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## FITZGERALD BUILDING CERTIFIERS PTY. LTD.

199 Pennant Hills Road  
Thornleigh NSW 2120  
ph: 9980 2155  
fax: 9980 2166  
admin@fitzgeralds.com.au  
ABN: 63 119 997 590

### CONSTRUCTION CERTIFICATE

#### PCA ENGAGEMENT - page 2

#### NOTICE OF COMMENCEMENT- page 2

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**Construction Certificate Number** CC 2007/216      **Approval Date:** 16.4.07  
Issued in accordance with the provisions of the Environmental & Assessment Act 1979 under Sections 109C(1)(b) and 109F

**Council:** PITTWATER COUNCIL

**Development Consent No:** N0747/06

**Name of Certifying Authority:**

**Name of Accredited Certifier:**

**Accreditation Body:**

**Approval Date:** 28.12.07

**Fitzgerald Certifiers**

**Paul Fitzgerald - No. PO117**

**DIPNR, 20 Lee Street, Sydney 2000.**

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<b>Applicant:</b>	<b>Mrs S &amp; Mr R Nichols</b>	<b>Owner:</b>	<b>As Applicant</b>
<b>Address:</b>	103 Narrabeen Park Pde, Warriewood NSW 2102	<b>Address:</b>	As Applicant
<b>Contact Number:</b>	9979 3825		

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**Subject Land:** Lot 2 DP 16692 (No.103) Narrabeen Park Pde, Warriewood  
**Description of Development –** Erection of chain & timber lap & cap fence.  
**Building Code of Australia Classification:** 10b      **Value of Work:** \$ 9 000

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**Builder Details**

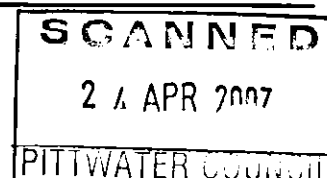
**Name:** AVA Fencing, Gardening & Landscaping  
**Licence Number:** 59433C  
**Address:** 22 Forestville Ave, Forestville  
**Contact Number:** 0414 966 046

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**Date Application Received:** 16.4.07      **Determination: APPROVED Date:** 16.4.07

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**Approved Plans:** Plans prepared by J.D Evens and Company, Drawing Nos.881-01, 881-02, dated 1.5.06.  
Landscape Plan Prepared by Souter & Associates, Drawing No.1991 dated 24.9.02.



19/04/07

R.214049

**CERTIFICATION:**

I, Paul Fitzgerald, as the certifying authority am satisfied that;

- (a) The requirements of the regulations referred to in s81A (5) have been complied with. That is, work completed in accordance with the documentation accompanying the application for this certificate (with such modifications verified by the certifying authority as may be shown on that documentation) will comply with the requirements of the Regulation as referred to in section 81A (5) of the Act, and
- (b) Long Service Levy has been paid where required under s34 of the Building and Construction Industry Long Service Payments Act 1986.

Signed: 

DATED: 16.4.07

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**PRINCIPLE CERTIFYING AUTHORITY:**

Name of Certifying Authority	Fitzgerald Certifiers
Name of Accredited Certifier	Paul Fitzgerald
Accreditation Number	P0117
Contact Number	9980 2155
Address	199 Pennant Hills Rd, Thornleigh 2120

**MANDATORY CRITICAL STAGE INSPECTIONS:** Class 1 & 10 Buildings

- 1) Commencement of Building Work
- 2) Final Inspection - issue of Occupation Certificate

SIGNED: 

DATED: 16.4.07

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**NOTICE OF COMMENCEMENT:** Earliest Date Building Work Can Commence: 18.4.07

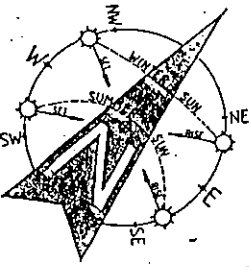
SIGNED: 

DATED: 16.4.07

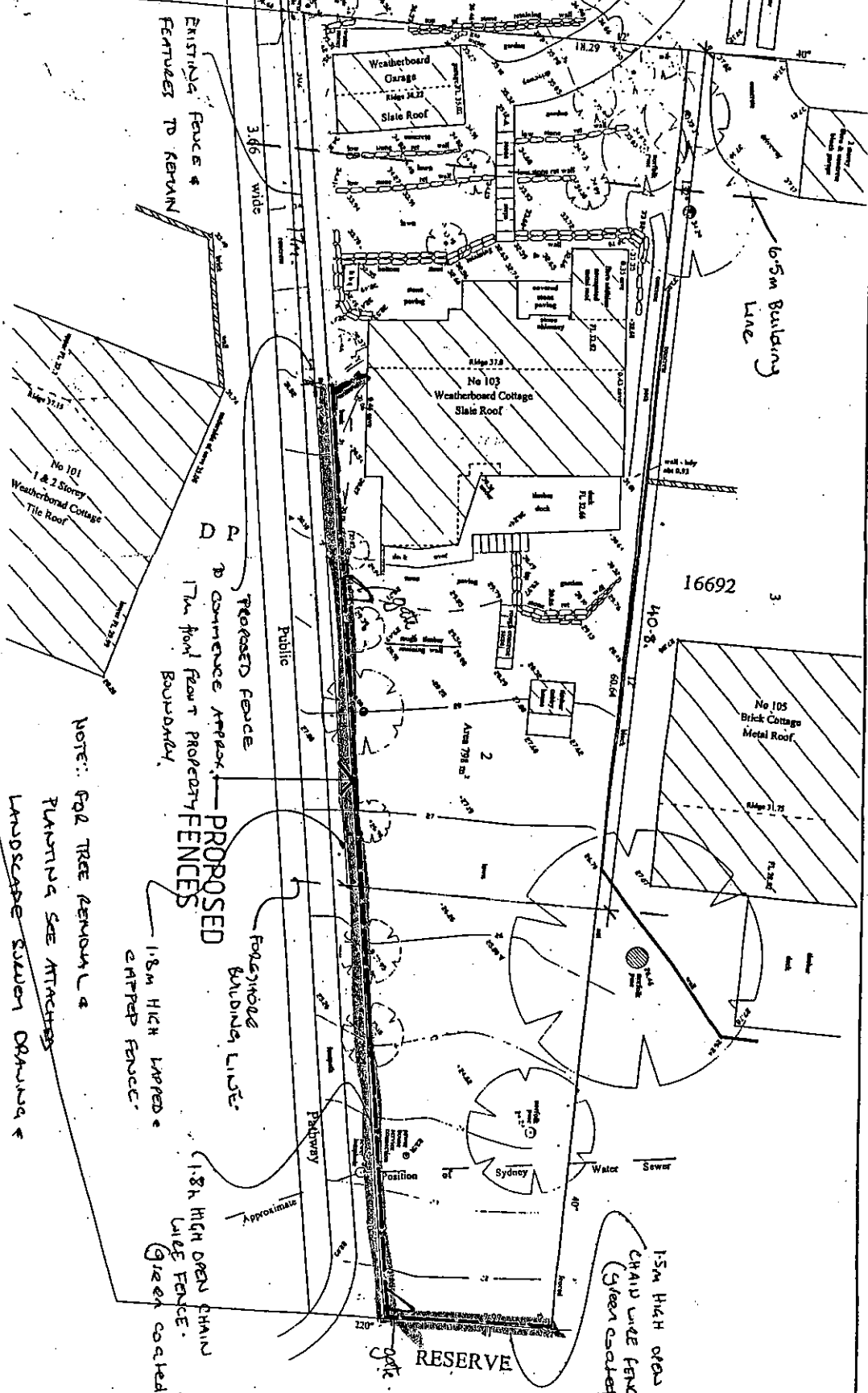
**Right of appeal** - under S109K where the Certifying Authority is a Council an applicant may appeal to the Land & Environment Court against the refusal to issue a Construction Certificate within 12 months of the date of issue.

