



PITTWATER COUNCIL

RECEIVED MONA VALE

30 JUN 2010

CUSTOMER SERVICE

APPLICATION FOR BUILDING CERTIFICATE

Environmental Planning & Assessment Act, 1979 (as amended)
Section 149A, B, C, D

APPLICANT

Applicants Name: LISA HANDSCOMB (NEE COWINS) + PAUL HANDSCOMB

Postal Address: 12 ILYA AVE.

Suburb: BAYVIEW NSW Postcode: 2104

Phone (02) 9979 2044 Daytime Contact No (02) 9265 0215 (LISA)

Mobile () LISA 0402 445 469
PAUL 0411 330 006

Fax ()

Email: lisa.handscomb@meeglobal.com

You can apply for a Building Certificate if you are:
(Please tick appropriate box)

- ☒ I am the owner of the building
- ☐ I have the owners consent to lodge this application(see below)
- ☐ I am the purchaser under a contract for the sale of the property
- ☐ I am the owner's or purchasers solicitor or agent
- ☐ We are a public authority which has notified the owner of its intention to apply for the certificate

Signature L Handscomb Date 28/6/2010

For access to the building please contact: owners - as above

Ph: Mobile:

Would you like to collect the certificate or would you like Council to post it? POST

PROPERTY DESCRIPTION

Street Number: 12 Street Name: ILYA AVENUE

Suburb: BAYVIEW

Lot Number: 21 DP Number: 27133 Section:

OWNER/S CONSENTOwner/s Name: LISA HANDSCOMB (NEE COWINS) + PAUL HANDSCOMBPostal Address: 12 ILYA AVESuburb: BAYVIEW NSWPostcode: 2104Phone (02) 9979 2044 Daytime Contact No (02) 9265 0215 LISAMobile () LISA 0402 445 469
PAUL 0411 330 006

Fax () _____

Email: lisa.handscomb@meeglobal.com

I/We consent to the lodgement of this application and permit Council authorised personnel to enter the site for the purpose of inspections:

Signature

L HandscombDate 28/6/2010**CERTIFICATE TYPE**☐ Whole Property☐ Whole Building i.e. _____☒ Part Building i.e. NEW DECKS, REPLACING OLD DECK, LIKE FOR LIKE☐ Pool, Fencing and Access _____**PROCESSING FEES**Class 1 Building (together with any class 10 building on the site)
\$210.00 each
or a Class 10 Building

\$210.00 each

In the case of any other Class of Building - as follows
Floor area of building or part -

(i) Not exceeding 200 square metres

\$210.00 each

(ii) Exceeding 200 square metres but not exceeding 2000 square metres

\$210.00 plus \$0.42 cents for
each sq.m in excess of 200 sq.
m

(iii) Exceeding 2000 square metres

\$966.00 plus \$0.063 cents for
each sq. m in excess of 2000
sq.m

(iv) Fee for additional inspection

\$75.00

In the case of any unapproved structures or works
(being \$210 Certificate plus \$370 Inspection and Assessment fees on
unauthorised building works)

