

04 FEB 2013

General Manager
Pittwater Council
PO Box 882
Mona Vale NSW 1660

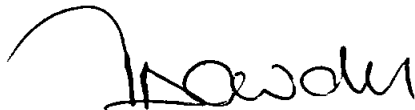
Dear Sir/ Madam

Development Consent No. N0088/11/S96/1
Construction Certificate No. 2012/4726

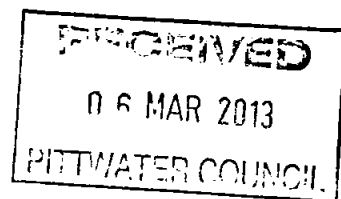
For Council's information, please find enclosed the following:

1. Occupation Certificate No. 2012/4726
2. A cheque for \$36.00 being Council's administration fee to accept the above. **Please send receipt to Insight Building Certifiers, PO Box 326, Mona Vale 1660.**

Yours faithfully



Tom Bowden
Insight Building Certifiers Pty Ltd



\$36 REC:338037 6/3/13.

Determination of a Final Occupation Certificate Application

Made under Sections 109C(1)(c) and 109H of the Environmental Planning and Assessment Act 1979

Final Occupation Certificate No: 2012/4726

Land to which this certificate applies:

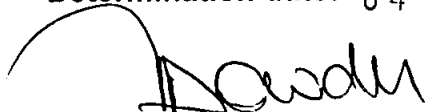
Address: 165 Riverview Road, Avalon

Lot No: 1 DP No: 1147783

I approve the issuing of this Final Occupation Certificate and certify that:

- I have been appointed as the Principal Certifying Authority under Section 109E of the Environmental Planning & Assessment Act 1979.
- Current Development Consent No. N0088/11/S96/1 is in force for this development.
- Construction Certificate No. 2012/4726 has been issued with respect to the plans and specifications for additions to an existing dwelling, boatshed, skid ramp, deck & walkway .
- The building is completed in accordance with its classification under the Building Code of Australia.
- Refer to the attached Schedule of all critical stage inspections.

Determination date: 04 MAR 2013



Tom Bowden
Accredited Certifier – Accreditation No. BPB0042

**Schedule of critical stage inspections carried out or missed by the Principal
Certifying Authority** (Clause 151, 162A, 162B & 162C of the Environmental Planning & Assessment Regulations
1994)

Critical Stage Inspections	Inspected or Missed	Date Inspected
Commencement of building works / Prior to issue of a Construction Certificate	Inspected	01/06/2012
Excavation for footings	Inspected	18/06/2012
Prior to pouring of any in-situ reinforced concrete	n/a	
Prior to the covering of any framework	Inspected	04/10/2012
Prior to covering waterproofing in any wet area	n/a	
Prior to covering any stormwater drainage connections	Inspected	04/12/2012
Other required inspections		
Final Inspection	Inspected	04/12/2012

Schedule of Compliance Certificates or other documentary evidence relied upon to issue the Final Occupation Certificate

Structural Engineers Compliance Certificate	Issued by Waddington Consulting Pty Ltd dated 29 November 2012
Aquatic Ecology Compliance Certificate	Issued by Cardno Ecology Lab dated 22 January 2013
Nest Box & Tree Planting Compliance Certification	Issued by de Soyres Malone Architects Pty Ltd dated 07 January 2013
Geotechnical "Form 3" Certificate	Issued by Peter Crozier dated 17 September 2012
Department of Industry & Investment Compliance Statement	Issued by R W Stidwill Constructions Pty Ltd dated 15 November 2012
Survey Report	Prepared by Base Surveying dated 19 December 2012
Bank Stability Compliance Statement	Issued by Crozier – Geotechnical Consultants dated 20 December 2012

BUILDING INSPECTION REPORT

Land to which this Building Inspection Report result sheet applies:

Council Area: Pittwater Date of Inspection: 18/6/12

Address: 165 Riverview Road Avalon

DA No. _____ CC No. 2012/4726 CDC No. _____

Requested by: Ryan Ph No. 0413 365410

Control Stage Inspections

- | | | |
|--|---|---|
| ☐ Site Assessment - Pre CC/ CDC Issue | ☒ Footings and Excavation | ☐ Waterproofing |
| ☒ PCA Signage | ☐ Steel Placement | ☐ Stormwater |
| ☐ Sediment Controls | ☐ Floor Framing / Slab | ☐ Pool Fence |
| ☐ Tree Protection Measures | ☐ Wall Framing | ☐ Final Inspection |
| ☐ Building Commencement | ☐ Roof Framing | ☒ Photographic record |
| ☐ Other (specify) _____ | | |

☒ An inspection of steel to boat shed has been carried out and has been found to be in compliance with the plans and specifications as approved in that Construction Certificate/Complying Development Certificate.

