

19 February 2009

General Manager
Pittwater Council
PO Box 882
MONA VALE NSW 1660

Dear Sir/Madam

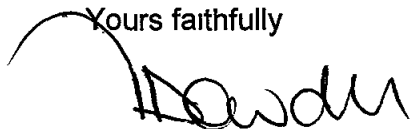
**Development Application No NO733/07
237A Whale Beach Road, Whale Beach**

For Council's information, please find enclosed Construction Certificate No 2009/3190 issued for alterations & additions to an existing dwelling including a swimming pool at the above address, accompanied by

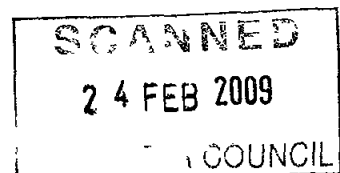
- Copy Construction Certificate application form
- Notice of Commencement of Work and Appointment of Principal Certifying Authority
- Builder's Home Warranty Insurance
- Cheque for \$30 00 being the prescribed fee to receive the above certificate

NB Please forward receipt for the above fee to **Insight Building Certifiers Pty Ltd, PO Box 326, Mona Vale 1660**

Yours faithfully



**Tom Bowden
Insight Building Certifiers Pty Ltd**



Construction Certificate Determination

issued under the Environmental
Planning and Assessment Act 1979
Section 109C (1) (b) 81A (2) and 81A (4)

Certificate No 2009/3190

Council	Pittwater
Determination date of issue	Approved 19 February 2009
Subject land Address Lot No DP No	237A Whale Beach Road, Whale Beach Lot 72 DP 11067
Applicant Name Address Contact No	Mr Douglas & Mrs Rita Otto C/- The Design Section P/L PO Box 71, Avalon NSW 2107 9918 7570
Owner Name Address Contact No	Mr Douglas & Mrs Rita Otto 6746 Breakers Way Ventura California 93001 USA -
Description of Development Type of Work	Alterations & Additions to an Existing Dwelling including a Swimming Pool
Builder or Owner/Builder Name Contractor Licence No/Permit	V & D Luzar Pty Ltd 36076
Value of Work Building	\$3 000 000 00

Attachments

- Copy of completed Construction Certificate Application Form
- Pittwater Council receipt no 253872 for payment of Long Service Levy
- BASIX Certificate no A24990 dated 7 December 2007
- Construction Management Plan prepared by V & D Luzar Pty Ltd (Licensed Builder) dated 10 December 2008

**COUNCIL
COPY**

Plans & Specifications certified

The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with *Insight Building Certifiers* stamp

- Architectural Details and Construction Specifications reference no DA-01 02 03 04 & 05 prepared by The Design Section Pty Ltd dated October 2007
- Completed Form 2 Certificate dated 18 December 2008
- Structural Details reference no 23892 drawing nos BS000 (03) BS010 (04) BS020 (04) BS030 (04) BS040 (04) BS050 (04) prepared & endorsed by Connell Wagner Consulting Engineers dated 2 February 2009
- Schedule of External Finishes prepared by The Design Section Pty Ltd dated 12 December 2007
- Copy of Sydney Water approval dated 16 February 2009

Certificate

I hereby certify that the above Plans documents or Certificates satisfy

- The relevant provisions of the Building Code of Australia
- The relevant conditions of this Development Consent

and that work completed in accordance with the documentation accompanying the application for this Certificate (and any modifications as verified by me and shown on that documentation) will comply with the requirements of the Environmental Planning & Assessment Regulation referred to in Section 81A(5) of the Environmental Planning & Assessment Act 1979

Signed



19 FEB 2009

Date of endorsement
Certificate No

2009/3190

Certifying Authority

Name of Accredited Certifier
Accreditation No
Accreditation Authority
Contact No
Address

Tom Bowden
BPB0042
Building Professionals Board
(02) 9999 0003
13/90 Mona Vale Road Mona Vale NSW 2103

Development Consent

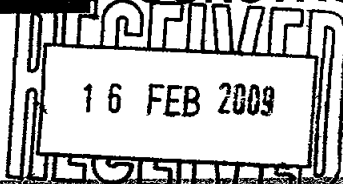
Development Application No
Date of Determination

NO733/07
15 February 2008

BCA Classification

1a & 10b

APPLICATION FOR A CONSTRUCTION CERTIFICATE



Construction Certificate ☒
Modified Construction Certificate ☐

1. Applicant's details

It is important that we are able to contact you if we need more information. Please give us as much details as possible.

Mr ☒ Mrs ☒ Ms ☐ Dr ☐ Other ☐

Given Names (or ACN) DOUGLAS & RITA Family Name (or Company) OTTO

Postal Address (we will post all mail to this address)

c/- THE DESIGN SECTION P/L
P.O. BOX 71 AVALON NSW Post Code 2107

Daytime telephone 9918-7570 Alternate no Mobile no 0414-266557

2. Owner's consent

Every owner of the land must sign this form. If the owner is a company the form must be signed by an authorized director and the common seal must be stamped on this form. If the property is a unit under the strata title or a lot in a community title then in addition to the owner's signature the common seal of the body corporate must be stamped on this form over the signature of the owner and signed by the Chairman or Secretary of the Owners Corporation or the appointed Managing Agent.

Owner(s) DOUGLAS & RITA OTTO

Address 6746 BREAKERS WAY VENTURA

CALIFORNIA 93001 U.S.A.

As owner(s) of the land to which this application relates I/We consent to this application. I/We also consent for the Principal Certifying Authority and/or Accredited Certifier to enter the land to carry out inspections relating to this application.

Signature(s) *Douglas Otto* *Rita Otto*

Without the owner's consent we will not accept the application. This is a very strict requirement for all applications. If you are signing on the owner's behalf as the owner's legal representative you must state the nature of your legal authority and attach documentary evidence (eg power of attorney, executor, trustee, company director etc).

3. Location of property

Unit/Street no 237A Street name WHALE BEACH RD

Suburb WHALE BEACH Post code 2107

Legal Property Description (these details are shown on your rate notices, property deeds etc)

Lot no 72 DP no 11067

4. Description of work

What type of work do you propose to carry out?

Please describe briefly everything that you want approved

ALTERATIONS TO SINGLE DWELLING
CONSTRUCT NEW SWIMMING POOL

5. Estimated cost of work

The estimated cost of the development or contract price may be subject to review

Estimated cost of work \$ 3,000,000 —

6. Development Consent

Council Consent no NO 733 / 07

Date of Determination 15 FEB 2008

7. Building Code of Australia classification

This can be found on the development consent

BCA Classification 1a + 10b

8. Builder's details

If known to be completed in the case of residential building work

Name V&D LUZAR PTY LTD

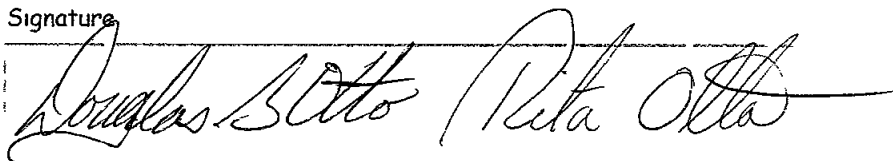
Licence no 36076

Owner/builder permit no NA

9. Applicant's declaration

I apply for a Construction Certificate to carry out building works as described in this application. I declare that the above Development Consent is valid and that no building works associated with this application have commenced. To the best of knowledge all the information in this application and checklist is true and correct.

Signature

* 

Date

30.1.2009

SUBMISSION REQUIREMENTS

A GENERAL

Are the plans submitted with the Construction Certificate Application in accordance with the Development Consent?

Yes ☒ No ☐

Have all the conditions of Development Consent relating to the issue of the Construction Certificate been fully complied with?

Yes ☒ No ☐

If you have answered NO to either of the above questions, then you will need to speak with the Accredited Certifier BEFORE LODGING YOUR APPLICATION

B ALL PROPOSALS (has the following required information been submitted?)

Yes	No	Not Applicable	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>In the case of an application for a Construction Certificate for building work</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Three (3) copies of detailed architectural plans and specifications
			The plan for the building must consist of a general plan drawn to a scale not less than 1:100 and a site plan drawn to a scale not less than 1:200. The general plan of the building is to
			a) show a plan of each floor section
			b) show a plan of each elevation of the building
			c) show the levels of the lowest floor and of any yard or unbuilt on area belonging to that floor and the levels of the adjacent ground
			d) indicate the height, design and full construction details
			e) indicate the provision for fire safety and fire resistance (if any)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Where the proposed building work involves any alteration or addition to, or rebuilding of, an existing building, all copies of the general plan are to be coloured or otherwise marked to the satisfaction of the Council to adequately distinguish the proposed alteration, addition or rebuilding with a separate letter listing the proposed changes being submitted.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 copies of a specification
			a) to describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply
			b) state whether the materials proposed to be used are new or second hand and give particular
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Where the proposed building work involves a modification to previously approved plans and specifications, the general plans must be coloured or otherwise marked to the satisfaction of the Accredited Certifier to adequately distinguish the modification.
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	If the proposed building work involves a modification to previously approved plans and specification which were subject of a Development Consent, has the original Development Consent been modified by Council?
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Except in the case of an application for, or in respect of domestic building work
			a) a list of any fire safety measures that are proposed to be implemented in the building or on the land on which the building is situated, and
			b) if the application relates to a proposal to carry out any alteration or rebuilding of, or addition to, an existing building, a separate list of such of those measures as are currently implemented in the building or on the land on which the building is situated. This list must specify the standard of design of each of those fire safety measures to which they were originally installed.
			c) This list must describe the extent, capability and basis of design of each of the measures concerned.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copy of BASIX Certificate & Schedule of BASIX Commitments
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copy of signed BASIX Compliance Statement
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All other documentation to satisfy conditions of Development Consent

HOME BUILDING ACT 1989 (as amended) OWNER/BUILDER REQUIREMENTS

Applicants for work at a residential property with a value of work over \$12,000 require insurance as specified in the Home Building Act 1989.

Owner Builders require Property Owner Builder's Permit issued by the Department of Fair Trading for all projects over \$5,000. In addition to this permit, all projects valued in excess of \$12,000 may also require a contract of insurance under the provisions of the Home Building Act 1989 as amended. This requirement will take effect should the property owner offer the property for sale in the ensuing period of 7 years.

Enquiries on any matters relevant to this section should be taken up with the Department of Fair Trading at Level 21, Astra House, 227 Elizabeth Street, Sydney (ph 133220).

LONG SERVICE LEVY (applies to all classes of buildings)

A Long Service Levy at 0.35% of the cost of works is payable on projects valued \$25 000 or more. This sum can be paid directly to the Long Service Payments Corporation or to Council acting as an agent to the Corporation. Partial exemption from the levy may be granted to non-profit organizations, churches and to owner/builders. The levy may also be paid in instalments. Application forms for these exemptions are available from Council but all enquiries in this regard should be addressed to the Long Service Payments Corporation.

THE CONSTRUCTION CERTIFICATION CANNOT BE ISSUED UNLESS THE LONG SERVICE LEVY AND HOME BUILDING ACT 1989 INSURANCE (APPLICABLE TO RESIDENTIAL PROPERTIES) HAVE BEEN PAID OR EVIDENCE OF THE EXEMPTION PROVIDED TO COUNCIL.

PARTICULARS OF THE PROPOSAL

What is the area of the land (m ²)? 1153 m²	Gross floor area of building (m ²) as proposed 1025 m²
What are the current uses of all or parts of the building(s)/land? SINGLE DWELLING	Location Use
Does the site contain a dual occupancy? NO	What is the gross floor area of the proposed addition or new building (sq metres)? 1025 m²
What are the proposed uses of all parts of the building(s) land? SINGLE DWELLING BEACH PAVILION SWIMMING POOL	Number of pre-existing dwellings ONE
Number of dwellings to be demolished N.A.	How many dwellings proposed? ONE
How many storeys will the building consist of? 4	Will the new building be attached to the existing building? NA Will the new building be attached to any new building? NA

MATERIALS TO BE USED

The following information must be supplied for the Australian Bureau of Statistics

Place a tick (✓) in the box which best describes the materials the new work will be constructed of

WALLS		FLOOR		ROOF		FRAME	
Brick veneer	<input type="checkbox"/>	Concrete	<input checked="" type="checkbox"/>	Aluminium	<input type="checkbox"/>	Timber	<input type="checkbox"/>
Full brick	<input checked="" type="checkbox"/>	Timber	<input type="checkbox"/>	Concrete	<input checked="" type="checkbox"/>	Steel	<input type="checkbox"/>
Single brick	<input type="checkbox"/>	Other	<input type="checkbox"/>	Concrete tile	<input type="checkbox"/>	Other	<input type="checkbox"/>
Concrete block	<input type="checkbox"/>	Unknown	<input type="checkbox"/>	Fibrous cement	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Concrete/masonry	<input type="checkbox"/>			Fibreglass	<input type="checkbox"/>		
Concrete	<input type="checkbox"/>			Masonry/terracotta shingle	<input type="checkbox"/>		
Steel	<input type="checkbox"/>			Tiles	<input type="checkbox"/>		
Fibrous cement	<input type="checkbox"/>			Slate	<input type="checkbox"/>		
Hardiplank	<input type="checkbox"/>			Steel	<input type="checkbox"/>		
Timber/weatherboard	<input type="checkbox"/>			Terracotta tile	<input type="checkbox"/>		
Cladding aluminium	<input type="checkbox"/>			Other	<input type="checkbox"/>		
Curtain glass	<input type="checkbox"/>			Unknown	<input type="checkbox"/>		
Other	<input type="checkbox"/>						
Unknown	<input type="checkbox"/>						

Pittwater Council

OFFICIAL RECEIPT

3/02/2009 Receipt No 253872

To Douglas Otto

C/O PO BOX 71
AVALON 2107

Applic	Reference	Amount
GL Recei	QLSL Builders	\$10 500 00
	1 x Long Service Levy 0733/07	

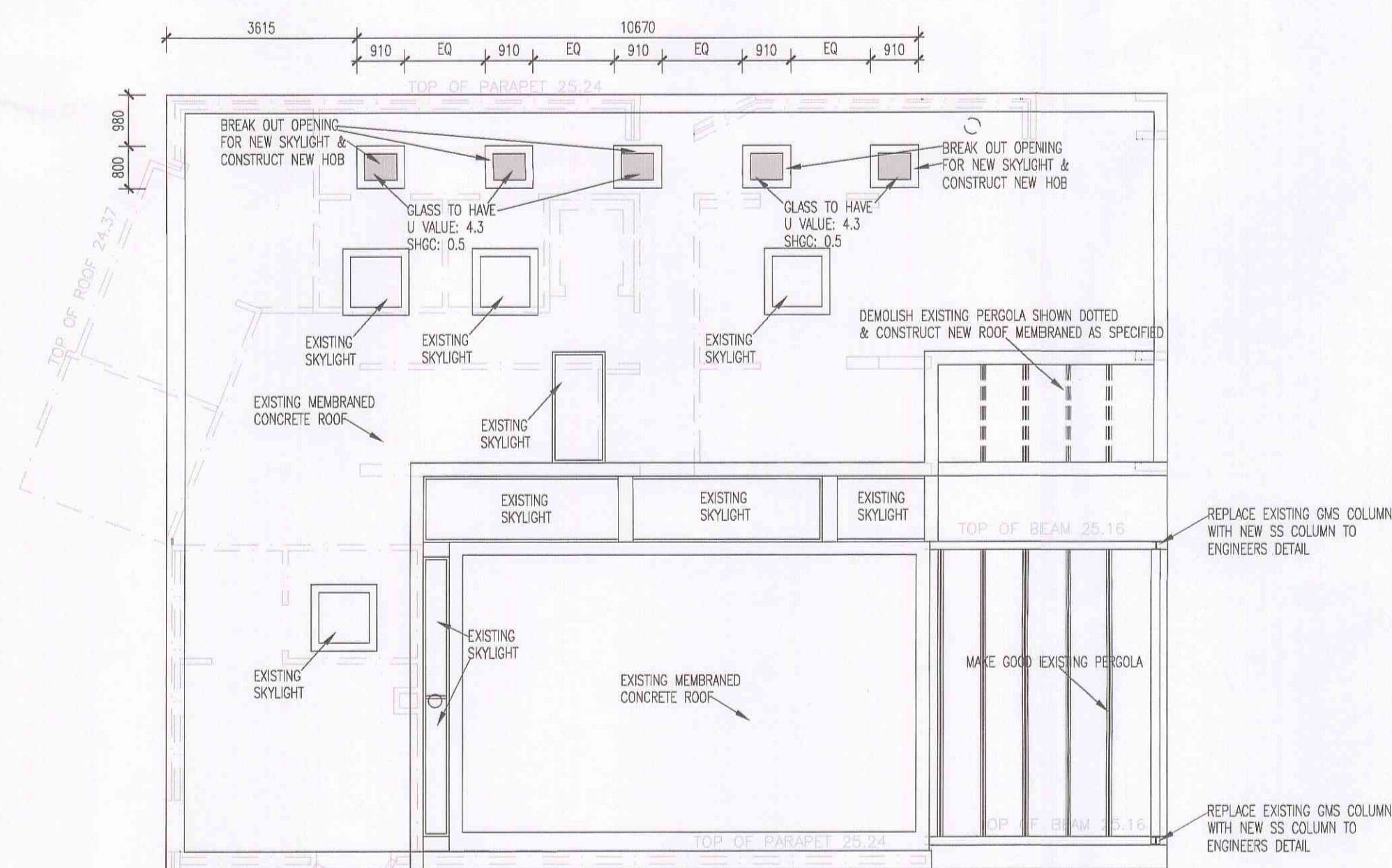
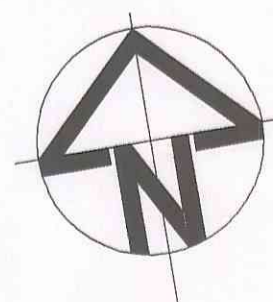
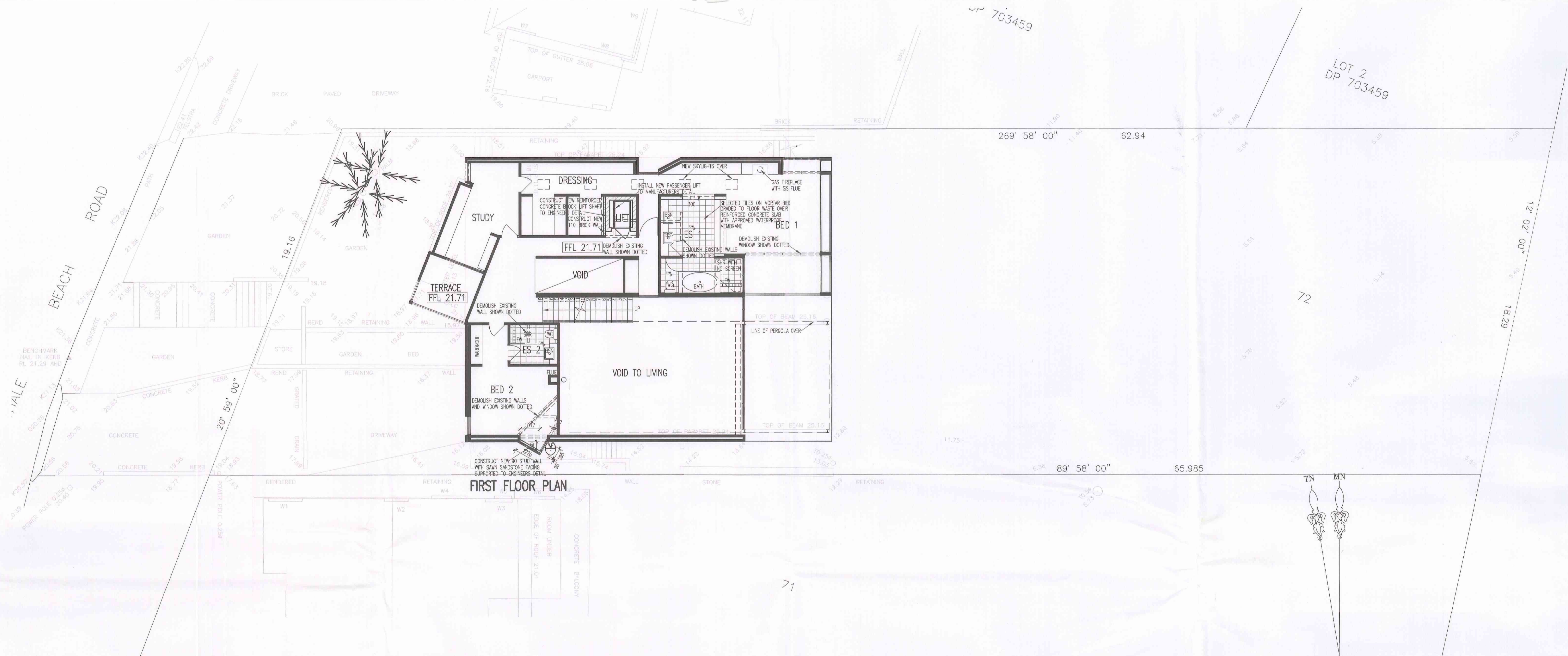
Total \$10 500 00