\$580.00

ACCOMPANYING INFORMATION TO BE SUBMITTED WITH APPLICATION		
Applicant Checklist	Document's - Required for a Building Certificate	Office Use Received
✓	A detailed survey prepared by a Registered Surveyor clearly showing the location of the structures and/or works on the site. The date of the survey is irrelevant in so far as the information contained therein is still current.	
Council already had this document	<p>A Geotechnical Engineers Report prepared in accordance with Council's Interim Geotechnical Risk Management Policy is to be provided, together with completed form 4 & 4a pursuant to that Policy</p> <p>Is required where the property is:</p> <p>Land identified on Pittwater Council's Geotechnical Risk Management Map 2003 as being areas subject to Pittwater Council's Geotechnical Risk Management Policy</p> <p>or</p> <p>Land identified on Pittwater Council's Coastal Hazard Map 96-080 as being Bluff Management Areas</p>	
Where the Certificate Application relates to unapproved structures or works the following additional information is to be provided:		
Refer Survey Above. Deck is replacement 'like for like'	A detailed survey prepared by a Registered Surveyor clearly showing the site of location of the structures and/or works in relation to the existing structures on the property and any nearby structures on adjacent properties together with floor levels, finish surface levels and the like. (A detail and contour survey as required to accompany Development Applications and outlined on Council's Development Application form will satisfy this requirement).	
✓	Works as constructed plans. These plans should be prepared by a suitably professional e.g. Architect/Town Planner and clearly annotate the unapproved structures and/or works as well as the existing approved structures and works on the land. These plans should be accompanied by a statement assessing the structures and/or works as to their compliance with the relevant Council's development controls.	
✓	Certification as to the structural and/or geotechnical adequacy of the structures and/or works as built. All built structures will require certification as to their structural integrity by a qualified Structural Engineer, all earthworks and foundations will require certification by a qualified and experienced Geotechnical Engineer as to their adequacy.	
✓	Certificate by an appropriately qualified person that the structures and/or works comply with the Building Code of Australia and appropriate Australian Standards.	
Note:	Council may require additional information to enable appropriate assessment and determination of the Building Certificate.	
OFFICE USE		
Building Certificate No: <u>BC0076/10.</u>		
Cashier Code (FHEA)	Receipt No: <u>282249</u>	Date: <u>30/6/2010.</u>



Jack Hodgson Consultants Pty Limited

CONSULTING CIVIL, GEOTECHNICAL AND STRUCTURAL ENGINEERS

ABN: 94 053 405 011

VS 24486

25th November, 2009

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The General Manager
Pittwater Council
P O Box 882
MONA VALE NSW 1660

Dear Sir,

12 ILYA AVENUE, BAYVIEW

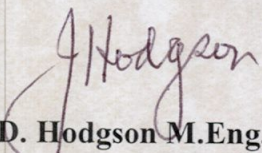
On the 6th November, 2009 we inspected the as built decks at the subject address. We have calculated the likely loads to be imposed on the decks and in our opinion the decks are in accordance with the BCA and relevant Australian standards provided the following points are addressed.

It appears that some time during the construction the works were stopped and when recommenced certain things were overlooked. This includes not concreting at least one of the new concrete pad footings (not all were accessible during the time of our inspection). We recommend that as soon as possible each footing is checked and concreted to current engineering standards if the footing is found to be void of concrete.

In certain places the timber is in contact with the ground and it is doubtful if the timber is treated to H5 level. This includes the new timber stair alongside the deck. We recommend clearing the soil from the timbers to the minimum recommendations of the BCA and the relevant Australian standards including but not limited to AS 3500.

The bearers of the lower deck are in our opinion undersized for the spans and loads likely to be imposed upon them. We recommend additional pads and post be installed to limit the span to 1.7 maximum or doubling the bearers.

JACK HODGSON CONSULTANTS PTY. LIMITED.

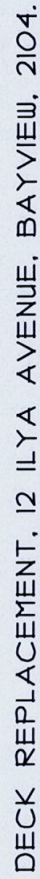

**J. D. Hodgson M.Eng.Sc.,
F.I.E.Aust., CP ENG.
Civil & Structural Engineer.
Nper3, Struct. Civil. No. 149788.
Director.**

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67 Darley Street, Mona Vale NSW 2103

PO Box 389 Mona Vale NSW 1660

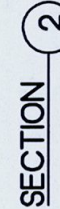
Telephone: 9979 6733 Facsimile: 9979 6926



WINDOW SCHEDULE		
WINDOW	SILL	LINTEL
W4	57.14	58.30
W5	57.14	58.30
W6	57.14	58.30
W7	57.14	58.30

ALL DIMENSIONS ARE TO BE
CONFIRMED ON SITE.

