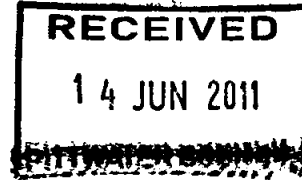


# greenfield

Accredited Certifiers



8 June, 2011

The General Manager  
Pittwater Council  
PO BOX 882  
MONA VALE NSW 2103

Dear Sir/Madam,

**Re: Construction Certificate No. 2011/14368**  
**Property: 34 Whale Beach Road, Avalon**

The attached copy of the Construction Certificate, Notice of Commencement/PCA Form & \$30.00 Council submission cheque is forwarded for your record in accordance with Regulation 142(2) of the Environmental Planning & Assessment Regulation 2000.

Yours faithfully

A handwritten signature in black ink, appearing to read "Stephen Murray".

Stephen Murray  
Accredited Certifier

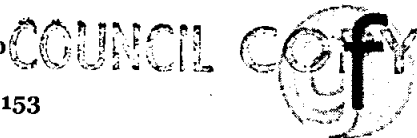
\$30 REC:303298 10/6/11

R Moy & Associates Pty Ltd  
ACN 100 924 605  
ABN 23 100 924 605

tel: 1300 663 215  
fax: 9836 3000

Suite 2.01, 20 Lexington Dr, Bella Vista 2153  
PO Box 6160, Baulkham Hills BC 2153  
[www.greenfieldcertifiers.com.au](http://www.greenfieldcertifiers.com.au)

Telephone 1300 663 215  
Facsimile (02) 9836 3000  
PO Box 6160  
Baulkham Hills BC NSW 2153



R Moy & Associates Pty Ltd  
T/as Greenfield Accredited Certifiers  
ACN 100 924 605  
ABN 23 100 924 605

# Construction Certificate

*Issued in accordance with section 109C(1)(b) of the Environmental Planning & Assessment Act 1979.*

**CONSTRUCTION CERTIFICATE NUMBER CC2011-14368**

<b>Subject Site Address</b>	34 Whale Beach Road, AVALON 2107
<b>Lot No</b>	90
<b>DP</b>	17189
<b>Council Area</b>	PITTWATER COUNCIL
<b>Applicant Name</b>	Hackett, Brendan
<b>Applicant Address</b>	PO Box 81, NEWPORT BEACH 2106
<b>Owner Name</b>	Hackett, Brendan
<b>Owner Address</b>	14/40-44 Foamcrest Avenue, NEWPORT
<b>Description of Building Work</b>	Single Storey Secondary Dwelling
<b>BCA Class of Building Work</b>	1a
<b>Development Consent No.</b>	NO069/11
<b>Development Consent Date</b>	3/05/2011
<b>Estimated Cost of Development</b>	\$72,000.00

**List of Documents Accompanying the Application:**

\$30.00 Council Submission Cheque  
Construction Certificate Application Form  
PCA Form  
Owner Builders Permit  
Long Service Levy Receipt  
Long Service Levy Calculation Sheet  
Builders Quote  
Pre-Certification Inspection Report  
Stormwater Plans  
Driveway Details  
ABSA Certificate  
Basix Certificate  
Section 139 Consent  
Sydney Water Quick Check Report  
Driveway Access Profiles  
Colour Schedule  
Stormwater Plans by TJ Taylor Consultants Pty Ltd dated 23 Feb, 2011  
Structural Engineers Details by Raffletos Zanuttini dated 30/5/11

**List of Plan References and Specifications approved under this Certificate:**

Job No. 331  
Dwg No. DA01A, DA02A, DA03A, DA04A, DA05A, DA06A, DA07A, DA08A dated 2/6/11

(Continued on Page 2)

**CONSTRUCTION CERTIFICATE NUMBER CC2011-14368**

The Certifying Authority (undersigned) is hereby satisfied that where the described works are completed in accordance with documentation accompanying the application for this certificate (with such modifications as shown on the documentation, if applicable) shall comply with the requirements of the Environmental Planning and Assessment Regulation 2000 as referred to in section 81A (5) of the Act.

Signed  
Certifying Authority  
Accreditation Number  
Accreditation Body

  
\_\_\_\_\_  
Stephen Murray  
BPB0282  
Building Professionals Board

Date of this Certificate

8/06/2011

# INSPECTIONS INFORMATION

Site Address                      [Lot90] 34 Whale Beach Road, AVALON 2107  
CC No.                              CC2011-14368

The following mandatory critical stage inspections apply:

- Pre certification (where existing buildings are to remain)
- \*Piers/footings prior to pouring
- \*Slab – prior to pouring
- Stormwater
- Framework
- Wet Area
- Final

\*Please note that you will need to arrange for a suitably qualified **STRUCTURAL ENGINEER** to provide the PCA with an Engineers Structural Certificate of Adequacy for piers and slabs during construction.

---

## **TO BOOK AN INSPECTION:**

**Fax: 9836 3000 incl Site address and inspection type**  
**or**

**Phone: 1300 663 215 => Option 1 => Option 1**

**\*\*PLEASE BOOK INSPECTIONS BEFORE 3.00PM THE DAY PRIOR TO THE INSPECTION\*\***

---

## Contact Personnel

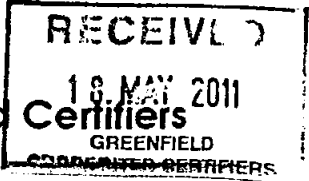
To check the status of your job contact    **Linda Wotherspoon**  
Extension numbers are available at [www.greenfieldcertifiers.com.au](http://www.greenfieldcertifiers.com.au)

For technical enquiries contact                      **Stephen Murray**



greenfield

Accredited



COUNCIL COPY

PCA FORM

NOTICE OF INTENTION TO COMMENCE BUILDING WORK
NOTICE OF INTENTION TO APPOINT PRINCIPAL CERTIFYING AUTHORITY (PCA)

CHECKLIST

- Complete all fields in the "PARTICULARS" section - we cannot accept incomplete forms and they will be sent back to you for your completion.
The Appointor/s to initial bottom right of all 5 pages.

SECTION 1 : PARTICULARS OF THE APPOINTOR/S

Table with 3 columns: Appointor Name, APPOINTOR NO. 1, APPOINTOR NO. 2. Rows include: Appointor Address, Appointor Contact Details, Site Address of the Proposed Building Works, Description of the Proposed Building Works, Estimated Value of Building Works, Proposed Date to Commence Building Work, Development Consent or CDC Date, Development Consent or CDC Registration Number, Builder/Principal Contractor, License/Permit Number.

Initial:

## SECTION 2 : PCA SERVICE AGREEMENT

### Engagement

The engagement or the appointment of the PCA will not commence until the proposed PCA has accepted and notified their acceptance of the appointment to the Appointor and the Consent Authority (usually Council). The proposed PCA or Greenfield Accredited Certifiers will not accept any responsibility for any damages, losses or delays suffered by the Appointor/s or any other party as a result of omissions or errors contained within this form or failure of the Appointor/s to comply with all items contained in the Checklist on this form.

### Scope

The scope of works covered under this appointment is restricted to those building works as described in the "PARTICULARS" section of the form.

### Terms and Conditions

1. All information provided by the Appointor/s on this form shall be taken to be accurate and correct. The PCA shall not accept any responsibility for any intentional or unintentional error or omission made by the Appointor/s on this form.
2. Where building works have commenced prior to the acceptance of appointment of PCA without the knowledge of the intended PCA the appointment shall be invalid and acceptance of the appointment will be withdrawn.
3. The Appointor/s shall be obliged to keep the PCA informed of any changes to the details of Principal Contractor (builder) and any relevant insurances required by the builder. Failure to meet this obligation shall result in the Appointor/s to indemnify the PCA against any losses or suffering as a result of non compliance with any legislative requirements.
4. The Appointor/s are responsible for ensuring that a copy of Home Warranty Insurance or Owner Builder Permit is submitted to the PCA prior to the commencement of building works, where required by Home Building Act 1989. The acceptance of the appointment will not occur until this requirement has been met.
5. It is recommended the Appointor/s ensure that the principal contractor (builder) shall make arrangements to book in critical stage inspections with our office via fax, post or email as required by giving prior day notice (before 3.00pm).
6. The PCA shall not accept responsibility for any damages or costs associated for the inability to issue and Occupation Certificate due to, but not limited to, the following: non compliance with a development consent condition, unsatisfactory final inspection, non compliance with Basix commitments, missed critical stage inspections, non compliance with approved building plans or failure to pay the required inspection or Occupation Certificate fees.

### Fees

Failure to pay the prescribed Appointment of PCA fee may result in the refusal to accept the appointment of PCA. Should an appointment be accepted and payment not honoured, the Appointor will be ultimately liable for unpaid fees, regardless of whether the fee was paid directly to the Builder, and any associated debt recovery costs plus interest incurred from the time of the appointment.


It is noted that the PCA and/or Greenfield may suspend its services provided to the appointor/s or the builder, where fees have not been paid, within the provisions of the Building and Construction Industry Security of Payment Act 1999.

### SECTION 3 : DECLARATIONS BY THE APPOINTOR/S

I/We the aforementioned persons as described as the Appointor/s in the PARTICULARS section hereby declare the following that:

- I/We "have the benefit of the Development Consent or Complying Development Certificate" within the meaning under EP&A Act 1979 for the proposed works as indicated on this form.
- I/We, to the best of my/our knowledge, have completed all details in the PARTICULARS section in a true and accurate manner and hereby indemnify the appointed PCA and Greenfield against any damages, losses or suffering as a result of incorrect information provided under that section.
- I/We have read, understood and hereby accept the terms and conditions outlined within the PCA Service Agreement on this form.
- I/We understand that the Appointment of the PCA is not taken to be have been accepted until a copy of the acceptance has been signed by the proposed PCA and released to the Appointor/s and the Consent Authority, effective from the date of the acceptance.
- I/We understand that the Commencement of Building Work cannot be any earlier than 2 business days after the appointment of PCA has been accepted and therefore declare that no building works shall commence until after such date.
- I/We authorise the right of entry for any certifying authority arranged by Greenfield Accredited Certifiers to carry out inspections required by the PCA under this agreement.
- I/We authorise the transfer of PCA to another employee of Greenfield if the original PCA ceases employment with Greenfield Accredited Certifiers for any reason or becomes unable to fulfil their duties as the PCA or ceases to become an Accredited Certifier at no cost to Greenfield Accredited Certifiers. I/We accept costs associated with the transfer of the PCA, for any reason whatsoever.
- I/We understand the appointment of PCA shall not be accepted until documentation of required insurances or owner builder permit is submitted to Greenfield, in accordance with the Home Building Act 1989.
- I/We declare that I/we shall notify the PCA, at the earliest possible instance, of any changes to the appointment of the builder and ensure any mandatory insurances required by the incoming builder in accordance with the Home Building Act 1989 are in place.

### APPOINTOR SIGNATURES

Signature of Appointor 1	X 
Full Name of Appointor 1	Hackett, Brendan
Dated	15/5/11
Signature of Appointor 2	X
Full Name of Appointor 2	
Dated	

## SECTION 4 : PCA ACCEPTANCE (office use only)

### PCA Selection:

Select	Name of PCA	Accreditation Number
<input type="checkbox"/>	Richard Moy	BPB0281
<input type="checkbox"/>	George Watts	BPB0434
<input type="checkbox"/>	Peter Dewick	BPB0090
<input checked="" type="checkbox"/>	Luke Jeffree	BPB0196
<input checked="" type="checkbox"/>	Stephen Murray	BPB0282
<input type="checkbox"/>	Wesley Vos	BPB0744

### PCA office details:

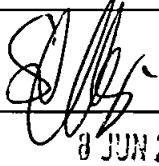
Address	PO Box 6160, Baulkham Hills BC NSW 2153
Phone	1300 663 215
Fax	02 9659 1633
Accreditation Body	Building Professionals Board 10 Valentine St, Parramatta NSW 2150

## PCA STATEMENT

I, the person selected above, hereby accept the appointment of Principal Certifying Authority (PCA) within the Terms and Conditions as indicated in "Section 2 : PCA Service Agreement" effective no earlier than the "Acceptance Date" shown below.

I, the appointed Principal Certifying Authority, am of the opinion that all conditions of the consent that are required to be satisfied prior to the work commencing have been satisfied.

## PCA SIGNATURE

Signature of PCA	X 
Appointment Acceptance Date	8 JUN 2011

## SECTION 5 : NOTICE OF CRITICAL STAGE INSPECTIONS (to be completed by the PCA only based on BCA Building Class)

- Pre Certification
- Footings
- Piers
- Slab/s
- Stormwater
- Frame
- Wet Areas
- Completion

- Other \_\_\_\_\_
- Other \_\_\_\_\_
- Other \_\_\_\_\_



## APPENDIX 1 : INFORMATION FOR THE APPOINTOR

The following information is a guide only and is aimed at clarifying the role of the PCA and the requirements under the Legislation surrounding the appointment of a PCA.

1. Only the "person having benefit of a development consent involving building work" can appoint the PCA. This is generally the Land Owner. The Builder is prohibited from appointing the PCA unless the builder is also the owner of the land.
2. A PCA must be appointed, accepted and notified to Council no later than 2 days prior to the commencement of building works. Failure to do so may jeopardise the legitimacy of the building certification.
3. An Occupation Certificate can only be issued by the appointed PCA.
4. Information about Home Warranty Insurance and Building Licensing requirements are available on the Dept of Fair Trading website below.  
<http://www.dft.nsw.gov.au/building.html>
5. All "critical stage inspections" as notified in this document are required to be carried out to enable the issue of an Occupation Certificate.
6. The appointment of PCA shall not be effective until the Appointor/s and Consent Authority has received the Acceptance of the Appointment of PCA by our office.
7. Greenfield recommends that the appointor/s should review the Development Consent conditions and ascertain whether the Building Contract covers all additional requirements under the development consent. It is common that some Council conditions are not covered under the Building Contract and may be the responsibility of the owner/s to fulfill such conditions prior to obtaining an Occupation Certificate. We recommend you familiarise yourself with such post-contract requirements and responsibilities.
8. Please note that additional inspection fees and charges may apply for additional inspections outside works covered under your Building Contract and for additional Occupation Certificates issued directly to the appointor. Refer to Appendix 2 for additional fees and charges.

## APPENDIX 2 : ADDITIONAL FEES AND CHARGES

The following fees and charges may be payable by the Appointor/s where the PCA is requested or required to carry out additional work, inspections or Occupation Certificates to be issued directly to the appointor as a result of owner/s having to comply with Council Development Consent conditions AFTER the Building Contract has been fulfilled. For example: driveways, landscaping, privacy screening, air conditioning and landings are often items which are not covered under the Building Contract but may be required in order to obtain a Final Occupation Certificate. The following rates are indicative only and rates can be increased at any time without notice.

Item	Ex GST	GST	Total
Additional Inspections after building contract has been fulfilled (per inspection)	\$150.00	\$15.00	\$165.00
Additional Occupation Certificate + Council Registration	\$240.00	\$24.00	\$264.00
Archive retrieval fee (applies where additional work is requested more than 12 months after final inspection or last activity or issue of an Occupation Certificate)	\$100.00	\$10.00	\$110.00

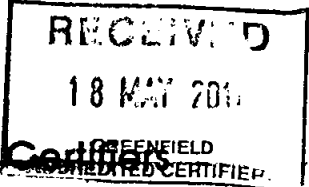
Note: The PCA shall be entitled to suspend his/her services under the Building and Construction Industry Security of Payment Act 1999 where payment of fees is not received.



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greenfield

Accredited Certifiers GREENFIELD ACCREDITED CERTIFIER



CONSTRUCTION CERTIFICATE APPLICATION FORM

INSTRUCTIONS

- COMPLETE THIS FORM Complete all YELLOW fields on this form (typing preferred). Some fields have been pre-filled - please check and modify if necessary.
PRINT THIS FORM Once completed - print this form. By Law we can only accept originals or scanned emailed forms. Faxed forms are prohibited.
OWNERS TO SIGN All Owners of the Site must sign this form on page 4 (or provide an appropriate separate Consent form for the Applicants nominated to make the Application for CC).
PCA FORM Follow the same procedure for the PCA Form also provided and pre-filled.
QUOTE CHECKLIST Attend to all other Checklist items listed on Page 2 of the Quotation.
SEND Send entire bundle to our office for assessment. We recommend the entire application be sent at the same time to reduce possibility of loss of documentation.

SECTION 1 : PARTICULARS

Table with 3 columns: Applicant Name, Applicant No. 1, Applicant No. 2. Rows include Applicant Address, Applicant Contact Details, Owner/s Name, Owner/s Current Address, and Owner/s Contact Details.

SITE Address of the Proposed Building Works	Lot/Shop No 90 34 Whale Beach Road, AVALON 2107
Local Government Area (Council)	PITTWATER COUNCIL
Development Consent Date	3/5/2011
Development Consent No.	N0069/11
Class of Building (under BCA) Or leave blank if uncertain	
Detailed description of proposed building works	Construction of a secondary dwelling.
Estimated Cost of Building Work	\$ 72 000.00
Number of proposed storeys	1
Gross floor area of proposed building	60 sqm sqm
Gross site area of property	544 sqm sqm

**For proposed new residential building work only:**

No. of existing dwellings on the property	1
No. of existing dwellings to be demolished	0
No. of dwellings to be included in the new building	1
Will new building be attached to any existing building ?	no
Will new building be attached to any other new building ?	no
Does the land contain a dual occupancy ?	no

**Building materials:**

External Walls	Weather tex Cladding.
Floors	Concrete Slab
Roof	Colorbond
Frame	Timber

**SECTION 2 : TERMS OF APPLICATION**

**Engagement**

The engagement of Greenfield Accredited Certifiers to provide services will not commence until the applicant successfully completes and signs this application form, provides all items in the checklist on page 1. Greenfield Accredited Certifiers will not accept any responsibility for any damages, losses or delays suffered by the Applicant as a result of omissions or errors contained within this form or failure to comply with all relevant items contained in the Checklist on this form.

**Scope**

The scope of works covered under this application is restricted to those building works as described in the "PARTICULARS" section of the form.

**Terms and Conditions**

1. All information provided by the Applicant on this form will be taken to be accurate and correct. Greenfield does not accept any responsibility for any intentional or unintentional error or omission made by the Applicant on this form.
2. The Applicant is to declare that no building works have commenced at the time of the application. A false representation in this regard will invalidate the application and Applicant will indemnify Greenfield against any damages or losses suffered by it or its employees in relation to the issue of a Construction Certificate. In such an event the Applicant agrees to cancel the Construction Certificate at the earliest possible time at no cost to Greenfield.