Amounts Tendered

Cash	\$0 00
Cheque	\$10 500 00
Db/Cr Card	\$0 00
Money Order	\$0 00
Agency Rec	\$0 00
Total	\$10 500 00
Rounding	\$0 00
Change	\$0 00
Nett	\$10 500 00

Printed 3/02/2009 4 08 37 PM

Cashier KSampso



ROOF PLAN

- Building to incorporate BASIX commitments to comply with the attached BASIX Certificate No. A24990 dated 11/12/09
- Smoke Alarms to be installed in accordance with AS 3785-1993 'Smoke alarms'
- Termite Management to comply with AS 3660 - 2000 'Termite Management - New Building Work'
- Glazing to comply with AS 1288 - 2006 'Glass in Buildings - Selection & Installation' and AS 2047 - 1999 'Windows in Buildings - Selection & Installation'
- Waterproofing of wet areas to comply with AS 3740 - 2004 'Waterproofing of Wet Areas in Residential Buildings'
- Doors to fully enclosed sanitary compartments to comply with Part 3.8.3 'Facilities' of the Building Code of Australia
- External Glazing & Cladding being of minimal reflectance (maximum of 20%)
- External Finishes being in natural, recessive, non-reflective colours and textures
- Balustrades construction to comply with Part 3.9.2.3 - 'Balustrades' of the Building Code of Australia
- Damp-proof membrane must be 'high impact', 0.2mm thick polyethylene film

WARNING
The stamping of this plan by Insight Building Certifiers Pty Ltd does not relieve:
• The applicant's responsibility to obtain approval from Sydney Water or other utilities
• The Structural Engineer of their responsibility to ensure the structural adequacy of this project
• The Applicant, Structural Engineer or other Professional of their responsibility to ensure these stamped details are consistent with the issued Construction Certificate Architectural Details.

insight building certifiers pty ltd
CONSTRUCTION CERT. NO. 209/3190
CONSTRUCTION CERTIFICATE PLANS
I certify that the work completed in accordance with these plans & specifications will comply with the regulations referred to in Section 61A(5) of the Environmental Planning & Assessment Act 1979
Nasim 19 FEB 2009
T. Bowden Accreditation No. BPD0042

Project ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D. OTTO

Title **WORKING DRAWINGS - FIRST FLOOR & ROOF PLAN**

Scale 1:100 Number DA-01

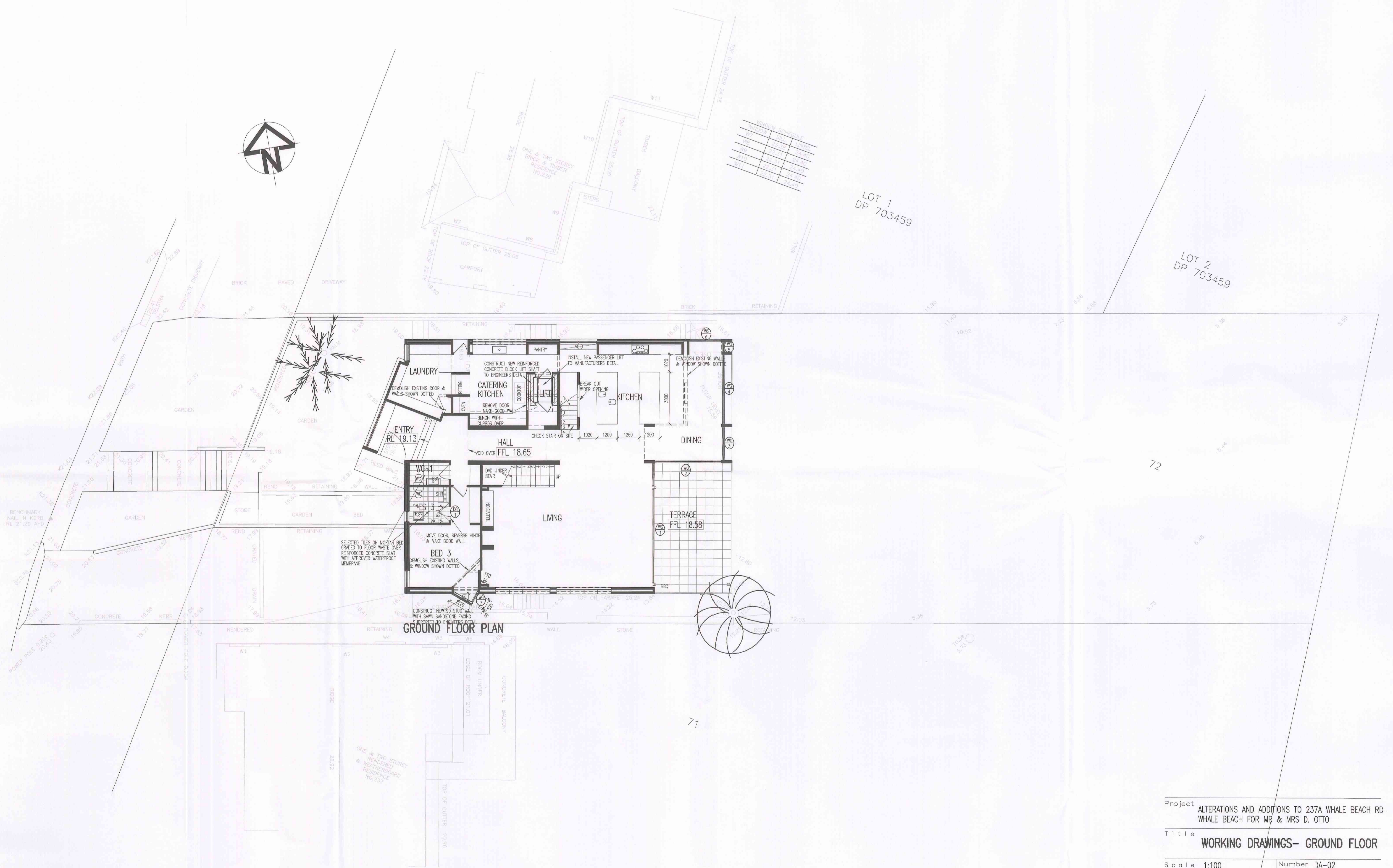
Date OCT 2007 Drawn GW, DP

SCANNED
24 FEB 2009
WATER COUNCIL

The Design Section Pty Ltd Architects
Suite 57/48 Avonon Ave Avonon NSW 2107
PO Box 71 Avonon NSW 2107
Phone 9918 7575 Fax 9973 1805
Email a.watson@designsection.com.au

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The Design Section
ARCHITECTS



Project ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D. OTTO

Title WORKING DRAWINGS- GROUND FLOOR

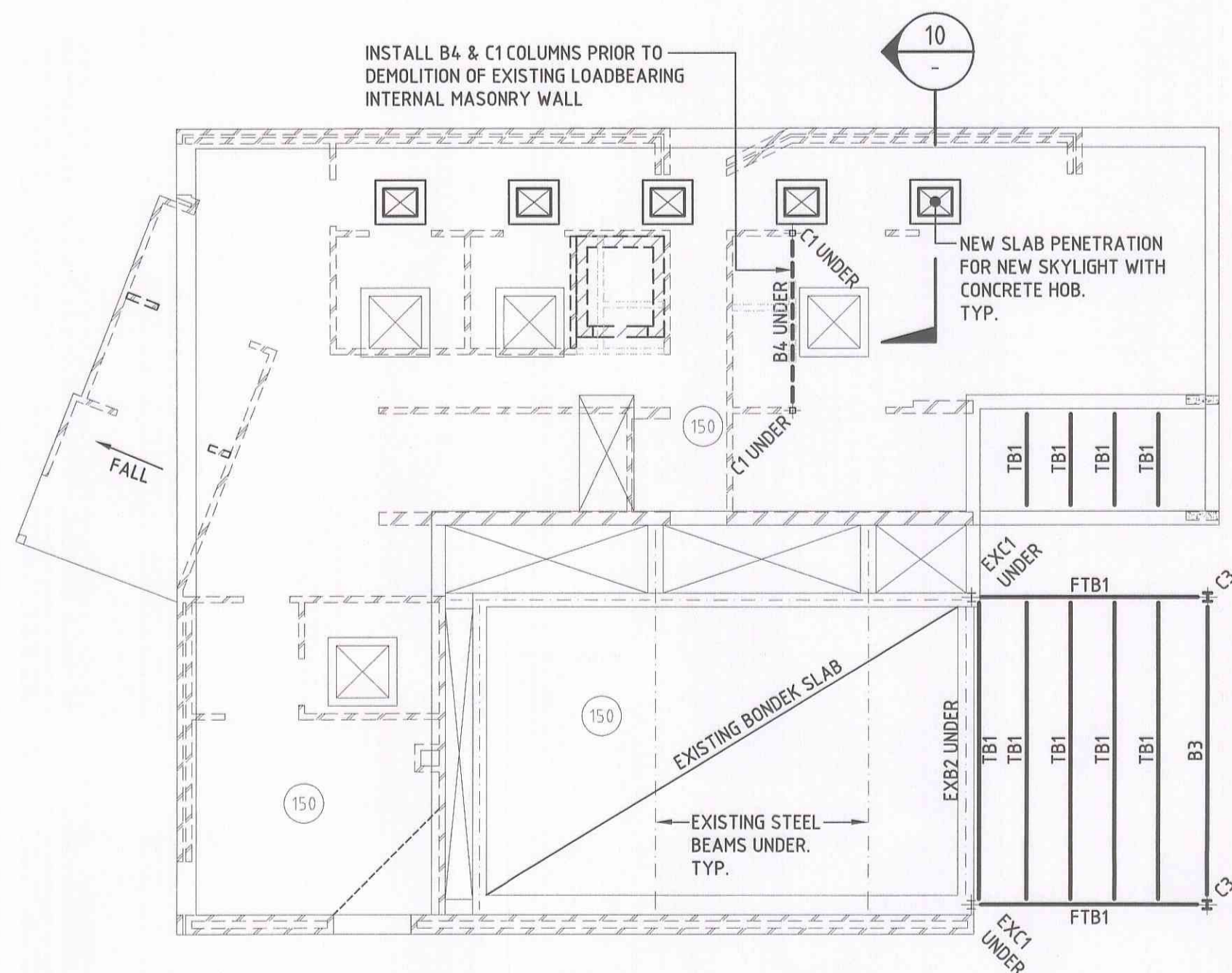
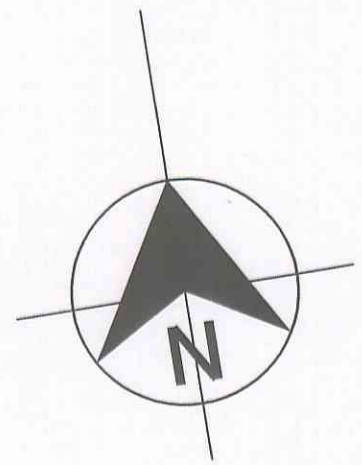
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Date OCT 2007 Drawn GW, DP

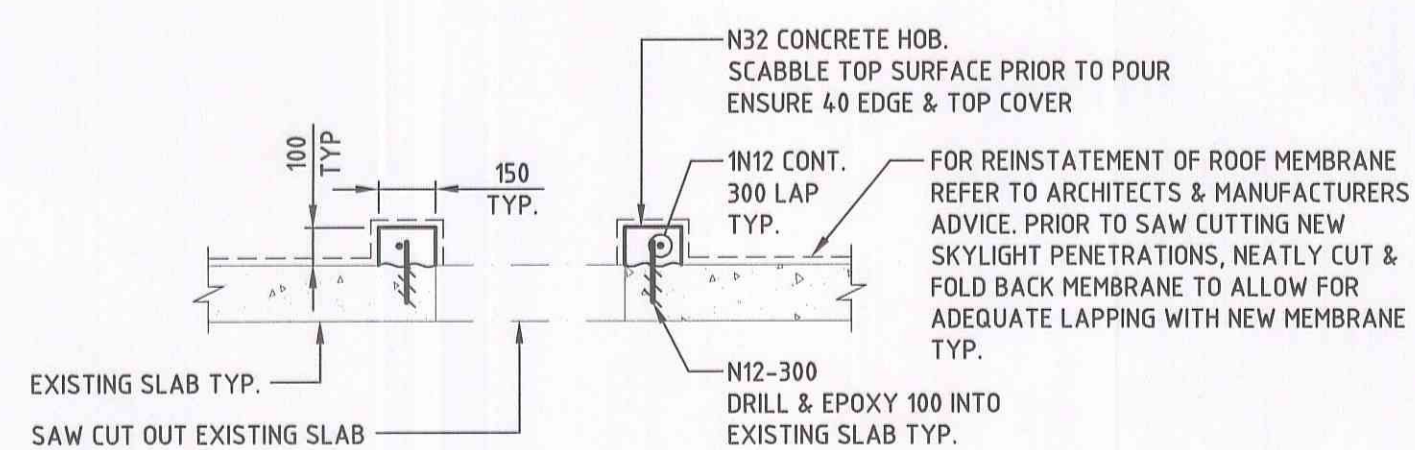
The Design Section Pty Ltd Architects
Suite 5/40 Avalon Pde Avalon NSW 2107
PO Box 711 Avalon NSW 2107
Phone 9918 7570 Fax 9973 1805
Email g.watson@designsection.com.au

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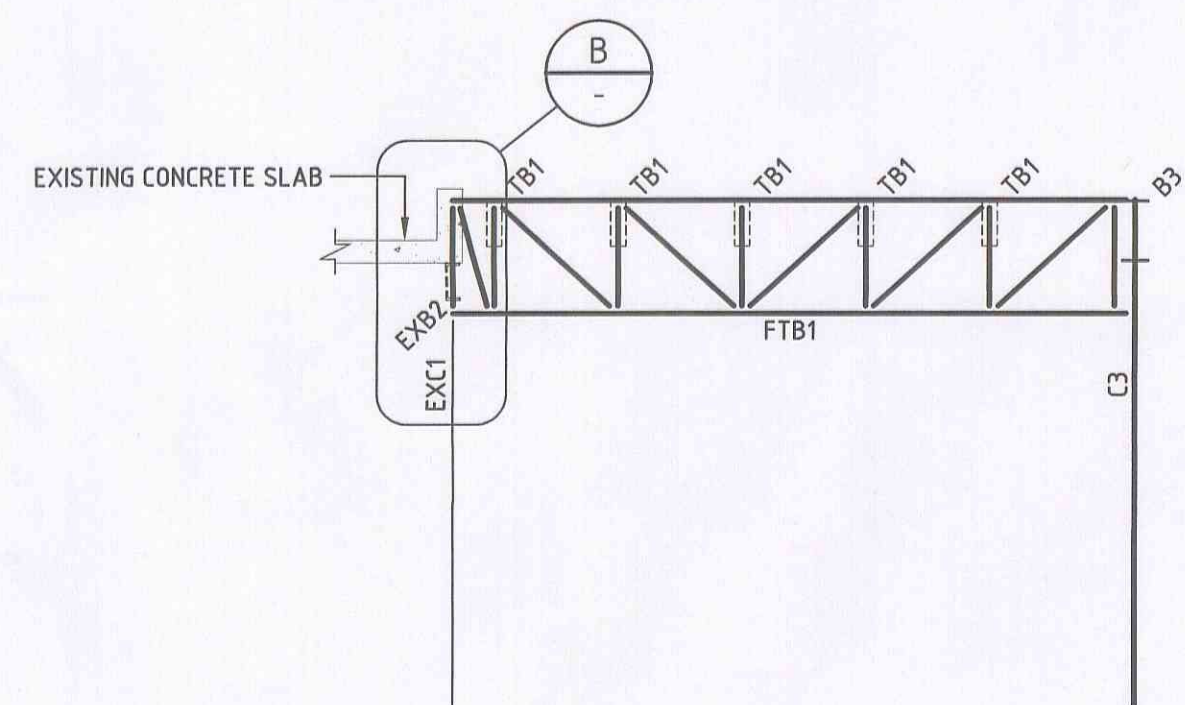
The Design Section
ARCHITECTS