[illegible]



6-2410	Rev.
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Amendments

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER - 2009
FORM NO. 4 (As per Pittwater Council's Geotechnical Risk Management Policy) – To be submitted
with Application for a Building Certificate/Response to an Order

Response to an Order applicable) for	<div style="border-bottom: 1px solid black; text-align: center;">Name of Applicant</div>
Address of Site	<u>12 ILYA AVENUE, BAYVIEW</u>
Order No.	NOT0186/09

Declaration made by geotechnical engineer in relation to the submission of an application for a Response to an Order

I, BEN WHITE on behalf of JACK HODGSON CONSULTANTS PTY LTD
(Insert Name) (Trading or Company Name)

on this the 11/11/09
(Date)

certify that I am a geotechnical engineer as defined by the Geotechnical Risk Management Policy for Pittwater 2009. I am authorised by the above organization/company to issue this document and to certify that the organization/company has a current professional indemnity policy of at least \$2million.

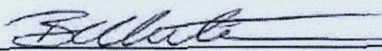
☐ I have inspected the site and the existing development and am satisfied that both the site and the development achieves at least the "Tolerable Risk Management" requirement of the Geotechnical Risk Management Policy for Pittwater - 2009. The attached report provides details of the assessment in accordance with the Geotechnical Risk Management Policy for Pittwater - 2009. The report also contains recommendations as to any reasonable and practical measures that can be undertaken to remove foreseeable risk. I am aware the Council will rely on this certification as the basis for ensuring that the geotechnical risk management aspects of the site and the development have been adequately addressed to achieve at least a "Tolerable Risk Management" level for the life of the structure taken as 100 years unless otherwise stated and justified in the Report.*

or

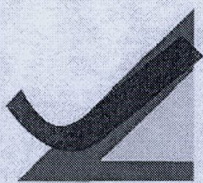
☒ I have inspected the site of the existing development. The attached report details the remedial actions required to be undertaken prior to me being prepared to certify that the site and the development achieves at least the "Tolerable Risk Management" criteria required in accordance with the Policy.

Geotechnical Report Details:

Report Title: RISK ANALYSIS & MANAGEMENT IN RESPONSE TO ORDER AT 12 ILYA AVENUE, BAYVIEW
Report Date: 11/11/09
Author: BEN WHITE

Signature	
Name	<u>Ben White</u>
Chartered Professional Status	<u>Chartered Professional Status</u>
Membership No.	<u>222757</u>
Company	<u>Jack Hodgson Consultants Pty Ltd</u>

* Note: If life of structure taken as less than 100 years, please indicate years



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RISK ANALYSIS & MANAGEMENT IN RESPONSE TO ORDER AT 12 ILYA AVENUE, BAYVIEW

1. INTRODUCTION.

1.1 This assessment has been prepared to accompany an application for a building certificate. The requirements of the Geotechnical Risk Management Policy for Pittwater, 2007 (Appendix 5 to Pittwater 21) have been met.

1.2 The definitions used in this Report are those used in the Geotechnical Risk Management Policy for Pittwater, 2007.

1.3 The methods used in this Assessment are based on those described in Landslide Risk Management March 2007, published by the Australian Geomechanics Society and as modified by the Geotechnical Risk Management Policy for Pittwater, 2007.

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. EXISTING DEVELOPMENT.

2.1 The site was inspected on the 6th November 2009.

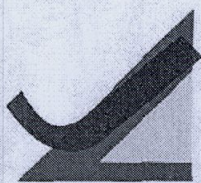
3.2 This property has a south easterly aspect and is on the low side of the road. It is located on the slope that rises from Pittwater to the plateau at Bayview Heights. The surface drops from the road at angles of 25 degrees across the property (Photo 1). This slope extends above the site at similar angles for some 50 metres before the grade eases at the top of the plateau and extends below at similar angles for some 60 metres before easing gradually to Pittwater.