NARRABEEN PARK

PARADE



THE BUILDER IS TO CHECK AND CONFIRM ALL NECESSARY DIMENSIONS AND LEVELS ON SITE PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION. DO NOT SCALE OFF THE DRAWING



## SITE PLAN

107-2, IN D.P. 616

This is the plan/spec. referred to in  
Fitzgerald-Building Certifiers Certificate  
Cert. No: 2007/216

16.4.07  
Accreditation No 11  
Fitzgerald

NOTE: FOR TREE REMOVAL &

PLANTING SEE ATTACHED  
LANDSCAPE SURVEY DRAWING &  
STATEMENT OF ENV. EFFECTS

### DEVELOPMENT CALCULATIONS

DESCRIPTION	EXISTING sqm	PROPOSED sqm
FLOOR AREA	N/A	N/A
ROOF AREA	140	NO FENCED
SITE COVERAGE (HARD SURFACE ETC)	210 (76%)	"
LANDSCAPING AREA	500 (65%)	NO DECREASE
SITE AREA	798	NOT APPLICABLE



**JD EVANS and COMPANY PTY LTD.**  
14 SYDNEY AVE, SYDNEY NSW 1587  
Phone (02) 9112204 Fax (02) 9112344  
Mobile 04 974 794

**PROPOSED BOUNDARY FENCES AT**  
No. 103 NARRABEEN PARK PARADE  
WARRENWOOD N.S.W. 2102  
CLIENT  
ROB & SELINA NICHOLS

881-01

DATE 11/5/2006 SCALE 1:100, 1:200  
DRAWN JDE  
CHECKED

LINE OF BOUNDARY

Front  
Bdy.

Elev 30.33

TOP 30.85

Elev 19.00

1.8m Lanes + Grooves  
Timber Posts & Grooves  
To F.S.B.L.

F.S.B.L.

Existing fence & features  
Remained to be

2x6 POSTED 1.8m H.C.H.  
TREATED PINE 1.8m H.C.H.  
FENCE & GATES WITH DETACHED  
BACK TO HOUSE LINE AS SHOWN  
ON SITE PLANS.

# SOUTH - EAST ELEVATION

TOP 26.42

Elev 26.42

TREATED PINE  
1.8m H.C.H.

1.5m OPEN GRAIN WIRE  
FENCE (GREEN COATED)

Existing

# SOUTH - WEST ELEVATION

THE BUILDER IS TO CHECK AND CONFIRM ALL NECESSARY  
DIMENSIONS AND LEVELS ON SITE PRIOR TO ORDERING MATERIALS  
AND COMMENCING CONSTRUCTION. DO NOT SCALE OFF THE DRAWING

This is the planspec. referred to in  
Fitzgerald Building Certificate  
Cert No: 2007/216

16.4.07  
Padi Fitzgerald Accreditation No 117

1.8m H.C.H. OPEN GRAIN WIRE  
FENCE

INWARD  
SOUTH GATE  
OCEAN FLOOR  
OCEAN BDR.

INWARD  
SOUTH GATE

Elev 22.00


TOP 25.12

TO 22.472

1. The drawings are prepared by the draughtsman on the basis of the information supplied by the client. The draughtsman is not responsible for the accuracy of the information supplied by the client. The draughtsman is not responsible for the accuracy of the information supplied by the client. The draughtsman is not responsible for the accuracy of the information supplied by the client.

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NO.	DESCRIPTION
1	1.8m H.C.H. OPEN GRAIN WIRE FENCE
2	1.8m H.C.H. OPEN GRAIN WIRE FENCE
3	1.8m H.C.H. OPEN GRAIN WIRE FENCE
4	1.8m H.C.H. OPEN GRAIN WIRE FENCE
5	1.8m H.C.H. OPEN GRAIN WIRE FENCE
6	1.8m H.C.H. OPEN GRAIN WIRE FENCE
7	1.8m H.C.H. OPEN GRAIN WIRE FENCE
8	1.8m H.C.H. OPEN GRAIN WIRE FENCE
9	1.8m H.C.H. OPEN GRAIN WIRE FENCE
10	1.8m H.C.H. OPEN GRAIN WIRE FENCE



**J.D. EVANS and COMPANY PTY LTD.**  
100 BAYVIEW DRIVE, SUITE 1107  
WARRIEWOOD N.S.W. 2120  
Phone: (02) 9713 2044 Fax: (02) 9713 2044  
Mobile: 080 913 2044