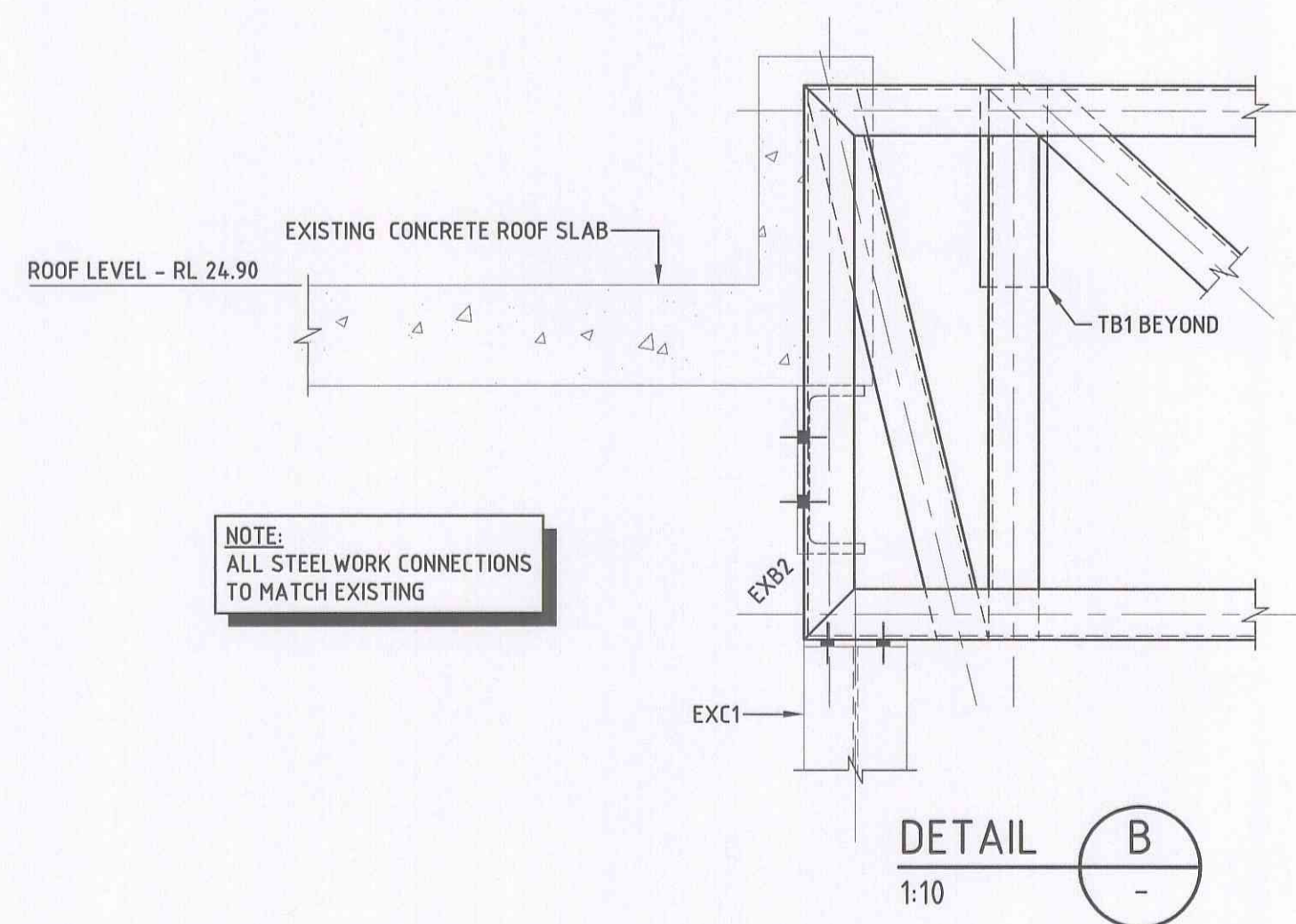
ROOF PLAN
1:100



SECTION 10
1:20



STAINLESS STEEL TRUSS ELEVATION
1:50



DETAIL B
1:10

This drawing has been assessed for compliance with the requirements of the Building Act 1993 and the Building Regulations 1993. It is a preliminary drawing and is not to be used for construction. No design calculations have been carried out and the designer is not responsible for the structural integrity of the design. The drawing is the property of the designer and is not to be reproduced without the written consent of the designer.

Drawn by: JRD
Checked by: JRD
Designed by: JRD
Approved by: JRD
For and on behalf of: JEFFERY AND KATAUSKAS PTY LTD

TENDER DOCUMENT
NOT FOR CONSTRUCTION

LEGEND

- 300 INDICATES SLAB THICKNESS.
- INDICATES STEP IN SLAB.
- INDICATES SETDOWN IN SLAB.
- INDICATES PENETRATION IN SLAB.
- INDICATES LOADBEARING CONCRETE WALL UNDER.
- INDICATES LOADBEARING CONCRETE WALL OVER ONLY.
- INDICATES LOADBEARING CONCRETE WALL UNDER & OVER.
- INDICATES NEW LOADBEARING BRICKWORK WALL UNDER.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL UNDER & OVER.
- INDICATES NEW LOADBEARING BRICKWORK WALL OVER ONLY.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL OVER ONLY.
- INDICATES NEW LOADBEARING BRICKWORK WALL UNDER & OVER.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL UNDER & OVER.
- INDICATES LOADBEARING BLOCKWORK WALL UNDER.
- INDICATES LOADBEARING BLOCKWORK WALL OVER ONLY.
- INDICATES LOADBEARING BLOCKWORK WALL UNDER & OVER.
- INDICATES WALL UNDER TO BE DEMOLISHED.
- INDICATES COLUMN UNDER.
- INDICATES COLUMN OVER ONLY.
- INDICATES COLUMN UNDER & OVER.

Rev	Date	Revision Details	Drn	Ver.	App.
04	19.12.08	ISSUED FOR CONSTRUCTION CERTIFICATE	AA		
03	17.10.08	ISSUED FOR TENDER	GSW		
02	12.09.08	ISSUED FOR REVIEW	ARB		
01	15.10.07	ISSUED FOR INFORMATION	JV		

Connell Wagner
Connell Wagner Pty Ltd ABN 54 005 139 873 Telephone: +61 2 9465 5598
116 Military Road (PO Box 530) Neutral Bay Facsimile: +61 2 9465 5598
New South Wales 2089 Australia Email: cwsyd@connwag.com

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2. using the drawings or other data for any purpose not agreed to in writing by Connell Wagner.

Client:

MR. D. OTTO

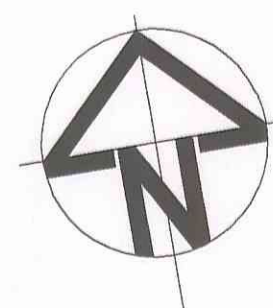
Project:

ALTERATIONS AND ADDITIONS
237A WHALE BEACH RD.
WHALE BEACH

Drawing Title:

ROOF PLAN
& DETAILS

Drawn	Signed	Date	Verified	Signed	Date
JV			JRD		
Designed	Signed	Date	Approved	Signed	Date
RA	RA	2/2/09	KK		
Project No.	23892	Scale: 1:10, 20 1:50, 1:100	Sheet Size	A1	
Drawing No.	BS050	Revision:	04		



WINDOW	TYPE	SIZE	LOCATION
W1	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W2	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W3	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W4	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W5	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W6	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W7	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W8	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W9	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W10	DOUBLE GLAZED	2000 x 1500	REAR TERRACE
W11	DOUBLE GLAZED	2000 x 1500	REAR TERRACE

LOT 1
DP 703459

LOT 2
DP 703459

LOWER GROUND PLAN

Project ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D. OTTO

Title WORKING DRAWINGS- LOWER GROUND
SPA ROOM OPTION

Scale 1:100 Number DA-03

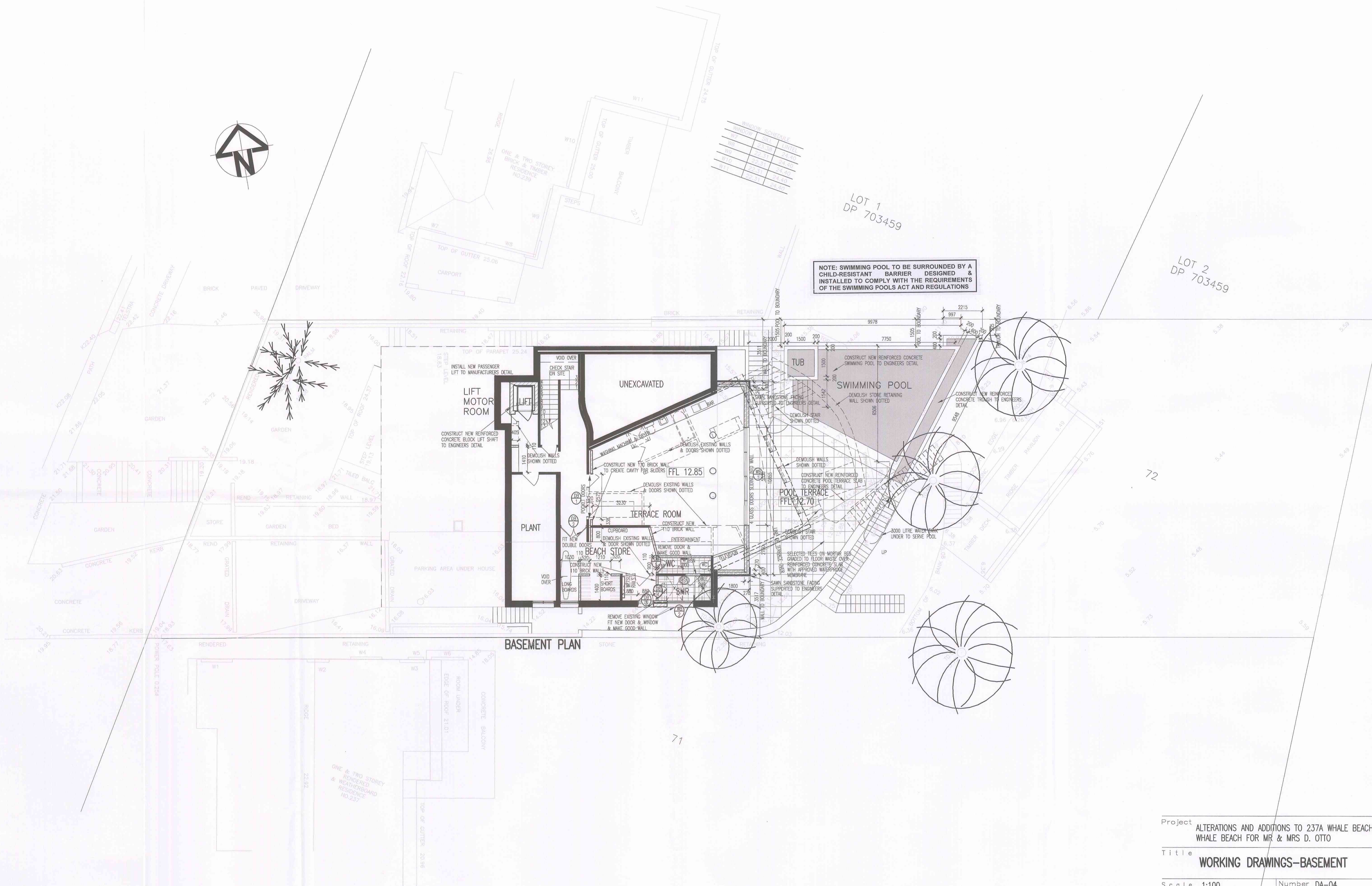
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The
Design
Section

ARCHITECTS



Project ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D. OTTO

Title WORKING DRAWINGS-BASEMENT

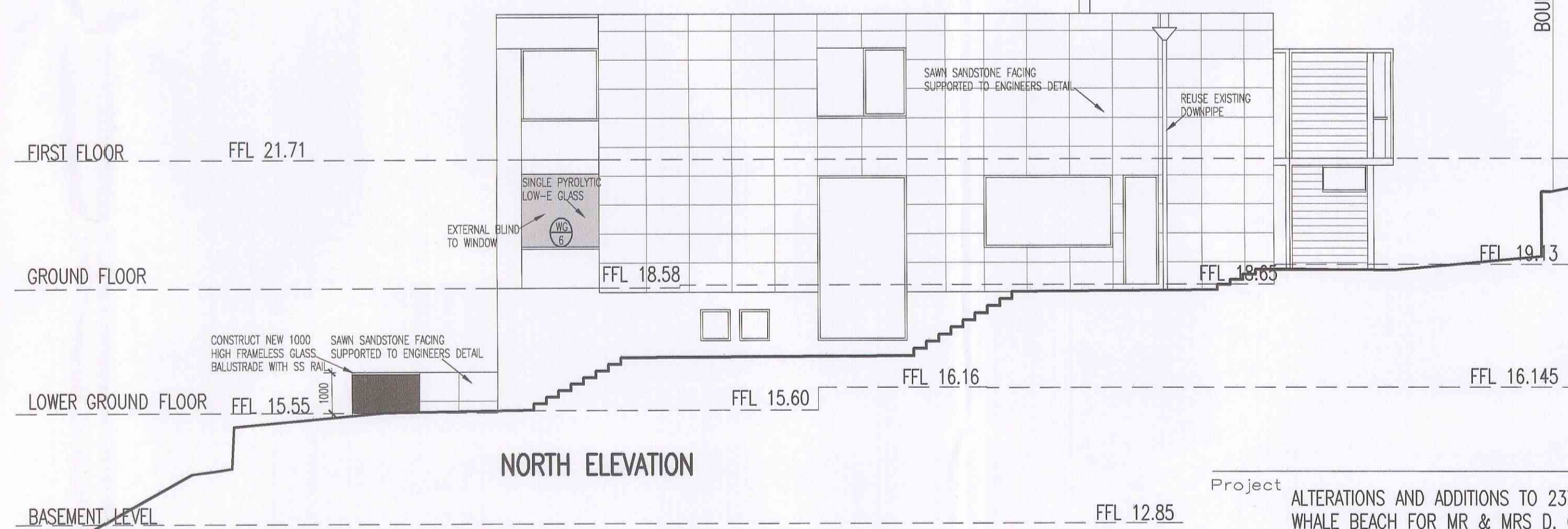
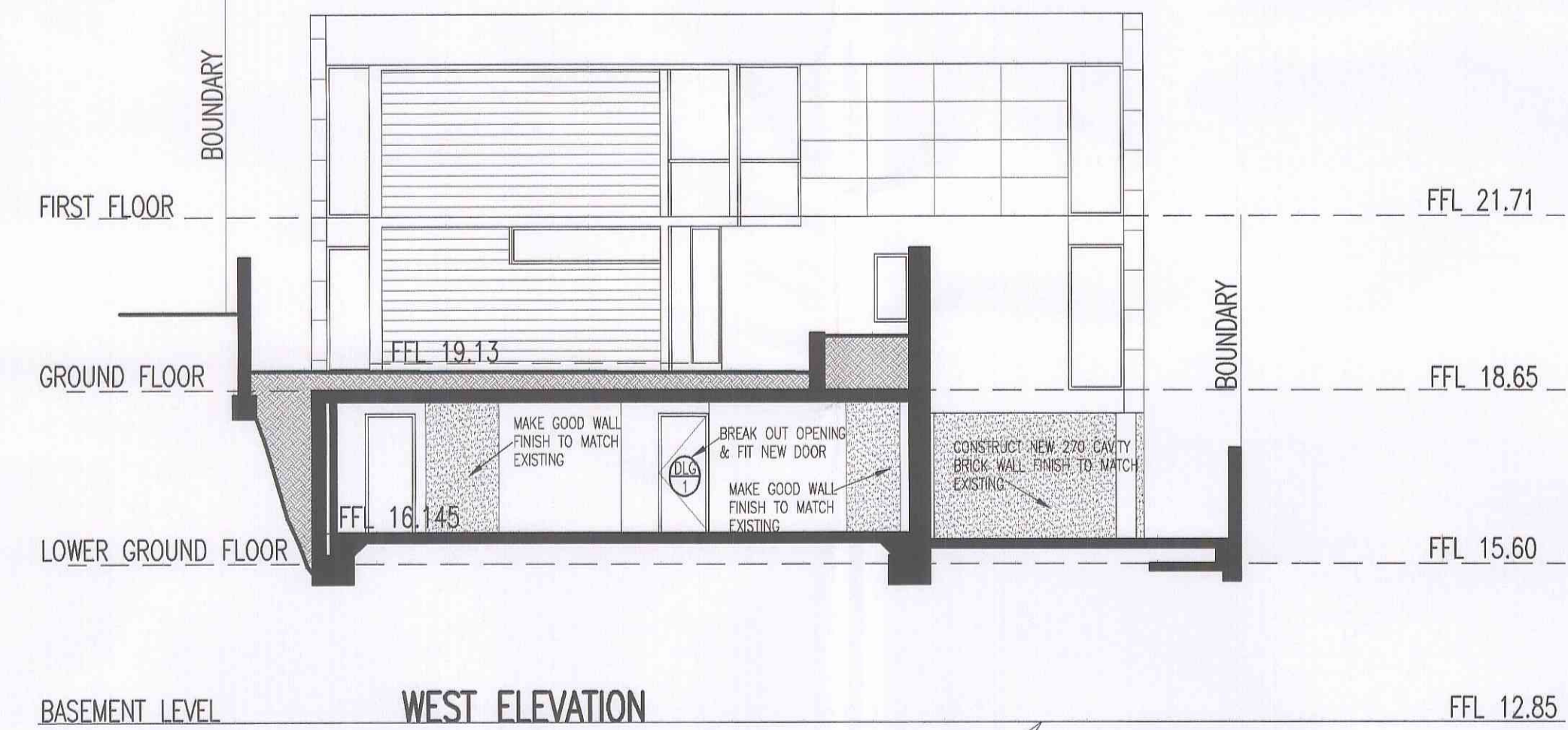
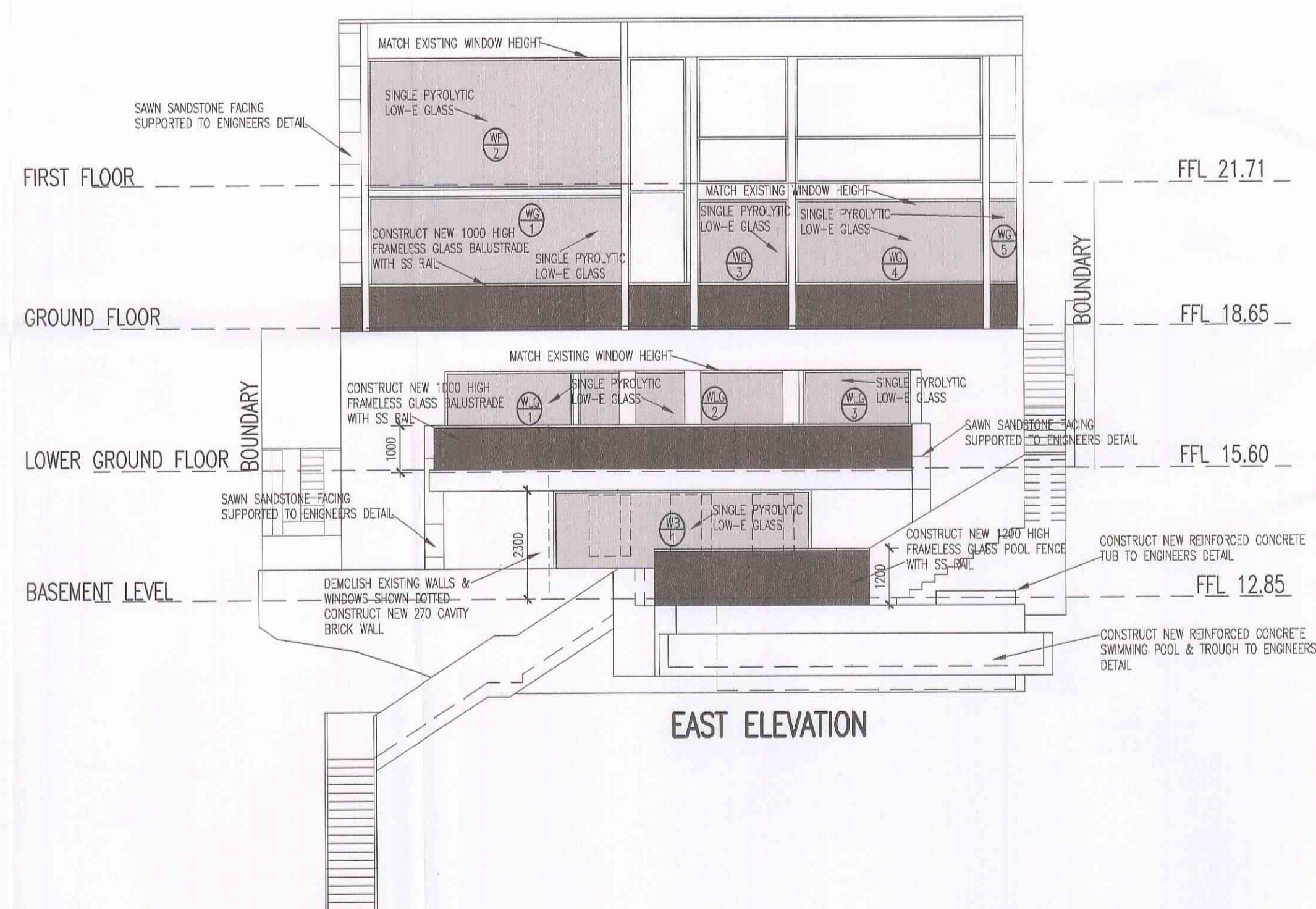
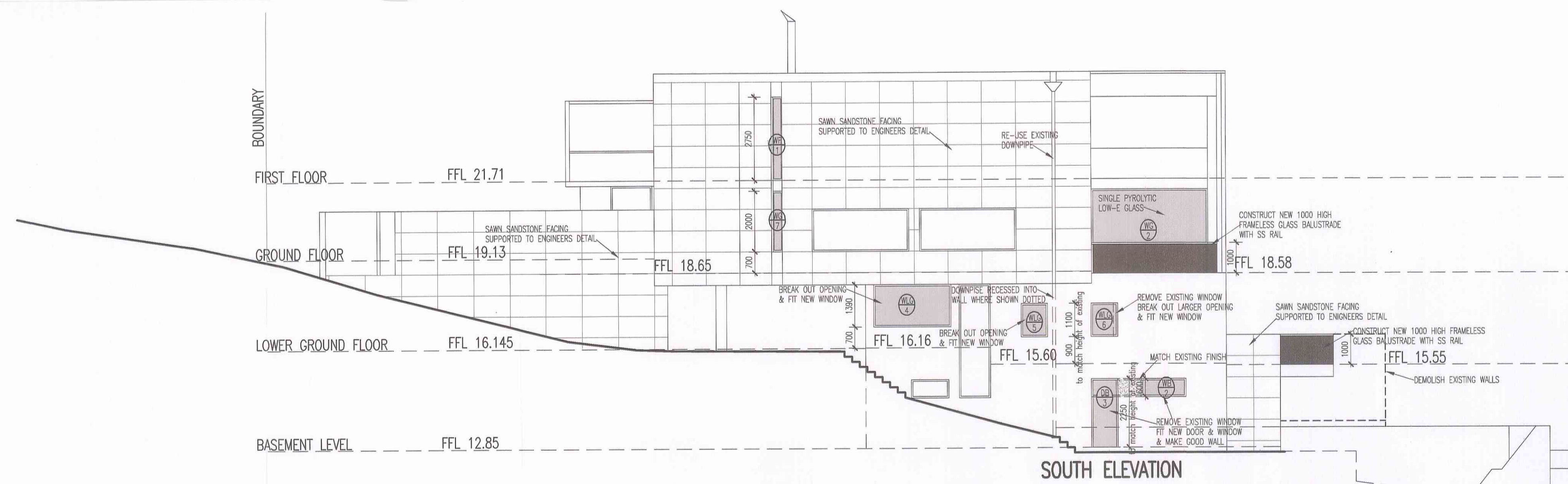
Scale 1:100 Number DA-04