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3.3 The crib style sleeper wall that is the reason for the commissioning of this report is located near the lower boundary close to the neighbouring house below (Photo 2). It has recently been partially cleared of weeds and creeper that were obscuring the structure from full view. It supports a fill that was placed on the slope after the construction of a concrete pool. The wall is old and the sleepers are in a state of decay (Photo 3). It has moved slightly in some areas (Photo 4). On the fill above pavers have been laid and these show signs of settlement (Photo 5). From the water level on the pool tiles it appears the pool has settled in the southern corner some 30mm (Photo 6). It is likely this movement occurred shortly after construction and is not currently active but this should be monitored over time to confirm this is the case. Work has been carried out to replace old decking with new decking at the northern side of the pool. Not all the footings for this decking appear to be in place but those complete show no sign of movement (Photo 7).

3.4 The two storey brick timber and fibre board house is in reasonable condition for its age (Photo 8). On the uphill side the cut batter to fit the house is supported by a concrete and sandstone block wall that is in good condition. The house is supported on brick walls, concrete pads and steel posts that show no evidence of ground movement that could be related to landslides (Photo 9).

3. DESCRIPTION OF SURROUNDING AREA.

The council map indicates that the surrounding properties are considered H1 hazard areas. Our observations indicate these hazards will not adversely affect the subject property from below or beside or above.

4. GEOLOGY OF THE SITE.

4.1 The site is underlain by interbedded sandstones, siltstones and shales of the Narrabeen Group that 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.

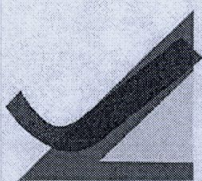
4.2 The soil materials are sandy loams over sandy clays and clays that merge into the weathered zone of the under lying rocks at depths expected to be in the range 0.6 to 3.0 metres and deeper where filling has been carried out.

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5. SUBSURFACE INVESTIGATION.

The surface features described in this Report are considered to be adequate for the proposed building certificate, therefore no subsurface investigation is required.

6. DRAINAGE OF THE SITE.

6.1 ON THE SITE.

The site is well drained with no natural watercourses.

6.2 SURROUNDING AREA.

Most sheet wash moving down the slope from above during heavy down pours will be intercepted by the Ilya Road above the property.

7. GEOTECHNICAL HAZARDS.

7.1 The old crib style sleeper retaining wall is a potential hazard (**HAZARD ONE**).

8. RISK ASSESSMENT.

8.1 HAZARD ONE Qualitative Risk Assessment on Property

The wall is old and the sleepers making up the wall are in a state of decay. Some movement has occurred in the wall. Some settlement has occurred in the fill supported by the wall. The likelihood of the wall failing and impacting on the house below is assessed as 'Possible' (10^{-3}). The consequences to property of such a failure are assessed as 'Minor' (8%). The risk to property is 'Moderate' (5×10^{-5}).

8.2 HAZARD ONE Quantitative Risk Assessment on Life

For loss of life risk can be calculated as follows:

$$R_{(Lol)} = P_{(H)} \times P_{(SH)} \times P_{(TS)} \times V_{(DT)} \quad (\text{See Appendix for full explanation of terms})$$

8.2.1 Annual Probability

The wall is in a state of decay.

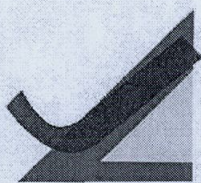
$$P_{(H)} = 0.001/\text{annum}$$

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8.2.2 Probability of Spatial Impact

The house below the wall is less than two metres from the wall.

$$P_{(SH)} = 0.7$$

8.2.3 Possibility of the Location Being Occupied During Failure

The average household is taken to be occupied by 4 people. It is estimated that 1 person is in the house for 20 hours a day, 7 days a week. It is estimated 3 people are in the house 12 hours a day, 5 days a week.