**Fees**

Failure to pay the quoted fee for services will generally result in a refusal to release the Construction Certificate. Should a Construction Certificate be released and payment not honoured the Applicant will be liable in addition to any associated debt recovery costs plus interest incurred from the time of the application. Greenfield may suspend where fees have not been paid in accordance with the provisions of the Building and Construction Industry Security of Payment Act 1999.

### SECTION 3 : DECLARATIONS BY THE APPLICANT AND SIGNATURES

I, the aforementioned person or authorised representative of a legal entity as described as the Applicant in the PARTICULARS section hereby declare the following:

- I/We "have the benefit of the Development Consent" within the meaning given under EP&A Act 1979 for the proposed works as indicated on this form.
- I, to the best of my knowledge, have completed all details in the PARTICULARS section in a correct and accurate manner and hereby indemnify Greenfield against any damages, losses or suffering as a result of incorrect information provided under that section.
- I have obtained consent from the owner/s of the property as indicated in the PARTICULARS section to apply and obtain a Construction Certificate.
- I have read, understood and hereby accept the terms and conditions outlined in Section 2 of this form.
- I understand that the Application for Construction Certificate is not complete until all required documentation has been received by Greenfield.
- I understand that the Application for and acquisition of Construction Certificate does not authorise Commencement of Building Work. (Refer to appointment of PCA on Greenfield PCA Form)

#### APPLICANTS SIGNATURE

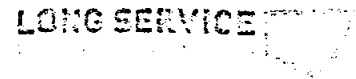
Signature of Applicant No. 1	X <i>B. Hackett</i>
Full Name of Applicant No. 1	Hackett, Brendan
Dated	15/5/11

Signature of Applicant No. 2	X
Full Name of Applicant No. 2	
Dated	

### SECTION 4 : OWNERS CONSENT TO APPLY FOR CONSTRUCTION CERTIFICATE

If there are additional site owners (not already named as Applicants) OR the site owners are not the Applicants (limited circumstances) it is necessary that ALL owners of the site consent to this Application. The person/s signing below declare they are an owner of the Site and consent to the Applicant/s named on this form to make an Application for Construction Certificate.

	OWNER NO. 1	OWNER NO. 2	OWNER NO. 3	OWNER NO. 4
Signature	X	X	X	X
Full Name	<i>B. Hackett</i>			
Dated	15/5/11			

**COUNCIL COPY****Levy Online Payment Receipt**

Thank you for using our Levy Online payment system. Your payment for this building application has been processed.

Applicant Name:	BRENDAN HACKETT
Levy Application Reference:	5014619
Application Type:	DA
Application No.:	N0069/11
Local Government Area/Government Authority:	PITTWATER COUNCIL
Site Address:	34 WHALE BEACH RD
	AVALON
	NSW
	2106
Value Of Work :	\$72,000
Levy Due:	\$252
Levy Payment:	\$252
Online Payment Ref.:	616222532
Payment Date:	12/05/2011 4:33:53 PM

**LONG SERVICE LEVY CALCULATOR - FROM 1/1/06**

Enter building value : 72,000

LSL calculated 252.00

# COUNCIL COPY



**Fair  
Trading**

Tel 13 32 20  
TTY 02 9338 4943  
ABN 81 913 830 179  
www.fairtrading.nsw.gov.au

Brendan Hackett  
PO Box 81  
NEWPORT BEACH NSW 2106

HOME BUILDING ACT 1989  
OWNER BUILDER PERMIT

Permit : 385405P  
Receipt: 1-1043509429

Issued : 11/05/2011  
Amount: \$151.00

## **BUILDING SITE**

34 Whale Beach Rd, AVALON, NSW 2107 AUSTRALIA

## **AUTHORISED BUILDING WORK**

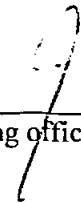
A secondary dwelling - granny flat.

**Authority No** : DA-N0069/11  
**Council Area** : PITTWATER (S) COUNCIL

Should the property be sold within 6 years of completion of the work it will be necessary to obtain home warranty building insurance from approved insurers if the value of the work was greater than \$12,000. A certificate of insurance must be attached to any contract of sale.

You should obtain professional advice from general insurers regarding public liability and property damage cover, etc.

Note: This permit is only valid when an official receipt has been imprinted.  
If payment is made by cheque, the permit is conditional on the cheque being met on presentation. \*GST amount included in total fee: \$0.00

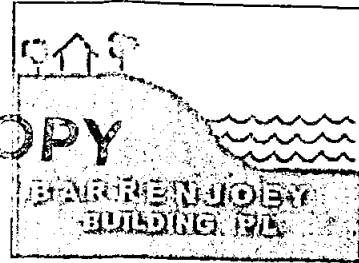
  
\_\_\_\_\_  
Issuing officer

\*\*\*\*\* END OF PERMIT \*\*\*\*\*

## Barrenjoey Building

22 COONANGA ROAD  
AVALON NSW 2107  
PH (02) 9918 0829  
Fax (02) 9918 0389  
BLD. LIC. 202939C  
A.B.N. 47 698 539 019

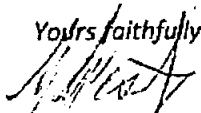
COUNCIL COPY



Friday, 11 March 2011

To Whom it may concern

*I have reviewed the plans submitted to Council as a development application for the erection of a secondary dwelling at No. 34 Whale Beach Road, Avalon and confirm the estimated cost to completion of the development is \$72,000*

Yours faithfully  
  
Graham West



# 37197



62/2 Forest Road, Warriewood 2102 N.S.W. ABN 37 427 224 361  
M - 0414 717 541 Fhone - 9979 9286

Email - jjdraft@tpg.com.au

**COUNCIL COPY**

30<sup>th</sup> May 2011

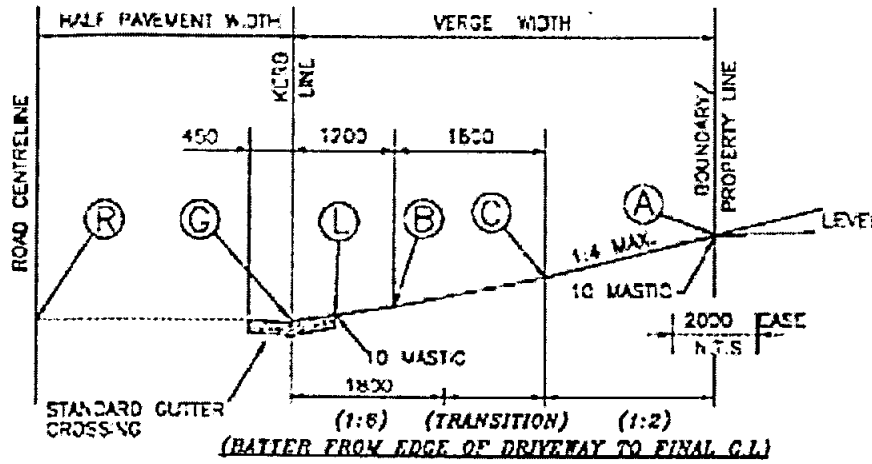
**RE: 34 Whale Beach Road, Avalon  
To Greenfield Certifiers**

Dear Stephen Murray

I hereby certify that the designed driveway and car parking space at 34 Whale Beach Road, Avalon complies in accordance with Council's technical specifications.

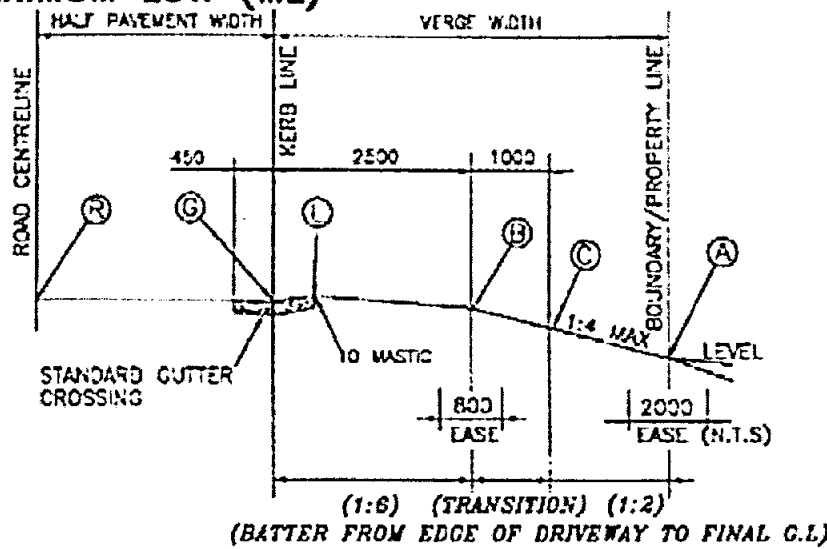
Kind Regards  
Jitka Jankovec  
c/o JJDrafting

### MAXIMUM HIGH (MH)



POINT	REMARKS	LEVELS
R	ROAD CENTRELINE	
G	INVERT OF GUTTER	
L	BACK OF LAYBACK	MAX 100 ABOVE "G"
B	1200 FROM KERB LINE	170 ABOVE "G"
C	3000 FROM KERB LINE	480 ABOVE "G"
A	BOUNDARY	EASE REQUIRED AT GRADE CHANGE

### MAXIMUM LOW (ML)



POINT	REMARKS	LEVELS
R	ROAD CENTRELINE	
G	INVERT OF GUTTER	
L	BACK OF LAYBACK	MAX 100 ABOVE "G"
B	2500 FROM KERB LINE	30 BELOW "G"
C	3500 FROM KERB LINE	265 BELOW "G"
A	BOUNDARY	EASE REQUIRED AT GRADE CHANGE

# Assessor Certificate

## Single Dwelling

Certificate Version 6.1.1. Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of  
BASIX THERMAL COMFORT - Simulation Method



<b>Assessor</b>		
<b>Name:</b> Jeremy Moy	<b>Company:</b> Greenfield DA Services	<b>Assr #:</b> 20722
<b>Address:</b> PO Box 6160 BAULKHAM HILLS BC NSW 2153		
<b>Phone:</b> (13) 0066 3215	<b>Fax:</b> (02) 9836 2499	<b>Email:</b> jeremymoy@greenfielddaservices.com.au
<b>Declaration of Interest:</b> None		

<b>Client</b>		
<b>Name:</b> Brendan Hackett	<b>Company:</b> None Specified	
<b>Address:</b> 34 Whale Beach Road AVALON NSW 2107		
<b>Phone:</b> 0408 080 790	<b>Fax:</b>	<b>Email:</b> bhackett@bigpond.com

<b>Project</b>		
<b>Address:</b> 34 Whale Beach Road AVALON NSW 2107		
<b>Lot / DP:</b> 90 / 17189	<b>LGA:</b> Pittwater Council	
<b>Applicant:</b> B Hackett		

<b>Assessment</b>			
<b>Date:</b> 31/05/2011	<b>Job ID:</b> 11-4935	<b>Filename:</b> 37196/1	<b>Run #</b> 1
<b>Software:</b> AccuRate	<b>Version:</b> V1.1.4.1	<b>Climate Zone:</b> 56	

### Referenced documents

All details, upon which this Assessment has been based, are included in the project documentation which has been stamped and signed by the Assessor issuing this Certificate, as detailed below:

<b>Thermal Performance Specification / Commitments attached and affixed to drawings, page:</b> 1
<b>Drawings:</b> DA1-DA8 Dated Feb 2011

**Specifications:** Only specifications, detailed on Drawings identified above, have been referenced

**ABSA Assessor Certificate Assessor # 20722 Certificate # 66179475 Issued: 31-May-11**

### THERMAL COMFORT - Simulation Method

The details must be entered into your BASIX Assessment

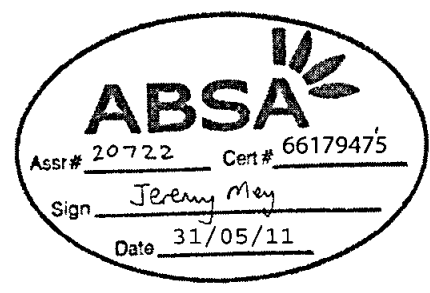
<b>Area calculations (M2)</b>	
<b>Net Conditioned Floor Area</b> 49	<b>Net Unconditioned Floor Area</b> 6

<b>Concessions / Ventilation Bonus</b>	
<b>Eligible Concessions:</b> None	
The dwelling has the required shading to qualify for BASIX cross ventilation bonus: N/A	

### Predicted annual energy loads

<b>Heating:</b>	<b>37</b>
<b>Cooling:</b> <small>(sensible + latent)</small>	<b>24</b>
<b>Total:</b>	<b>61</b>

ABSA Assessor stamp



ABSA Assessor Certificate

Assessor # 20722

Certificate # 66179475

Issued: 31-May-11

**Thermal Performance Specifications - BASIX THERMAL COMFORT - Simulation Method**

These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
Generic 01		Single clear	Aluminium	7.32	0.77		Throughout

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
Generic 01		Single Glazed Clear	Aluminium	7.32	0.77		As per plans

Any U and SHGC values specified on Certificates Issued after 1 May 2007 are according to NFRC. All values prior to this date are ANAC. Alternate products may be used if their U value is lower, and the SHGC value is less than 10% higher or lower.

External walls	Construction	Insulation	Colour - Solar absorptancy	Detail
Weatherboard		R2.0	Medium - SA 0.475 - 0.7	As per plans

Internal walls	Construction	Insulation	Detail
Plasterboard on Studs		None	As per plans

Floors	Construction	Insulation	Covering	Detail
Concrete		None	Carpet/Tiles	As per plans

Cellings	Construction	Insulation	Detail
Plasterboard		R4.0	As per plans

Roof	Construction	Insulation	Colour - Solar absorptancy	Detail
Metal Deck		Foil + R1.0 Batts	Medium - SA 0.475 - 0.7	As per plans

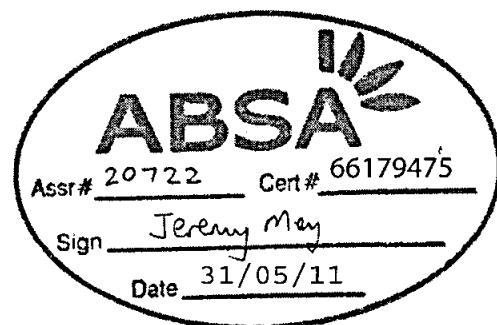
Window cover	Internal (curtains)	External (awnings, shutters, etc)
Holland blinds	Throughout	None As per plans

Fixed shading	Eaves (width - inc. gutters, height above windows)	Verandahs, Pergolas (type, description)
600 300	As per plans	

Overshadowing	Overshadowing structures	Overshadowing trees

Orientation, Exposure, Ventilation and Infiltration	
Orientation of nominal north elevation	84
Terrain category	Suburban
Roof ventilation:	Unventilated
Cross ventilation:	Standard
Subfloor ventilation:	On ground
Living area open to entry:	Yes
Living areas separated by doors:	No
Stair open to heated areas:	No
Weather seals to windows and doors:	Yes
Exhaust fans without dampers:	No
Ventilated skylights:	No
Open fireplace or unflued gas heater:	No
Vented downlights:	No
Wall and ceiling vents:	No

ABSA Assessor stamp



# BASIX<sup>®</sup> Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 362765S\_02

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated <none> published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 362765S lodged with the consent authority or certifier on 09 March 2011 with application N0069/11.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Director-General  
Date of issue: Tuesday, 31 May 2011



Planning

Project summary	
Project name	Proposed Secondary Dwelling_02
Street address	34 Whale Beach Rd Road Avalon 2107
Local Government Area	Pittwater Council
Plan type and plan number	deposited 17189
Lot no.	90
Section no.	-
Project type	separate dwelling house
No. of bedrooms	2
Project score	
Water	✓ 40 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 40 Target 40

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Certificate Prepared by (please complete before submitting to Council or PCA)	
Name / Company Name:	
ABN (if applicable):	

# Description of project

Project address	
Project name	Proposed Secondary Dwelling_02
Street address	34 Whale Beach Rd Road Avalon 2107
Local Government Area	Pittwater Council
Plan type and plan number	Deposited Plan 17189
Lot no.	90
Section no.	0
Project type	
Project type	separate dwelling house
No. of bedrooms	2
Site details	
Site area (m <sup>2</sup> )	544
Roof area (m <sup>2</sup> )	92
Conditioned floor area (m2)	49
Unconditioned floor area (m2)	6
Total area of garden and lawn (m2)	280

Assessor details and thermal loads	
Assessor number	20722
Certificate number	66179475
Climate zone	56
Area adjusted cooling load (MJ/m <sup>2</sup> .year)	24
Area adjusted heating load (MJ/m <sup>2</sup> .year)	37
Other	
none	n/a
Project score	
Water	✓ 40 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 40 Target 40

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Landscape</b>			
The applicant must plant indigenous or low water use species of vegetation throughout 279.83 square metres of the site.	✓	✓	✓
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star (> 4.5 but ≤ 6 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 5 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 5 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 5 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 49 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		✓	✓

**Thermal Comfort Commitments**

**Simulation Method**

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.

The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.

**Floor and wall construction**

floor - concrete slab on ground

**Area**

All or part of floor area square metres

	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
		✓	✓
	✓	✓	✓



Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas storage with a performance of 4 stars.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development: At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 1 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Other</b>			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.



INSPECTION PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE  
EXISTING BUILDINGS  
Clause 143B & 143C Environmental Planning & Assessment Regulation

Site Inspection Report

Premises: ..34...WILLOW...BENT...ROAD...MILTON 2107  
Development Application No: N0069/11.. (PITTWATER COUNCIL)  
Type of Inspection: Pre C/C  
Date of Inspection: ..19/5/11.....

Current fire safety measures installed in the building are listed as follows-

.....  
New structure residential development with  
.....

Do the Construction Certificate plans & specifications adequately & accurately depict the condition of the existing building?

Yes  No

Details

.....  
.....  
.....  
.....

Has any work authorised by the Consent commenced on site?

Yes  No

Details

.....  
.....  
.....

Name of Certifier: .....Steph Munday.....  
Accreditation No: .....BPS 0202.....



# COLOUR SCHEDULE

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consider this matter on its merits, noting that there is a ready availability of kerbside parking in Alexander Rd. In this regard, it is noted that most of the surrounding dwellings only provide for 1 off-street car parking space, although it appears that in many cases it would be possible to park a second vehicle in a stacked arrangement on the driveway. This arrangement could be replicated on the development site, however, a second space in this location would be located on the road reserve which, for various reasons is unacceptable and therefore it is intended that any second vehicle associated with the principal dwelling will continue to be parked at kerbside in Alexander Rd.