☐ Complete the work detailed hereunder.

☐ Complete the work detailed hereunder and contact the Principal Certifying Authority to arrange a re-inspection. NB A re-inspection fee of \$_____ will be charged, which is payable PRIOR TO THE RE-INSPECTION BEING CARRIED OUT.

Change from block wall + reinforced retaining wall
geotechnical Engineer to certify foundation material
Engineers certificate required for the steel

Signed: A Bailey Accreditation No. BPB00215 Date: 18/6/12
 Accredited Building Surveyor

BUILDING INSPECTION REPORT

Land to which this Building Inspection Report result sheet applies:

Council Area : PITTWATER Date of Inspection 4 OCTOBER 2012
 Address 165 RIVERVIEW ROAD AVALON
 DA No. CC No. 2012/4726 CDC No.
 Requested by: RYAN Ph No. 0413 365 410

Critical Stage Inspections

- | | | |
|--|--|---|
| ☐ Site Assessment - Pre CC/ CDC Issue | ☐ Footings and Excavation | ☐ Waterproofing |
| ☐ PCA Signage | ☐ Steel Placement | ☐ Stormwater |
| ☐ Sediment Controls | ☐ Floor Framing / Slab | ☐ Pool Fence |
| ☐ Tree Protection Measures | ☒ Wall Framing | ☐ Final Inspection |
| ☐ Building Commencement | ☒ Roof Framing | ☒ Photographic record |
| ☐ Other (specify) _____ | | |

☒ An inspection of wall & roof framing has been carried out and has been found to be in compliance with the plans and specifications as approved in that Construction Certificate/Complying Development Certificate.

☐ Complete the work detailed hereunder.

☐ Complete the work detailed hereunder and contact the Principal Certifying Authority to arrange a re-inspection. NB A re-inspection fee of \$_____ will be charged, which is payable PRIOR TO THE RE-INSPECTION BEING CARRIED OUT.

Framing water factory

Signed: A. Boyle Accreditation No. BA60015 Date: 4/10/12 ✓
 Accredited Building Surveyor



Waddington Consulting Pty Ltd

ACN 130 522 851
Structural and Civil Engineering
Suite 506, Level 5
22 Central Ave, Manly NSW
P.O. Box 1044
Manly NSW 1655

Our ref: 8166-8

29 November 2012

P (02) 9976 0070
F (02) 9976 0095

Mr and Mrs N. Samodol
165 Riverview Rd
Clareville NSW

c/o
de Soyres Malone Architects Pty Ltd
PO Box 657
Newport Beach NSW 2106

Attention: Mrs Liz de Soyres

Dear Liz,

Subject: New Boatshed at 165 Riverview Road, Clareville
ENGINEERS CERTIFICATE FOR INSPECTIONS

I certify that I carried out the structural engineering inspections of the structural work listed below for the new boatshed at the above address and that at the time of the inspection the structure appeared to be in accordance with the design intent of the structural details provided.

During construction, I carried out the following engineering inspections. The date of the inspection is given in brackets.

- **Foundation material (18/06/2012)**
- **Steel reinforcement for the reinforced concrete footings and piers (18/06/2012)**
- **Steel reinforcement for reinforced concrete retaining wall around the boatshed (18/06/2012)**

This certificate assumes the construction was carried out by a licensed builder who has experience in this type of work. The above inspections do not, in any way whatsoever, relieve the builder of his responsibility.

The above inspections do not include inspections for contract administration purposes (e.g. progress payments), cosmetic matters and work that, once the competence of the builder has been established, is reasonable for the builder to supervise.

Yours sincerely,

Simon Waddington
MIEAust CPEng NPER (Structural)
Director
Waddington Consulting Pty Ltd



Our Ref: NA49913090
Contact: Rick Johnson (rick.johnson@cardno.com.au)

Cardno (NSW/ACT) Pty Ltd
Trading as Cardno Ecology Lab
ABN 95 001 145 035

Date: 22 January 2013

Mr Nik Samodol
165 Riverview Road
Avalon
NSW 2106

Level 9 – The Forum
203 Pacific Highway
St Leonards
New South Wales 2065
Australia
Telephone: 02 9496 7700
Fax: 02 9439 5170
ecologylab@cardno.com.au
www.cardno.com.au

Dear Mr Samodol

RE: Occupation Certificate for 165 Riverview Road, Avalon

An underwater field survey was undertaken at 165 Riverview Road, Avalon by Cardno Ecology Lab staff on 21 January 2013 in relation to an Occupation Certificate requested by Pittwater Council.