For the person most at risk:

$$\frac{20}{24} \times \frac{7}{7} = 0.83$$

$$P_{(TS)} = 0.83$$

8.2.4 Probability of Loss of Life on Impact of Failure

Based on the volume of land sliding when the wall fails and its likely velocity when it hits the house, it is estimated that the vulnerability of a person to being killed in the house when a landslide hits is 0.2

$$V_{(DT)} = 0.2$$

8.2.5 Risk Estimation

$$R_{(Lol)} = 0.001 \times 0.7 \times 0.83 \times 0.2 \\ = 0.000116$$

$$R_{(Lol)} = 1.16 \times 10^{-4}/\text{annum} \quad \text{NOTE: This level of risk is 'UNACCEPTABLE'}$$

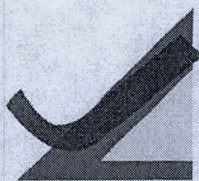
To move risk to 'Acceptable' levels the old wall is to be replaced with a wall constructed to current engineering standards.

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9. RISK ASSESSMENT SUMMARY.

HAZARDS	Hazard One
TYPE	The old crib style sleeper retaining wall failing and impacting on the neighbouring property below.
LIKELIHOOD	'Possible' (10^{-6})
CONSEQUENCES TO PROPERTY	'Minor' (8%)
RISK TO PROPERTY	'Moderate' (5×10^{-5}).
RISK TO LIFE	1.16×10^{-4} /annum
COMMENTS	'Unacceptable' level of risk. To move risk to 'Acceptable' levels the old wall is to be replaced with a wall constructed to current engineering standards.

10. CONCLUSION.

On completion of the remedial works mentioned above the property can achieve an Acceptable Risk Level in accordance with the 2009 Geotechnical Risk Management Policy for Pittwater.

JACK HODGSON CONSULTANTS PTY. LIMITED.

Ben White M.Sc. Geol.,
AusIMM., CP GEOL.
No. 222757
Engineering Geologist.

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Photo 1



Photo 2

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Photo 3



Photo 4

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Photo 5



Photo 6

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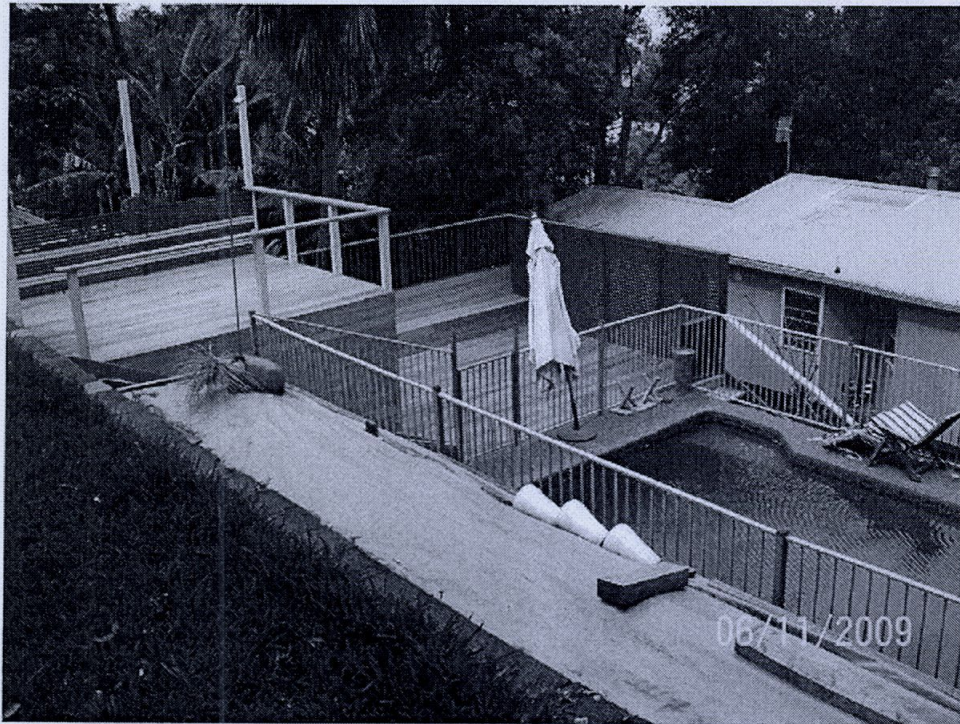