All vehicles would have to reverse off the site, as currently occurs as there is no on-site turning area, however vehicular and pedestrian sightlines are extensive in this location, as confirmed by the photos on page 18 of this Statement. This access arrangement is consistent with that predominant in the locality.

The exterior materials and a roof design of the proposed secondary dwelling are to replicate those of the principal dwelling and will comprise 'weathertex' wall cladding, aluminium framed windows & doors and a pitched metal roof. The exterior exterior colours are :-

Roof & gutters – colorbond 'Deep Ocean'

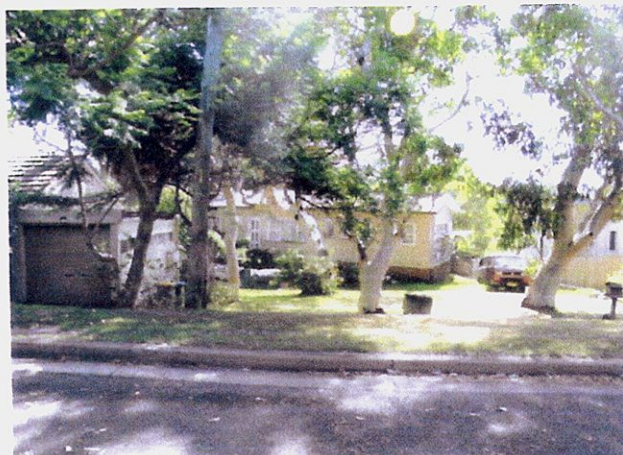
Exterior walls, fascia and downpipes – mid-grey

Window frames and building trims – white

Due to the extent and density of landscaping around the site perimeter, the only supplementary landscaping required & proposed is between the principal dwelling and the secondary dwelling to provide an appropriate degree of privacy and separation between these buildings.



The 2 storey dwelling to the west of the site.



The single storey dwelling to the north & N/W of the site.

COUNCIL COPY



## Application Lodgement Summary



Reference Number 3185115

Date Requested: Fri June 3 2011

DOLFIN Number D10/1-14030

**Agent** Greg Houston Plumbing, 1/9 Hargraves Pl Wetherill Park  
**Applicant** AWPM, UNIT 1,151 HARTLEY SMEATON GRANGE 2567  
**Property/Asset** 34 Whale Beach Rd, Avalon 2107 (Bj Hackett) PNum: 3464020  
 150 mm VC Sewer Main - (3144882)  
**Product** Building Plan Approval Application

Charge	Product Cost	GST	Total
Building Plan Approval Application Fee	\$26.45	\$0.00	\$26.45

**REFERRAL FOR BUILDING PLAN APPROVALS****Quick Check Agent**

The Quick Check Agent has lodged your application with Sydney Water and determined that your proposed building/structure may potentially impact on Sydney Water's infrastructure.

The Quick Check Agent has advised you to contact a Water Servicing Coordinator for approval of your proposed building/structure. The Water Servicing Coordinator acts as your contact in dealing with Sydney Water.

**Water Servicing Coordinator**

Some of the activities required prior to approving your plan may include;

- Reviewing your proposed building/structure plans and discussing options.
- Advise if a Service Protection Report (also known as a Pegout) is required.
- Advise if structural engineering detail is required.
- Arrange supervision of concrete encasement and piercing.
- Specify asset protection requirements and/or alternative options.

Water Servicing Coordinators are located across Sydney, Illawarra and the Blue Mountains. Sydney Water recommends that you contact several Water Servicing Coordinators to ensure you choose the one that is most appropriate for you.

To assist in your selection, Sydney Water recommends you ask each Water Servicing Coordinator the following type of questions:

1. How long will it take to obtain the Building Plan Approval?
2. How much do you charge for a Building Plan Approval?
3. If I require a Service Protection Report (pegout), how much will it cost?
4. Are there any other charges that I may have to pay?

For more information and a list of Water Servicing Coordinators, visit the Building, Developing and Plumbing section of Sydney Water's website at [www.sydneywater.com.au](http://www.sydneywater.com.au). Alternatively you may obtain a list from the Sydney Water call centre on Tel: 13 20 92.

**SYDNEY WATER  
BUILDING PLAN APPROVED  
SUBJECT TO REQUIREMENTS**

Dolphin No: D10/1-14030

Quick Check Ref No: 3185115

Case No.:

AWPM Ref No.: B11/562

**Property Location**

Street No: 34

Street Name: Whale Beach Road

Suburb: Avalon

Building/Structure Description: Secondary Dwelling

Building Plan No: DA 1 & DA 7

Engineers Plan No: B P 2

Proposed building/structure is **APPROVED** to construct **OVER/ADJACENT TO** a Sydney Water sewer/asset, subject to the following requirements:

**SPECIAL REQUIREMENTS**

**(a) PIER INSPECTION (INSPECTION MUST BE CARRIED OUT)**

**(b) N/A**

**(c) N/A**

**THE SPECIAL REQUIREMENTS WHICH MUST BE MET OR WE CAN NOT APPROVE YOU'RE BUILDING PLAN APPROVAL.**

**NOTE:**

The listed requirements as detailed on page 2 and in engineer drawings must be inspected/supervised by AWPM – Australian Water Project Management to enable the issue of a satisfactory compliance letter. Please call the office on (02) 4648 0666 to make a booking.

(NB. Delete non applicable requirements)

1. The foundations/piers are to be founded below 1.0 metre zone of influence, CLAY strata.
2. No part of the building/structure or its foundations to be less than a minimum 0.6 metre, horizontal distance from the centreline of the sewer.
3. No part of the swimming pool or its foundations to be less than a minimum 0.6 metre, horizontal distance from the centreline of the sewer.
4. No part of the building/structure or swimming pool coping to be less than 1 m horizontal distance from outside edge of maintenance hole rim / maintenance shaft rim / lamp hole rim / vertical rim / rodding point or edge of vent shaft.
5. No Piering of building/structure to be less than 2 m horizontal distance from centreline of maintenance hole to edge of piers.
6. Foundations/piers are constructed in accordance with Engineers detail plans (stated above) as submitted to Sydney Water.
7. All foundations/piers are to be founded to below the zone of influence or to solid rock.
- ~~8. Indemnity letter to be signed by owner/s of property and returned to Water Servicing Coordinator prior to issue of building plan approval.~~
- ~~9. Concrete encase approximately N/A metres of sewer. Concrete encasement to be carried out by an Accredited Constructor of Minor Works (Sewer) / Constructor and a Minor Works Agreement signed prior to commencement of works.~~
- ~~10. Concrete encasement must extend a minimum of 600 mm past the external walls of the building/structure.~~
- ~~11. Minimum of 150 mm vertical clearance between top of concrete encasement to underside of concrete slab.~~
- ~~12. Minimum of 50 mm of compressible membrane between top of concrete encasement to underside of concrete slab.~~
- ~~13. Property connection point (junction) to be inserted under Minor Works Agreement.~~
- ~~14. All works are to be completed in accordance with Case No.~~

Permits are required to fill all new swimming pools with a capacity greater than 10,000 litres. To arrange for a permit please contact Sydney Water on 13 20 92 during business hours. Fines will apply for filling swimming pools without a permit.

APPROVED BY

WSC Company Name: AWPM Australian Water Project Management

Name of Key Personnel: Les O'Sullivan



Signature of Key Personnel: \_\_\_\_\_

Date: 3-6-11 .....

## INFORMATION SHEET

---

### Pier / Site Inspection

This is required if the foundations/footings for the proposed structure/building are within the Zone of Influence of the Sydney Water asset(s). Additional fees apply.

We are required to attend site to confirm that the foundations/footings are as indicated on the plan prior to the foundations being laid &/or the concrete being poured.

A report is completed and submitted to Sydney Water with the project completion package (approved plans).

**Please complete the enclosed booking form when you are ready to book the inspection.**

---

### Concrete Encasement

If your structure/building is being built directly over or within the Zone of Influence, you are required to have the asset concrete encased to ensure its stability and minimise impact in the future. This work must be carried out at your expense.

An accredited Sydney Water supplier must carry out the concrete encasement. A list of suppliers can be found on Sydney Water's website at:  
[www.sydneywater.com.au/Developing\\_Your\\_Land/Suppliers/](http://www.sydneywater.com.au/Developing_Your_Land/Suppliers/)

We are required to supervise the concrete encasement works as explained below.

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### Concrete Encasement Supervision

To ensure the correct procedures & materials are being carried out to Sydney Water's standards, we are required to supervise the concrete encasement during construction. Additional fees apply.

We will liaise with your nominated constructor to arrange a suitable time to attend site.

A report will be prepared and submitted to Sydney Water for their records with the approved plans.

**Please complete the enclosed booking form when you are ready to book the inspection.**

---

### Relocate Property Connection Point (PCP) / Junction

You are required to relocate the existing PCP as it is affected by your structure/building. This work must be carried out at your expense.



An accredited Sydney Water supplier must carry out the relocation of Property Connection Point / Junction. A list of suppliers can be found on Sydney Water's website at:

[www.sydneywater.com.au/Developing\\_Your\\_Land/Suppliers/](http://www.sydneywater.com.au/Developing_Your_Land/Suppliers/)

We are required to inspect the works and will liaise with your nominated constructor to arrange a suitable time to attend site.

A report will be prepared and submitted to Sydney Water for their records with the approved plans.

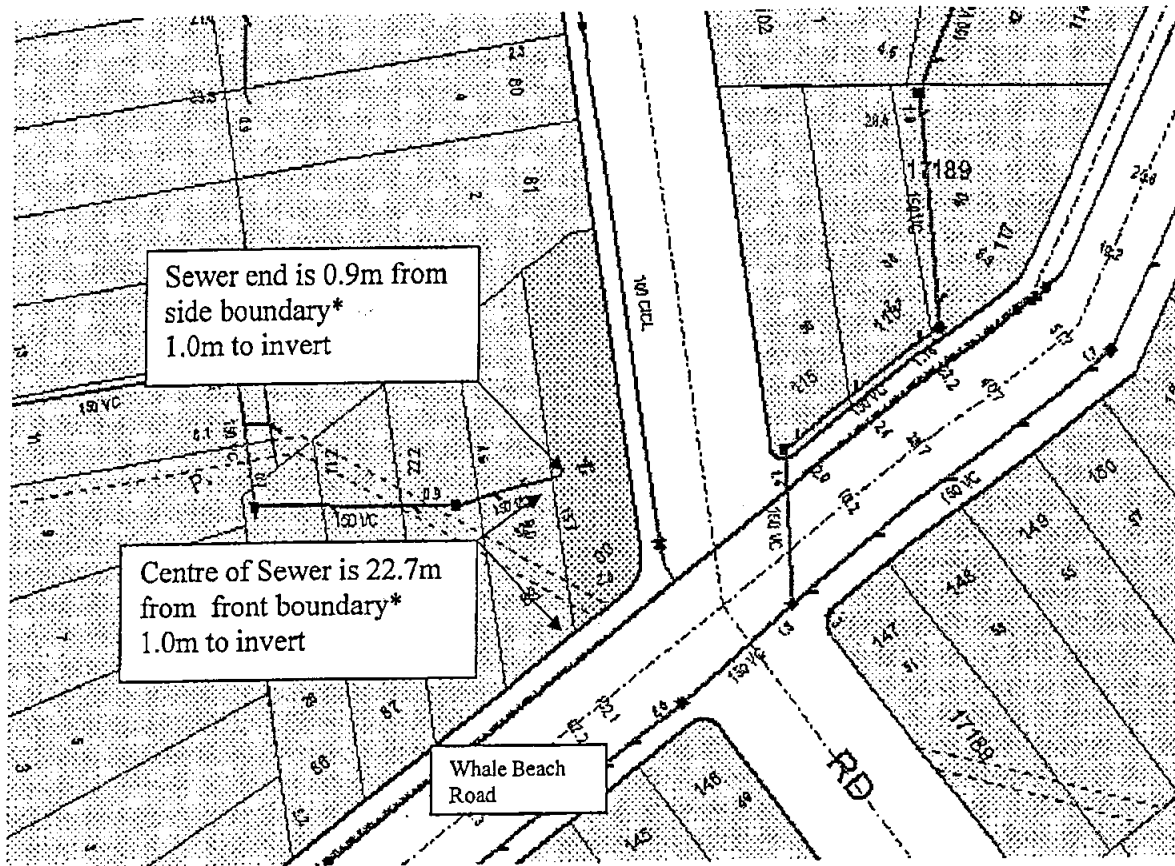
**Please complete the enclosed booking form when you are ready to book the inspection.**

---

**SUPPLIER:** AWPM Australian Water Project Management  
 ABN: 98 002 902 392  
 Unit 1, 151 Hartley Rd, Smeaton Grange NSW 2567  
 Phone: (02) 4648 0666 Fax: (02) 4648 0644

**AWPM REF NO:** P11/279

**PROPERTY ADDRESS** 34 Whale Beach Rd, AVALON



Pipe Size:	150	Pipe Type:	VC	Strata	CLAY
------------	-----	------------	----	--------	------

CLAY	ROCK	SAND	SHALE	SOIL	TUNNEL
------	------	------	-------	------	--------

\* For the purpose of this report, 'boundary' refers to fixed structures (fence, retaining walls, buildings, etc.) used to tie location of the Sydney Water asset(s), and may not always correspond to the property boundary (as identified on site survey plan). Do not scale. S.O. = Square Off

I, **Les O'Sullivan** of **AWPM Australian Water Project Management**, being accredited to carry out a Service Protection Report, certify that the information shown on the Report is accurate and has been prepared in accordance with the relevant instructions.

Report completed by: **Les O'Sullivan**

Signed: 

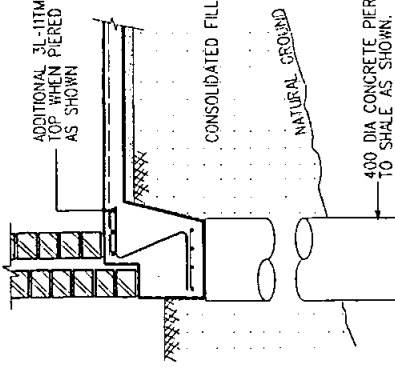
Date: 3/6/2011

D10/1-14030

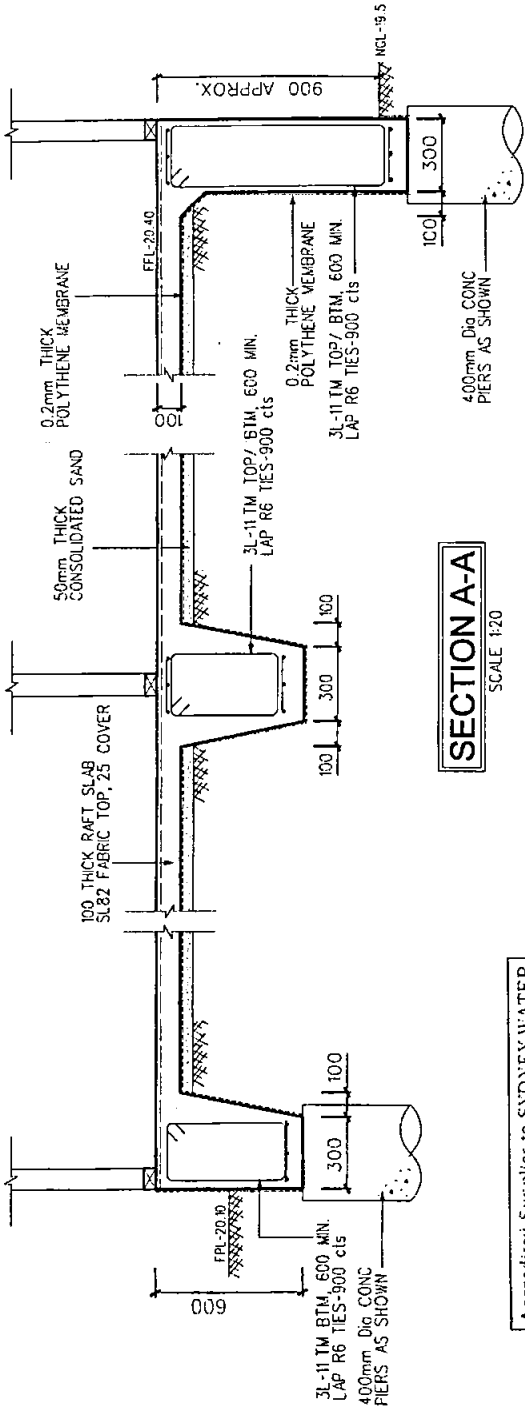
<b>BUILDING PLAN APPROVAL RETURN ADVICE:</b>	
<b>BUILDING PLANS APPROVED - REQUIREMENTS APPLY</b>	
<input checked="" type="checkbox"/>	The Building Plans submitted have been approved and are being returned. Additional charges now apply (see advice attached).
<input checked="" type="checkbox"/>	The foundations/footings for the proposed structure/building are required to be supervised by <b>AWPM as accredited supplier to provide this service</b> . To engage AWPM to carry out the supervision, please complete the enclosed booking form and return it to our office. Fees apply.
<input type="checkbox"/>	The existing Sydney Water sewer is required to be concrete encased. This work needs to be carried out by an accredited Minor/Major Works Supplier. The Concrete Encasement will require supervision by <b>AWPM as an accredited supplier to provide this service</b> . To engage AWPM to carry out the Supervision, please complete the enclosed booking form and return it to our office. Fees apply.
<input type="checkbox"/>	The existing Property Connection Point (Junction) is required to be moved. This work needs to be carried out by an accredited Minor/Major Works Supplier. The new Property Connection Point (Junction) will require an inspection by <b>AWPM as accredited supplier to provide this service</b> . To engage AWPM to carry out the inspection, please complete the enclosed booking form and return it to our office. Fees apply.
<i>Please note, if you engage Sydney Water to <u>also</u> attend the Inspection / Supervision as well as your accredited supplier, you will be required to pay both suppliers.</i>	
<b>BUILDING PLANS NOT APPROVED</b>	
The Building Plans submitted have <u>not</u> been approved and are being returned:	
<input type="checkbox"/>	The location of Sydney Water's assets (sewer, stormwater & watermain) will need to be accurately determined before the plans can be reviewed. The customer will need to carry out a Service Protection Application ("Peg Out") which will accurately determine the location of the asset(s), as well as determining its depth and the property sub strata details (soil, clay, sand, rock, etc.). The Service Protection Application must be carried out by an accredited supplier. <b>AWPM are accredited to provide this service</b> . Alternatively, you can engage Sydney Water to carry out this work.
<input type="checkbox"/>	Once you have received the Service Protection Report ("Peg Out") you will need to give this report to the Structural Engineer who is designing the foundations for the structure so that they can design the foundations appropriately to ensure that the structure does not impact on Sydney Water's asset(s).
<input type="checkbox"/>	Upon completion of the Service Protection Application and once the engineers plans have been prepared/amended, you will need to submit the building plans, engineers plans and a copy of the Service Protection Report for review.
<input type="checkbox"/>	The Indemnity Letter attached needs to be completed, signed by the owner(s) of the property and returned with the Building Plans for approval.
<b>BUILDING PLANS APPROVED - NO SPECIFIC REQUIREMENTS</b>	
<input type="checkbox"/>	The Building Plans submitted have been approved. There are no specific requirements in this instance and does not require the works to be supervised.
<b>AWPM are accredited to carry out Minor &amp; Major Works Construction, Project Management, Peg Outs (Service Protection Applications), Pier Inspections, Concrete Encasement Supervisions &amp; Property Connection Point (Junction) Inspections - please contact us for a quote.</b>	

