Framing), 3.4.1 (Subfloor ventilation), 3.4.2 (Steel framing) and 3.4.4 (Structural steel member) are not applicable to this proposal.

Part 3.4.3 – Timber Framing

3.4.3.0	Application	_	Structural Engineers Certificate attached
		-	
		Performance	
		Requirement	
		P2.1.1 -	

PART 3.5 – ROOF & WALL CLADDING

Parts 3.5.2 (Roof tiles and shingles) and 3.5.5 (Metal wall cladding) are not applicable to this proposal.

BCA Clause	Description	DTS Compliance	Performance Solution	Comments			
Part 3.5.1 – Sheet roofing							
3.5.1.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.1.1 and P2.2.2	Installer Certificate to be supplied			
Part 3.5.3 –	Gutters and Down	oipes					
3.5.3.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.2.2	Installer Certificate to be supplied			
Part 3.5.4 –	Timber and compo	site wall claddi	ng				
3.5.1.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.1.1 and P2.2.2	Installer Certificate to be supplied			
		PART 3.6 – G					
3.6.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.1.1 and P2.2.2	Details to be supplied			
	PART 3.7 - FIRE SAFETY						
Parts 3.7.3 (Fire protection of separation walls and floors) and 3.7.4 (Fire separation of garage top dwellings) are not applicable to this proposal.							
Part 3.7.1 – Fire properties for materials and construction							
3.7.1.1	Application	Noted	Compliance with this part will satisfy Performance Requirement P2.3.1	Noted			

BCA	Description	DTS	Performance	Comments	
Clause		Compliance	Solution		
3.7.1.2	Fire hazard properties	Noted	Compliance with this part will satisfy Performance Requirement P2.3.1	Installation Certificate Required	
Part 3.7.	2 - Fire separation of e	external walls			
3.7.2.2	External walls of class 1 buildings	Noted	Compliance with this part will satisfy Performance Requirement P2.3.1	Survey Report Attached	
3.7.2.3	Measurement of distance	Noted		N/A	
3.7.2.4	Construction of external walls	Noted		N/A	
3.7.2.5	Class 10a buildings	Noted	Compliance with this part will satisfy Performance Requirement P2.3.1	Compliance achieved	
3.7.2.6	Open Carports	Noted		N/A	
3.7.2.7	Allowable encroachments	Noted		Compliance achieved	
3.7.2.8	Roof lights	Noted		N/A	
Part 3.7.5 – Smoke Alarms					
3.7.5.2	Smoke Alarm	Noted	Compliance with this part will satisfy Performance Requirement P2.3.1	Details to be supplied	

PART 3.8 – HEALTH & AMENITY

Parts 3.8.1 (Wet Areas & External Waterproofing), 3.8.3 (Facilities) and 3.8.6 (Sound Insulation) are not applicable to this proposal.

Part 3.8.2 – Room Height

Height of rooms and other spaces Noted Compliance with this part will satisfy Performance Requirement P2.4.2	BCA	Description	DTS	Performance	Comments
other spaces his part will satisfy Performance Requirement P2.4.2	Clause		Complian	Solution	
this part will satisfy Performance Requirement P2.4.4 Part 3.8.5 - Ventilation requirements Noted Compliance with this part will satisfy Performance Requirement P2.4.5 PART 3.9 - SAFE MOVEMENT & ACCESS Part 3.9.3 (Swimming Pool Access) is not applicable to this proposal. Part 3.9.1 - Stairway and Ramp Construction 3.9.1.6 Thresholds Complies Compliance with these requirements will satisfy Performance Requirement P2.5.1 Part 3.9.2 - Balustrades 3.9.2.3 Construction of barriers to prevent falls PART 3.10 - ADDITIONAL CONSTRCUTION REQUIREMENTS Are not applicable to this proposal. PART 3.11 - STRUCTURAL DESIGN MANUAL Are not applicable to this proposal. PART 3.12 - ENERGY EFFICIENCY	3.8.2.2	_	Noted	this part will satisfy Performance Requirement	Compliance achieved
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PART 3.11 – STRUCTURAL DESIGN MANUAL Are not applicable to this proposal. PART 3.12 – ENERGY EFFICIENCY		PART 3.10 – ADDIT	ONAL CONS		QUIREMENTS
Are not applicable to this proposal. PART 3.12 – ENERGY EFFICIENCY					
PART 3.12 – ENERGY EFFICIENCY					NUAL
					•







20 June 2019

General Manager Northern Beaches Council PO Box 82 Manly NSW 1655 Australia

Dear Sir/Madam,

Re: Addition - 19 Joseph Street, Avalon

This is to certify that an inspection was undertaken on the recently constructed timber framed addition to the existing dwelling.

Footing geometry & relevant dimensions appeared to be in accordance with principles of engineering design and standard building practice. Nothing was observed during the course of the inspection to suggest that the footings were not structurally adequate.

The floor, wall and roof frame was also inspected following the placement of floor, wall and ceiling linings. I also reviewed numerous photos of the works during construction. Subsequently, these frames appeared to be in accordance with AS 1684 Residential Timber Framed Construction and standard building practice and were considered satisfactory.

In addition, the addition is also considered adequate to resist the flooding effects of buoyancy and impacts of debris for the Probable Maximum Flood level of 2.57m A.H.D. & a flow velocity of 0.61ms⁻¹.

This certification shall not be construed as relieving any other party of their responsibilities or contractual obligations.

Yours faithfully TAYLOR CONSULTING

D M SCHAEFER - Director B.E. Civil (Hons) M.I.E.Aust











20 June 2019

General Manager Northern Beaches Council PO Box 82 Manly NSW 1655 Australia

Dear Sir/Madam,

Re: Carport - 19 Joseph Street, Avalon

This is to certify that an inspection was undertaken on the recently constructed timber framed carport in the driveway area of the existing site.

Footing geometry & relevant dimensions appeared to be in accordance with principles of engineering design and standard building practice. Nothing was observed during the course of the inspection to suggest that the footings were not structurally adequate.

The wall and roof frame was also inspected prior to the placement of wall and ceiling linings. I also reviewed numerous photos of the works during construction. Subsequently, this structure appeared to be in accordance with AS 1684 Residential Timber Framed Construction and standard building practice and were considered satisfactory.

In addition, the carport is also considered adequate to resist the flooding effects of buoyancy and impacts of debris for the Probable Maximum Flood level of 2.57m A.H.D. & a flow velocity of 0.61ms⁻¹.

This certification shall not be construed as relieving any other party of their responsibilities or contractual obligations.

Yours faithfully TAYLOR CONSULTING

D M SCHAEFER - Director B.E. Civil (Hons) M.I.E.Aust