Photo 7



Photo 8

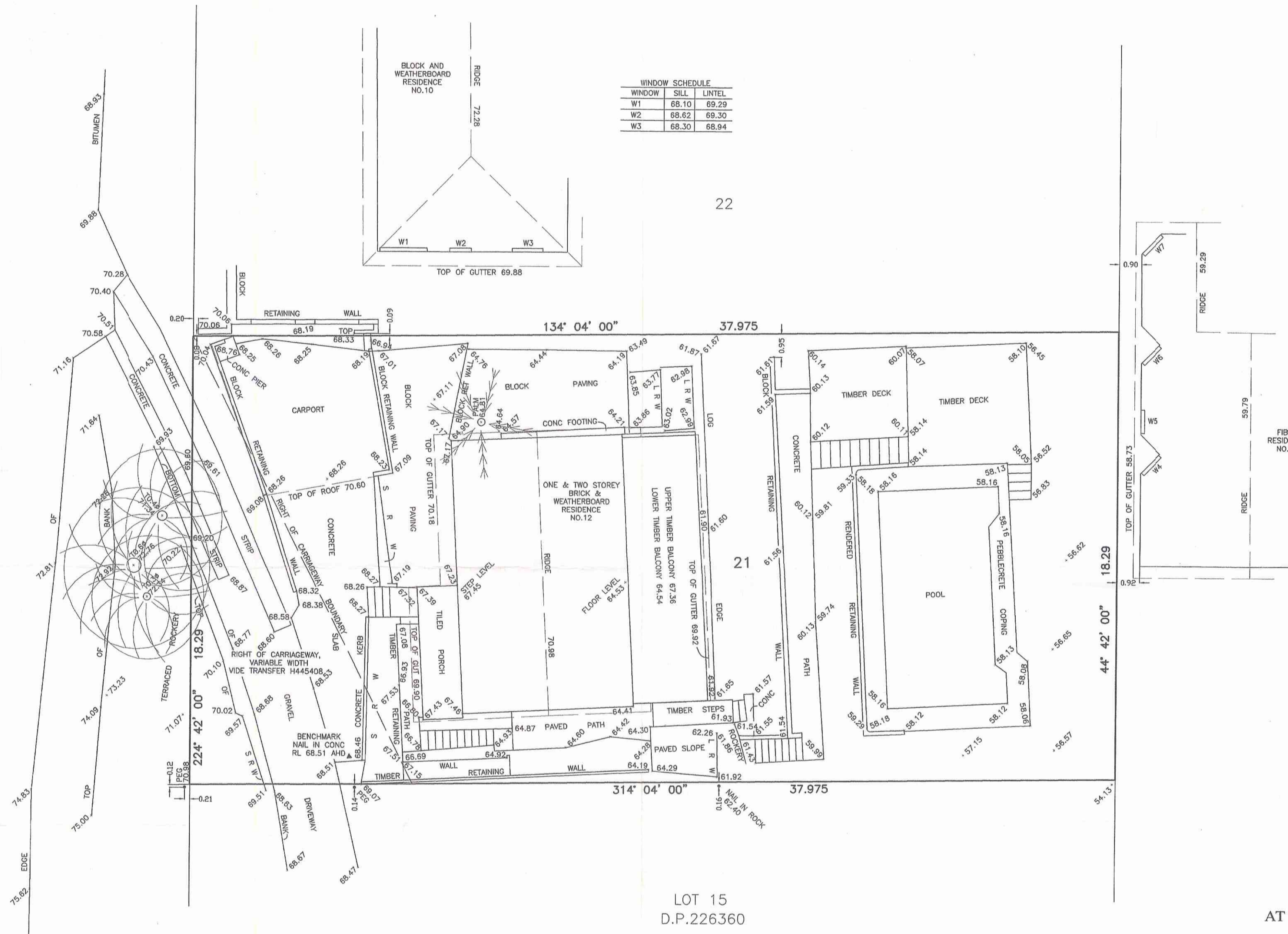
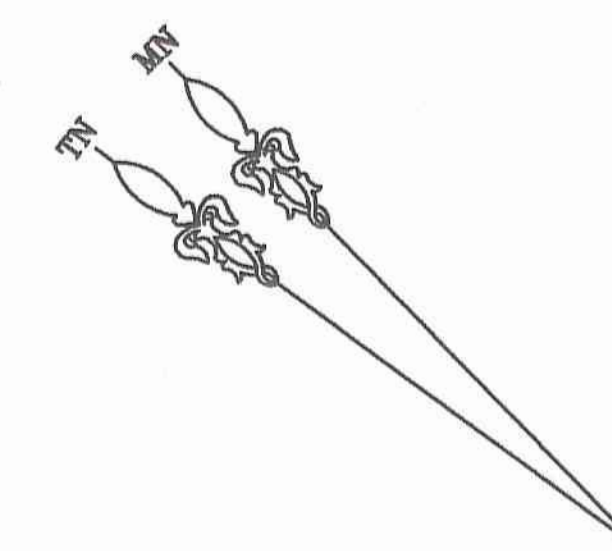
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Photo 9