The two components of the Occupation Certificate assessed by us were to:

- Confirm the position and design of the newly installed timber skid, decking and boatshed; and
- Certify that seagrass beds and intertidal habitats had not been negatively impacted due to the development.

Skid and Boatshed Specifications

I can confirm that on inspection the timber skid, decking and boatshed was located in the position as per the plans prior to the development, and constructed of timber plank decking with concrete piers.

Intertidal Habitat and Seagrass Inspection

After comparing seagrass distribution and morphology in the vicinity of the development on 21 January 2013 with the initial marine habitat survey on 26 October 2010, it can be confirmed that there has been no discernable change in coverage or composition/morphology of seagrass at the site.

In October 2010, the rocky intertidal platform that the new structures are now positioned over was colonised by sparse invertebrate fauna and scattered patches of Neptune's necklace (*Hormosira banksii*). This site inspection confirmed the presence of the same suite of sparse invertebrate fauna species and an increase in the density of Neptune's necklace.

In October 2010, seagrass was present on site (*Posidonia* and *Zostera*) and located 21 m seaward of the seawall, continuing beyond the end of the existing pontoon. The mixed seagrass bed was considered to be of low density. In this current site inspection, the location of the seagrass habitat was confirmed to be unchanged with no signs of any damage. The cover of seagrass had increased in the interim to medium density (15 – 50 % cover) and an additional species of seagrass (*Halophila ovalis*) had colonised the shallower margins mixed in with *Zostera*.

In summary, it is considered that the condition and diversity of both the intertidal habitat and seagrass habitat has improved in the two year time period between Cardno Ecology Lab site inspections.

Underwater photos were taken of the new structures, intertidal habitats and seagrass habitats and can be supplied upon request.

Yours faithfully,



Rick Johnson
Environmental Scientist
Cardno Ecology Lab

de Soyres

M a l o n e

Architects Pty Ltd

OCCUPATION CERTIFICATE CERTIFICATION

Date: 7 January 2013
Property: 165 Riverview Road, Avalon, NSW 2107
Proposed works: Boatshed, skid ramp, deck and walkway
DA no: Section 96 No: N0088/11/S96/1

We certify that one nest box has been installed on site in accordance with condition E4 of the development consent and 2 canopy trees have been planted in accordance with condition B5 of the development consent.

Should you require any further information, please contact this office.



James de Soyres

ABN 50 084 840 648

5, Heron Cove Marina
Queen's Park West
Newport NSW

P O B o x 6 5 7
Newport Beach
N S W 2 1 0 6

info@dsarchitects.com

T: (02) 9979 1823
F: (02) 9979 5263

James de Soyres
NSW Architects Registration
Board No: 6769

0715d



PITTWATER COUNCIL

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER FORM NO. 3 – Post Construction Geotechnical Certificate to be submitted with Occupation Certificate or Subdivision Certificate

Development Application for	<u>de Souza Maloney Architects</u>
Name of Applicant	
Address of site	<u>165 Riverview Road, Avalon</u>
Dty Ltd	

Declaration made by geotechnical engineer on completion of the Development

I, Peter Crozier on behalf of Crozier Geotechnical Consultants
(Insert Name) (Trading or Company Name)

on this the 17th September 2012

certify that I am a Geotechnical Engineer, Engineering Geologist and/or Coastal Engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009. I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least \$2million. I prepared and/or verified the Geotechnical Report as per Form 1 dated referred to below.

Geotechnical Report Details:

Report Title:	<u>Geotechnical Investigation for Proposed Boat Shed at 165 Riverview Rd, Avalon</u>
Report Date:	<u>12th April 2010</u>
Author:	<u>Peter Crozier</u>
Author's Company/Organisation:	<u>Crozier Geotechnical Consultants</u>
Project No:	<u>27119-2</u>

I reviewed the original structural design, and where applicable the subsequently amended structural details (below listed) which have been incorporated into the completed project.

I have inspected and/or am satisfied that the foundation materials, upon which the structural elements (as detailed in the original and amended structural documents) of the development have been erected, comply with the requirements specified in the Geotechnical Report and the Construction Certificate approved Structural Plans.