# PIERING NOTES

- (UNLESS NOTED OTHERWISE)
- SPACE PIERS AS SHOWN
- PIERS ARE TO BE PLACED UNDER ALL LOAD BEARING, INTERNAL AND EXTERNAL BEAMS AND PADS AS SHOWN.
- BEAMS TO BE FOUNDED OR PIERED TO SHALE



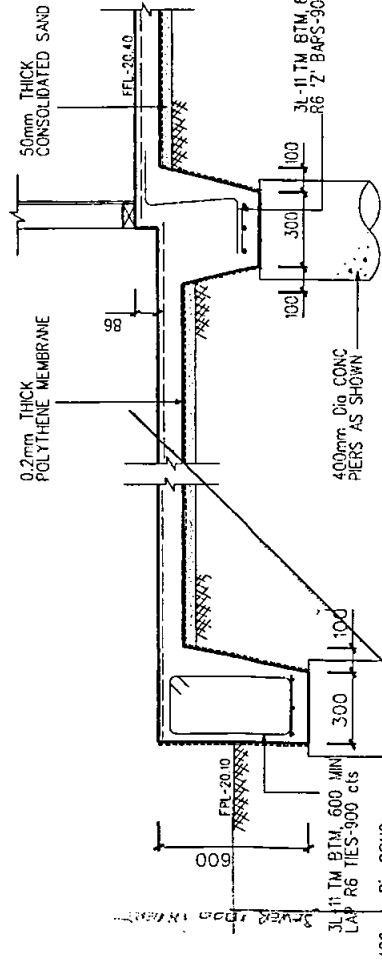
## PIERING DETAIL



## SECTION A-A

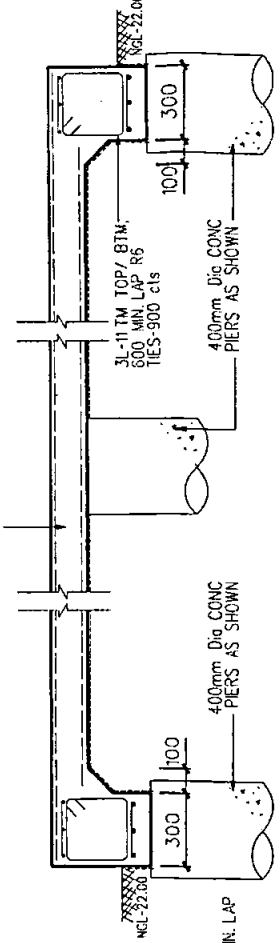
SCALE 1:20

Accredited Supplier to SYDNEY WATER  
**BUILDING PLAN APPROVED**  
**SUBJECT TO REQUIREMENTS**  
 Ref No: D10/1-14030 Date: 3.6.11



## SECTION B-B

SCALE 1:20



## SECTION C-C

SCALE 1:20

BR. 2

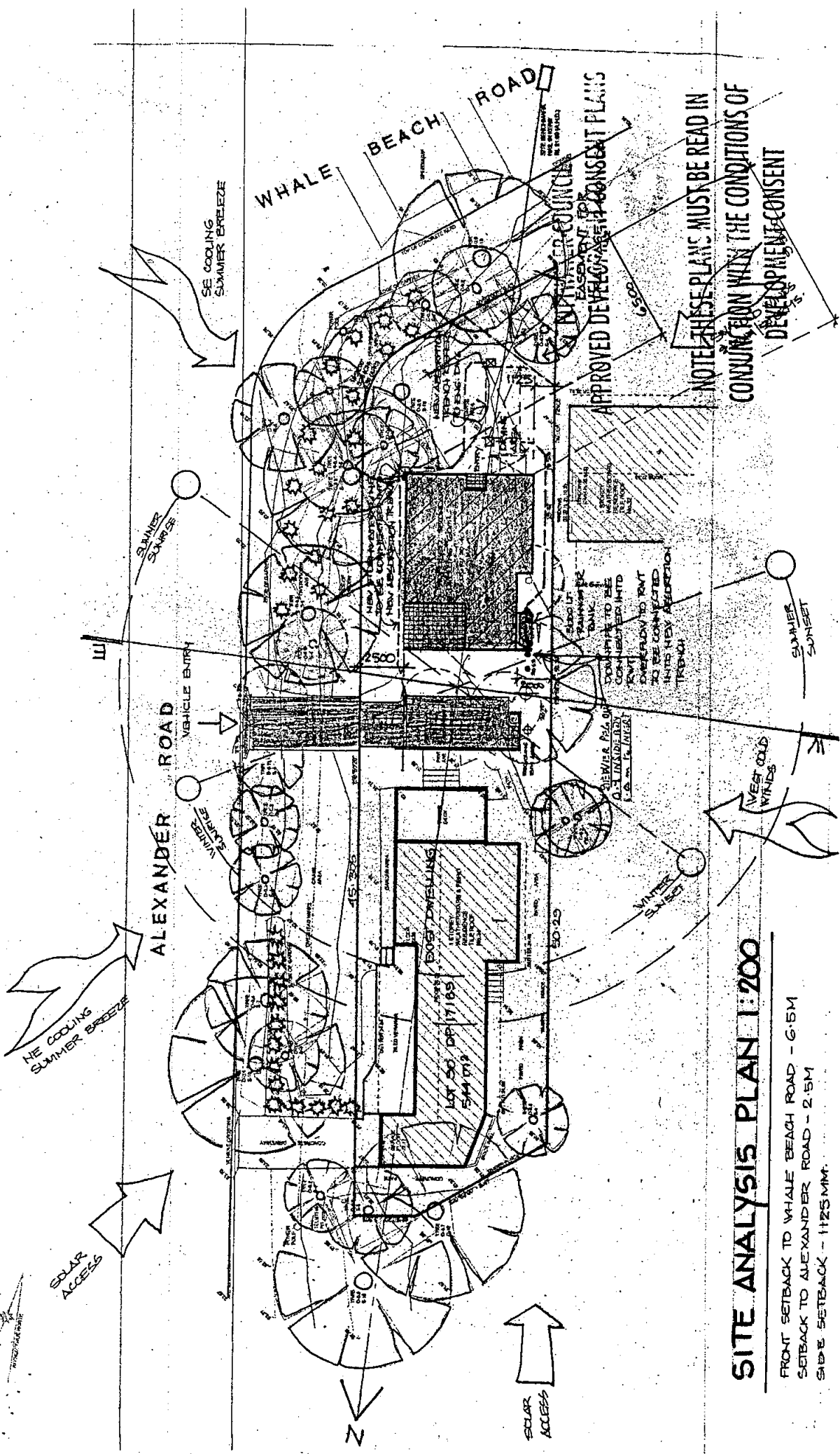
**FOR REVIEW**

**RAFFLETOS ENGINEERS**  
 ABN: 35 079 047 489  
 LEVEL 2, 103 VANESSA STREET  
 KINGSGROVE NSW 2204  
 PO BOX 181 KINGSGROVE NSW 2208

**ZANUTTINI ENGINEERS**  
 PH: 146  
 FACSIMILE: (02) 8654 9764  
 TELEPHONE: (02) 8654 9311  
 EMAIL: zom@zanuttini.com.au

**B.E. M.I.E. AUSTR.**

STRUCTURAL CROSS SECTIONS			
CLIENT	BRENDAN HACKETT		
LOCATION	34 WHALE BEACH ROAD, AVALON		
DRAWN	MD	SCALE	1:100
ISSUE	A	DATE	18/05/11
REFERENCE		SHEET No.	2
		JOB No.	47681 PC



**SITE ANALYSIS PLAN 1:200**

FRONT SETBACK TO WHALE BEACH ROAD - 6.5M  
 SETBACK TO ALEXANDER ROAD - 2.5M  
 SIDE SETBACK - 1.25M

Accredited Supplier to SYDNEY WATER  
**BUILDING PLAN APPROVED**  
**SUBJECT TO REQUIREMENTS**  
 Ref No: D101-14-03 Date: 3/6/11

- NOTES**
- All structure including stormwater & drainage to engineer's detail
  - Do not include dimensions for machine details
  - Dimensions are to be used on site prior to starting work
  - These drawings are to be used in conjunction with all other consent drawings & specifications
  - All workmanship standards shall be in accordance with the requirements of current editions including amendments of the relevant SAA Codes of Practice, the Building Code of Australia, & Housing
  - Concrete footings are to be used throughout unless otherwise noted
  - Concrete is to be designed & endorsed by a practicing structural engineer

**JDrafting**  
 JRS Architects  
 522 Forest Rd  
 Wentworthville, NSW 2102  
 Tel: 0414 217 541 Phone: 9779 7226  
 Email: jdraft@jra.com.au

Project: PROPOSED NEW SECONDARY DWELLING AT 34 WHALE BEACH ROAD, AVALON  
 Title: SITE ANALYSIS

Scale: 1:200 Date: Feb-2011  
 Job No.: 331  
 Draw No.: DA 1

**NOTE THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT**

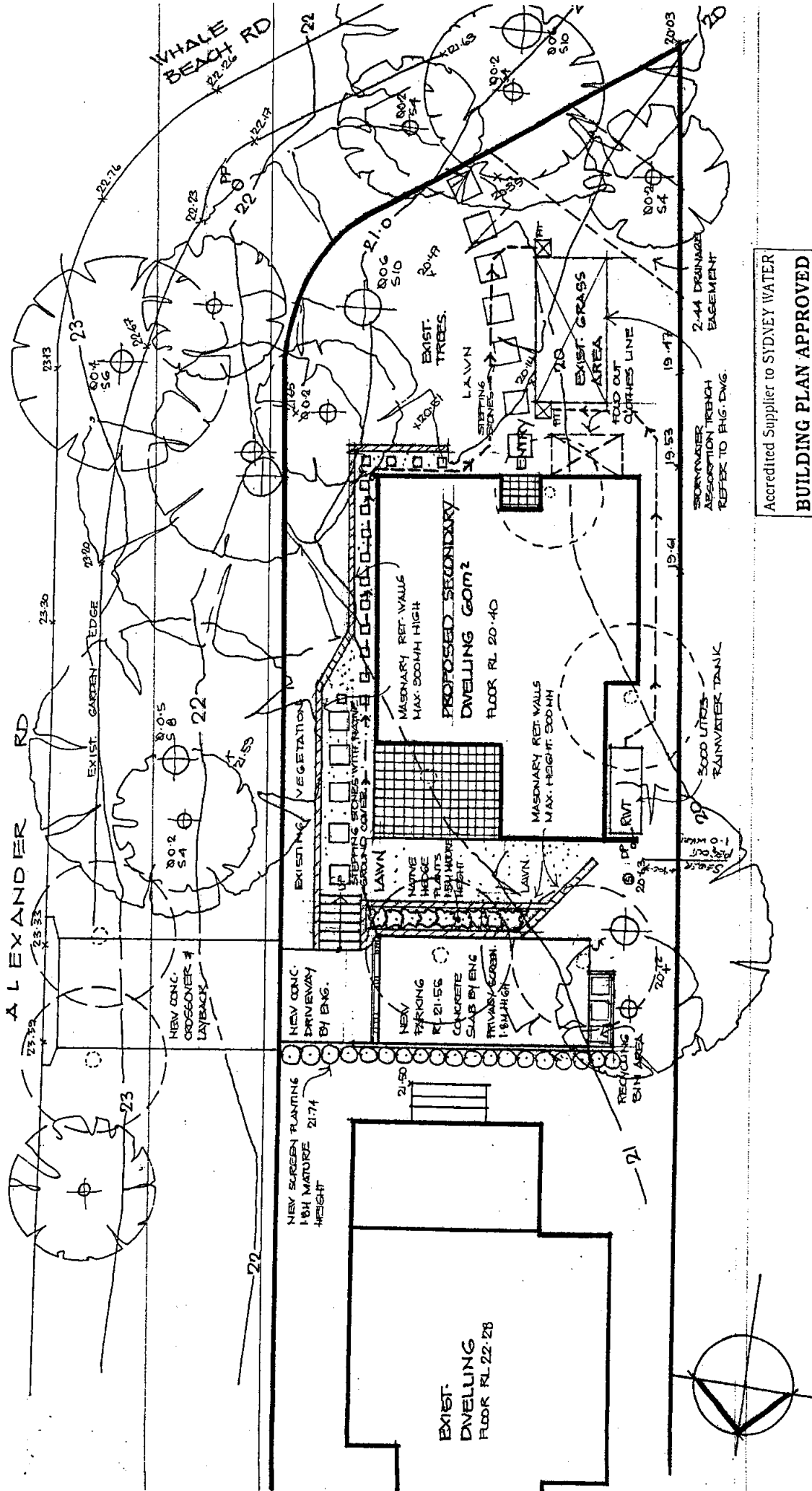
**APPROVED DEVELOPMENT CONSENT PLANS**

**SUNSHINE COUNCIL**

CONNECTIONS TO BE COMPLETED TO RMT TO BE CONNECTED INTO NEW ADDRESS TRENCH

SEWER & GAS TO BE INSTALLED TO PROPERTY

SEE DRAWING 10 FOR EASEMENT FOR THE SUBSTATION



Accredited Supplier to SYDNEY WATER  
**BUILDING PLAN APPROVED**  
**SUBJECT TO REQUIREMENTS**  
 Ref No: **PI01/14030** Date: **3/6/11**

- NOTES**
- All amounts including stormwater & drainage to engineers details
  - All soil depths determined by suitable engineer
  - All site works to be completed prior to construction work
  - These drawings are to be read in conjunction with all other construction drawings & specifications
  - All workmanship & materials shall be in accordance with the requirements of the relevant Australian Standards of the relevant SAA Codes of Practice for the relevant work
  - New materials are to be used wherever indicated otherwise
  - Concrete footings, slab, structural beams or any other structural members are to be designed & endorsed by a practicing engineer

 JJDrafting 67/2 Forest Rd. Wentworthville, NSW 2112 M: 0411 717 541 Phone: 9979 9716 Email: jjdrafting@optus.net.au	Project: <b>PROPOSED NEW SECONDARY DWELLING AT 34 WHALE BEACH ROAD, AVALON</b>	Scale: 1:200 Date: Feb.2011
	Title: <b>LANDSCAPED CONCEPT PLAN</b>	Job No.: 331 Dwg No.: DA 7

**LANDSCAPE CONCEPT PLAN 1:100**



# PITTWATER COUNCIL

## Information for Access Driveway Profiles

1 July 2010 – 30 June 2011

COUNCIL

17-2011  
COPY

To: Brendon Hackett  
Postal Address: PO Box 81  
NEWPORT BEACH 2106

Date: 30 May 2011

Receipt No: 302149  
Amount: \$100

**ACCESS DRIVEWAY PROFILE AT: 34 Whale Beach Road, Avalon (access from Alexander Road)**

- The proposed vehicular access driveway profile shall be as per the enclosed plan ML.
- **Type of Construction: Domestic**
  - **For Residential single & dual occupancy - 20MPa Concrete, 150mm thick with SL82 mesh**
- **Slab Construction:** Vehicular access slab 6.5 metres long, 3.5 metres wide at gutter crossing to 3.5 metres wide at the boundary.
- Council will only permit an absolute maximum gradient of 25% (1 in 4) measured at any point on the driveway and that an ease may be required for access into the car stand area, carport or garage. Refer to relevant attached profile.
- All work within the road reserve (including excavation) in connection with the above, is to be carried out by authorised Contractors only;
- Quotations for the work specified above should be obtained from any of the contractors on Council's list and should be for the whole of the work stated;
- Construction of vehicular access will be strictly in accordance with the profile supplied; and
- A formwork inspection by Council is required prior to construction. (Provide minimum 24 hours notice)

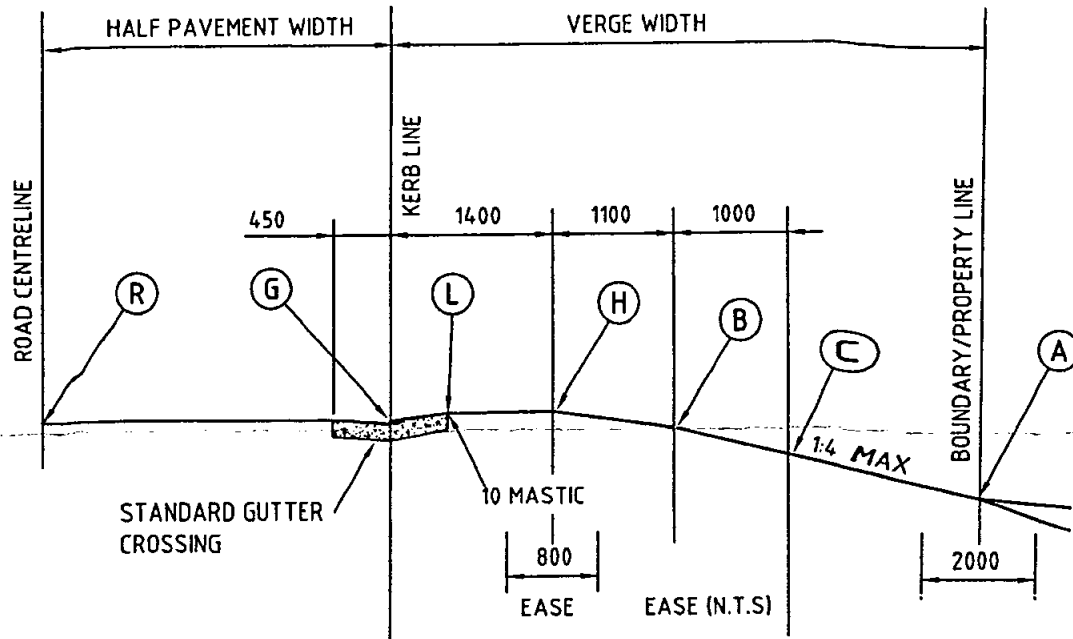
1. **NOTE THAT THIS INFORMATION SHEET DOES NOT CONSTITUTE AN APPROVAL TO COMMENCE OR PROCEED WITH ANY WORK ON SITE.**
2. **A SECTION 139 CONSENT UNDER THE ROADS ACT – 1993 IS REQUIRED (FORM UI302).**
3. **FAILURE TO OBTAIN SUCH CONSENT PRIOR TO COMMENCING WORK WILL INCUR A PENALTY.**

*R. McWhirter*

Ross McWhirter  
PROJECT LEADER – URBAN INFRASTRUCTURE  
Telephone: 9970 1207

# MAXIMUM LOW (M.L)

FOR USE ONLY FOR SINGLE DWELLINGS OR DUAL OCCUPANCIES



**(MAX BATTER FROM EDGE OF DRIVEWAY TO FINAL G.L.) (WHERE THERE IS NO CONSTRUCTED FOOTPATH)**

(1:6) (1:6 → 1:2) (1:2)

POINT	REMARKS	LEVELS
R	ROAD CENTRELINE	
G	INVERT OF GUTTER	
L	BACK OF LAYBACK	100 ABOVE "G"
H	1000 FROM BACK OF LAYBACK	130 ABOVE "G"
B	2500 FROM KERB LINE	30 BELOW "G"
C	3500 FROM KERB LINE	265 BELOW "G"
A	BOUNDARY	EASE REQUIRED AT GRADE CHANGE

## NOTES

- To be read in conjunction with Pittwater 21 Development Controls.
- Only considered for issue by Council if kerb & gutter exists & approved by Council's Drainage Engineer.