Photo 10



WINDOW	SILL	LINTEL
W1	68.10	69.29
W2	68.62	69.30
W3	68.30	68.94

WINDOW	SILL	LINTEL
W4	57.14	58.30
W5	57.14	58.30
W6	57.14	58.30
W7	57.14	58.30

- NOTES:
1. CAUTION: SHOULD ANY DEVELOPMENT OR CONSTRUCTION BE PLANNED ON OR NEAR THE BOUNDARIES, THE BOUNDARIES SHOULD BE CLEARLY MARKED ON SITE.
 2. SERVICES SHOWN HEREON HAVE BEEN DETERMINED FROM VISUAL EVIDENCE ONLY. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE THE RELEVANT AUTHORITY SHOULD BE CONTACTED TO ESTABLISH DETAILED LOCATION AND DEPTH. MINIMISE YOUR RISK AND DIAL 1100 BEFORE YOU DIG.
 3. THE BEARINGS ON THESE PLAN BOUNDARIES ARE FROM LAND TITLES OFFICE PLANS AND ARE SUBJECT TO FINAL SURVEY. BEARINGS SHOWN ARE BASED ON A MAGNETIC MERIDIAN.
 4. W DENOTES WINDOW, D DENOTES DOOR, WINDOW AND DOOR DEPTHS SHOWN ARE INDICATIVE ONLY.
 5. ALL NEW WORKS MUST REFER TO THE BENCHMARK FOR LEVEL CONTROL.
 6. TREE SPREADS ARE DIAGRAMMATIC ONLY AND MAY NOT BE SYMMETRICAL.
 7. SRW DENOTES STONE RETAINING WALL.
 8. LRW DENOTES LOG RETAINING WALL.

PLAN OF
LOT 21 IN D.P. 27133
AT No.12 ILYA AVE., BAYVIEW.
SCALE 1:100 DATUM A.H.D.
SITE AREA =694.4M SQ.

DP SURVEYING SERVICES

LAND & ENGINEERING SURVEYORS
 50 BINBURRA AVE, AVALON 2107.
 PHONE : 99182060
 FAX NO : 99187677
 DATE : 27 MARCH, 2007
 MY REF : 1694