I have inspected the site during construction and to the best of my knowledge, I am satisfied that the development referred to in the development consent D.A. dated (D.A.No) (Date consent given)

has been constructed in accordance with the intent of the Geotechnical Report, the requirements of the conditions of Development Consent and the Construction Certificate approved Structural Plans relating to the geotechnical issues (including any treatment and/or maintenance plan that may be required to remove risk where reasonable and practical).

I am aware that Pittwater Council require this certificate prior to issuing an occupancy certificate for the development identified above and will rely on this certificate in regard to the development having achieved the "Acceptable Risk Management" criterion defined in the Policy and that reasonable and practical measures have been taken to remove foreseeable risk.

List of all work as executed drawings and Ongoing Maintenance plans relevant to geotechnical risk management.

As per attached letter & Table 2 enclosed

Signature
Name
Chartered Professional Status
Membership No.
Company

Registered Professional Engineer 691550	
Mr Peter Crozier	
MIEAust CPEng (Civil / Geotechnical)	
N P E R	
Signature	Date <u>17.09.2012</u>
Registered on the NPER in the area of practice of	
Civil / Geotechnical	
National Professional Engineers Register	



CROZIER - Geotechnical Consultants

Engineering Geologists & Geotechnical Engineers

(A Division of PJC Geo-Engineering Pty Ltd)

A.B.N 96 113 453 624

Suite 203/30 Fisher Road, Dee Why, NSW, 2099.

Phone: 9972 9578 Fax: 9971 1774

Date: 17th September 2012

No. Pages: 1 of 4

Project No.: 27119A.2

The Manager,
Development Compliance Office
Pittwater Council
Mona Vale Customer Service Centre,
Village Park, 1 Park Street,
Mona Vale. 2103.

RE: Proposed Boat Shed at 165 Riverview Road, Avalon.

Recently we received a request from the Architect, James de Soyres to inspect the completed works at the above site. We have inspected the site works during construction and recently on completion and are of the opinion that they were generally carried out in accordance with the recommendations in our report titled; "Geotechnical Investigation for Proposed Boat Shed at 165 Riverview Road, Avalon." Report Number: 27119.2, Dated: 12th April 2010.

Council's Form: 3 of the Risk Management Policy has been completed and enclosed with this letter. We would suggest that the maintenance schedule as detailed on the attached page and Table: 2 (copies enclosed) be set as minimal requirements for this site.

Hope the above information meets Councils requirements. If we can be of further assistance in regards to this matter please don't hesitate to contact the undersigned.

Yours faithfully,



Peter Crozier
MSc. MIE Aust. CPEng. NPER.
Registration Number: 691550.

Attached:

1. Maintenance Schedule.
2. Table: 2 Schedule.
3. Form: 3.

CROZIER - Geotechnical Consultants
Project No: 27119A.2, September, 2012.

Maintenance Schedule:

A recommended maintenance program for this site is given in Table: 2 and should also include the following guidelines

- The conditions on the block don't change from those present at the time this report was prepared, except for the changes due to this development.
- There is no change to the property due to an extraordinary event external to this site, and the property is maintained in good order and in accordance with the guidelines set out in;
 - a) CSIRO sheet No. 10-91 1988 and ,
 - b) The Australian Geomechanics article "Geotechnical Risk Associated with Hillside Development" Number 10, December 1985, Australian Geomechanics Society, March 2007, Titled "Landslide Risk Management" in the Journal and News of the Australian Geomechanics Society, Volume 42, No 1 and,
 - c) Comply with the requirements of AS 2870 – 1996, Australian Standard for Residential Slabs and Footings.

Where changes to site conditions are identified during the maintenance and inspection program, reference should be made to relevant professionals (e.g. structural engineer, geotechnical engineer or Council).

It is assumed that Pittwater Council and Maritime will carry out regular inspections of the soil slopes, trees, undergrowth on public land, waterways and reserve adjacent to the site so as to ensure that stability conditions do not deteriorate with potential increase in risk level to the site. And that individual Government Departments will maintain public utilities in the form of power, phone lines, water mains, gas, sewer lines and boat jetties to ensure they don't unduly deteriorate or leak and increase the local groundwater level, fire, shoreline or landslide potential.

TABLE: 2

Recommended Maintenance and Inspection Program

Structure	Maintenance/ Inspection Item	Frequency
Stormwater drains,	Owners to inspect to ensure that the drains, pipes and contour drain upslope of boatshed slope are free of debris & sediment build-up. Clear surface grates, remove sediment, litter.	Every year or following each major rainfall event.
Retaining Walls.	Owners to inspect walls for deviation from as constructed condition.	Every two years or following major rainfall event.
Large Trees on or adjacent to site	Arborist to check condition of trees and remove branches as required.	Every five years
Slope Stability	Hydraulics (stormwater) & Geotechnical Consultants to check on site stability at same time and provide report. Owners to inspect after every major storm event.	One year after construction is completed.