Special Driveway Profile

**MAXIMUM LOW**

PLAN No.  
**PWC-DW08**

REV No. **B**

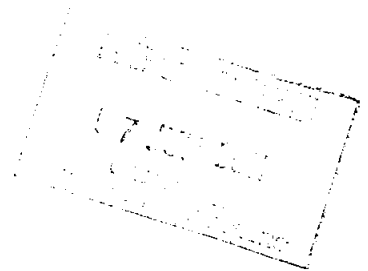
DATE **17/08/07**



Ross McWhirter, Project Leader – Road Reserve Management  
8am to 4:30pm Mon - Fri  
Phone 9970 1207 Mobile 0419 629 007

30 May 2011

Brendon Hackett  
PO Box 81  
NEWPORT BEACH NSW 2106



Dear Sir,

**Re: SECTION 139 CONSENT (*Roads Act 1993*) – 34 Whale Beach Road, Avalon**

Council grants the applicant(s), Brendon Hackett, consent to construct a driveway crossing at 34 Whale Beach Road (driveway crossing in Alexander Road).

This Section 139 Consent is granted subject to the following conditions: -

1. The Applicant(s) shall, at all times, keep indemnified Council from and against all actions, suits, proceedings, losses, costs, damages, changes, claims and demands in any way arising out of or by reason of anything done or omitted to be done by the Applicant(s) in respect of the work in question.
2. The Applicant(s), at all times for the duration of this Consent, will not interrupt or otherwise disturb the traffic flow on the road without first obtaining the consent of Council.
3. In the event that the driveway construction requires the use of a mobile concrete pump in the road reserve, separate approval must be obtained from Council for that activity. Form No UI 313 (*Application to Stand Construction Plant on a Public Road Reserve*) must be lodged with the applicable fees.
4. The Applicant(s) shall be responsible for the cost of all service and utility adjustments associated with the construction of the driveway. Contact Dial Before You Dig (1100) at least two working days before the works are due to start for information on the location of underground pipes and cables.
5. A formwork inspection by Council is required prior to construction. (Provide minimum 24 hours notice)
6. The Applicant(s) shall make good any damage caused to the property of any person or any property of Council by reason of the carrying out of any work by the Applicant(s) under the Conditions of this Consent.
7. Should the Applicant(s) fail to comply with any of these conditions or any requirement of Council as provided then this Consent shall permanently lapse and any part of the work remaining within the road at that time shall be deemed to be an obstruction or encroachment under *Section 107* of the *Roads Act 1993*.

8. This Consent receipt must be held on the job and produced to any officer of Council when called upon.
9. The Applicant(s) shall accept all responsibility for public safety during the construction of the works.
10. Compliance with the conditions of Development Consent N0069/11 that relate to the road reserve.
11. The nature strip on both sides of the driveway crossing is to be reinstated with topsoil and grass turf with a maximum grade of 1 in 4. The finished turf levels are to match the driveway surface levels.
12. A FINAL INSPECTION OF THE COMPLETED WORK IS REQUIRED.

**Advisory Note: -**

The driveway profile shown on Job No 331 Drawing DA 4 by JJ Drafting does not comply with Council's driveway standards as there is no transition from the 1 in 4 grade to the level car parking space. In order for potential scraping of vehicles to be minimised, the car space needs to be raised to provide a suitable transition.

Yours faithfully



Ross McWhirter  
**PROJECT LEADER – ROAD RESERVE MANAGEMENT**

- Enclosures: - Information for Access Driveway Profiles
- Driveway profile (ML)
  - List of Council Authorised Concrete Contractors for Vehicle Footpath Crossings and Associated Works.

**CONSTRUCTION NOTES**

- GENERAL: UNLESS NOTED OTHERWISE
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS AND SPECIFICATIONS AND ANY OTHER WRITTEN INSTRUCTIONS ISSUED DURING CONSTRUCTION. ALL DISCREPANCIES AND VARIATIONS SHALL BE REFERRED TO THE ENGINEER, BEFORE PROCEEDING WITH THE WORK.
- DURING CONSTRUCTION THE STRUCTURE AND ANY ADJACENT STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWING. ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS.
- THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH THE LOCATION, SIZE AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS.
- ALL WORKMANSHIP AND MATERIALS TO BE IN ACCORDANCE WITH THE REGULATIONS OF THE RELEVANT AUSTRALIAN STANDARD CODES AND THE UNLESS REQUESTED AND PRODUCED ON THE PLANS, THE BUILDER IS TO ENSURE THAT ARTICULATION JOINTS ARE SHOWN ON THEIR ARCHITECTURAL DRAWINGS AND BE SATISFIED THAT THEY ARE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS AND BUILDING CODES.
- ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION. APPROPRIATELY ACTED ON ANY POTENTIAL HAZARDS.
- BUILDER TO ADHERE TO ANY GEOTECHNICAL REPORT RECOMMENDATIONS PREPARED FOR THE SITE.
- REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF RAINWATER TANK AC, HWS AND LPG UNITS.
- CONCRETE SPECIFICATION (F<sub>c</sub> 28 DAYS) TO BE AS FOLLOWS: ADOPT TYPE 'X' CEMENT WITH MAX AGGREGATE SIZE OF 20mm AND 80mm SLUMP

LOCATION	NORMAL F <sub>c</sub>	SALINE AFFECTED F <sub>c</sub>
PIERS	15 MPa	32 MPa
SLAB	20 MPa	32 MPa
STRIP FOOTINGS	25 MPa	32 MPa

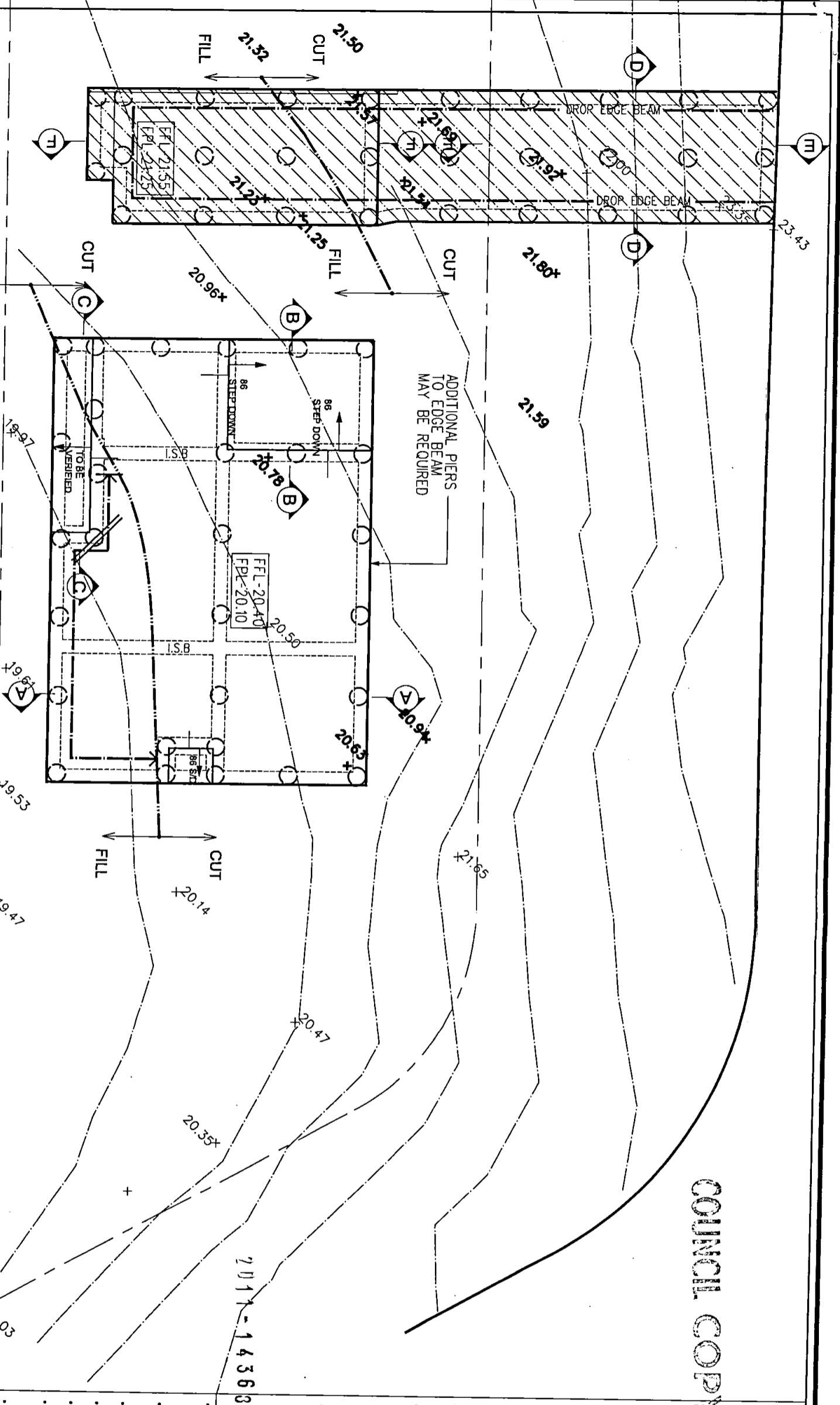
LOCATION	FORMED & SHELTERED	FORMED & EXPOSED	POURED ON GROUND
SLABS & WALLS	20	30	65
BEAMS	25	40	65
COLUMNS	40	50	65
STRIP FOOTING			65

- CLEAR COVER TO REINFORCEMENT TO BE AS FOLLOWS:
- REINFORCEMENT SYMBOLS ARE FOLLOWS:
  - (N) - HOT ROLLED DEFORMED BARS (400 n)
  - (SL) - HARD-DRAWN WIRE REINFORCING FABRIC (450 #)
  - (S) - STRUCTURAL GRADE DEFORMED BARS
- NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS ARE TO BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR ENGINEERS APPROVAL.
- CONSTRUCTION JOINTS THAT ARE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER
- ALL REINFORCEMENT TO BE ADEQUATELY SUPPORTED IN ITS REQUIRED POSITION AND COVER DURING PLACEMENT OF CONCRETE
- PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER
- ALL CONCRETE TO BE MECHANICALLY VIBRATED AND SHALL BE CAREFULLY WORKED AROUND THE REINFORCEMENT AND INTO THE CORNERS OF FORMWORK EARTHWORKS
- FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 100kPa.
- PIER HOLES ARE DESIGNED FOR ALLOWABLE BEARING PRESSURE OF 200kPa.
- FOUNDATION MATERIAL SHALL BE APPROVED PRIOR TO CONSTRUCTION
- ADDITIONAL CONCRETE PIERS MAY BE REQUIRED UNDER SLAB TO EVEN BEARING IN SOIL AS RECOMMENDED BY AUSTRALIAN STANDARD AS 2870.
- ADDITIONAL PIERS IN THE CUT SECTION OF BUILDING PLATFORM MAY ALSO BE REQUIRED TO ACHIEVE THE SAME BEARING AS PIERS IN THE FILL SECTION.
- ALL SITE FILLING PLACED BENEATH SLAB TO BE TREATED IN ACCORDANCE WITH CLAUSE 6.4 OF AS 2870.2 - 1996.
- A 1 METRE WIDE APRON WITH 25 CROSS FALL AWAY FROM SLAB EDGE IS TO BE FORMED ALL AROUND THE RAFT SLAB WHERE APPLICABLE
- IF THE LOCATION OF THE SLAB IS NEXT TO AN ABOVE OR BELOW ON SITE DETENTION SYSTEM OR BELOW GROUND RAINWATER TANK, THE BUILDER IS TO ADVISE ENGINEER IN ORDER TO ENSURE THAT CONCRETE PIERS ARE TAKEN 500mm BELOW THE INVERT LEVEL OF TANK OR THE FOOTING OF THE SUPPORTING WALL FOR AN ABOVE GROUND DETENTION SYSTEM.

- ⊗ REINFORCED CONC. PIER
- ⊙ UNREINFORCED CONC. PIER
- SEWER AFFECTED PIER
- ⊕ SCREW PIER
- ⊙ ARTICULATION JOINT
- \* STARTING POINT

DESIGNED TO AS 2870 - 1996 SLAB AND FOOTING CODE

**COUNCIL COP**

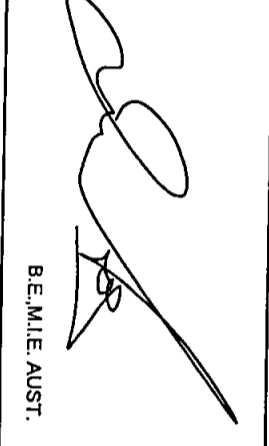


**GROUND FLOOR RAFT SLAB/DRIVEWAY PLAN**

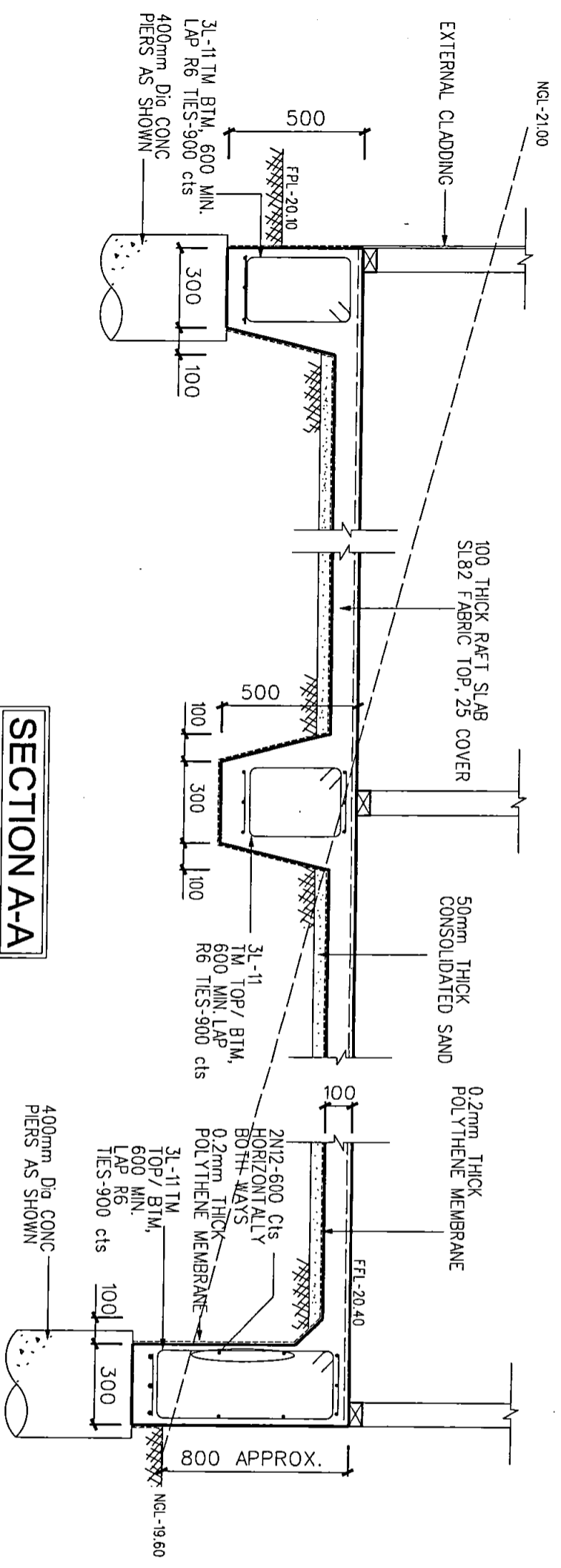
- \* CONC F<sub>c</sub> = 25 MPa
- \* 100mm THICK SLAB
- \* SL82 TOP FABRIC 25mm COVER
- \* FPL DENOTES FINISHED FLOOR LEVEL
- \* FGL DENOTES FINISHED GROUND LEVEL
- \* SPOT LEVELS SHOWN ARE APPROXIMATE AND FOR THE PURPOSE OF THIS DESIGN ONLY, REFER TO CONTOUR SURVEY PLAN FOR ACCURATE LEVELS
- \* 400mm Dia CONC PIERS AS SHOWN MAY BE REQUIRED IF BEAM ARE NOT FOUNDED ON NATURAL BEARING
- \* HATCHED AREA DENOTES 150mm THICK SLAB
- \* SL82 TOP FABRIC 25mm COVER
- \* SL82 BTM FABRIC 30mm COVER

**RAFFLETOS**  
 ABN: 35 079 047 466  
 LEVEL 2, 103 VANESSA STREET  
 KINGSGROVE NSW 2208  
 PO BOX 161 KINGSGROVE NSW 2208