PROPOSED BOUNDARY FENCES AT  
NO. 103 WARRIEWOOD PARK PARADE  
WARRIEWOOD N.S.W. 2120  
CLIENT  
ROB & SELINA NICHOLS

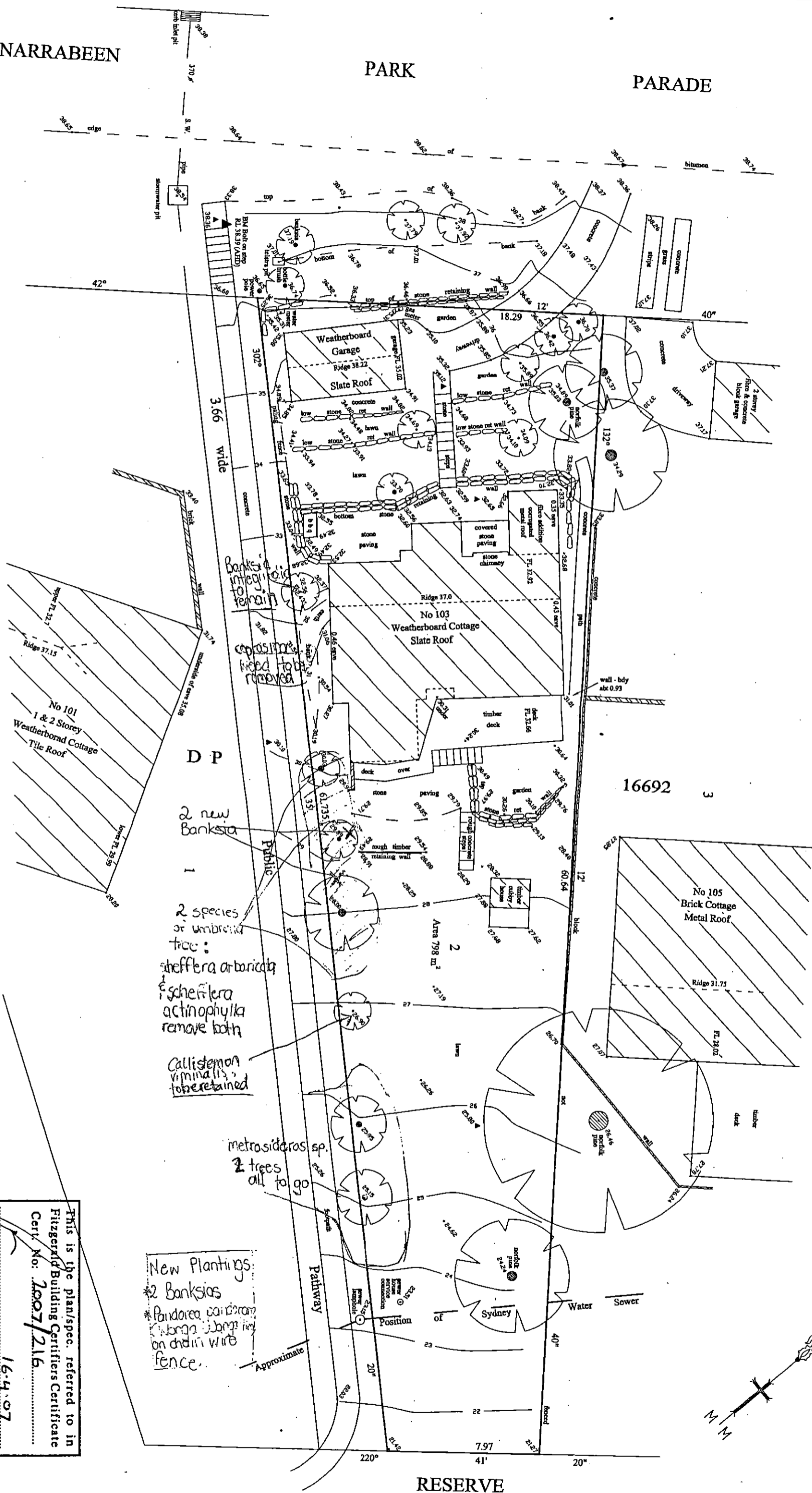
DATE 1/5/2006  
DRAWN BY JOE  
CHECKED  
881-02

NARRABEEN

PARK

PARADE

- NOTES:
1. Levels are on the Australian Height Datum (A.H.D.).
  2. Origin of levels S.M. 24619.
  3. R.L. 42.053 A.H.D.
  4. Tree trunks and spreads are diagrammatic only.
  5. Contour interval is 1.0 metre.
  6. Contours are indicative of ground form only.



This is the plan/spec. referred to in  
Fitzgerald Building Certifiers Certificate  
Cert. No. 1007/216

Paul Fitzgerald Accreditation No 117

16-4-07

New Plantings:  
\* 2 Banksias  
\* Pandorea pandorana  
\* on chain wire  
fence.

SOUTER & ASSOCIATES  
CONSULTING SURVEYORS AND PLANNERS  
SUITE 6, HERON COVE MARINA, QUEENSBURY (WEST), NEWPORT 2106  
PHONE: 02 9779 5709 FAX: 02 9779 9449

CLIENT: SELINA NICHOLS  
PLAN SHOWING DETAIL & LEVELS  
OVER LOT 2 IN DP 16692

SCALE  
1:100  
DATE  
24-09-2002



**Jack Hodgson Consultants Pty Limited**

CONSULTING CIVIL, GEOTECHNICAL AND STRUCTURAL ENGINEERS

ABN: 94 053 405 011

**RISK ANALYSIS &  
MANAGEMENT  
FOR  
PROPOSED FENCE  
AT  
103 NARRABEEN PARK  
PARADE  
WARRIEWOOD**



DIRECTOR: J.D. HODGSON, M. Eng. Sc., F.I. E. Aust., Nper3 Struc. Civil 149788  
67 Darley Street, Mona Vale NSW 2103  
PO Box 389 Mona Vale NSW 1660  
Telephone: 9979 6733 Facsimile: 9979 6926

**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER**  
**FORM NO. 1 – To be submitted with Development Application**

Development Application for SELINA NICHOLS

Name of Applicant

Address of site 103 NARRABEEN PARK PARADE, WARRIEWOOD

*Declaration made by geotechnical engineer or engineering geologist or coastal engineer (where applicable) as part of a geotechnical report*

I, J Hodgson on behalf of Jack Hodgson Consultants Pty Ltd  
(insert name) (Trading or Company Name)

on this the 28/11/06 certify that I am a geotechnical engineer or engineering geologist or coastal engineer as defined by the Geotechnical Risk Management Policy for Pittwater and 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 have:

Please mark appropriate box

- ☐ Prepared the detailed Geotechnical Report referenced below in accordance with the Australia Geomechanics Society's Geotechnical Risk Management Guidelines and the Pittwater Council Policy
- ☐ Am willing to technically verify that the detailed Geotechnical Report referenced below has been prepared in accordance with the Australian Geomechanics Society's Geotechnical Risk Management Guidelines and the Pittwater Council Policy
- ☒ Have examined the site and the proposed development/alteration in detail and am of the opinion that the Development Application only involves Minor Development/Alterations that do not require a Detailed Geotechnical risk Assessment and hence my report is in accordance with the Policy requirements for Minor Development/Alterations.
- ☐ Provided the coastal process and coastal forces analysis for inclusion in the geotechnical report

**Geotechnical Report Details:**

Report Title: RISK ANALYSIS & MANAGEMENT FOR PROPOSED FENCE AT 103 NARRABEEN PARK PARADE, WARRIEWOOD

Report Date: 24/11/06

Author: BEN WHITE

Documentation which relate to or are relied upon in report preparation:


I am aware that the above geotechnical report, prepared for the abovementioned site is to be submitted in support of a Development Application for this site and will be relied on by Pittwater Council as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature

Name Jack Hodgson

Chartered Professional Status MEngSc FIEAust

Membership No. 149 788



**GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER**  
**FORM NO. 1(a) - Checklist Of Requirements For Geotechnical Risk Management Report for**  
**Development Application or Part V assessment**

Development Application for SELINA NICHOLS  
 Name of Applicant  
 Address of site 103 NARRABEEN PARK PARADE, WARRIEWOOD

*The following checklist covers the minimum requirements to be addressed in a Geotechnical Risk Management Geotechnical Report. This checklist is to accompany the Geotechnical Report and its certification (Form No. 1).*

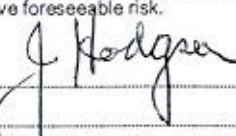
**Geotechnical Report Details:**

Report Title: RISK ANALYSIS & MANAGEMENT FOR PROPOSED FENCE AT 103 NARRABEEN PARK PARADE, WARRIEWOOD  
 Report Date: 24/11/06  
 Author: BEN WHITE

Please mark appropriate box

- ☒ Comprehensive site mapping conducted 24/11/06  
 (date)
- ☒ Mapping details presented on contoured site plan with geomorphic mapping to a minimum scale of 1:200 (as appropriate)
- ☐ Subsurface investigation required
  - ☒ No Justification SEE REPORT
  - ☐ Yes Date conducted .....
- ☒ Geotechnical model developed and reported as an inferred subsurface type-section
- ☒ Geotechnical hazards identified
  - ☐ Above the site
  - ☐ On the site
  - ☐ Below the site
  - ☐ Beside the site
- ☒ Geotechnical hazards described and reported
- ☒ Risk assessment conducted in accordance with Council's Policy
  - ☒ Consequence analysis
  - ☒ Frequency analysis
- ☒ Risk calculation
- ☒ Risk assessment for property conducted in accordance with Council's Policy
- ☒ Risk assessment for loss of life conducted in accordance with Council's Policy
- ☒ Assessed risks have been compared to "Acceptable Risk Management" criteria as defined in the Geotechnical Risk Management Policy for Pittwater
- ☒ Opinion has been provided that the design can achieve the "Acceptable Risk Management" criteria provided that the specified conditions are achieved.
- ☒ Design Life Adopted:
  - ☒ 100 years
  - ☐ Other ..... specify
- ☒ Development Conditions to be applied to all four phases as described in Pittwater Geotechnical Risk Management Policy have been specified
- ☒ Additional action to remove risk where reasonable and practical have been identified and included in the report.

I am aware that Pittwater Council will rely on the Geotechnical Report, to which this checklist applies, as the basis for ensuring that the geotechnical risk management aspects of the proposal have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure, taken as at least 100 years unless otherwise stated, and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature   
 Name Jack Hodgson  
 Chartered Professional Status MEngSc FIEAust  
 Membership No. 149 788





**RISK ANALYSIS & MANAGEMENT  
FOR  
PROPOSED FENCE  
AT  
103 NARRABEEN PARK PARADE, WARRIEWOOD**

**1. INTRODUCTION.**

1.1 This assessment has been prepared to accompany an application for development approval. The requirements of the Interim Geotechnical Risk Management Policy for Pittwater, June 2003 have been met.

1.2 The definitions used in this Report are those used in the Interim Geotechnical Risk Management Policy for Pittwater, June 2003.

1.3 The methods used in this Assessment are based on those described in Landslide Risk Management Concepts and Guidelines, March 2000, published by the Sub-Committee on Landslide Risk Management of the Australian Geomechanics Society and as modified by the Interim Geotechnical Risk Management Policy for Pittwater, June 2003.

1.4 The experience of Jack Hodgson spans some 50 years in many areas of Australia and in the Pittwater area, particularly in the last 30 years as Principal of Jack Hodgson Consultants Pty Limited.

**2. PROPOSED DEVELOPMENT.**

2.1 Construct an open chain wire fence down most of the south western boundary and across south eastern boundary.

2.2 Details of the proposed fence are shown on two drawings prepared by J.D Evans and Company Pty. Ltd. Numbered 881-01 to 02 and dated 1/5/2006.



# Jack Hodgson Consultants Pty Limited

CONSULTING CIVIL, GEOTECHNICAL AND STRUCTURAL ENGINEERS

ABN: 94 053 405 011

VR 24114.

27<sup>th</sup> November, 2006.

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## 3. DESCRIPTION OF SITE & SURROUNDING AREA.

3.1 The site was inspected on the 24<sup>th</sup> November 2006.

3.2 This property is located on the low side of the road and has an easterly aspect. A vegetated fill batter forms the road frontage and the toe of the batter has been excavated for a garage on the southern end of the frontage (Photo 1). The stone fascia wall supporting the cut batter is in poor condition and has partially collapsed (Photo 2). A concrete paved driveway runs down from the northern side of the frontage to the front of the garage. Steps from the driveway provide access to a paved area in front of the house. The cut batter for the paved area is supported by stone fascia wall that has partially collapsed at the northern corner of the house (Photo 3). The stone that made up the collapsed portion of the wall has been removed. The soil materials behind the failed area of wall have not collapsed and are free standing. Access to the rear of the block is down the northern side of the house and is also possible from the Public Pathway which runs down outside the southern boundary. Some minor terracing has been carried out on the rear of the block and the surfaces are grassed (Photo 4).