Date OCT 2007 Drawn GW, DP

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Project ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D. OTTO

Title WORKING DRAWINGS-ELEVATIONS

Scale 1:100 Number DA-05

Date OCT 2007 Drawn GW, DP

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The Design Section
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ALTERATIONS & ADDITIONS TO 237A WHALE BEACH RD, WHALE BEACH

GENERAL NOTES

GENERAL

- G1 THESE STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUPER OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT BEFORE PROCEEDING WITH THE WORK.

DETAIL NOTES ON THESE DRAWINGS AND THE SPECIFICATION CLAUSES TAKE PRECEDENCE OVER THE GENERAL NOTES.

- G2 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT CURRENT STANDARDS AUSTRALIA CODES AND WITH THE BUILDING CODE OF AUSTRALIA.

- G3 ALL DIMENSIONS SHOWN ON THESE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. THESE STRUCTURAL DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.

- G4 UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES.

- G5 THE STRUCTURAL COMPONENTS DETAILED ON THESE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT STANDARDS AUSTRALIA CODE AND BUILDING CODE OF AUSTRALIA FOR THE FOLLOWING LOADINGS. REFER TO ARCHITECTURAL DRAWINGS FOR PROPOSED FLOOR USAGE.

FLOOR USAGE	LIVE LOAD (kPa)	SUPERIMPOSED DEAD LOAD (kPa)
DOMESTIC	2kPa	

- G6 THE STRUCTURE HAS BEEN DESIGNED FOR WIND ACTIONS IN ACCORDANCE WITH AS/NZS1170.2:2002. THE DESIGN WIND SPEED (Vdes, 0) ism/s

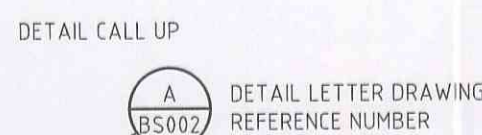
- G7 THE RELEVANT PROVISIONS OF AS1170.4 HAVE BEEN APPLIED FOR AN EARTHQUAKE DESIGN CATEGORY OF WITH SITE FACTOR, S = AND GROUND ACCELERATION, A = FOR A TYPE STRUCTURE, IMPORTANCE FACTOR =

- G8 THE METHOD OF CONSTRUCTION AND THE MAINTENANCE OF SAFETY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. IF ANY STRUCTURAL ELEMENT PRESENTS DIFFICULTY IN RESPECT OF CONSTRUCTIBILITY OR SAFETY, THE MATTER SHALL BE REFERRED TO THE SUPERINTENDENT FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.

- G9 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERLOADED. TEMPORARY BRACING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR IN ORDER TO KEEP THE BUILDING WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

- G10 PRIOR TO CONSTRUCTION OF ALL CONCRETE FLOORS AND WALLS, THE CONTRACTOR SHALL PREPARE CONTRACTORS' WORKS DRAWINGS FOR REVIEW BY THE SUPERINTENDENT COMPRISING CO-ORDINATED FLOOR PLANS AND WALL ELEVATIONS AT 1:100 SCALE SHOWING ALL PROPOSED PENETRATIONS, OPENINGS AND CAST-IN FIXINGS. PREPARATION OF THESE DRAWINGS SHALL INCLUDE THE PLANNING AND CO-ORDINATION OF ALL TRADES WHICH MAY REQUIRE PENETRATIONS, OPENINGS AND FIXINGS. THE DRAWINGS SHALL BE PREPARED IN TIME FOR USE IN THE SCHEDULING OF REINFORCEMENT AND PRESTRESSING TENDON PROFILES.

- G11 SECTION CALL UP:



CONCRETE

- C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF AS3600 INCLUDING AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

- C2 READY-MIX CONCRETE SUPPLY SHALL COMPLY WITH AS1379.

- C3 CONCRETE QUALITY

GENERAL REQUIREMENTS ARE GIVEN IN THE FOLLOWING TABLE. REFER TO THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS FOR SPECIAL CLASS CONCRETE.

ELEMENT	CONCRETE CLASS	STRENGTH (MPa)	CEMENT TYPE	MAX. AGG. SIZE (mm)	SLUMP (mm)	MAXIMUM SHRINKAGE STRAIN @ 56 DAYS (%)
PAD FOOTINGS	NORMAL	32	-	20	80	TO AS1379
STOP FOOTINGS	NORMAL	40	-	20	60	TO AS1379
BORED PIERS	SPECIAL	40	SL	20	80	450
INTERNAL SLABS ON GROUND, RAFT SLABS, FOOTING BEAMS	SPECIAL	40	SL	20	80	450
SUSPENDED SLABS, BEAMS, STAIRS	SPECIAL	40	SL	20	80	450
COLUMNS	SPECIAL	40	SL	20	80	450
WALLS	SPECIAL	40	SL	20	80	450
DRIVEWAYS, PARKING AREAS	SPECIAL	40	GP	20	60	450
FOOTPATHS, CROSSINGS, KERB AND GUTTERS	NORMAL	25	-	20	80	TO AS1379

- C4 PROJECT CONTROL TESTING SHALL BE CARRIED OUT ON ALL SPECIAL CLASS CONCRETE IN ACCORDANCE WITH AS1379, CLAUSE 6.5.

- C5 NO ADMIXTURES CONTAINING CHLORIDES SHALL BE USED.

- C6 CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY AND FIRE RESISTANCE SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE.

ELEMENT, INT OR EXT SURFACE	EXPOSURE CLASSIFICATION TO AS3600	CONCRETE GRADE	MINIMUM COVER	ADJUSTED COVER FOR FIRE RATING
		AS ABOVE		

AT EXTERNALLY EXPOSED SURFACES NO METALLIC ITEMS INCLUDING FORM BOLTS, FORM SPACERS, METALLIC BAR CHAIRS AND TIEWIRE ARE TO BE PLACED IN THE COVER ZONE.

- C7 CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.

- C8 DEPTHS OF BEAMS AND BANDS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.

- C9 FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC., REFER TO ARCHITECTS DETAILS. MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.

- C10 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE SUPERINTENDENT.

- C11 WHERE NOT SHOWN ON THE STRUCTURAL DRAWINGS CONSTRUCTION JOINTS SHALL BE LOCATED TO THE APPROVAL OF THE SUPERINTENDENT.

- C12 CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE COVER TO THE REINFORCEMENT.

- C13 SLABS AND BEAMS SHALL BE CONSTRUCTED TO BEAR ONLY ON THE BEAMS, WALLS, COLUMNS, ETC. SHOWN ON THE STRUCTURAL DRAWINGS. ALL OTHER BUILDING ELEMENTS SHALL BE KEPT 15mm MINIMUM CLEAR FROM THE SOFFITS OF THE STRUCTURE UNLESS NOTED OTHERWISE.

- C14 REINFORCEMENT SHALL BE SUPPORTED ON PURPOSE MADE CONCRETE, STEEL OR PLASTIC SUPPORTS DEPENDING ON THE EXPOSURE CONDITION TO PROVIDE THE SPECIFIED CLEAR COVER. AT EXTERNAL SURFACES EITHER ALL PLASTIC OR CONCRETE SUPPORTS SHALL BE USED.

- C15 SUPPORTS SHALL BE LOCATED AT NOT MORE THAN 60 BAR DIAMETERS EACH WAY FOR BARS AND NOT MORE THAN 750mm EACH WAY FOR MESH.

- C16 REINFORCEMENT SYMBOLS - BARS
R - ROUND
D - DEFORMED
I - INDENTED
250, 300, 500 - STRENGTH GRADE IN MPa
L - LOW DUCTILITY
N - NORMAL DUCTILITY
E - EARTHQUAKE DUCTILITY

eg. D500N16
- DEFORMED BAR, GRADE 500 MPa, NORMAL DUCTILITY, 16mm DIAMETER

REINFORCEMENT SYMBOLS - WELDED MESH

R, D, I - AS FOR BARS
500 - STRENGTH GRADE
S - SQUARE MESH
R - RECTANGULAR MESH
L, N, E - DUCTILITY AS FOR BARS

CONCRETE (cont')

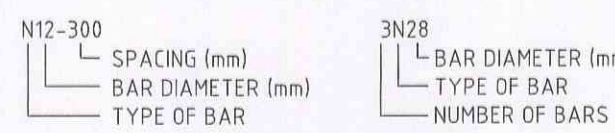
- C17 BARS DENOTED N SHALL BE TYPE D500N.

BARS DENOTED R SHALL BE TYPE R250N.

MESH DENOTED SL..... OR RL..... SHALL BE TYPE D500SL OR TYPE D500RL RESPECTIVELY.

TRENCH MESH SHALL BE TYPE D500L.

- C18 REINFORCEMENT NOTATION



THE FIGURE FOLLOWING THE MESH SYMBOLS RL..... SL..... OR L..... IS THE REFERENCE NUMBER FOR MESH IN ACCORDANCE WITH AS4671.

- C19 PULL OUT BARS OR OTHER BARS WHICH ARE SHOWN ON THE DRAWINGS TO BE RE-BENT ON SITE SHALL BE MADE FROM QUENCHED AND SELF TEMPERED STEEL. THE BARS SHALL BE POSITIONED WITH THE INITIAL BEND CLEAR OF THE CONCRETE FACE.

- C20 SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS3600-2001.

- C21 REINFORCEMENT IS REPRESENTED DIAGMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

- C22 WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 UNLESS NOTED OTHERWISE.

- C23 SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS.

- C24 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE SUPERINTENDENT. LAPS SHALL BE IN ACCORDANCE WITH AS3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.

SPLICES IN MESH: THE OUTERMOST TRANSVERSE WIRES SHALL BE OVERLAPPED BY AT LEAST THE SPACING OF THE TRANSVERSE WIRES PLUS 50mm.

- C25 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE SUPERINTENDENT.

- C26 AT JOGGLES IN BARS, THE MAXIMUM OFFSET SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETERS.

- C27 REINFORCEMENT COUPLERS, UNLESS SHOWN ON THE DRAWINGS, SHALL NOT BE USED WITHOUT APPROVAL BY THE SUPERINTENDENT.

- C28 ALL DOWELS PLACED IN DOWEL JOINTS AND IN EXPANSION JOINTS IN CONCRETE SLABS SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCES.
VERTICAL ALIGNMENT ± 2 DEGREES FROM LEVEL
HORIZONTAL ALIGNMENT ± 2 DEGREES FROM A LINE PERPENDICULAR TO THE FACE OF THE JOINT.
POSITION ± 5 mm

- C29 GIVE A MINIMUM OF 24 HOURS NOTICE FOR INSPECTION OF REINFORCEMENT BY THE SUPERINTENDENT AS REQUIRED BY THE SPECIFICATION.

- C30 THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.

- C31 CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 7 DAYS, UNLESS SPECIFIED OTHERWISE. APPROVED SPRAY ON CURING COMPOUNDS THAT COMPLY WITH AS3799 MAY BE USED WHERE FLOOR FINISHES WILL NOT BE AFFECTED. POLYTHENE SHEETING OR WET HESSIAN MAY BE USED TO RETAIN CONCRETE MOISTURE WHERE PROTECTED FROM WIND AND TRAFFIC. CURING IS TO COMMENCE IMMEDIATELY AFTER CONCRETE PLACEMENT.

- C32 CONSTRUCTION SUPPORT PROPPING IS TO BE LEFT IN PLACE WHERE NEEDED TO AVOID OVERSTRESSING THE STRUCTURE DUE TO CONSTRUCTION LOADING. BACKPROPPING IS SUBJECT TO APPROVAL BY THE SUPERINTENDENT. NO BRICKWORK OR PARTITION WALLS ARE TO BE CONSTRUCTED ON SUSPENDED LEVELS UNTIL ALL PROPPING IS REMOVED AND THE SLAB HAS DEFLECTED UNDER ITS SELF WEIGHT.

STRUCTURAL STEEL

- S1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH AS4100 AND AS1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

- S2 UNLESS NOTED OTHERWISE, ALL STEEL SHALL BE OF THE FOLLOWING GRADE IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARD.

TYPE OF STEEL	GRADE
UNIVERSAL BEAMS AND COLUMNS, PARALLEL FLANGE CHANNELS, LARGE ANGLES TO AS/NZS3679.1	250 PLUS
FLATS, SHALL, ANGLES, TAPER FLANGE BEAMS AND COLUMNS TO AS/NZS3679.1	250
WELDED SECTIONS TO AS/NZS3679.2	300
ROLL ROLLED PLATES, FLOOR PLATES AND SLABS TO AS/NZS3678	250
HOLLOW SECTIONS TO AS1163	C250
- CIRCULAR SECTIONS LESS THAN 265mm OUTSIDE DIAMETER	C250
- SECTIONS OTHER THAN THE ABOVE	C250

- S3 WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE SUPERINTENDENT IN ACCORDANCE WITH THE SPECIFICATION FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. FABRICATION SHALL NOT COMMENCE WITHOUT THE SUPERINTENDENT'S APPROVAL OF THE WORKSHOP DRAWINGS.

- S4 THE CONTRACTOR SHALL ENSURE THAT FIXINGS BETWEEN STEELWORK AND OTHER BUILDING ELEMENTS ARE COORDINATED AND INSTALLED, WHERE POSSIBLE THE FIXINGS SHALL BE SHOWN ON THE WORKSHOP FABRICATION DRAWINGS.

- S5 THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, IN ORDER TO ENSURE THAT ALL REQUIREMENTS OF THE DESIGN ARE MET.

- S6 ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP. REFER TO DRAWINGS FOR OTHER CAMBER REQUIREMENTS.

- S7 ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.

- S8 ALL STEELWORK SHALL BE SECURELY TEMPORARILY BRACED BY THE CONTRACTOR AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

- S9 BOLTING CATEGORIES ARE IDENTIFIED ON THE STRUCTURAL DRAWINGS IN THE FOLLOWING MANNER.

BOLT CATEGORY	COMMENTS:
4.6/S	COMMERCIAL BOLTS OF GRADE 4.6 TO AS1111 SNUG TIGHTENED
8.8/S	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 SNUG TIGHTENED
8.8/TB	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A BEARING TYPE JOINT
8.8/TF	HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A FRICTION TYPE JOINT WITH FAYING SURFACES LEFT UNCOATED U.N.O.

- S10 UNLESS NOTED OTHERWISE ALL BOLTS SHALL BE M20 CATEGORY 8.8/S. NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS. ALL BOLTS AND WASHERS SHALL BE GALVANISED. ALL HOLES SHALL BE 2MM LARGER THAN THE BOLT DIAMETER UNLESS NOTED OTHERWISE.

- S11 WELDING:
ALL WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS1554.1. ELECTRODES SHALL BE EITHER TO AS1553, AS1858, AS2203 OR AS2717, AS APPROPRIATE.