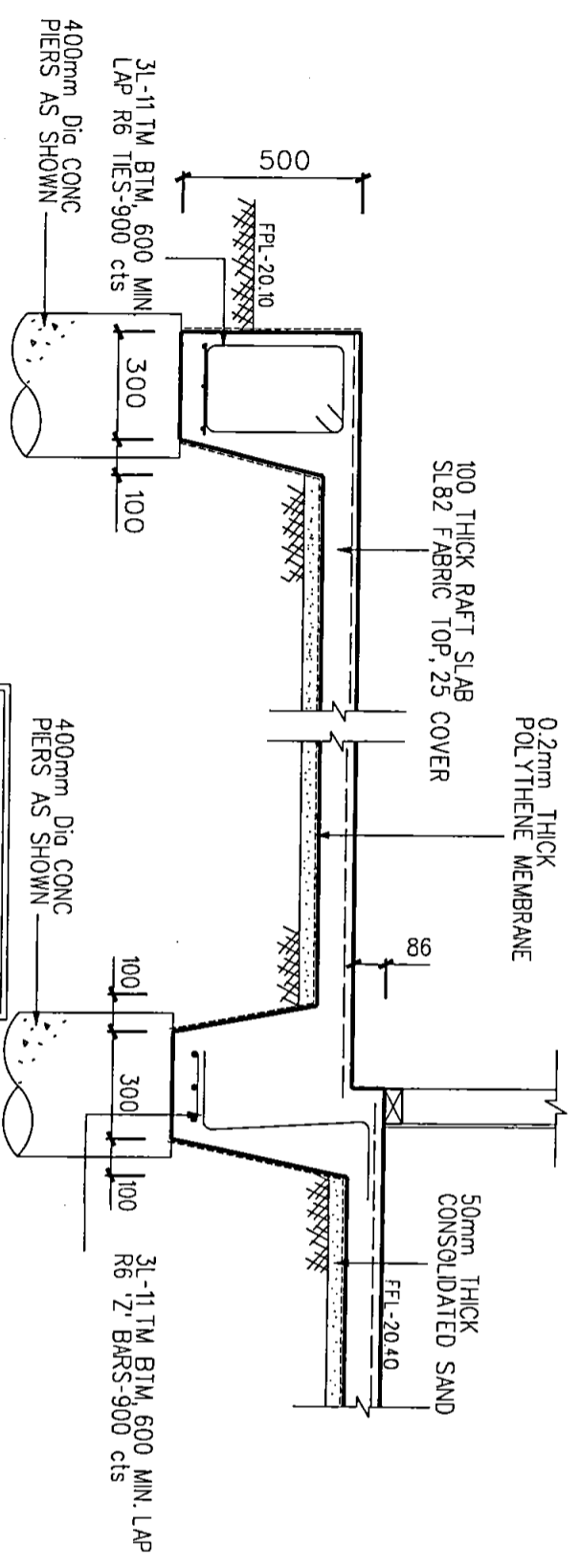
**ZANUTTINI**  
 CONSULTING ENGINEERS  
 FASCIUMILE: (02) 9554 9764  
 TELEPHONE: (02) 9554 9311  
 EMAIL: admin@zafzan.com.au



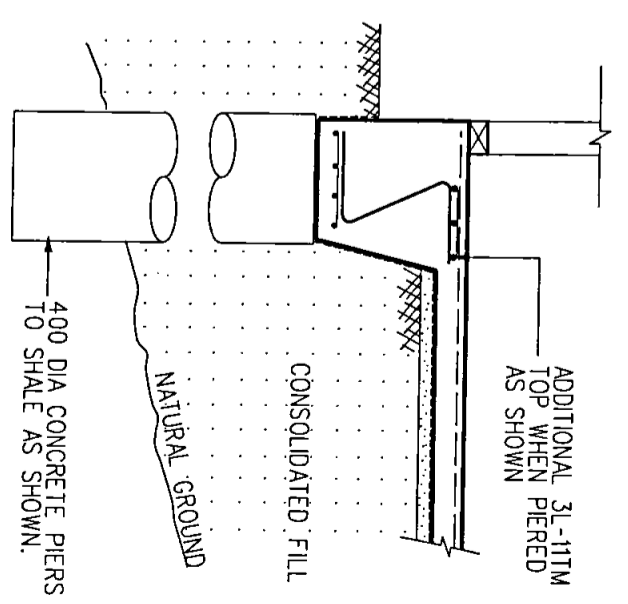
CLIENT LOCATION	BRENDAN HACKETT	34 WHALE BEACH ROAD, AVALON
CLASSIFICATION	MD	SCALE
REFERENCE	A	DATE
DRAWN	1:100	SHEET No.
ISSUE	30/05/11	JOB No.
		47661 PC



**SECTION A-A**  
SCALE 1:20



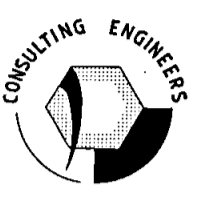
**SECTION B-B**  
SCALE 1:20



**PIERING DETAIL**

**PIERING NOTES**  
(UNLESS NOTED OTHERWISE)  
 \* SPACE PIERS AS SHOWN  
 \* PIERS ARE TO BE PLACED UNDER ALL LOAD BEARING INTERNAL AND EXTERNAL BEAMS AND PADS AS SHOWN.  
 \* BEAMS TO BE FOUNDED OR PIERED TO SHALE

**RAFFLETOS**  
 ABN: 35 079 047 466  
 LEVEL 2, 103 VANESSA STREET  
 KINGSGROVE NSW 2208  
 PO BOX 161 KINGSGROVE NSW 2208



**ZANUTTINI**  
 Pty Ltd  
 FASCILMILE: (02) 9554 9764  
 TELEPHONE: (02) 9554 9311  
 EMAIL: admin@rafzan.com.au



STRUCTURAL CROSS SECTIONS			
CLIENT	BRENDAN HACKETT		
LOCATION	34 WHALE BEACH ROAD, AVALON		
DRAWN	MD	SCALE	SHEET No.
ISSUE	A	DATE	2
REFERENCE			
		30/05/11	JOB No. 47661 PC

2011-14360







# T J TAYLOR CONSULTANTS PTY LIMITED

ABN 98 002 360 054

Consulting Civil and Structural Engineers

'Seascope', Suite 7, 22-26 Fisher Road, Dee Why, NSW 2099

Telephone: 9982 7092 Fax: 9982 5898 Email: taylor\_consultants@tpg.com.au



The Association of  
Consulting Engineers  
Australia

24 February 2011  
Our Ref: DMS: 14011

General Manager  
Pittwater Council  
PO Box 882  
MONA VALE NSW 1660

Dear Sir,

**Re: Stormwater Drainage Details – 34 Whale Beach Road, Avalon**

With reference to the development application for the above property, please find enclosed four copies of the Drainage Concept Plan No.14011-1 for your perusal.

The plan shows the new hard surface areas of the site draining to a proposed absorption trench system, located towards the southern end of the site. The trench has been designed to dispose of flows associated with the critical 100yr ARI design storm.

A small test hole was opened on-site and the underlying soil was found to be a silty sand. Subsequently a conservative rate of stormwater absorption of 0.25 l/s/m<sup>2</sup> was adopted as a design parameter for the absorption trench design.

Also note that a rainwater storage tank has been shown located at the north-western corner of the proposed dwelling. High level overflows from this storage tank are to be connected to the absorption trench drainage system.

Should you require any further information, please contact the undersigned

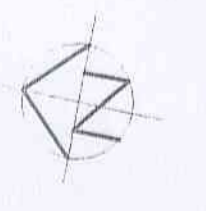
Yours faithfully,  
T J TAYLOR CONSULTANTS PTY LTD

D M SCHAEFER  
BE (Civil) MIEAust

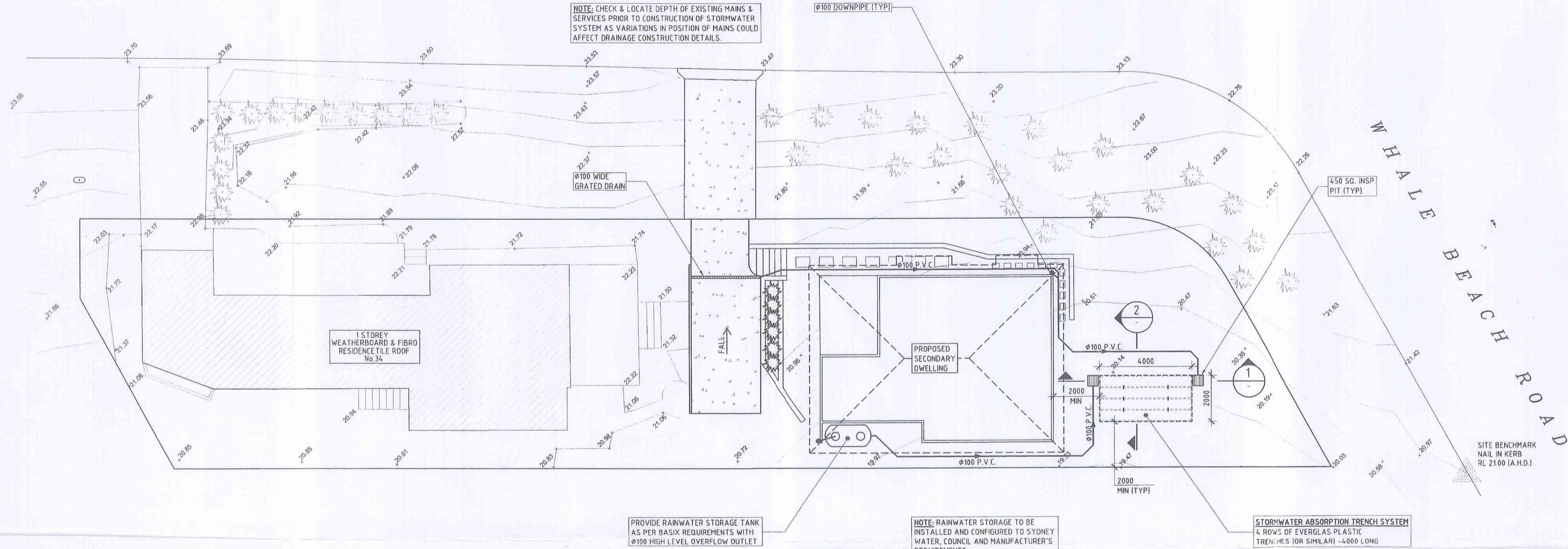
CI1/14011 L01







ALEXANDER ROAD



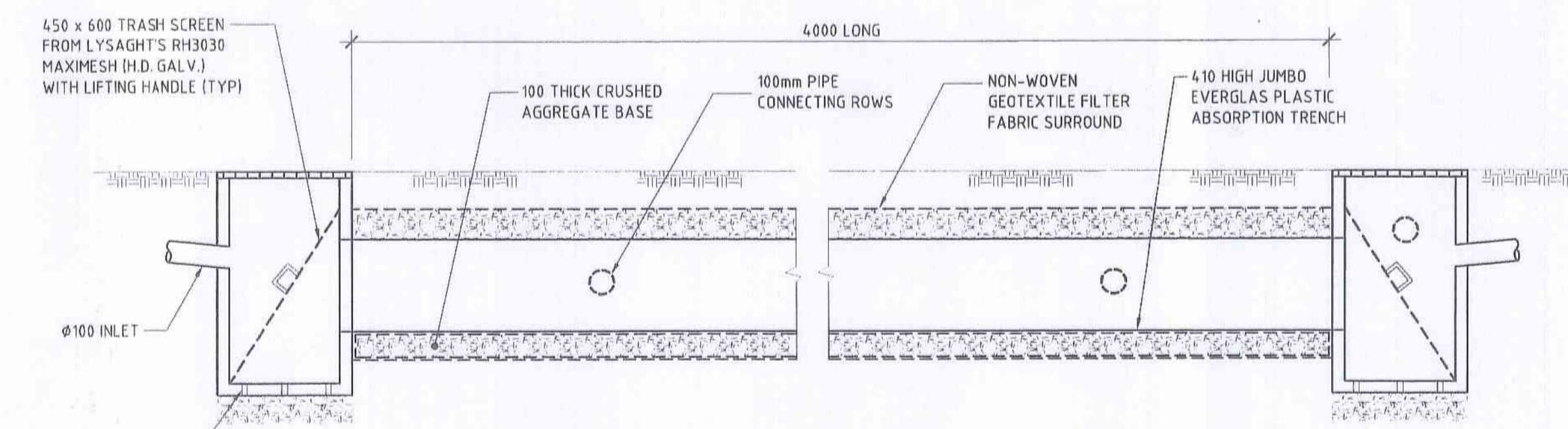
SITE DRAINAGE PLAN  
SCALE 1:100

NOTES

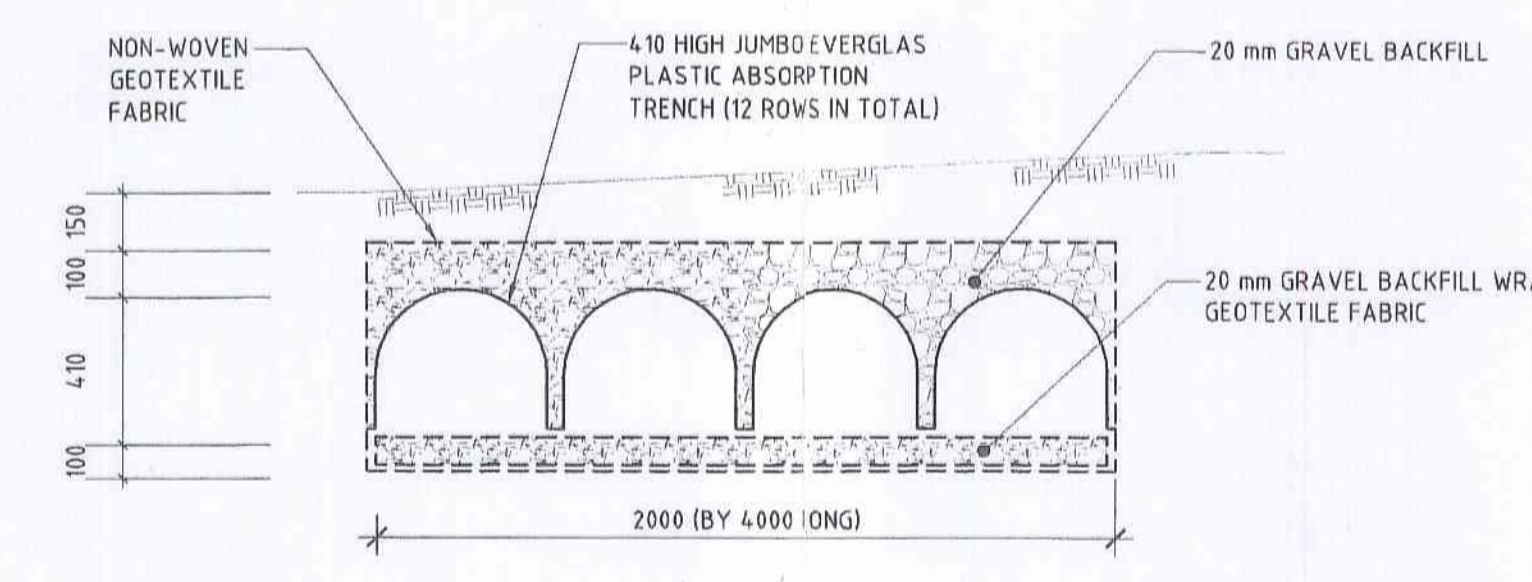
- 1 + DENOTES EXISTING GROUND LEVEL
- 2 FALL STORMWATER PIPES AT 1% MIN UNLESS OTHERWISE NOTED
- 3 SUB-SOIL DRAINAGE TO BE CONNECTED TO THE STORMWATER SYSTEM AS NECESSARY
- 4 ALL STORMWATER PIPES TO HAVE SOLVENT RESISTANT WATER TIGHT JOINTS
- 5 CHECK & LOCATE DEPTH OF EXISTING MAINS & SERVICES PRIOR TO CONSTRUCTION OF STORMWATER SYSTEM AS VARIATIONS IN POSITION OF MAINS COULD AFFECT DRAINAGE CONSTRUCTION DETAILS
- 6 INSPECTIONS MUST BE UNDERTAKEN BY THE OFFICE BY PRIOR ARRANGEMENT WITH ENGINEER DURING CONSTRUCTION TO ENABLE FULL CERTIFICATION UPON COMPLETION OF WORKS
- 7 ALL CONSTRUCTION OF COUNCIL DRAINAGE WORKS TO COMPLY WITH COUNCIL STANDARD
- 8 REMOVE REDUNDANT DRAINAGE FITS AND SEAL PIPES
- 9 PIT BENCHING TO BE HALF THE OUTGOING PIPE DIAMETER CONCRETE FOR BENCHING TO BE 20 MPa MASS CONCRETE
- 10 APPROVED PRE-CAST FITS MAY BE USED
- 11 ALL PIPES TO BE LAID ON COMPACTED FINE CRUSHED ROCK OR SAND BEDDING 75mm THICK & PIPES BACKFILLED WITH COMPACTED SAND TO 300mm ABOVE TOP OF PIPE ELSE SECURED TO UNDERSIDE OF STRUCTURE AT PER.C.C.
- 12 STORMWATER TANK REQUIRES SIGNIFICANT MAINTENANCE DUE TO POTENTIAL HIGH POLLUTANT LOAD. FILTERS AND POLLUTANT TRAPS SHOULD BE CHECKED AFTER LARGE STORM EVENTS AND CLEANED EVERY 6 MONTHS
- 13 'FIRST FLUSH' DEVICE TO BE PROVIDED TO EACH DOWNPIPE OR IF PREFERRED A SINGLE DEVICE TO BE PROVIDED ON THE UPSTREAM SIDE OF STORAGE TANK FOR EACH PIPED INLET TO RAINWATER TANK. A SINGLE FIRST FLUSH DEVICE MAY BE PROVIDED IN LIEU OF EACH DOWNPIPE
- 14 PIPE ROUTES SHOWN ARE INDICATIVE ONLY AND SHOULD BE AS NECESSARY ACCORDING TO SITE CONDITIONS, TREE POSITIONS ETC. CONFIRM SIGNIFICANT CHANGES IN PIPE SYSTEM DETAILS WITH SUPERVISING ENGINEER PRIOR TO COMMENCEMENT OF DRAINAGE CONSTRUCTION WORKS
- 15 PLUMBING AND DRAINAGE WORKS TO COMPLY WITH AS-3500, THE NATIONAL DRAINAGE & PLUMBING CODE
- 16 THIS DRAINAGE CONCEPT PLAN HAS BEEN PREPARED FOR D.A. SUBMISSION TO COUNCIL AND DOES NOT NECESSARILY CONTAIN ALL APPROPRIATE INFORMATION TO ENABLE FOR ISSUE. TO PLUMBER/QUALIFIER FOR CONSTRUCTION CONTACT T.J. TAYLOR CONSULTANTS FOR MORE INFORMATION