3.3 The existing part two storey timber and brick house is supported on brick walls and brick piers that display no evidence of ground movement. A deck, which is supported on timber posts, runs across the down hill side of the house. One of the piers under the house is partially undercut but still stands vertical (Photo 5). We recommend the undercut portion be under pinned. The house is in good condition for its age.

3.4 Observation of the adjacent properties indicates that these properties do not present a risk of instability to the subject property.

## 4. GEOLOGY OF THE SITE.

4.1 The site is underlain by interbedded sandstones, siltstones and shales of the Narrabeen Group which do not outcrop on the site. The Narrabeen Group Rocks are Late Permian to Middle Triassic in age with the early rocks not outcropping in the area under discussion. The materials from which the rocks were formed consist of gravels, coarse to fine sands, silts and clays. They were deposited in a riverine type environment with larger floods causing fans of finer materials. The direction of deposition changed during the period of formation. The lower beds are very variable with the variations decreasing as the junction with the Hawkesbury Sandstones is approached. This is marked by the highest of persistent shale beds over thicker sandstone beds which are similar in composition to the Hawkesbury Sandstones.



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4.2 The slope materials are colluvial at the surface and residual at depth. They consist of sandy loam topsoil over sandy clays and clays with rock fragments and some floaters through out the profile. The sandy clays and clays merge into the weathered zone of the under lying rocks at depths expected to be in the range 0.6 to 2 metres.

## 5. SUBSURFACE INVESTIGATION.

The surface features described in this Report are considered to provide adequate information for the proposed development, therefore no subsurface investigation is required.

## 6. DRAINAGE OF THE SITE.

### 6.1 ON THE SITE.

Water was pooling at the northern corner of the house at the time of inspection (Photo 3). According to the owner this is a recent phenomenon and the source of the water is being investigated. It is suspected to be a broken pipe due to its sudden appearance. If the source cannot be identified and the flow stopped we recommend drainage be installed to pipe the water to the downhill side of the house.

Two storm water down pipes on the north east side of the house drain onto the ground. We recommend these be connected to the existing stormwater system for the house or piped to the downhill side of the house (Photo 6).

### 6.2 SURROUNDING AREA.

No signs of water flows entering the site from adjoining properties were observed.

## 7. GEOTECHNICAL HAZARDS.

### 7.1 ABOVE THE SITE.

No geotechnical hazards likely to adversely affect the subject property were observed above the site.

### 7.2 ON THE SITE.

7.2.1 The unsupported cut batter on the uphill side of the garage is a potential hazard (**HAZARD ONE**).

7.2.2 The unsupported cut batter on the northern corner of the house is a potential hazard (**HAZARD TWO**).

DIRECTOR: J.D. HODGSON, M.Eng.Sc., F.I.E. Aust., Nper3 Struc. Civil 149788

67 Darley Street, Mona Vale NSW 2103

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## 7.3 BELOW THE SITE.

No geotechnical hazards likely to adversely affect the subject property were observed below the site.

## 7.4 BESIDE THE SITE.

No geotechnical hazards likely to adversely affect the subject property were observed beside the site.

## 8. RISK ASSESSMENT.

### 8.1 ABOVE THE SITE.

As no geotechnical hazards likely to adversely affect the subject site were observed above the site, no risk analysis is required.

### 8.2 ON THE SITE.

**8.2.1 HAZARD ONE** The cut batter is some 1.4 metres in height. It is battered back at 25 degrees from vertical. A stone fascia wall supporting the batter has collapsed and has come to rest on the garage wall. The likelihood of further significant movement of the cut batter is assessed as 'Unlikely' ( $>10^{-4}$ ). The consequences to property is assessed as 'Medium' ( $>1\%$ ). The consequences to life of such a failure are assessed as 'Minor' ( $>10^{-3}$ ). The risk to property is 'Low' ( $10^{-6}$ ). The risk to life is 'Low' ( $10^{-7}$ ).

Although the risk is 'Acceptable' good practice is to replace the failed wall with a properly designed retaining wall.

**8.2.2 HAZARD TWO** The cut batter is 1.3 metres high. A stone fascia wall that supported the cut has collapsed and been removed. The cut batter has not moved. The likelihood of a failure of the cut batter is assessed as 'Possible' ( $>10^{-3}$ ). The consequences to property is assessed as 'Minor' ( $>0.1\%$ ). The consequences to life of such a failure are assessed as 'Minor' ( $>10^{-3}$ ). The risk to property is 'Low' ( $10^{-6}$ ). The risk to life is 'Low' ( $10^{-6}$ ).

Although the risk is 'Acceptable' good practice is to support the cut batter with a properly designed retaining wall.



# Jack Hodgson Consultants Pty Limited

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27<sup>th</sup> November, 2006.

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## 8.3 BELOW THE SITE.

As no geotechnical hazards likely to adversely affect the subject site were observed below the site, no risk analysis is required.

## 8.4 BESIDE THE SITE.

As no geotechnical hazards likely to adversely affect the subject site were observed beside the site, no risk analysis is required.

## 9. SUITABILITY OF DEVELOPMENT FOR SITE.

### 9.1 GENERAL COMMENTS.

The proposed fence is suitable for the site.

### 9.2 GEOTECHNICAL COMMENTS.

No geotechnical hazards will be created by the completion of the proposed fence.

### 9.3 CONCLUSIONS.

The site and the proposed development can achieve the Acceptable Risk Management criteria outlined in the Pittwater Interim Geotechnical Risk Policy provided the recommendations given in **Section 10** are undertaken.

## 10. RISK MANAGEMENT.

### 10.1. TYPE OF STRUCTURE.

The proposed fence is structurally suitable.

### 10.2. EXCAVATIONS.

10.2.1 Apart from those for footings no excavations are required.

### 10.3. FILLS.

10.3.1 No fills are shown on the plans.



# Jack Hodgson Consultants Pty Limited

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## 10.4. FOUNDATION MATERIALS AND FOOTINGS.

10.4.1 The underlying clays are a suitable footing for the fence. These should be taken to at least 0.5 metres into the clay. The maximum bearing capacity is 300kPa.