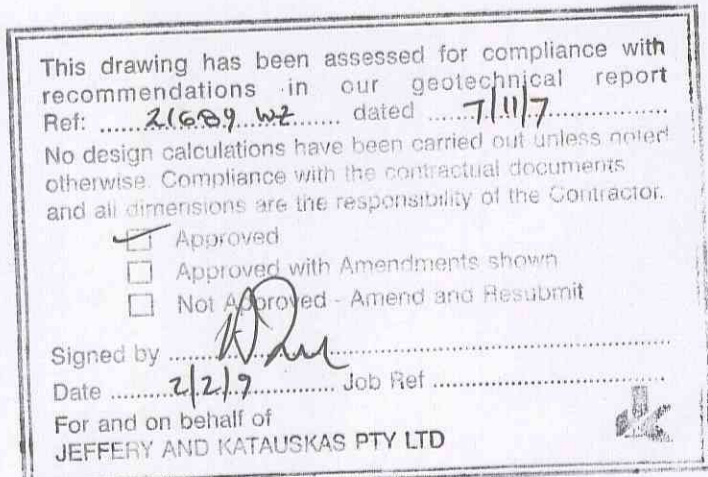
UNLESS NOTED OTHERWISE, ALL FILLET WELDS SHALL BE 6mm. CONTINUOUS CATEGORY SP USING E48XX ELECTRODES OR EQUIVALENT. ALL BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS. CATEGORY SP TO AS1554.1 U.N.O.

THE EXTENT OF NON-DESTRUCTIVE WELD EXAMINATION SHALL BE AS NOTED BELOW UNLESS OTHERWISE NOTED.

RADIOGRAPHIC OR ULTRASONIC EXAMINATION SHALL BE TO AS1554.1, AS2177.1 AND AS2207 AS APPROPRIATE.

TYPE OF WELD AND CATEGORY	EXAMINATION METHOD	EXTENT (% OF TOTAL LENGTH OF WELD TYPE)
FILLET WELDS, GP - SP	VISUAL INSPECTION	100
BUTT WELDS, GP	VISUAL INSPECTION	100
BUTT WELDS, SP	VISUAL INSPECTION	100
BUTT WELDS, SP	ULTRASONIC TESTING	10

- S12 GROUT ALL STEEL BASES BY DRY PACKING USING GROUT WHICH IS NON-SHRINK AND HAS A MINIMUM COMPRESSIVE STRENGTH AT 7 DAYS OF 40 MPa.



STRUCTURAL STEEL (cont')

- S19 PROTECTIVE COATING:
STRUCTURAL STEELWORK NOT ENCASED IN CONCRETE SHALL HAVE THE FOLLOWING PROTECTIVE COATING UNLESS STATED OTHERWISE IN THE SPECIFICATION.

INTERNAL MEMBERS - ALL SURFACES
PRIMER: HIGH BUILD ZINC PHOSPHATE POWER TOOL
SURFACE PREPARATION: CLEAN TO AS1627.2 OR ABRASIVE BLAST CLEAN TO AS1627.1 CLASS 2
DRY FILM THICKNESS: MINIMUM 75 MICRONS
EXTERNAL MEMBERS: STAINLESS STEEL GRADE 316

- S20 STEELWORK INTENDED TO BE CONCRETE ENCASED SHALL BE UNPAINTED. ENCASED CONCRETE SHALL BE GRADE M25 UNLESS NOTED OTHERWISE. PROVIDING A COVER ADEQUATE TO SUIT FIRE RATING OR EXPOSURE CONDITIONS. CONCRETE ENCASEMENT SHALL BE CENTRALLY REINFORCED WITH 5mm WIRE TO AS4617 OR 6mm STRUCTURAL GRADE BARS TO AS4617 AT 150mm PITCH.

MASONRY

- M1 MATERIALS INCLUDING MORTAR, CONCRETE, GROUT SHALL COMPLY WITH SECTION 10 OF AS3700. MASONRY UNITS SHALL COMPLY WITH AS4455. WALL TIES SHALL COMPLY WITH AS2699.

- M2 MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 11 OF AS3700.

- M3 STRENGTHS OF BRICKS, BLOCKS, AND TYPE OF MORTAR SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE.

TYPE OF MASONRY	EXPOSURE CONDITION REFER TABLE 5.1 AS3700	MATERIAL	MIN UNCONF. COMPRESSIVE STRENGTH (f _{yk} MPa)	MORTAR CLASSIFICATION TO TABLE 10.1
REINFORCED BLOCKWORK	ALL	CONCRETE	15	M4
LOADBEARING UNREINFORCED BLOCKWORK	SEVERE	CONCRETE	12	M4
LOADBEARING SOLID BLOCKWORK, FULLY BEDDED	NOT SEVERE	CONCRETE	12	M3
LOADBEARING SOLID BLOCKWORK, FULLY BEDDED	SEVERE	CONCRETE	10	M4
NON LOADBEARING BLOCKWORK	NOT SEVERE	CONCRETE	10	M3
NON LOADBEARING BLOCKWORK	SEVERE	CONCRETE	10	M3
NON LOADBEARING BLOCKWORK	NOT SEVERE	CONCRETE	10	M3

- M4 MORTAR SHALL COMPLY WITH TABLES 5.1 AND 10.2 OF AS3700. CEMENT SHALL BE TYPE GP.
M5 MORTAR PROPORTIONS: C1: L1: S6 OR C1: S5 + WATER THICKENER
M6 MORTAR PROPORTIONS: C1: L0.25: S3 OR C1: S4 + WATER THICKENER
THE WATER THICKENER SHALL BE DYNEX OR APPROVED EQUIVALENT ADDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

- M5 ALL MASONRY WALLS AND PIERS SUPPORTING SLABS AND BEAMS SHALL HAVE A PRE-GREASED GALVANISED STEEL SLIP JOINT BETWEEN THE CONCRETE SOFFIT AND THE TOP OF THE MASONRY ELEMENT.

- M6 NON LOAD BEARING WALLS SHALL BE SEPARATED FROM CONCRETE ABOVE BY 15mm THICK CLOSED CELL POLYETHYLENE STOP AND TIED TO THE SLAB USING APPROVED MFA ANCHORS UNLESS NOTED OTHERWISE.

- M7 THE TOP COURSE IN HOLLOW BLOCK WALLS SHALL BE LAID IN SOLID BLOCK UNLESS NOTED OTHERWISE ON THE DRAWINGS.

- M8 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL CONTROL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE FLOORS.

- M9 NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE SUPERINTENDENT.

- M10 ALL BONDING, TYING AND FIXING OF MASONRY SHALL COMPLY WITH CLAUSE 4.11 OF AS3700.

- M11 DO NOT CONSTRUCT MASONRY WALLS ON SUSPENDED CONCRETE SLABS UNTIL SLAB HAS BEEN STRIPPED AND DEPROPPED.

- M12 PROVIDE VERTICAL CONTROL JOINTS AT 10m MAX CENTRES, AND 5m MAXIMUM FROM CORNERS IN ALL MASONRY WALLS, UNLESS SHOWN OTHERWISE ON THE STRUCTURAL DRAWINGS. SEAL THE JOINTS WITH AN APPROVED SEALANT.

- M13 REINFORCED CONCRETE BLOCKWORK SHALL COMPLY WITH THE FOLLOWING:

- * PROVIDE CLEANOUT HOLES AT BASE OF ALL WALLS AND ROD CORE HOLES TO REMOVE PROTRUDING MORTAR FINS.
- * CORE FILLING GROUT TO HAVE A CHARACTERISTIC STRENGTH OF 20 MPa, 10mm MAXIMUM AGGREGATE, 230mm SLUMP (± 30mm) WITH A MINIMUM PORTLAND CEMENT CONTENT OF 300kg/m³.
- * COMPACT THE GROUT WITH A VIBRATOR.
- * PROVIDE 65mm COVER TO REINFORCING BARS FROM THE OUTSIDE FACE OF THE BLOCKWORK TO ALLOW ADEQUATE GROUT COVER.

- M14 MASONRY WALLS SHALL BE TIED TO ABUTTING CONCRETE AND STEEL COLUMNS WITH 38 X 16 X 300 LONG CRIMPED GALVANISED STEEL STRAPS AT MAXIMUM 350 CENTRES VERTICALLY, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS. FIX STRAPS TO COLUMNS WITH 2/ NO 10 SELF DRILLING STEEL FASTENERS INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALTERNATIVE FIXINGS MAY BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL.

- M15 MASONRY FLEXIBLE OR SLIDING ANCHORS SHALL BE TYPE MFA (FROM BRUNSWICK SALES) OR AN APPROVED EQUIVALENT.

- M16 WHERE COLUMN TIES OR OTHER ANCHORS CONNECT TO BED JOINTS IN HOLLOW BLOCK WALLS, USE SOLID BLOCKS OR CORE FILLED BLOCKS IN THE EMBEDMENT AREA.

DRAWING INDEX

DRG NO	TITLE
BS000	GENERAL NOTES & DRAWING LIST
BS010	BASEMENT PLAN & DETAILS
BS020	LOWER GROUND PLAN & DETAILS
BS030	GROUND FLOOR PLAN & DETAILS
BS040	FIRST FLOOR PLAN & DETAILS
BS050	ROOF PLAN & DETAILS

03	19.12.08	ISSUED FOR CONSTRUCTION CERTIFICATE	AA	
02	17.10.08	ISSUED FOR TENDER	GSW	
01	12.09.08	ISSUED FOR REVIEW	ARB	
Rev	Date	Revision Details	Drn	Ver. App.

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MR. D. OTTO

**ALTERATIONS AND ADDITIONS TO
237A WHALE BEACH RD.
WHALE BEACH**

Drawing Title:

GENERAL NOTES & DRAWING LIST

Drawn	Signed	Date	Verified	Signed	Date
JV			JRD		
Designed	Signed	Date	Approved	Signed	Date
RA	21/17	02/02/09	KK		
Project No.	23892	Scale	Sheet Size		

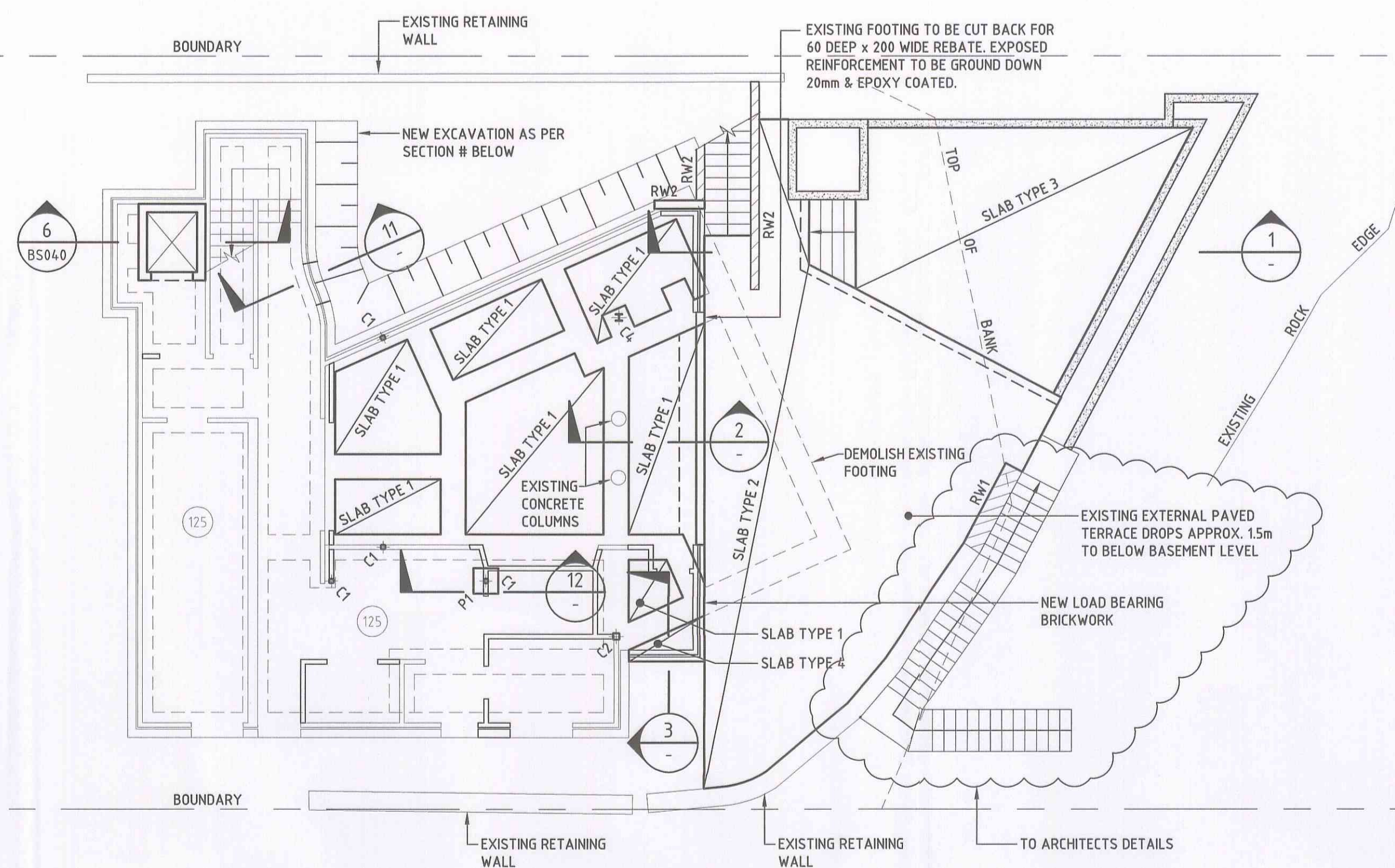
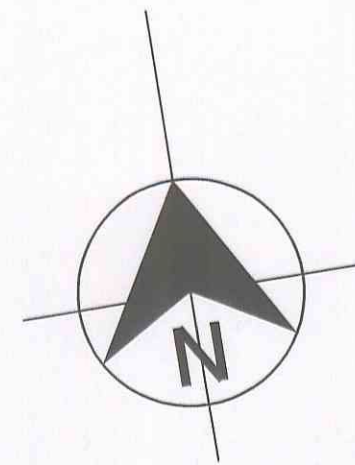
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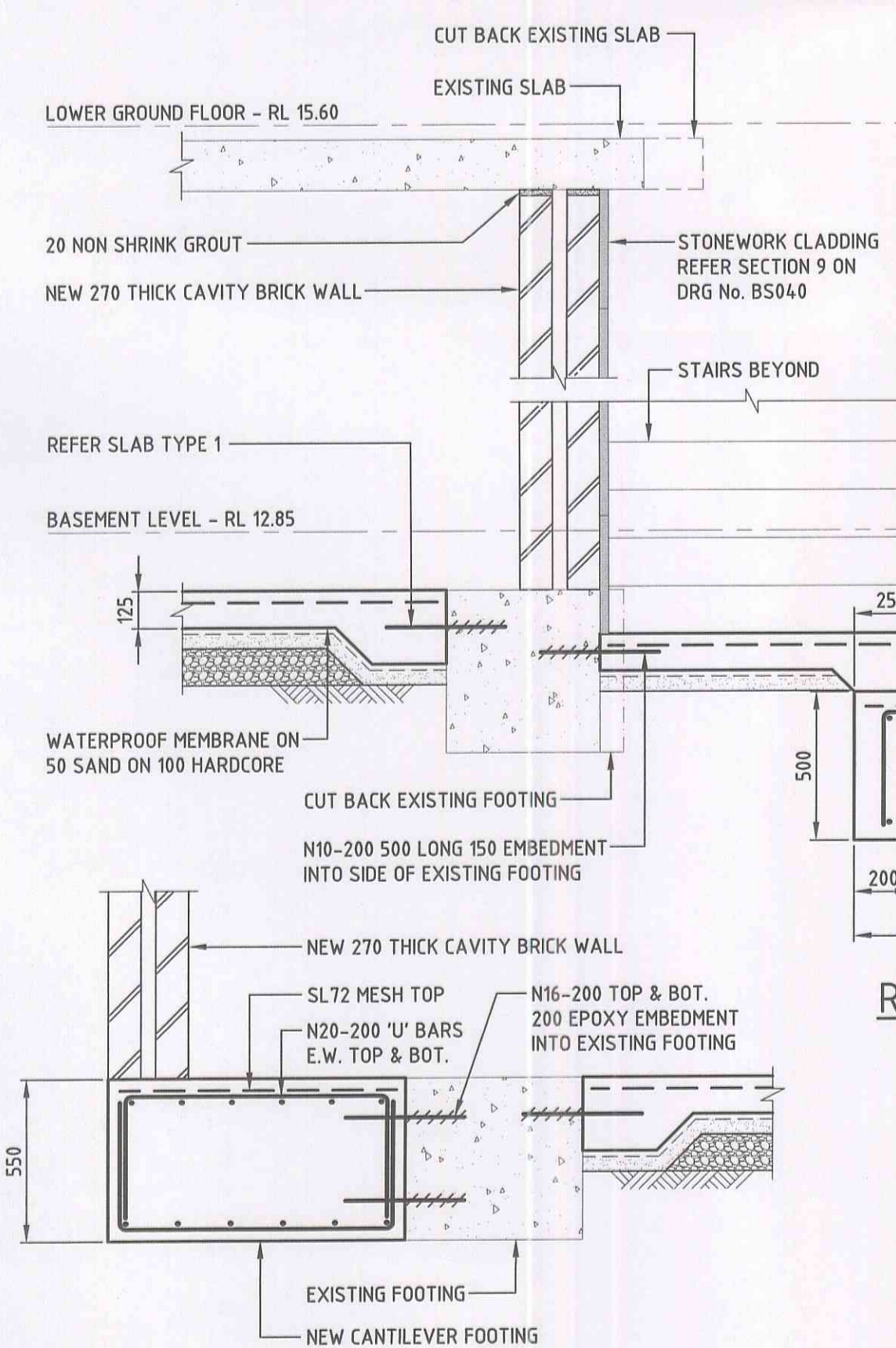
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NOT FOR CONSTRUCTION



STEELWORK MEMBER SCHEDULE		
MARK	SIZE	REMARKS
C1	100 x 5.0 SHS	10 BASE @ 2M16-8.8/5 CHEMSETS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C2	150 x 9.0 SHS	10 BASE @ 3M16-8.8/5 CHEMSET ANCHORS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C3	150UC30	STAINLESS STEEL GRADE 316
C4	150UC30	-
B1	310UC97	12 @ CLEAT 6M20/8.8S BOLTS TO C2 WHERE APPLICABLE
B2	150UB18	-
B3	FABRICATED 410UB54	STAINLESS STEEL GRADE 316
B4	180 PFC	-
FTB1	TO MATCH EXIST.	STAINLESS STEEL TRUSS GRADE 316
TB1	TO MATCH EXIST.	TIMBER BEAM WITH STAINLESS STEEL BOLTS, PLATES & FITMENTS
EXC1	150UC30	EXISTING COLUMN
EXB1	200x100x5.0 RHS	EXISTING BEAM
EXB2	250 PFC	EXISTING BEAM

BASEMENT FLOOR PLAN - 1:100

SLAB TYPE 1: 125 THICK, SL72 MESH, N10-200 DOWELS 500 LONG 150 EMBEDMENT INTO SIDE OF EXISTING FOOTING, LAP & REINSTATE MEMBRANE, 30 TOP COVER
SLAB TYPE 2: 100 THICK, SL82 TOP MESH, SAWCUT INTO PANELS, 50 TOP COVER
SLAB TYPE 3: THICKNESS & DETAILS TO BE CONFIRMED (ASSUME 200 THICK, N16-200 E.W.)
SLAB TYPE 4: 550 NOM. THICK WITH DOWELS INTO SIDE OF EXISTING FOOTING. REFER SECTION 3.