RAINWATER RE-USE NOTES AND SPECIFICATIONS

- 1 ROOF WATER ONLY TO BE DRAINED TO THE RAINWATER STORAGE TANKS
- 2 THE RAINWATER STORAGE TANKS NEEDS TO BE CONNECTED FOR RE-USE AS REQUIRED BY THE OWNER
- 3 RAINWATER STORAGE TANKS TO BE CONFIGURED IN ACCORDANCE WITH SYDNEY WATER SPECIFICATIONS 'GUIDELINES FOR RAINWATER TANKS ON RESIDENTIAL PROPERTIES'
- 4 PROVIDE MAINS 'TOP-UP' SUPPLY TO RAINWATER TANKS. MAINS 'TOP-UP' ZONE TO BE BASED ON THE DAILY NON-POTABLE USAGE THAT MAY BE EXPECTED FROM THE TANKS
- 5 PROVIDE A MECHANICAL PUMPING ARRANGEMENT (IN SOUND-PROOF HOUSING) TO PUMP SUPPLIERS SPECIFICATION TO SUIT INTENDED USAGE OF RAINWATER STORAGE PUMPING ARRANGEMENTS MUST COMPLY WITH EPA GUIDELINES
- 6 INLETS TO RAINWATER TANKS MUST BE SCREENED TO PREVENT THE ENTRY OF FOREIGN MATTER, ANIMALS OR INSECTS
- 7 A SIGN MUST BE AFFIXED TO THE RAINWATER TANKS CLEARLY STATING THAT THE WATER IN THE TANKS IS RAINWATER AND IS NOT TO BE USED FOR HUMAN CONSUMPTION
- 8 RAINWATER TANKS TO BE PLACED ON A STRUCTURALLY ADEQUATE BASE IN ACCORDANCE WITH THE MANUFACTURER'S OR STRUCTURAL ENGINEER'S DETAILS
- 9 THE TANKS MUST NOT BE INSTALLED OVER ANY MAINTENANCE STRUCTURE OR FITTINGS USED BY A PUBLIC AUTHORITY
- 10 RAINWATER TANKS AND ASSOCIATED PLUMBING WORKS TO BE INSTALLED AND CONFIGURED BY A LICENSED PLUMBER. PUMP TO BE INSTALLED BY A LICENSED ELECTRICIAN



SECTION 1  
SCALE 1:20  
TYPICAL ABSORPTION TRENCH & PIT DETAIL



SECTION 2  
SCALE 1:20  
TRANSVERSE SECTION THROUGH ABSORPTION TRENCH SYSTEM

COUNCIL COPY

Grant Thornton  
Construction Certifications  
No: 2011-14368  
Dated: 8 JUN 2011

DATE	REVISION	BY	CHK

**T. J. TAYLOR CONSULTANTS PTY LIMITED**  
Consulting Civil and Structural Engineers  
A.C.N. 002 940 054  
22 Fisher Road, Dee Why, NSW 2099 Telephone: 9982 7092 Fax: 9982 5898

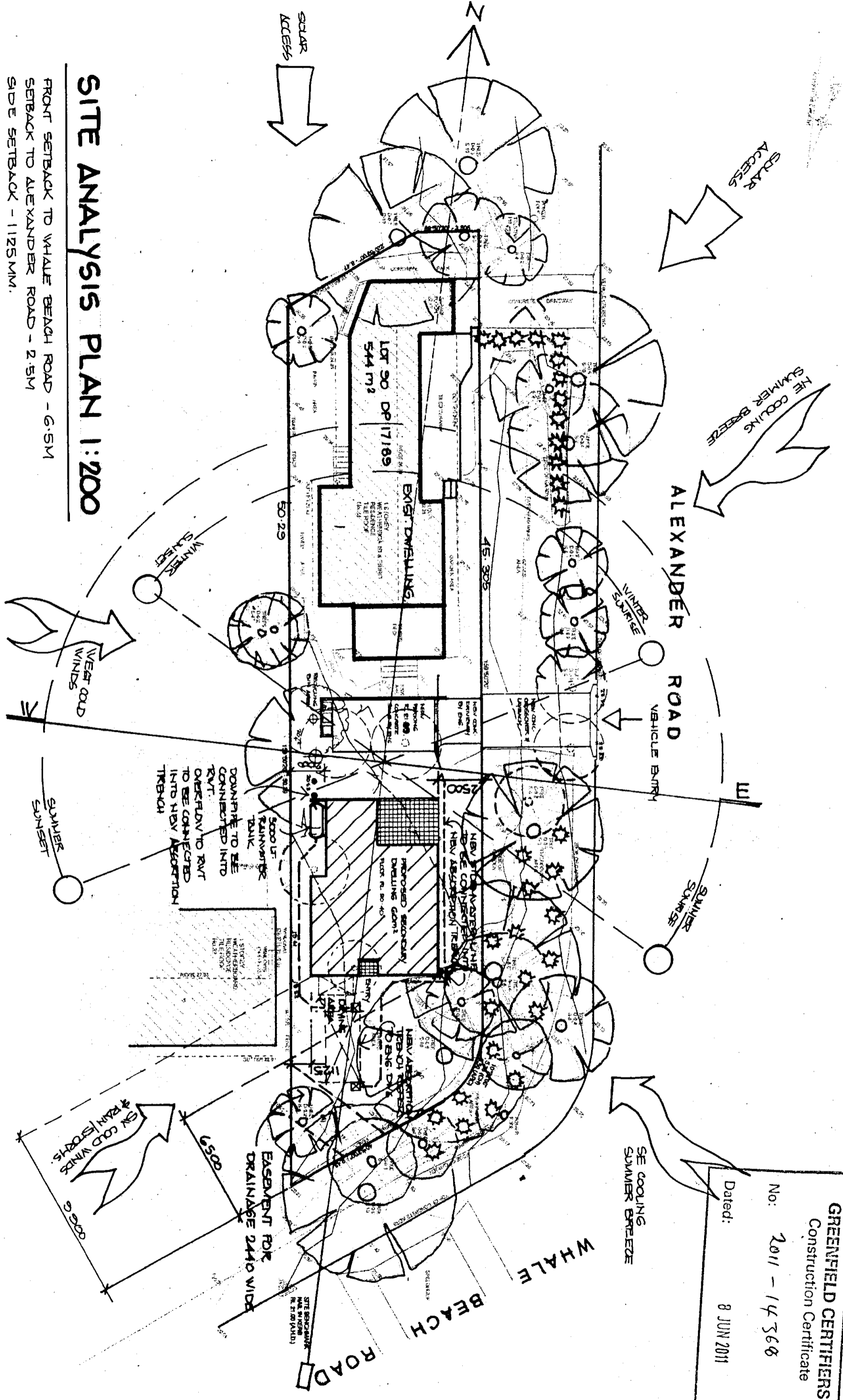
**DRAINAGE CONCEPT PLAN**  
34 WHALE BEACH ROAD, AVALON

DRAWN	CHECKED	SCALE	DRAWING No.
DEEP		1:100	14-011-1
23 FEB 2011			



No: 2011 - 14368

Dated: 8 JUN 2011



# SITE ANALYSIS PLAN 1:200

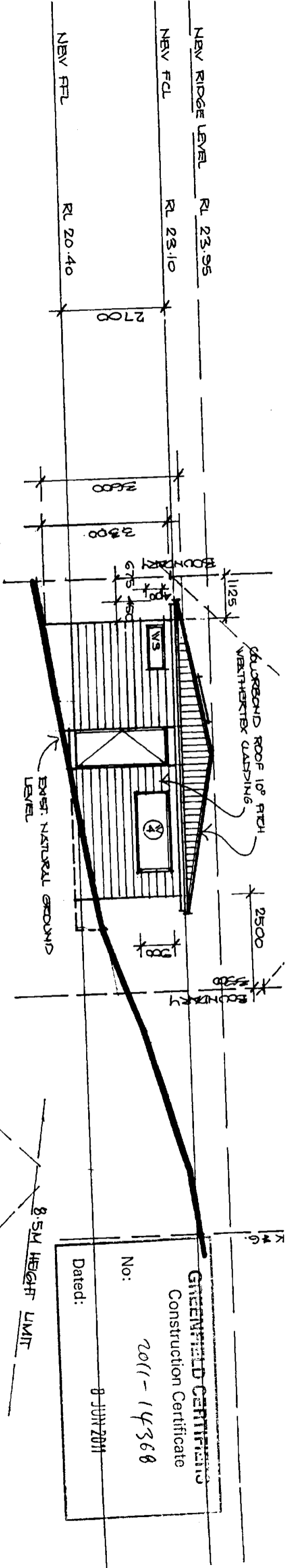
FRONT SETBACK TO WHALE BEACH ROAD - 6.5M  
SETBACK TO ALEXANDER ROAD - 2.5M  
SIDE SETBACK - 1125MM.

- NOTES**
- All structure including stormwater & drainage to engineers details
  - Do not obtain dimensions by existing drawings
  - All dimensions are to be checked on the prior to starting work.
  - These drawings are to be read in conjunction with all other consultants drawings & specifications
  - All workmanship & materials shall be in accordance with the requirements of current editions including amendments of the relevant SAA Codes of Practice, the Building Code of Australia & Licenses
  - New materials are to be used throughout unless otherwise noted
  - Concrete footings, slab, structural beams or any other structural members are to be designed & endorsed by a practicing engineer.

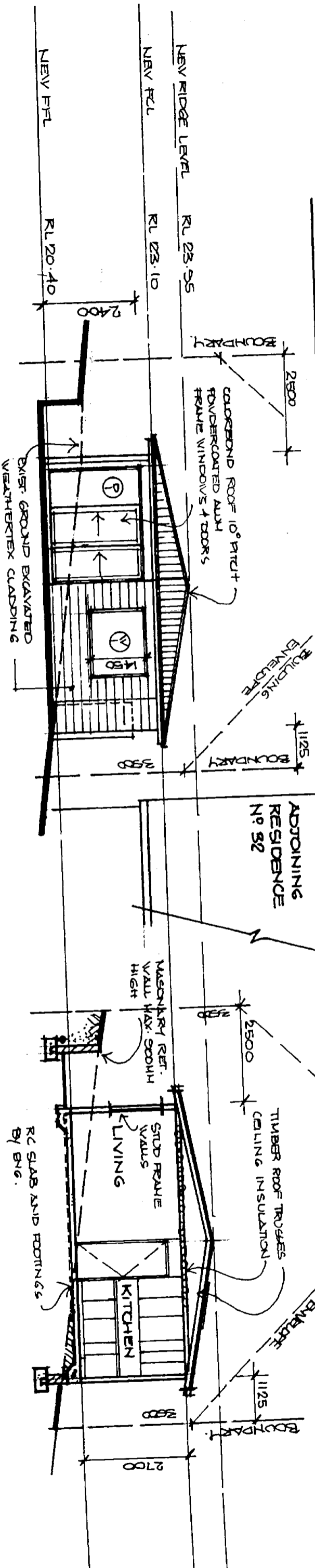
<p><i>JDrafting</i></p> <p>Jilka Architects</p> <p>62/2 Forest Rd Warrimoo, NSW 2102</p> <p>M: 0414 717 541 Phone: 9979 9286 Email: jilka@jilka.com.au</p>	<p>Project: PROPOSED NEW SECONDARY DWELLING AT 34 WHALE BEACH ROAD, AVALON</p>	<p>Scale: 1:200 Date: Feb. 2011</p>
	<p>Title: SITE ANALYSIS</p>	<p>Job No.: 331 Dwg No: DA1A</p>

'A' - 2.0.11 - PARKING LEVEL RAISED



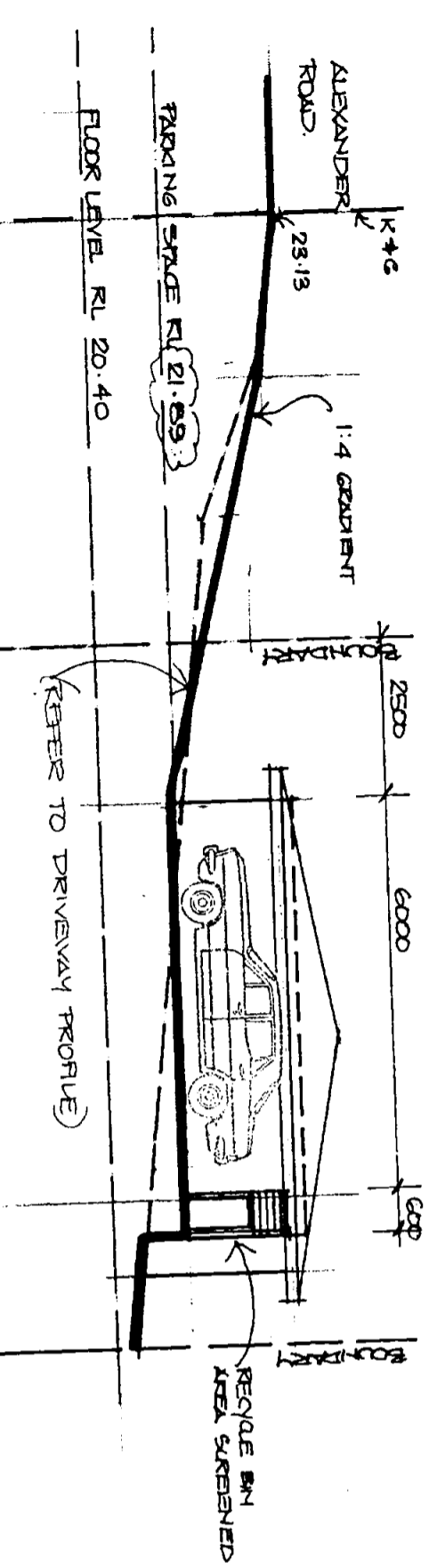


**SOUTH ELEVATION 1:100**



**NORTH ELEVATION 1:100**

**SECTION A-A 1:100**



**NORTH ELEVATION - PARKING ELEVATION**

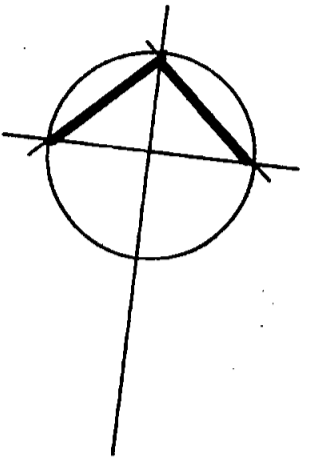
GREENFIELD CERTIFICATES  
Construction Certificate  
No: 2011-14368  
Dated: 8 JULY 2011

- NOTES**
- All structure including stormwater & drainage to engineers details
  - Do not obtain dimensions by scaling drawings
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  - These drawings are to be read in conjunction with all other consultants drawings & specifications
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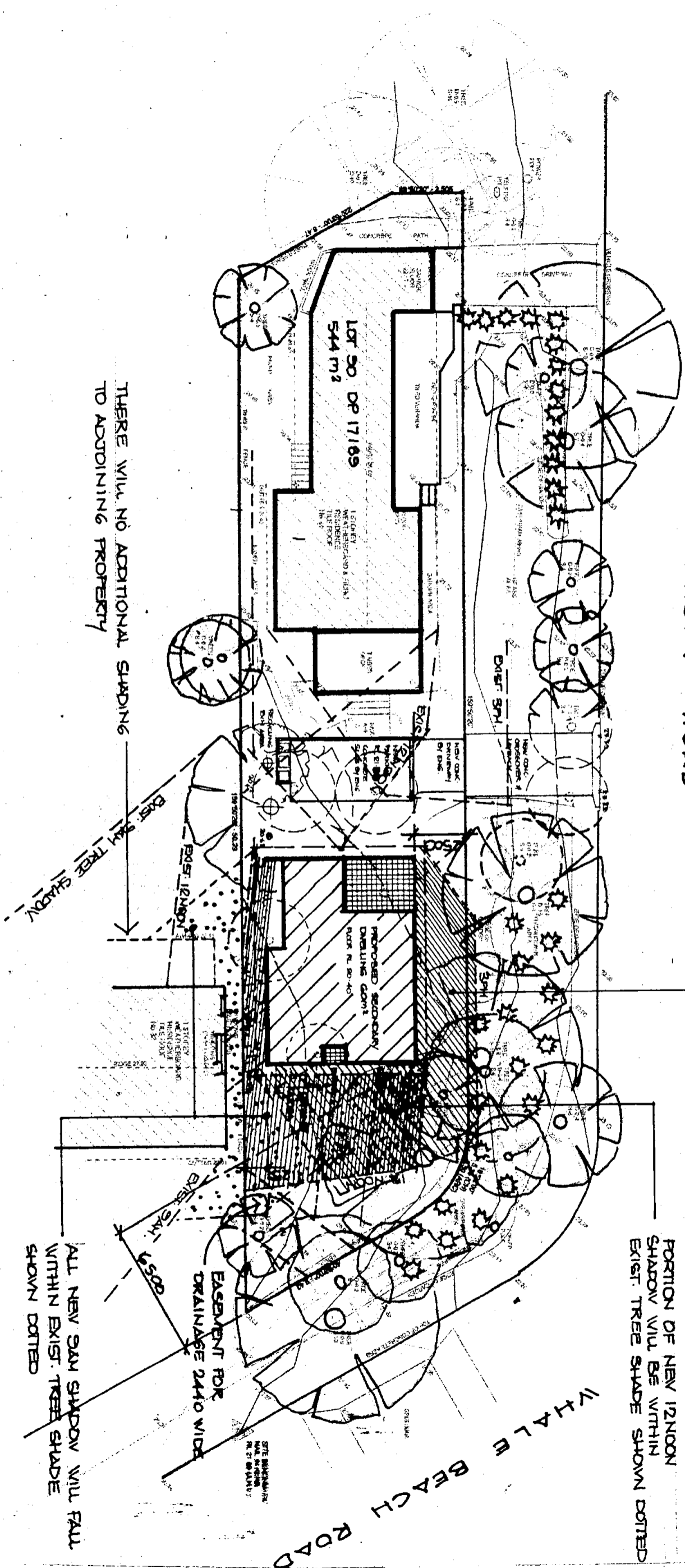
<p><b>JJ Drafting</b> Jilka Bankovic 622 Forest Rd Warrenwood, NSW 2102 M: 0414 717 541 Phone: 9970 9286 Email: jilka@jjdrafting.com.au</p>		<p>Project: <b>PROPOSED NEW SECONDARY DWELLING</b> AT 34 WHALE BEACH ROAD, AVALON</p>		<p>Scale: 1:100 Date: Feb 2011</p>	
<p>Title: <b>ELEVATIONS &amp; SECTION</b></p>		<p>Job No.: 331</p>		<p>DWG No.: DA 3A</p>	

A-A - 2.6.11 - PARKING LEVEL RAISED





ALEXANDER ROAD



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Construction Certificate

No: 2011-14368

Dated: 9 JUN 2011

NEW 3PM SHADOW

PORTION OF NEW 12NOON SHADOW WILL BE WITHIN EXIST. TREE SHADE SHOWN DOTTED

THERE WILL NO ADDITIONAL SHADING TO ADJOINING PROPERTY

ALL NEW 9AM SHADOW WILL FALL WITHIN EXIST. TREE SHADE SHOWN DOTTED

EASEMENT FOR DRAINAGE 2440 WIDE

'A'- 2.0-11 - PARKING LEVEL RAISED

SHADOW PLAN 1:200 JUNE 21 - 9am, 12noon, 3pm

**NOTES**

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- New materials are to be used throughout unless otherwise noted
- Concrete footings, slab, structural beams or any other structural members are to be designed & endorsed by a practicing engineer.