## 10.5. STORM WATER DRAINAGE.

No additional stormwater will be generated by the proposed fence.

## 10.6. SUBSURFACE DRAINAGE.

No subsurface drainage is required.

## 10.7. INSPECTIONS.

10.7.1 It is recommended that the foundation materials of all footing excavations be inspected and approved before concrete is placed.

## 10.8. MAINTENANCE.

10.8.1 The property is to be maintained in good order and in accordance with the guidelines set out in CSIRO BTF 18 "Foundation Maintenance and Footing Performance: A Homeowner's Guide" and the Australian Geomechanics Article "Landslide Risk Management Concepts and Guidelines" May 2002.

10.8.2 All retaining walls are to be inspected at intervals not exceeding 20 years.

## 11. GEOTECHNICAL CONDITIONS FOR ISSUE OF CONSTRUCTION CERTIFICATE.

It is recommended that the following geotechnical conditions be applied to the Development Approval:-

The work is to be carried out in accordance with the Risk Management Report VR 24114 dated 27<sup>th</sup> November 2006.

The Geotechnical Engineer is to inspect and approve the foundation materials of all footing excavations before concrete is placed.

DIRECTOR: J.D. HODGSON, M.Eng.Sc., F.I.E. Aust., Nper3 Struc. Civil 149788

67 Darley Street, Mona Vale NSW 2103

PO Box 389 Mona Vale NSW 1660

Telephone: 9079 6722 Facsimile: 9079 6036



# Jack Hodgson Consultants Pty Limited

CONSULTING CIVIL, GEOTECHNICAL AND STRUCTURAL ENGINEERS

ABN: 94 053 405 011

VR 24114.

27<sup>th</sup> November, 2006.

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## 12. GEOTECHNICAL CONDITIONS FOR ISSUE OF OCCUPATION CERTIFICATE.

The Geotechnical Engineer is to certify the following geotechnical aspects of the development:-

The work has been carried out in accordance with the Risk Management Report VR 24114 dated 27<sup>th</sup> November 2006.

The foundation materials of all footing excavations were inspected and approved before concrete was placed.

## 13. RISK ANALYSIS SUMMARY.

HAZARDS	Hazard One	Hazard Two
TYPE	The unsupported cut batter on the uphill side of the garage.	The unsupported cut batter on the northern corner of the house.
LIKELIHOOD	'Unlikely' ( $>10^{-4}$ )	'Possible' ( $>10^{-3}$ )
CONSEQUENCES TO PROPERTY	'Medium' ( $>1\%$ )	'Minor' ( $>0.1\%$ )
CONSEQUENCES TO LIFE	'Minor' ( $>10^{-4}$ )	'Minor' ( $>10^{-4}$ )
RISK TO PROPERTY	'Low' ( $10^{-6}$ )	'Low' ( $10^{-6}$ )
RISK TO LIFE	'Low' ( $10^{-7}$ )	'Low' ( $10^{-6}$ )
COMMENTS	'Acceptable'	'Acceptable'

JACK HODGSON CONSULTANTS PTY. LIMITED.

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## **Statement of Environmental Effects**

(Incorporating a Site Analysis)

For Construction of a 1.8m High Lapped & Capped Timber Paling Fence and Chain Wire Fence on the South-West Boundary & a 1.5m High Chain Wire Fence on the South-East (ocean front) Boundary.

At Lot 2 DP 16692 No. 103 Narrabeen Park Parade Mona Vale.

For Mr.R. & Mrs. S Nichols.(nee Buresti)

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Prepared By  
Northern Vista Pty Limited  
November, 2006

## **1.0 INTRODUCTION**

This Statement of Environmental Effects forms part of a submission of a DA for the fencing of 103 Narrabeen Park Parade, Mona Vale. It is proposed to construct a 1.8m high lapped & capped timber paling fence in part on the south-west boundary of the property as far as the Foreshore Building Line. From the Foreshore Building Line to the oceanfront boundary a 1.8m high chain wire fence is proposed. Across the south-east (ocean front) boundary a 1.5m high chain wire fence is proposed to complete the project.

This statement examines the details and takes into account the relevant matters for consideration under the Environmental Planning and Assessment Act, as well as Pittwater Local Environmental Plan (PLEP) 1993, Draft Pittwater 21 LEP and Pittwater 21 Development Control Plan (DCP)

Please note, this Statement and site analysis accompanies details as identified on Drawing No. 881-01 dated 1<sup>st</sup> May 2006 prepared by J.D. Evans and Company Pty Ltd. It is also to be read in conjunction with contour survey plan, Ref No. 22-100 dated 24/09/02 prepared by Souters & Associates, Consulting Surveyors & Planners and a landscape survey plan detailing tree removal and planting.

## **2.0 SITE ANALYSIS**

### **2.1 Property Description**

The subject allotment is identified as lot 2 in DP 16692 No. 103 Narrabeen Park Parade Mona Vale as identified by contour survey plan, Ref No. 22-100 dated 24/09/02 prepared by Souters & Associates, Consulting Surveyors & Planners;

### **2.2 Site Description**

The subject site is located on the Warriewood Beach headland and on south-eastern low side of Narrabeen Park Parade. The site has an area of 798sq. meters and contains a weatherboard cottage, detached garage and concrete driveway.

The accompanying contour survey reflects the slope of land away from the street to the east. There are no identified easements other than Sydney Water Sewer that dissects the property down slope at the rear of the property, a 3.66m wide Public walkway adjacent to the southwestern boundary that provides pedestrian access to Warriewood Beach and a beach front Reserve adjacent to the south eastern oceanfront boundary.

The subject land is bounded by residential development that supports a variety of both natural and exotic trees and shrubs of varying maturity.

## **3.0 STATEMENT OF ENVIRONMENTAL EFFECTS**

### **3.1 Development Proposal**

It is proposed to construct;

- a 1.8m high lapped & capped timber paling fence in part on the south-west boundary as far as the foreshore building line;

- Within the foreshore building alignment area line to the southeast corner the fence would be of chain wire construction (green plastic coated) and 1.8m high and return on the south-east (ocean-front) boundary with a continuation of the open chain wire fence at a height of 1.5m;
- Provision of access gates and

Furthermore, as detailed below it is proposed supplement the removal of some undesirable and native plantings with suitably selected native species to compliment the headland position and provide suitable screening of the fence when viewed from the adjacent walk way and beachfront escarpment.