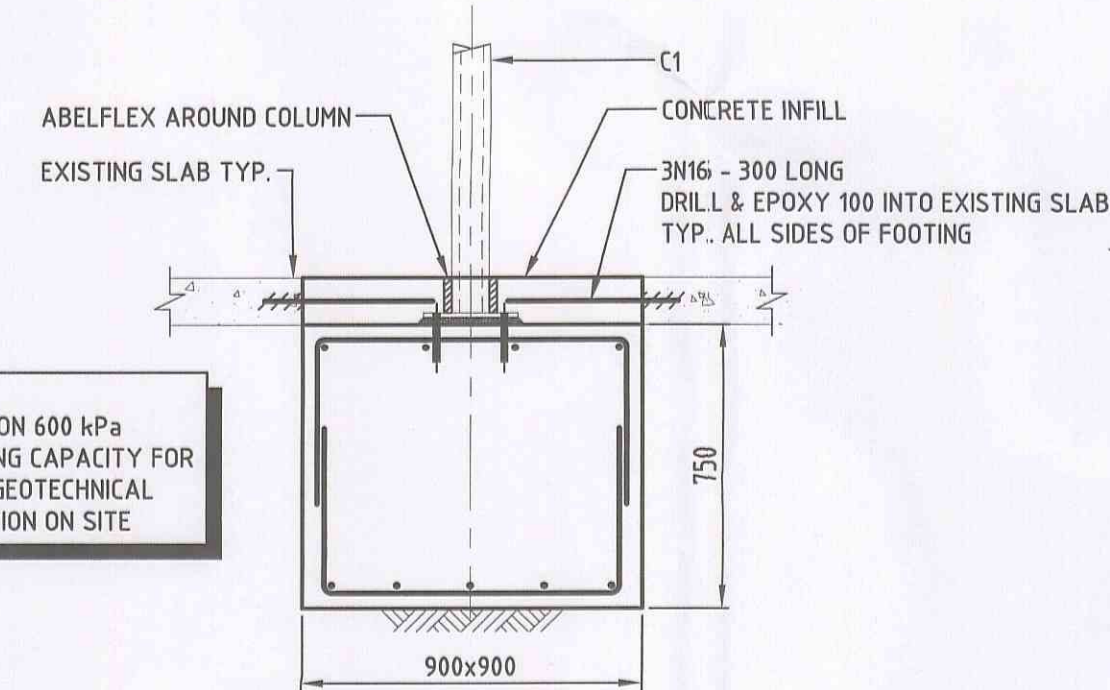


RW2 DETAIL

SECTION 1

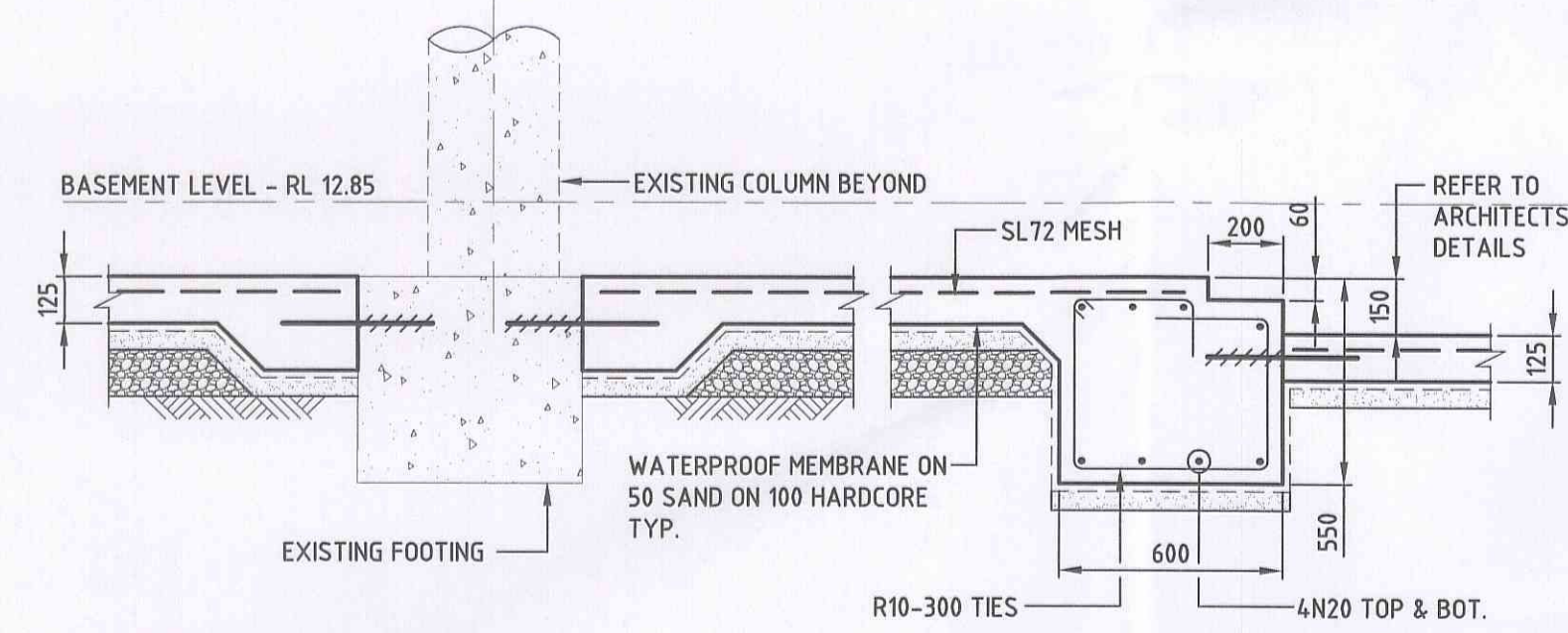
SECTION 3

NOTE:
P1 TO BE FOUNDED ON 600 kPa ALLOWABLE BEARING CAPACITY FOR ROCK SUBJECT TO GEOTECHNICAL ENGINEERS INSPECTION ON SITE



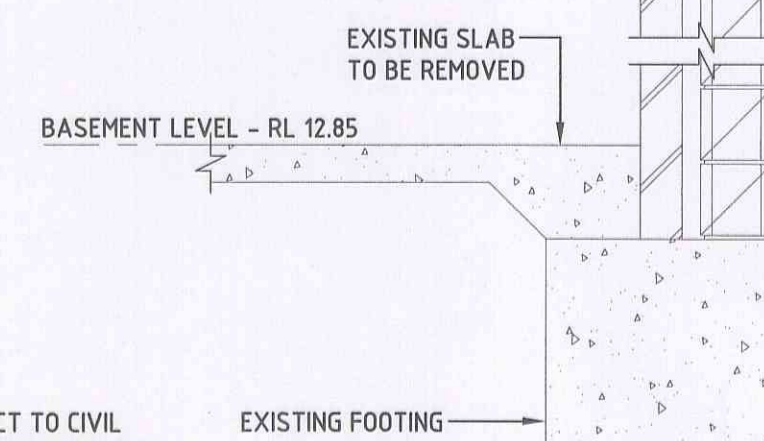
P1 DETAIL

SECTION 12



SECTION 2

PROVIDE LOCAL 1.0m wide x 1.5m HIGH OPENING DURING CONSTRUCTION IN EXISTING BASEMENT RETAINING WALL HARD TO UNDERSIDE OF FLOOR ABOVE & WITH COMPLIANCE TO OH&S REGULATIONS. EXCAVATE BEHIND RETAINING WALL. ONCE A 1m STRIP HAS BEEN COMPLETED A GEOTECHNICAL ENGINEER IS TO APPROVE SUITABLE BATTERING AND/OR ROCK STABILISATION TO EXPOSED FACE PRIOR TO FURTHER EXCAVATION. THIS WORK REQUIRES CONFINED SPACES TRAINING FOR ALL PERSONNEL



SECTION 11

This drawing has been assessed for compliance with recommendations in our geotechnical report Ref: 2169WZ dated 2/11/17. No design calculations have been carried out unless noted otherwise. Compliance with the contractual documents and all dimensions are the responsibility of the Contractor.

Approved: [Signature] Date: 2/11/17
Noted: [Signature] Date: 2/11/17
For and on behalf of JEFFERY AND KATAUSKAS PTY LTD

TENDER DOCUMENT
NOT FOR CONSTRUCTION

LEGEND

- 300 INDICATES SLAB THICKNESS.
- INDICATES STEP IN SLAB.
- INDICATES SETDOWN IN SLAB.
- INDICATES PENETRATION IN SLAB.
- INDICATES LOADBEARING CONCRETE WALL UNDER.
- INDICATES LOADBEARING CONCRETE WALL OVER ONLY.
- INDICATES LOADBEARING CONCRETE WALL UNDER & OVER.
- INDICATES NEW LOADBEARING BRICKWORK WALL UNDER.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL UNDER.
- INDICATES NEW LOADBEARING BRICKWORK WALL OVER ONLY.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL OVER ONLY.
- INDICATES NEW LOADBEARING BRICKWORK WALL UNDER & OVER.
- INDICATES EXISTING LOADBEARING BRICKWORK WALL UNDER & OVER.
- INDICATES LOADBEARING BLOCKWORK WALL UNDER.
- INDICATES LOADBEARING BLOCKWORK WALL OVER ONLY.
- INDICATES LOADBEARING BLOCKWORK WALL UNDER & OVER.
- INDICATES WALL UNDER TO BE DEMOLISHED.
- INDICATES COLUMN UNDER.
- INDICATES COLUMN OVER ONLY.
- INDICATES COLUMN UNDER & OVER.

Rev	Date	Revision Details	Drn	Ver.	App.
04	18.12.08	ISSUED FOR CONSTRUCTION CERTIFICATE	AA		
03	17.10.08	ISSUED FOR TENDER	GSW		
02	12.09.08	ISSUED FOR REVIEW	ARB		
01	15.10.07	ISSUED FOR INFORMATION	JV		

Connell Wagner

Connell Wagner Pty Ltd ABN 54 005 139 873 Telephone: +61 2 9465 5599
116 Military Road (PO Box 538) Neutral Bay Facsimile: +61 2 9465 5598
New South Wales 2089 Australia Email: cwsyd@connwag.com

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2. using the drawings or other data for any purpose not agreed to in writing by Connell Wagner.

Client:

MR. D. OTTO

Project:

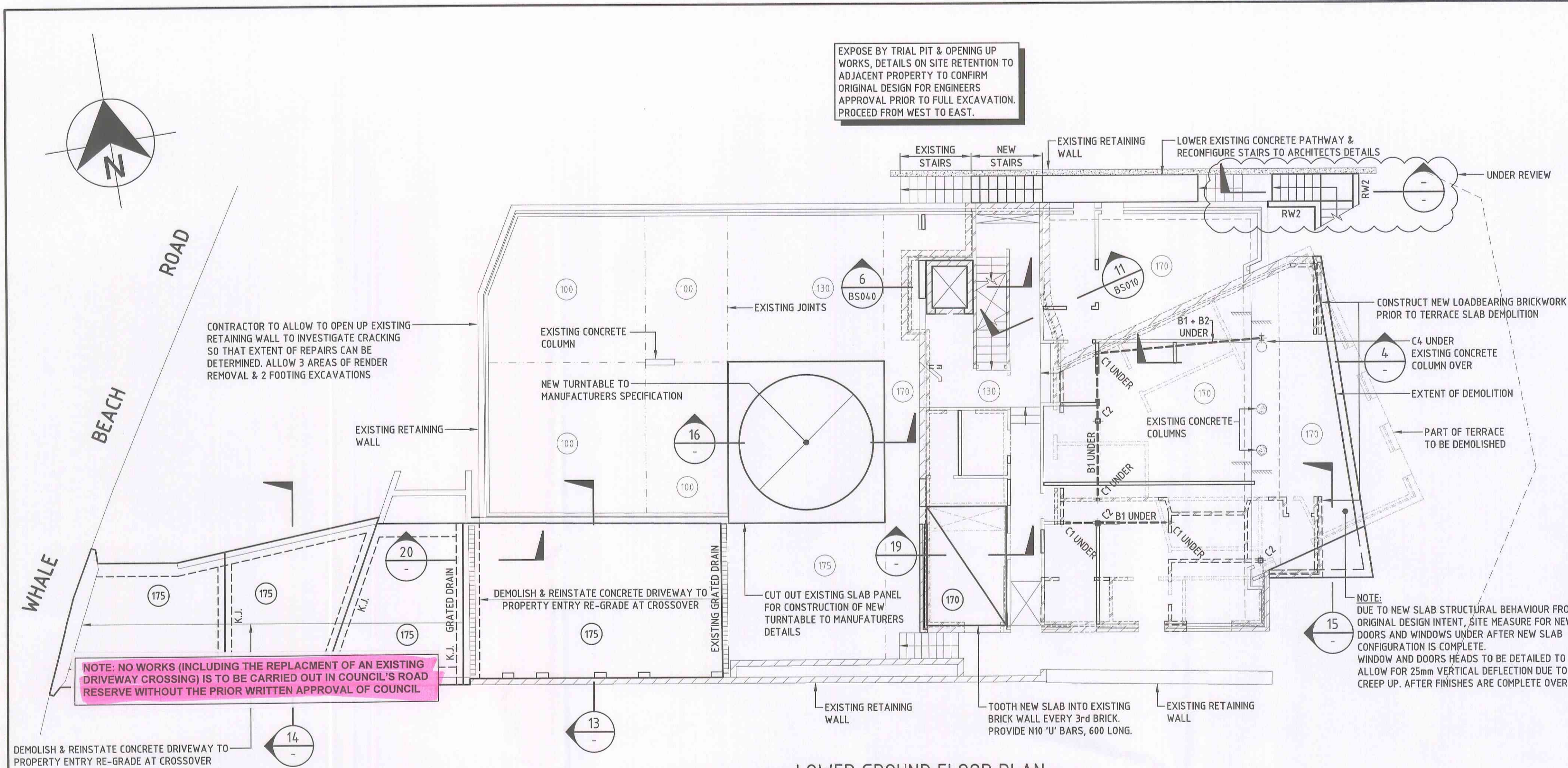
ALTERATIONS AND ADDITIONS
237A WHALE BEACH RD.
WHALE BEACH

Drawing Title:

BASEMENT PLAN
& DETAILS

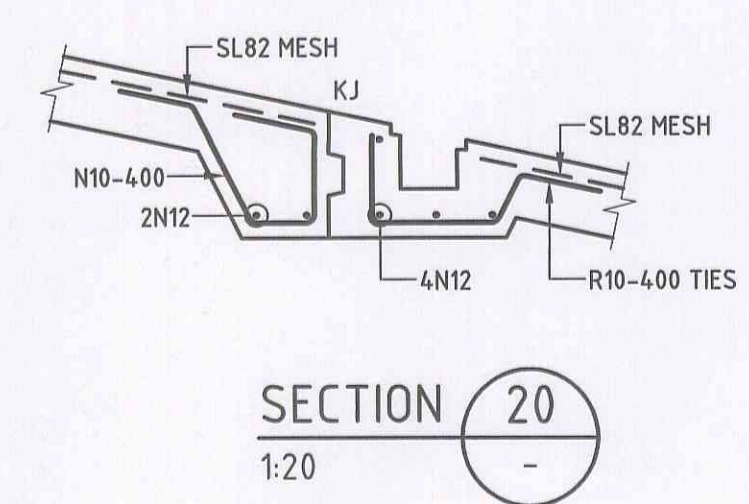
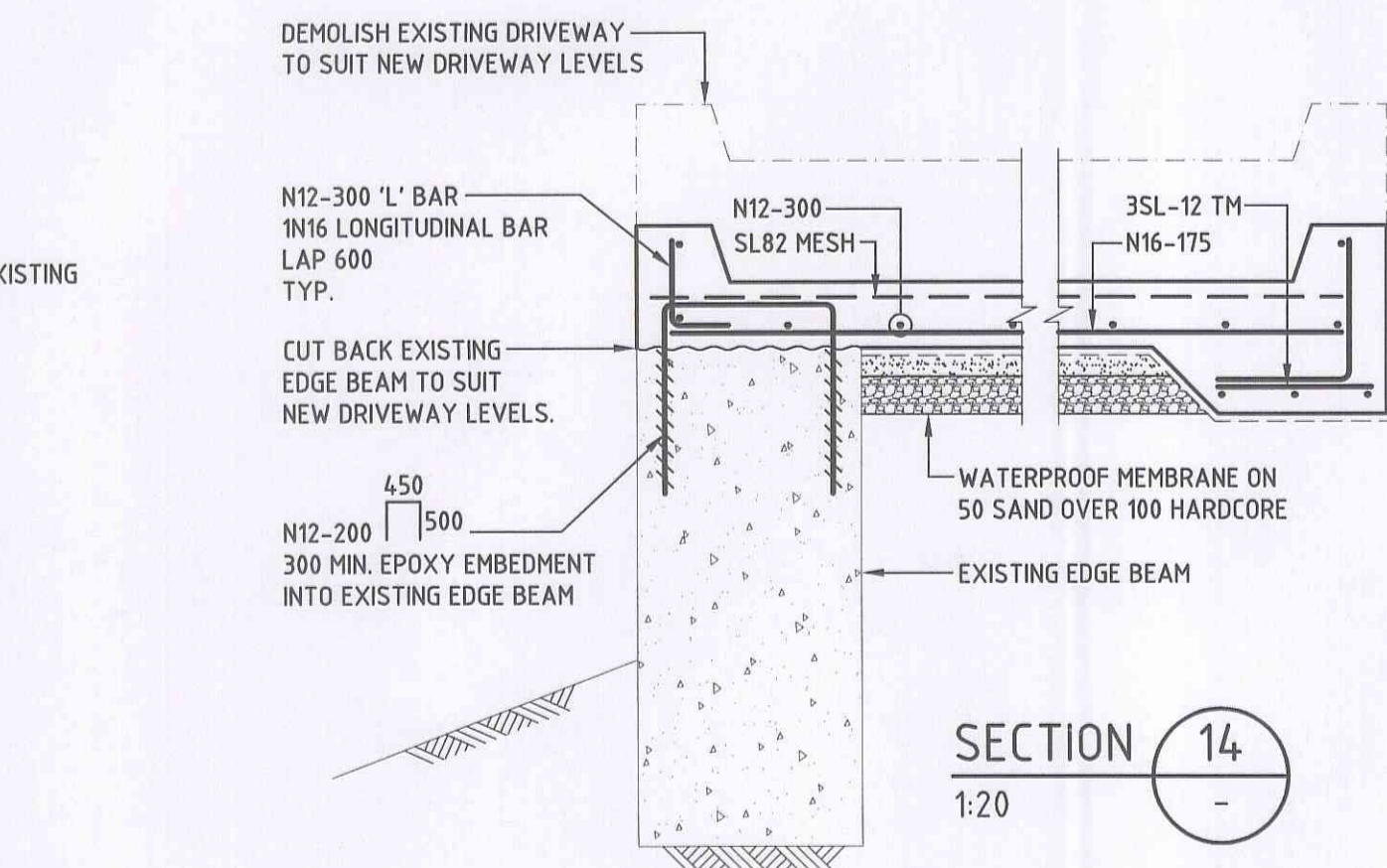
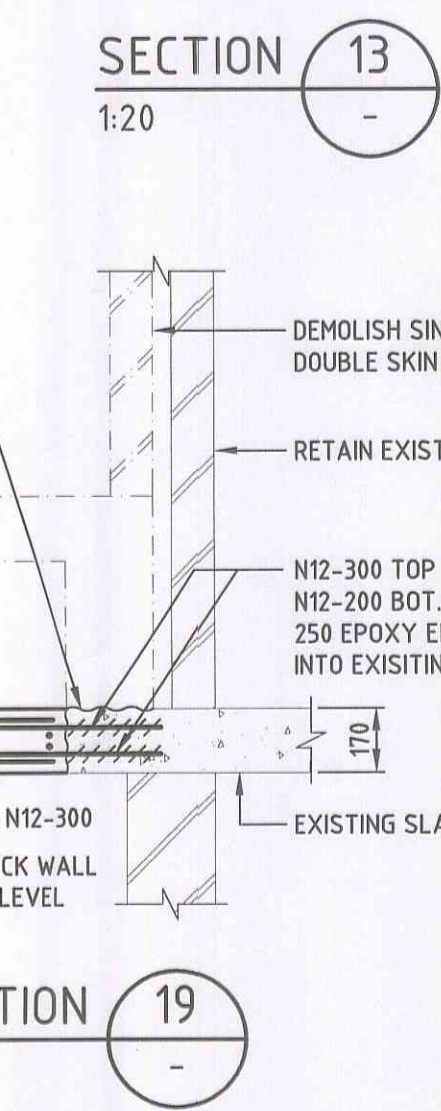
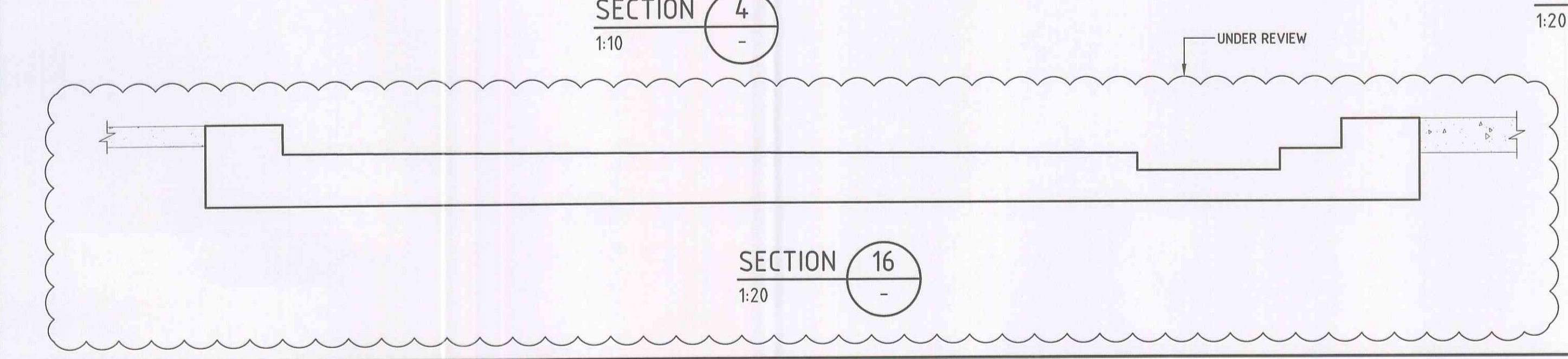
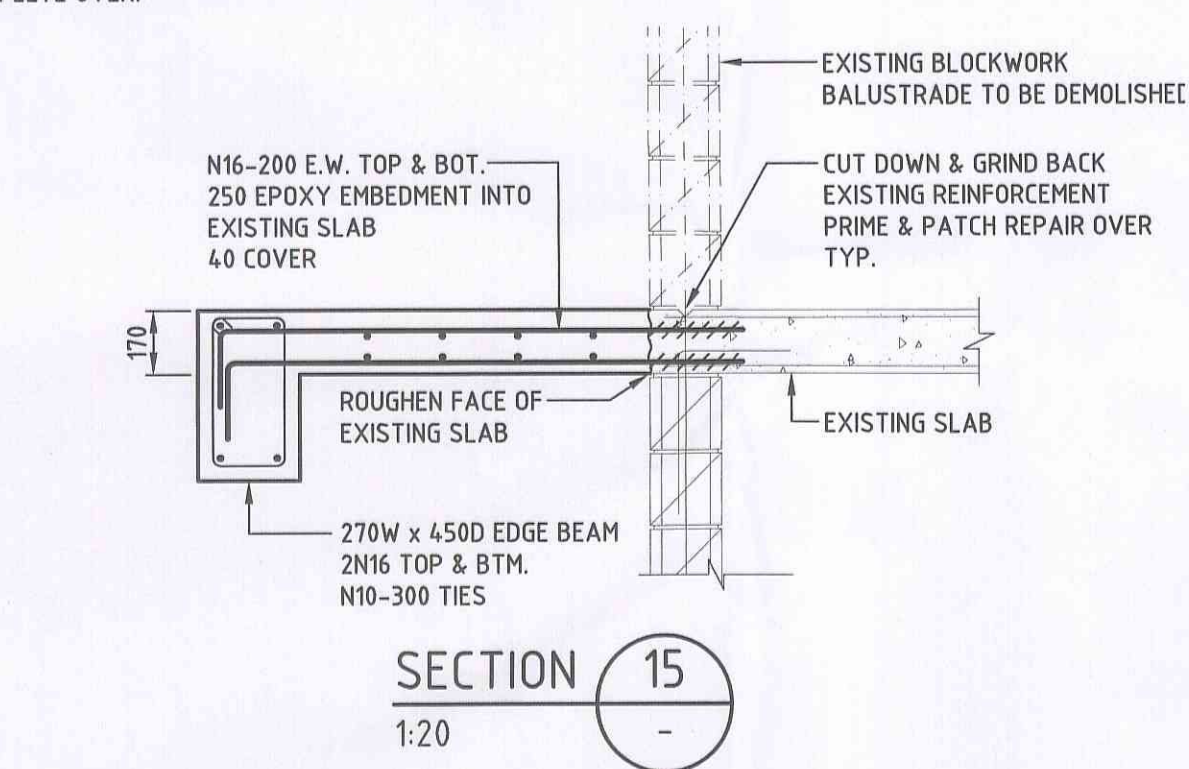
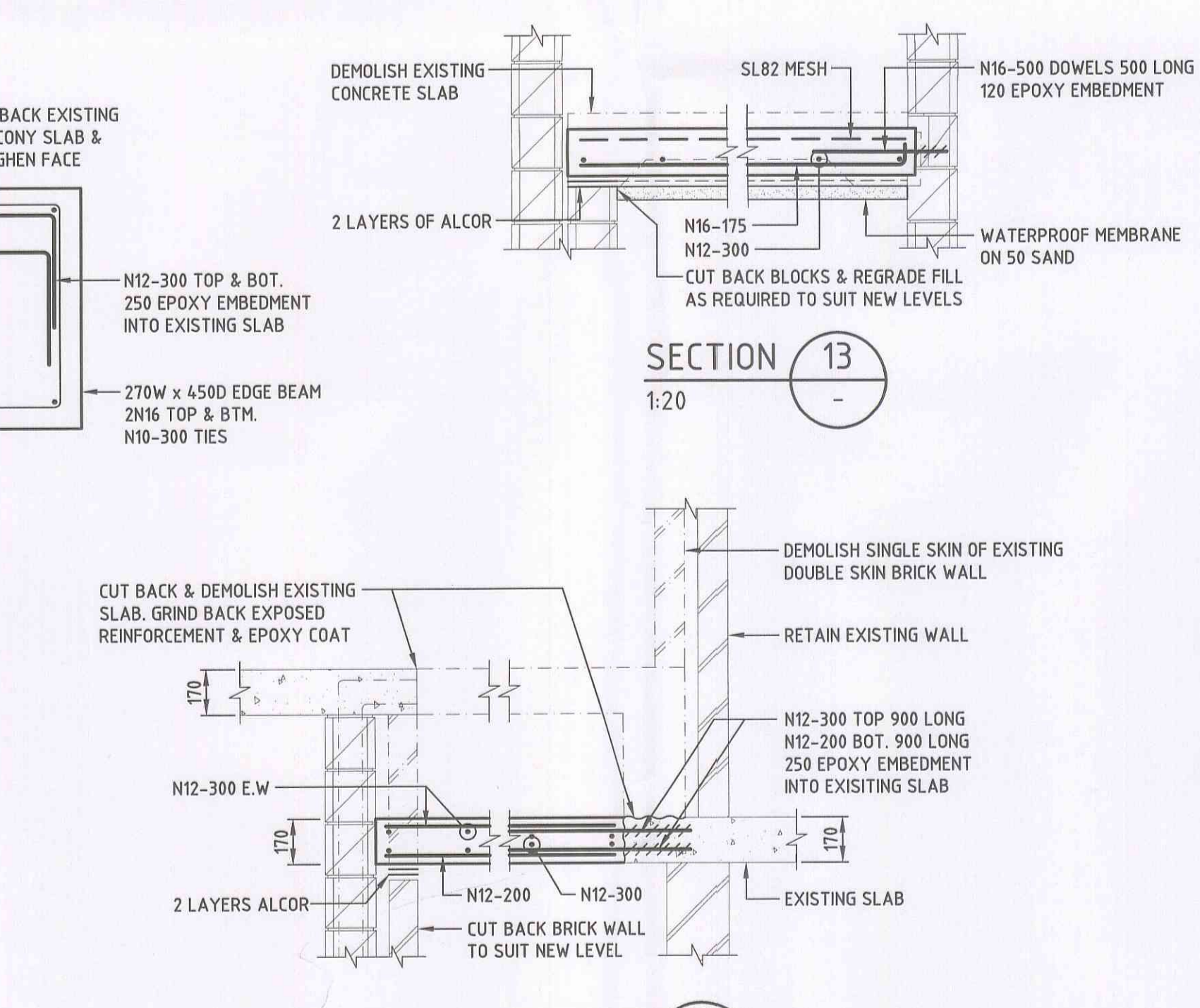
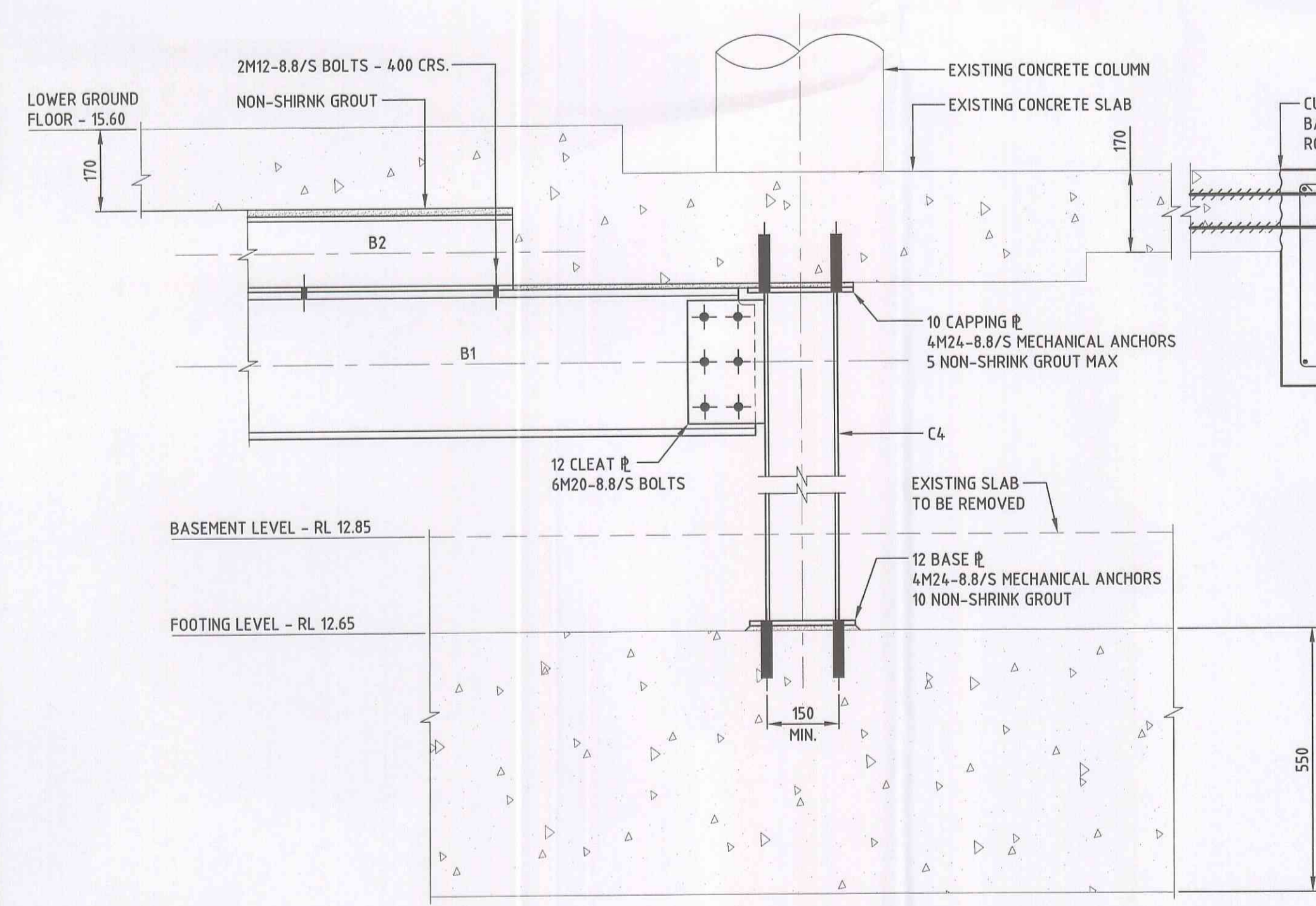
Drawn	Signed	Date	Verified	Signed	Date
JV			JRD		
Designed	Signed	Date	Approved	Signed	Date
RA	[Signature]	2/11/17	KK		
Project No.			23892		
Drawing No.			BS010		
			Revision:		
			04		

Scale: 1:100, 1:20 Sheet Size: A1



STEELWORK MEMBER SCHEDULE		
MARK	SIZE	REMARKS
C1	100 x 5.0 SHS	10 BASE Φ 2M16-8.8/S CHEMSETS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C2	150 x 9.0 SHS	10 BASE Φ 3M16-8.8/S CHEMSET ANCHORS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C3	150UC30	STAINLESS STEEL GRADE 316
C4	150UC30	-
B1	310UC97	12 Φ CLEAT 6M20/8.8S BOLTS TO C2 WHERE APPLICABLE
B2	150UB18	-
B3	FABRICATED 410UB54	STAINLESS STEEL GRADE 316
B4	180 PFC	-
FTB1	TO MATCH EXIST.	STAINLESS STEEL TRUSS GRADE 316
TB1	TO MATCH EXIST.	TIMBER BEAM WITH STAINLESS STEEL BOLTS, PLATES & FITMENTS
EXC1	150UC30	EXISTING COLUMN
EXB1	200x100x5.0 RHS	EXISTING BEAM
EXB2	250 PFC	EXISTING BEAM

LEGEND	
	INDICATES SLAB THICKNESS.
	INDICATES STEP IN SLAB.
	INDICATES SETDOWN IN SLAB.
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	INDICATES LOADBEARING BLOCKWORK WALL UNDER.
	INDICATES LOADBEARING BLOCKWORK WALL OVER ONLY.
	INDICATES LOADBEARING BLOCKWORK WALL UNDER & OVER.
	INDICATES WALL UNDER TO BE DEMOLISHED.
	INDICATES COLUMN UNDER.
	INDICATES COLUMN OVER ONLY.
	INDICATES COLUMN UNDER & OVER.



This drawing has been assessed for compliance with recommendations in our geotechnical report Ref: 21692-10-1, dated 11/11/17. No design calculations have been carried out unless noted otherwise. Compliance with the contractual documents and all dimensions are the responsibility of the Contractor.

Approved: Approved with Amendments shown
Not Approved - Amend and Resubmit

Signed by: Job Ref: 21692-10-1
Date: 2/2/19 For and on behalf of JEFFERY AND KATAUSKAS PTY LTD

04	19.12.08	ISSUED FOR CONSTRUCTION CERTIFICATE	AA		
03	17.10.08	ISSUED FOR TENDER	GSW		
02	12.09.08	ISSUED FOR REVIEW	ARB		
01	15.10.07	ISSUED FOR INFORMATION	JV		
Rev	Date	Revision Details	Drn	Ver.	App.