*JSDrafting*

Jilka Jankovic  
6272 Ford Rd  
Wentworthville, NSW 2102  
M - 0414 717 541 Phone - 9079 0286  
Email - jilka@jds.com.au

Project:  
PROPOSED NEW SECONDARY DWELLING  
AT  
34 WHALE BEACH ROAD, AVALON

TITLE: SHADOW PLAN

Scale: 1:200  
Date: Feb. 2011

Job No.: 331

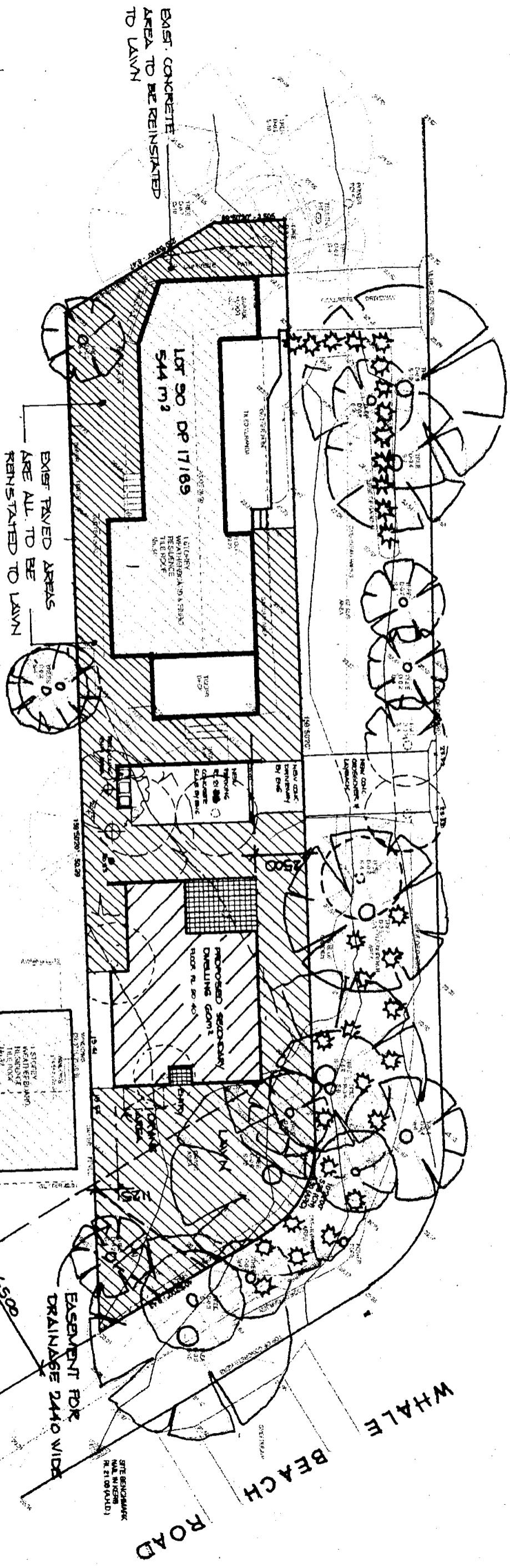
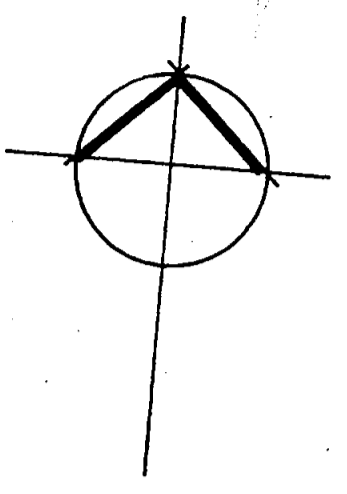
Dwg No.: DA 5A

**GREENFIELD CERTIFIERS**  
Construction Certificate

No: 2011 - 14368

Dated: 8 JUN 2011

ALEXANDER ROAD



**CALCULATIONS**

- SITE AREA - 544 m<sup>2</sup>
- SITE COVERAGE REQUIREMENT 50% - 272 m<sup>2</sup>
- LANDSCAPING - 50% - 272 m<sup>2</sup>
- EAST HARD SURFACE AREA - 217.398 m<sup>2</sup> (40%)
- EAST HARD SURFACE AREAS REINSTATED TO LAWN - 73.0355 m<sup>2</sup>
- PROPOSED NEW ADDITIONAL HARD SURFACE - 95.2 m<sup>2</sup>
- PROPOSED NEW HARD SURFACE - 239.5625 m<sup>2</sup> - 43.6% (COMPLIES) AN ADDITIONAL 22.1645 m<sup>2</sup> (3.6%)
- TOTAL OF NEW HARD SURFACE - 239.5625 m<sup>2</sup> (51.4%) - INCLUDES REINSTATED PAVED AREAS TO LAWN.
- PROPOSED NEW LANDSCAPING - 279.83 m<sup>2</sup> (51.4%) - INCLUDES REINSTATED PAVED AREAS TO LAWN.
- PRIVATE OPEN SPACE - NEW DWELLING - 143.585 m<sup>2</sup>
- EAST DWELLING - 168.63 m<sup>2</sup>

**SITE COVERAGE CALCULATION PLAN 1:200**

'A' - 2.6.11 - PARKING LEVEL RAISED

**NOTES**

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- Do not exhibit dimensions by scaling drawings
- All dimensions are to be checked on site prior to starting work.
- These drawings are to be read in conjunction with all other consultants drawings & specifications
- All workmanship & materials shall be in accordance with the requirements of current editions including amendments of the relevant SAA Codes of Practice: the Building Code of Australia & Isometrics
- New materials are to be used throughout unless otherwise noted
- Concrete footings, walls, structural beams or any other structural members are to be designed & endorsed by a practicing engineer

		Project: PROPOSED NEW SECONDARY DWELLING AT 34 WHALE BEACH ROAD, AVALON		Scale: 1:200 Date: Feb. 2011
Title: SITE COVERAGE CALCULATION PLAN		Job No.: 331		Dwg No.: DA 6A
Jina Jankovc 62/2 Forest Rd Warriewood, NSW 2102 M. 0414 717 541 Phone: 9079 0286 Email: jidraft@jdg.com.au				



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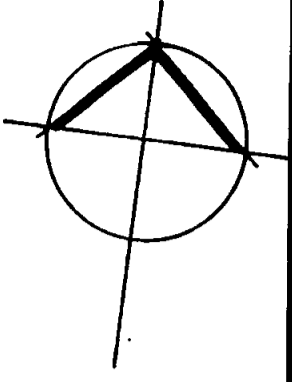
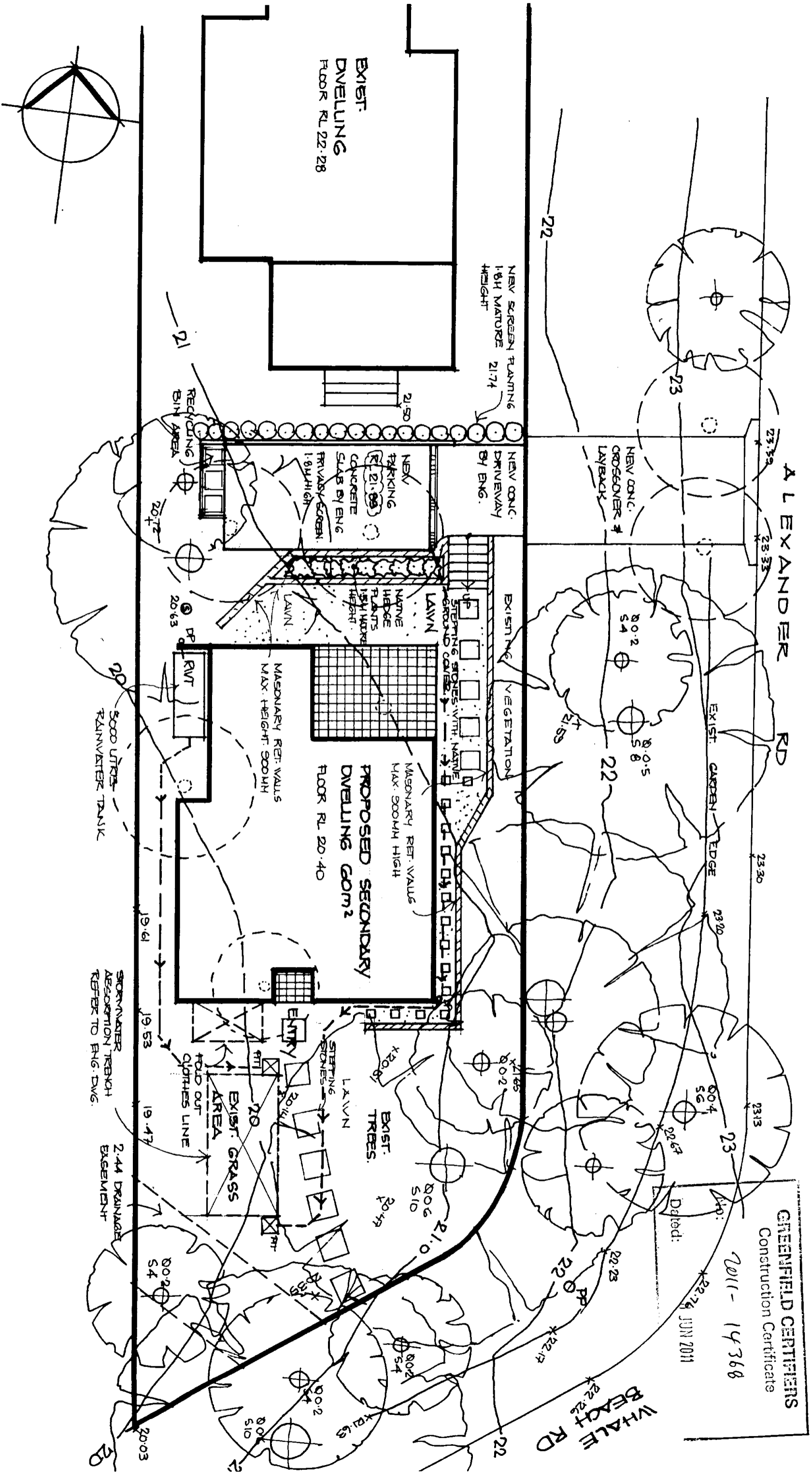
Dated: 22/24 JUN 2011

ALEXANDER RD

RD

EXIST. GARDEN EDGE

WHALE BEACH RD



# LANDSCAPE CONCEPT PLAN 1:100

A' - 2.6.11 - PARKING U/L/B. RAISED

**NOTES**

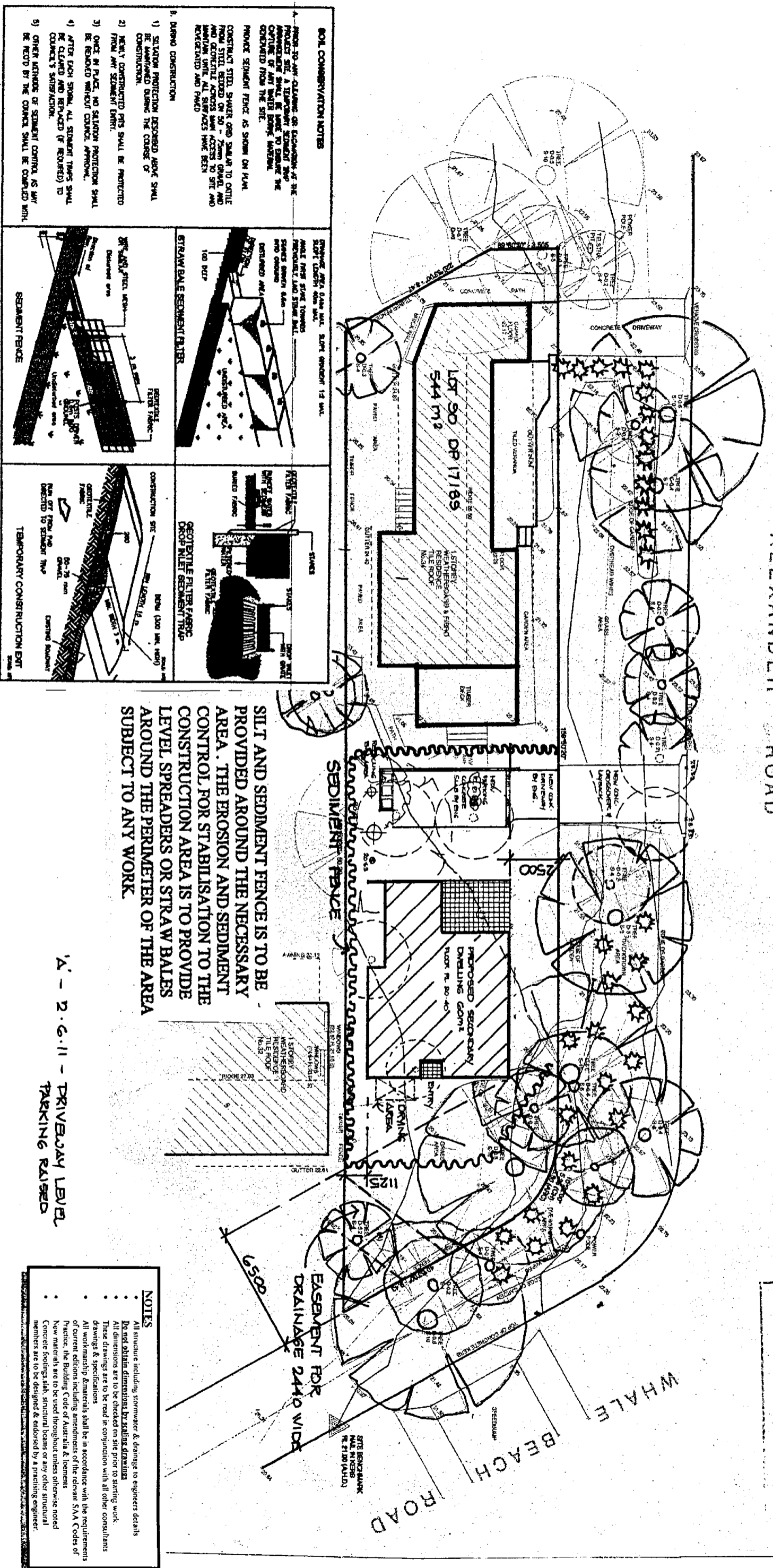
- All structure including stormwater & drainage to engineers details
- Do not obtain dimensions by scaling drawings
- All dimensions are to be checked on site prior to starting work
- These drawings are to be read in conjunction with all other consultants drawings & specifications
- All workmanship & materials shall be in accordance with the requirements of current editions, including amendments of the relevant SAA Codes of Practice, the Building Code of Australia & Elements
- New materials are to be used throughout unless otherwise noted
- Concrete footings, slab, structural beams or any other structural members are to be designed & endorsed by a practicing engineer.

<p><b>JDrafting</b></p> <p>Jika Jankovic</p> <p>6227 Forest Rd Warrenwood, NSW 2102</p> <p>M - 0414 717 541 Phone: 0970 9286 Email - jdrafting.com.au</p>	<p>Project: <b>PROPOSED NEW SECONDARY DWELLING</b></p> <p>AT</p> <p>34 WHALE BEACH ROAD, AVALON</p> <p>Title: <b>LANDSCAPED CONCEPT PLAN</b></p>	<p>Scale: 1:200</p> <p>Date: Feb. 2011</p>
	<p>Job No.: 331</p> <p>DWG No.: DA 7A</p>	



ALEXANDER ROAD

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Construction Certificate  
No: 2011-14368  
Dated: 8 JUN 2011



SILT AND SEDIMENT FENCE IS TO BE PROVIDED AROUND THE NECESSARY AREA. THE EROSION AND SEDIMENT CONTROL FOR STABILISATION TO THE CONSTRUCTION AREA IS TO PROVIDE LEVEL SPREADERS OR STRAW BALES AROUND THE PERIMETER OF THE AREA SUBJECT TO ANY WORK.

A - 2.6.11 - DRIVEWAY LEVEL PARKING RAISED

**NOTES**

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- Do not obtain dimensions by scaling drawings
- All dimensions are to be checked on site prior to starting work
- These drawings are to be read in conjunction with all other consultants drawings & specifications
- All workmanship & materials shall be in accordance with the requirements of current editions, including amendments of the relevant SAA Codes of Practice, the Building Code of Australia & the relevant AS/NZS Standards
- New materials are to be used throughout unless otherwise noted
- Concrete footings/slab, structural beams or any other structural members are to be designed & endorsed by a practising engineer.

**EROSION AND SEDIMENT CONTROL PLAN**

<p><i>JDrafting</i> Jilla Jankovic 62/2 Forest Rd Wentwood, NSW 2102 M - 0414 717 541 Phone - 9979 9286 Email - jdrafting@jira.com.au</p>		<p>Project: PROPOSED NEW SECONDARY DWELLING AT 34 WHALE BEACH ROAD, AVALON</p>		<p>Scale: 1:200 Date: Feb. 2011</p>	
<p>Title: SEDIMENT &amp; EROSION CONTROL PLAN</p>		<p>Job No.: 331</p>		<p>Dwg No: DA 8A</p>	