This proposal stems from the need of the property owners to identify property boundaries from the adjacent public walkway and Reserve and to provide a level of safety and security for their three young children (under the age of 7 years).

Privacy to the rear yard area from the adjacent public walkway is a key concern as it is used by both large numbers of locals and tourists alike accessing Warriewood beach and doing the Bicentennial Walk. The property owners frequently see persons inadvertently accessing the subject site from the public walkway and the adjacent Public Beach Reserve in the absence of any defined boundary structure. This poses a potential risk and public safety issue of injury on their land, as well as property security and the safety of their own children. In addition, the property owners have become extremely concerned about the number of unleashed dogs entering their land off the public walkway and harassing anyone in the yard.

The property borders the Reserve which has a steep drop down the cliff to the beach below. This is very worrying to the owners as it is dangerous with no barrier between the cliff and their children and their young friends.

A piecemeal vegetative screen of predominantly exotic shrubs currently exists adjacent to the south west boundary and the public walk way in the location of the proposed timber and chain wire fence. This vegetative screen is made up of predominately undesirable species such as Schefflera actinophylla (Umbrella Tree) and Schefflera arboricola (Dwarf Umbrella Tree) amongst others. These shrubs will be required to be removed to allow for construction of the fence on the boundary. The pruning of these fast-growing species which overhang the much-frequented public path is of considerable expense to the property owners and, the owners believe, Pittwater Council every year. As a result a number of the plantings are proposed for removal as in the supporting documentation. An existing indigenous native tree Banksia integrifolia (Coastal Banksia) and a Callistemon viminalis (Weeping Bottle Brush) that are located near to the adjacent public walkway, will be able to be retained in the proposal, but will fail to provide sufficient screening of the yard.

The owners therefore propose the new fence coupled with some further revegetation/ landscaping of the rear yard area utilizing indigenous native plants and trees to soften the fence line in discrete locations. These species will include Banksia integrifolia and Banksia ericifolia (Heath Banksia). The 1.8 m high lapped and capped timber paling fence on the south west boundary and adjacent to the public walkway is proposed as far as the Foreshore Building Line. It is believed this part of the fence, closest to the house would provide the desired security and privacy sought by the owners. From the Foreshore Building Line to the oceanfront boundary it is proposed that the fence would be green plastic coated chain wire to blend in with the natural environment.

To this end, it is proposed that the indigenous Pandorea pandorana (Wonga Wonga Vine) would be planted to grow through the chain wire fence. This is in line with Council policy requirements to maintain open style fencing within the foreshore building area. Inward swing access gates are proposed to provide entry to and from the adjacent public walkway.

To finish the fencing project a 1.5 metre fence is proposed to extend across the oceanfront boundary of the property. This is consistent with the objective of the proposal to identify property boundaries from the adjacent public walkways and Reserve. This fence would also maintain some consistency with the existing fencing on the adjoining property at No.105 Narrabeen Park Parade and meet council policy requirements on open style fencing. Importantly for the owners, the fence would be a barrier between their children and the cliff face.

The provision of such fencing would not impede pedestrian access as it is considered the area is limited and unsafe due to the existing contours of the site and adjacent escarpment to provide any reasonable degree of public safety and/ or access.

### *3.2 Pittwater Local Environmental Plan (LEP) 1993/ Pittwater 21 Draft LEP & Pittwater 21 Development Control Plan.*

Whilst boundary fencing or fencing below 1m high does not normally require Council approval, it is in this instance that whilst Council zoning/ DCP permits the construction of fencing within the residential locality, development consent is required to be obtained beforehand due to the height of the proposed open chain wire fence within the foreshore building line area.

Notwithstanding the above, having reviewed all other relevant matters in relation to the planning controls in respect to the proposed development, it is assessed that the proposal is permissible and complies with all numerical requirements and of the outcomes as outlined in the Pittwater 21 DCP under the appropriate sections.

#### *3.2.1. D14 Warriewood Locality – Pittwater 21 DCP*

The two (2) applicable clauses to the development proposal under Pittwater 21 DCP are;

- cl.14.10 'Foreshore Building Line' and
- cl.14.15 'Fences –General'.

It is viewed that Pittwater 21 DCP provides development controls regulating built form of development in the area. The requirements, whilst not statutory are a guide to building designers of what may be considered reasonable development in Pittwater. In its quantitative form, it provides numerical standards for which building designers are guided to conform to.

Clause 14.10 requires built form to comply with Building Line setbacks though it is noted that it permits fencing within the Foreshore Building Line and to provide where applicable pedestrian access.

Clause 14.15 also permits fencing within foreshore building alignment areas though has numerical standards and of the type of fencing to be satisfied being an open style and of a maximum of 1.8m in height.

It is noted the application satisfies numerical requirements and outcomes of both clauses as described above with regard to the fence specification, height and pedestrian access.

It is noted that this control does not take into account any adjacent public walkways in assessment and inherent associated problems with pedestrian access adjacent to an unsecured property boundary.

In the absence of any specific controls of regulating boundary fencing adjacent to a public footway, it is a reasonable expectation of the property owners in the submission of the development application for the proposed fence to maintain a high level of security, safety for their children and property possessions as well as privacy from the adjacent public pathway and reserve. This would otherwise be expected in a normal residential environment with immediate adjoining development and boundary fencing.

Notwithstanding the above, and of the proposal's technical and numeric compliance, that even should the application be based on merit assessment alone the application would still warrant favourable consideration as it is considered the proposal does not affect the amenity, beach and/ oceanviews from the adjoining and surrounding properties, pedestrian use of the public footway and Reserve, Bicentennial walkway and the streetscape in general and that in addition it should be viewed in the following context;