N.B. Provided the above schedule is maintained the design life of the property should conform with Pittwater Councils Risk Management Policy.



STATEMENT

15/11/12

PROPERTY: 165 Riverview Road Clareville

DA No.: N0269/08/S96/3

This letter confirms that works were completed to the boatshed at 165 Riverview Road Clareville were in accordance with the requirements set by the Department of Industry and Investment's letter dated 21/4/11.

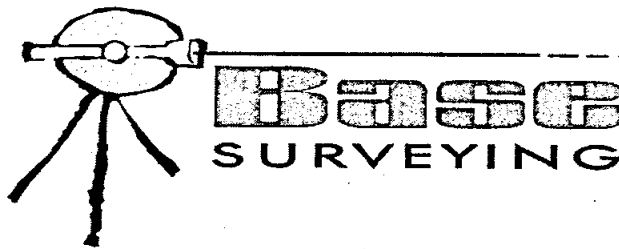
Environmental safeguards were taken during the construction process, and no deleterious materials to marine life were used in the construction of the boatshed.

Should you require additional information, please contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Ryan Stidwill', is written over a horizontal line.

Ryan Stidwill
Builder



OUR REF : 11-05

19th December 2012

TO: R W STIDWILL CONSTRUCTION PTY LTD

RE: FLOOR LEVEL BOAT SHED
165 RIVERVIEW RD, CLAREVILLE

Dear Ryan,
As instructed by you I have undertaken field measurements and wish to confirm the following finished levels.

Boat Shed FL 2.04 (A.H.D.)

Origin of Levels PM 60564 RL 37.145 A.H.D. located in Riverview Rd.

Simon Warren
Diploma Surveying
Member Institution of Surveyors NSW

mob 0412 448 259 fax 02 6555 3006
6 Surfview ave Forster 2428 email basesurveying@iinet.net.au

CROZIER - Geotechnical Consultants

Engineering Geologists & Geotechnical Engineers

(A Division of PJC Geo-Engineering Pty Ltd)

A.B.N 96 113 453 624

Suite 203/30 Fisher Road, Dee Why, NSW, 2099.

Phone: 9972 9578 Fax: 9971 1774

Date: 20th December 2012

No. Pages: 1 of 1

Project No.: 27119A.2

Tom Bowden
Insight Building Certifiers

Bank Stability at 165 Riverview Road, Avalon.

We have completed inspections during construction and also post construction for the new house and boatshed at 165 Riverview Road, Avalon.

A steep natural slope/bank exists between the house and the boatshed retaining wall. This slope contains numerous trees and low vegetation along with exposed soil slopes. There are signs of minor erosion within the exposed soil slopes whilst the trees show signs of slow down slope creep. However this is consistent with adjacent natural slopes. It was identified during construction inspections that soil cover on the slope is shallow with weathered shale and sandstone bedrock at generally <0.5m depth.

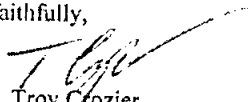
As part of the development works stormwater drainage systems were implemented across the upper half of the block, as part of the house development, to reduce the likelihood of surface stormwater flow down the site. Also drainage was installed behind the boatshed retaining wall to prevent groundwater build-up at the base of the bank/slope. The retaining wall for the boatshed is considered to be suitably constructed to provide structural stability and prevent instability at the toe of the slope.

The site drainage system will require ongoing maintenance to ensure concentrated surface stormwater flow does not occur over the lower portion of the site. This must include inspections of the stormwater pipes passing down the bank/slope to ensure they do not become separated due to creep movement or become blocked with debris. The system must ensure that all collected water is discharged at the foreshore.

Whilst ongoing soil creep is expected the control of stormwater flow over the bank will significantly reduce the likelihood of larger scale slope instability. As such provided ongoing maintenance of the stormwater system is undertaken and any changes in slope condition are reported to a geotechnical engineer, the stability of the bank should remain within the 'Acceptable' risk criteria of Pittwater Council's Policy for the design life of the development.

Hope the above information meets Councils requirements. If we can be of further assistance in regards to this matter please don't hesitate to contact the undersigned.

Yours faithfully,


Troy Crozier
Senior Engineering Geologist

CROZIER - Geotechnical Consultants
Project No: 27119A.2, December 2012.