- a) The property is adjacent to a public walkway whereby the owners are seeking a reasonable degree of safety and security for their three young children (under the age of 7 years). They are also wanting privacy to the rear yard area from the adjacent public walkway that is frequently used as pedestrian access to and from Warriewood Beach and the beachfront reserve. The proposal aims to overcome the inherent associated problems with pedestrian access adjacent to an unsecured property boundary;
- b) The provision of such fencing would not impede pedestrian access as it is considered the area is limited and unsafe due to the existing contours of the site and adjacent escarpment to provide any reasonable degree of public safety and/ or access.
- c) The proposal is unusual in that the Pittwater 21 DCP has not covered fencing of the walkway to adjacent properties;
- d) The proposal does not affect the amenity, beach and/ oceanviews from the adjoining and surrounding properties, Bicentennial walkway and the streetscape in general.
- e) The maximum height of the fence is significantly lower than the edge of bitumen as shown on survey at RL 38.64 and will not be visible from the Street and or impact on coastal views from the Bicentennial walkway;
- f) The proposed fence adjacent to the public footway within the foreshore building line is unlikely to impede ocean views from surrounding properties or restrict pedestrian access on the public footway and to the Reserve;
- g) The fencing proposed adjacent to the pathway and Reserve is compliant with the development controls under Pittwater 21 DCP.
- h) The timber fence will be attractive when viewed from the adjacent public footway and reserve as it is proposed to be of dressed timber in lapped and capped construction and the open chain wire fence will be green plastic coated to blend with the existing and proposed landscaping.
- i) Precedents have been set on neighbouring blocks where side fencing higher than a metre have been constructed within the foreshore building line.

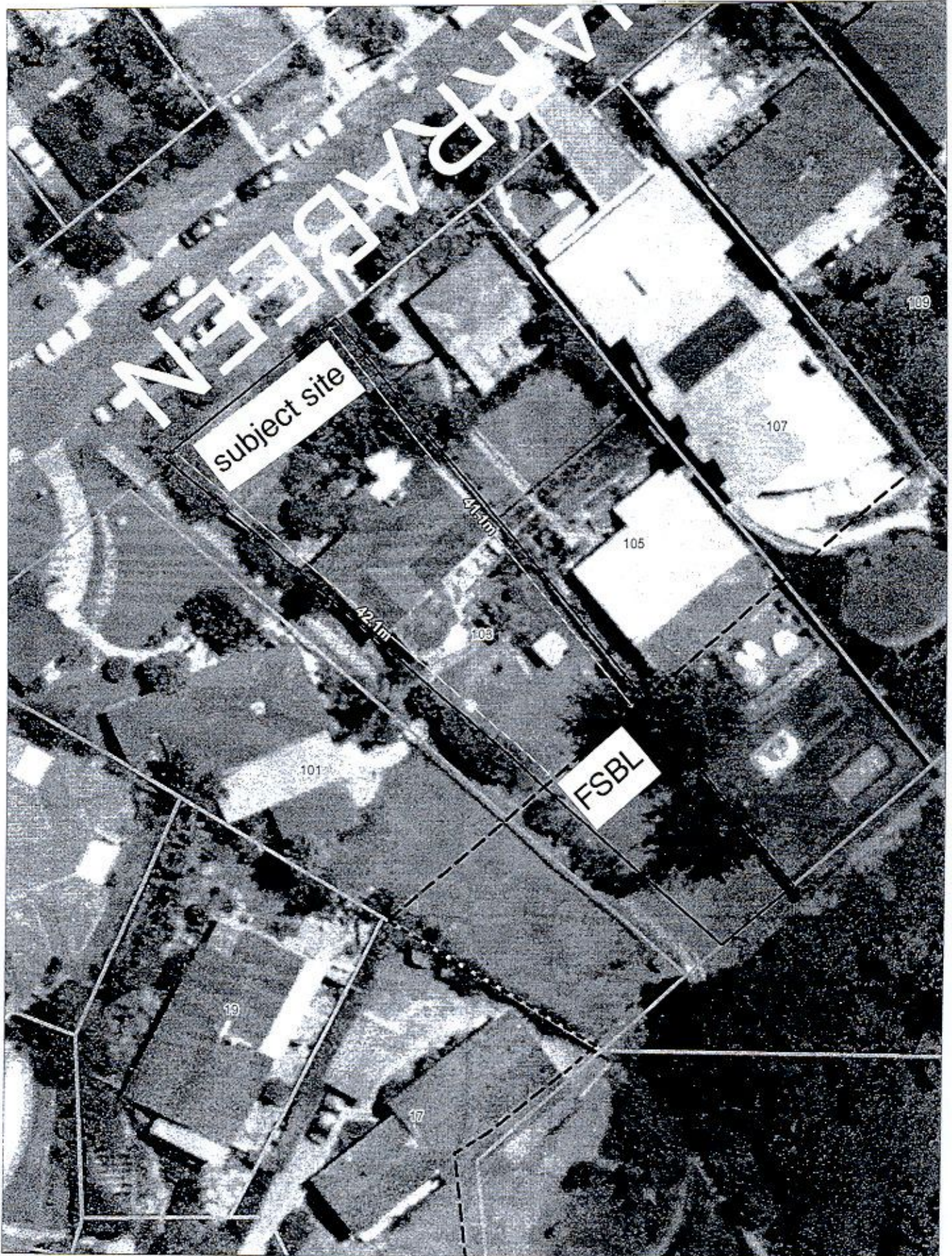
#### **4.0 LANDSLIP-REQUEST TO WAIVER GEOTECHNICAL REPORT REQUIREMENT**

The subject property is identified as being subject to possible landslip.

It is on the basis that the proposal is very minor in nature and in which would not normally require development approval it is request that Council waiver its request to provide a geotechnical report in this instance.

#### **5.0 CONCLUSION**

The property owners of No. 103 Narrabeen Park Parade are conscious of the beachfront environment in which they live and look forward to discussing with Council how the safety, security and privacy to their rear yard area can be provided and maintained.



Aerial photography - Jan 2005  
Licensed from Sinclair Knight Merz.  
This plan is not survey accurate.

Foreshore Building Line  
103 Narrabeen Park Parade, Mona Vale

  
**NORTH**  
A4 Scale 1:400

Pittwater Council

OFFICIAL RECEIPT

19/04/2007 Receipt No 214049

To FITZGERALD BUILDING  
CERTIFIERS PTY LTD

199 PENNANT HILLS ROAD  
THORNLEIGH 2120

Applic Reference	Amount
GL Re PRVC-Priv	\$30.00
1 X 103 NARRABEEN PARK PD	

Total: \$30.00

Amounts Tendered

Cash	\$0.00
Cheque	\$30.00
Db/Cr Card	\$0.00
Money Order	\$0.00
Agency Rec	\$0.00
Total	\$30.00
Rounding	\$0.00
Change	\$0.00
Nett	\$30.00

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