Connell Wagner

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Client:

MR. D. OTTO

Project:

**ALTERATIONS AND ADDITIONS
237A WHALE BEACH RD.
WHALE BEACH**

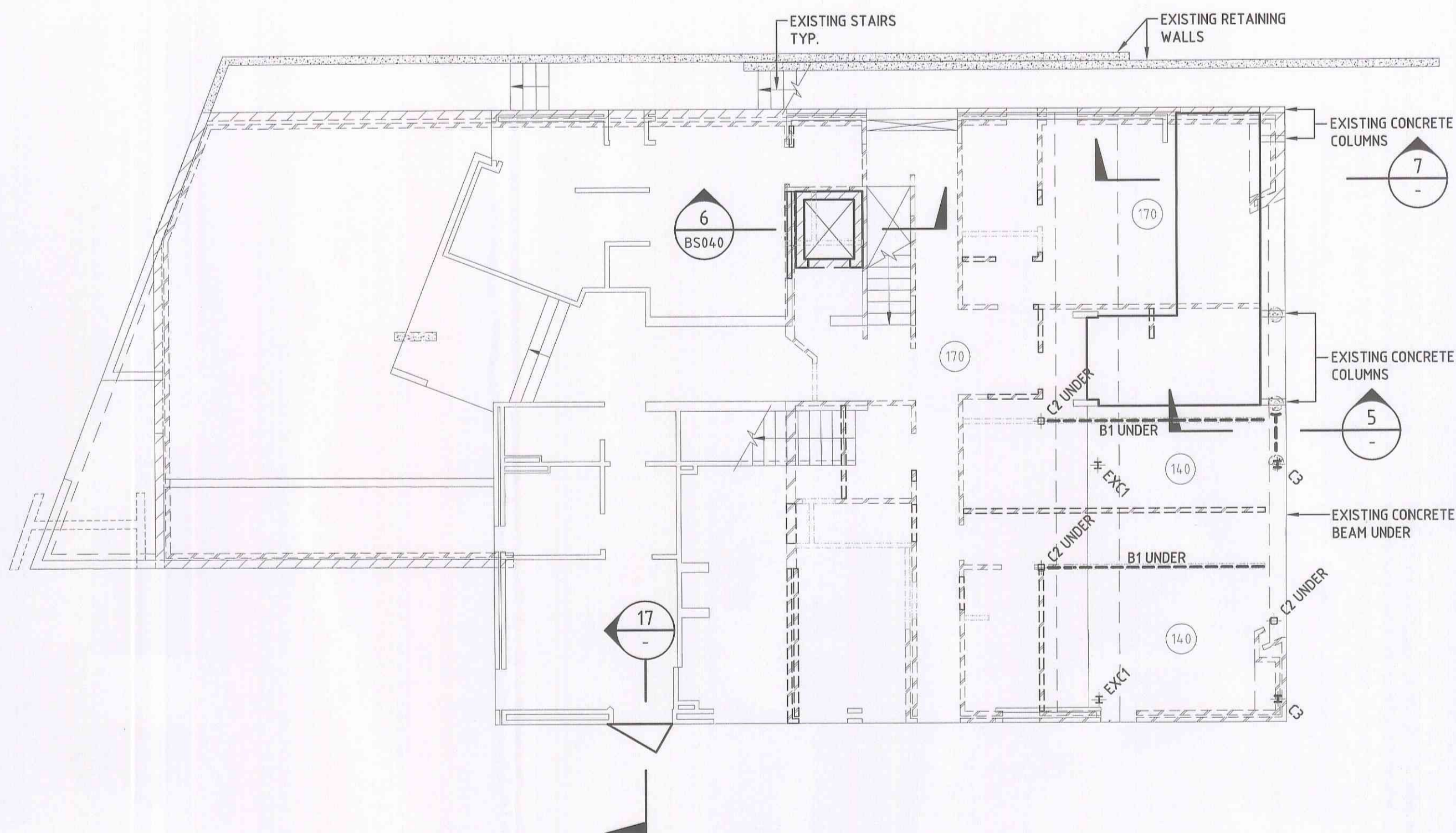
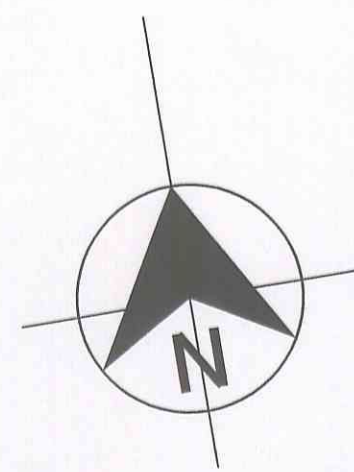
Drawing Title:

**LOWER GROUND PLAN
& DETAILS**

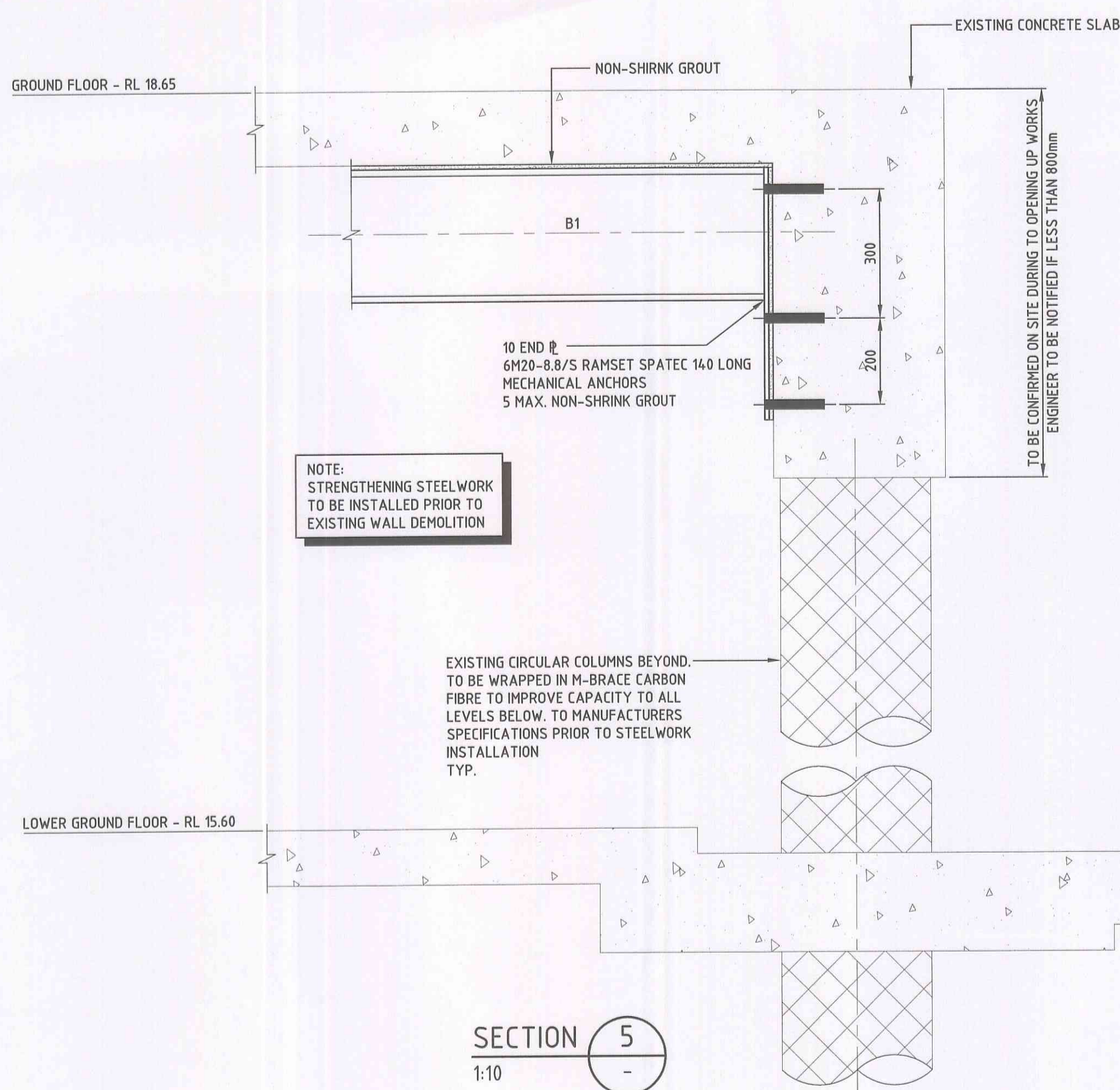
Drawn	Signed	Date	Verified	Signed	Date
JV			JRD		
Designed	Signed	Date	Approved	Signed	Date
RA		2/2/19	KK		
Project No.	23892		Scale: 1:100, 1:10, 1:20	Sheet Size A1	
Drawing No.	BS020		Revision:	04	

**TENDER DOCUMENT
NOT FOR CONSTRUCTION**

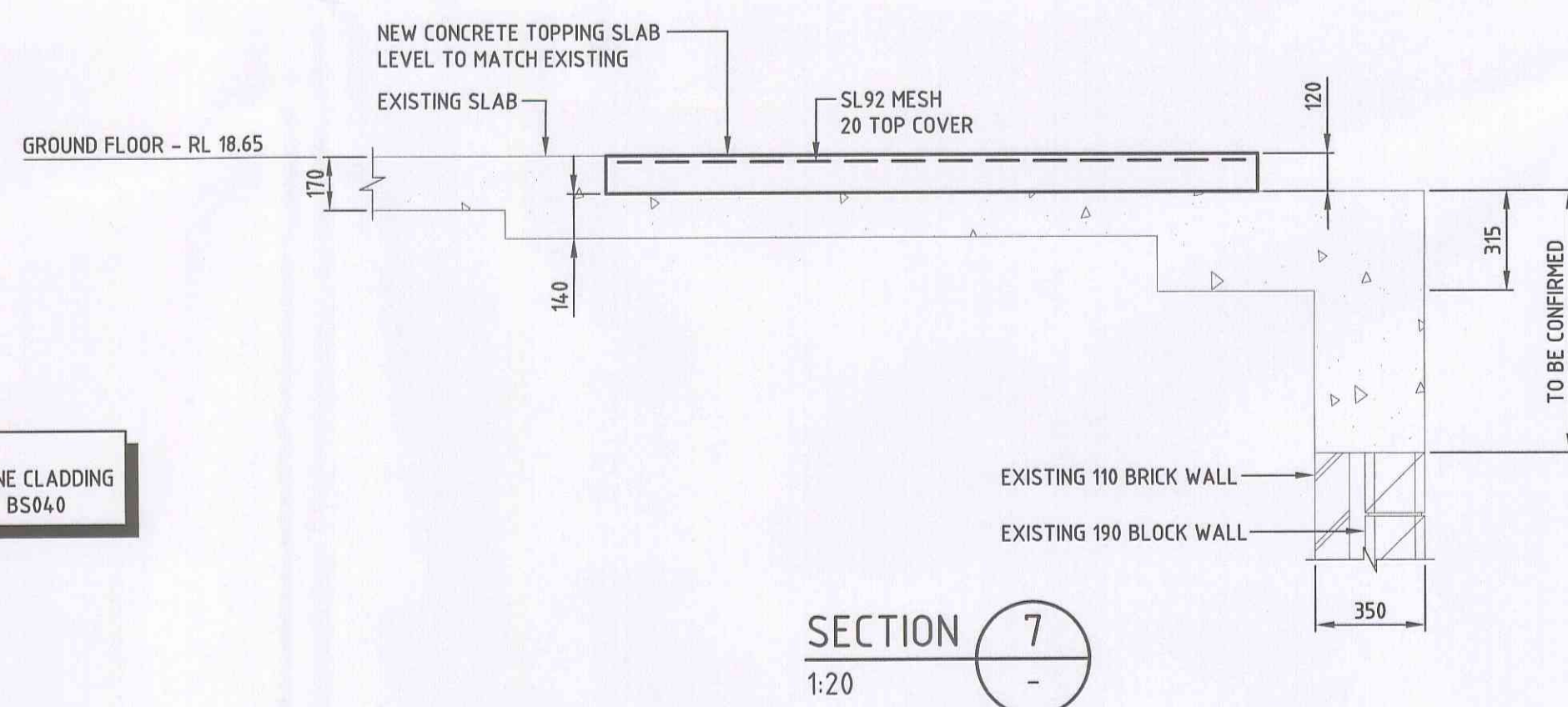
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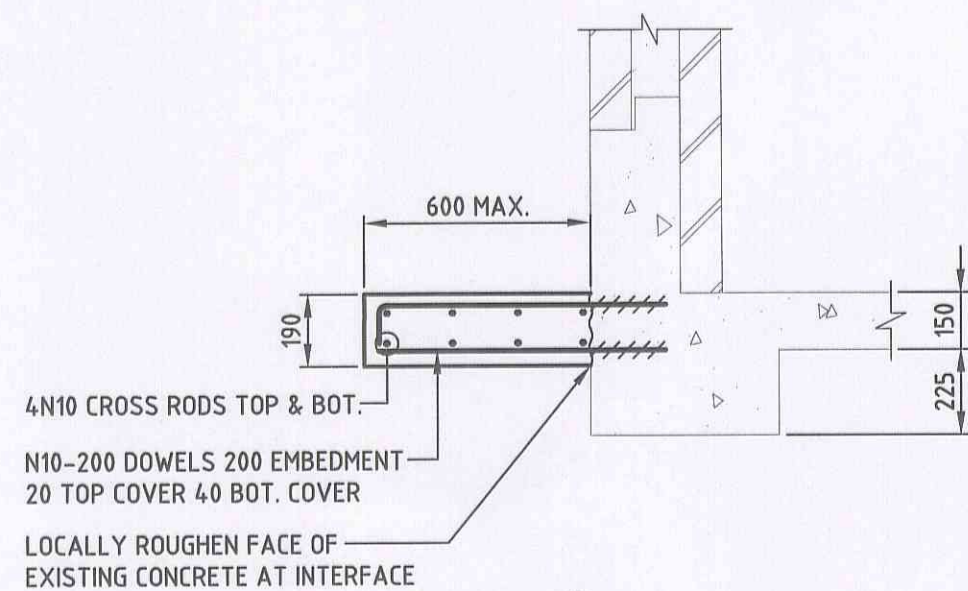
GROUND FLOOR PLAN
1:100



SECTION 5
1:10



SECTION 7
1:20



SECTION 17
1:20

STEELWORK MEMBER SCHEDULE		
MARK	SIZE	REMARKS
C1	100 x 5.0 SHS	10 BASE @ 2M16-8.8/S CHEMSETS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C2	150 x 9.0 SHS	10 BASE @ 3M16-8.8/S CHEMSET ANCHORS WITH COUNTERSUNK HEADS 10 NON-SHRINK GROUT
C3	150UC30	STAINLESS STEEL GRADE 316
C4	150UC30	-
B1	310UC97	12 @ CLEAT 6M20/8.8S BOLTS TO C2 WHERE APPLICABLE
B2	150UB18	-
B3	FABRICATED 410UB54	STAINLESS STEEL GRADE 316
B4	180 PFC	-
FTB1	TO MATCH EXIST.	STAINLESS STEEL TRUSS GRADE 316
TB1	TO MATCH EXIST.	TIMBER BEAM WITH STAINLESS STEEL BOLTS, PLATES & FITMENTS
EXC1	150UC30	EXISTING COLUMN
EXB1	200x100x5.0 RHS	EXISTING BEAM
EXB2	250 PFC	EXISTING BEAM

LEGEND

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04	19.12.08	ISSUED FOR CONSTRUCTION CERTIFICATE	AA
03	17.10.08	ISSUED FOR TENDER	GSW
02	12.09.08	ISSUED FOR REVIEW	ARB
01	15.10.07	ISSUED FOR INFORMATION	JV
Rev	Date	Revision Details	Drn Ver. App.

Connell Wagner

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Client:

MR. D. OTTO

Project:

ALTERATIONS AND ADDITIONS
237A WHALE BEACH RD.
WHALE BEACH

Drawing Title:

GROUND FLOOR PLAN
& DETAILS

Drawn	Signed	Date	Verified	Signed	Date
JV			JRD		
Designed	Signed	Date	Approved	Signed	Date
RA	RA	1/2/09	KK		
Project No.	23892		Scale: 1:100, 1:10, 1:20	Sheet Size A1	
Drawing No.	BS030		Revision:	04	

TENDER DOCUMENT
NOT FOR CONSTRUCTION

BASIX Certificate

Building Sustainability Index www.basix.nsw.gov.au

Alterations and Additions

Certificate number A24990

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 Alterations and Additions Definitions" dated 29/9/2006 published by Department of Planning. This document is available at www.basix.nsw.gov.au

Director General
Date of issue: Friday 07 December 2007



Project address	
Project name	002 Mr and Mrs Otto
Street address	237A Whale Beach Road Whale Beach 2107
Local Government Area	Pittwater Council
Plan type and number	Deposited Plan 11067
Lot number	72
Section number	0
Project type	
Dwelling type	Separate dwelling house
Type of alteration and addition	My renovation work is valued at \$50,000 or more, and includes a pool (and/or spa)

Pool and Spa		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Rainwater tank				
The applicant must install a rainwater tank of at least 2865 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 rainwater runoff from at least 100 square metres of roof area			✓	✓
The applicant must connect the rainwater tank to a tap located within 10 metres of the edge of the pool			✓	✓
Outdoor swimming pool				
The swimming pool must be outdoors		✓	✓	✓
The swimming pool must not have a capacity greater than 57.5 kilolitres		✓	✓	✓
The applicant must install a pool pump timer for the swimming pool			✓	✓
The applicant must install the following heating system for the swimming pool that is part of this development: solar only			✓	✓

Fixtures and systems		Show on DA Plans	Show on CC/CDC Plans & specs	Certifier Check
Hot water	The applicant must install the following hot water system in the development gas storage	✓	✓	✓
Lighting	The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent or light-emitting-diode (LED) lamps		✓	✓
Fixtures	The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating		✓	✓
	The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating		✓	✓
	The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating		✓	

Construction

Show on
DA Plans

Show on
CC/CDC
Plans &
specs

Certifier
Check

Insulation requirements

The applicant must construct the new or altered construction (floor(s), walls, and ceilings/roofs) in accordance with the specifications listed in the table below, except that a) additional insulation is not required where the area of new construction is less than 2m2, b) insulation specified is not required for parts of altered construction where insulation already exists

Construction	Additional insulation required (R-value)		Other specifications				
external wall cavity brick	nil						

Glazing requirements

Show on
DA Plans

Show on
CC/CDC
Plans &
specs

Certifier
Check

Windows and glazed doors

The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below
Relevant overshadowing specifications must be satisfied for each window and glazed door

The following requirements must also be satisfied in relation to each window and glazed door

Each window or glazed door with standard aluminium or timber frames and single clear or toned glass may either match the description, or, have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions

Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions The description is provided for information only Alternative systems with complying U value and SHGC may be substituted

For projections described in millimetres, the leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 mm above the head of the window or glazed door and no more than 2400 mm above the sill

Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35

External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed

Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window The spacing between battens must not be more than 50 mm

Windows and glazed doors glazing requirements

Window / door no	Orientation	Area of glass inc. frame (m2)	Overshadowing Height (m)	Distance (m)	Shading device	Frame and glass type			
WB 1	E	12.7	0	0	eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e, (U-value 5.7, SHGC 0.47)	✓	✓	✓
WB 2	S	0.8	0	0	none	standard aluminium, single clear, (or U-value 7.63 SHGC 0.75)	✓	✓	✓
WLG 1	E	5.9	0	0	eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e,	✓	✓	✓

Glazing requirements

Show on
DA Plans

Show on
CC/CDC
Plans &
specs

Certifier
Check

Window / door no.	Orientation	Area of glass inc. frame (m2)	Overshadowing Height (m)	Distance (m)	Shading device	Frame and glass type			
WLG 2	E	9.9	0	0	>=450 mm eave/verandah/pergola/balcony	(U-value 5.7, SHGC 0.47) standard aluminium, single pyrolytic low-e			
WLG 3	E	4.7	0	0	>=450 mm eave/verandah/pergola/balcony	(U-value 5.7, SHGC 0.47) standard aluminium, single pyrolytic low-e,			
WLG 4	S	3.6	0	0	none	standard aluminium, single clear (or U-value 7.63, SHGC 0.75)			
WLG 5	S	1	0	0	none	standard aluminium, single clear (or U-value 7.63 SHGC 0.75)			
WLG 6	S	1	0	0	none	standard aluminium, single clear (or U-value 7.63 SHGC 0.75)			
WG 1	E	15.5	0	0	>=900 mm eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e, (U-value 5.7, SHGC 0.47)			
WG 2	S	10.7	0	0	>=900 mm eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e, (U-value 5.7, SHGC 0.47)			
WG 3	E	5.5	0	0	>=450 mm eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e (U-value 5.7 SHGC 0.47)			
WG 4	E	11.2	0	0	>=450 mm eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e, (U-value 5.7, SHGC 0.47)			
WG 5	E	1.6	0	0	>=450 mm eave/verandah/pergola/balcony	standard aluminium, single pyrolytic low-e, (U-value 5.7 SHGC 0.47)			
WG 6	N	3.5	0	0	external louvre/blind (fixed)	standard aluminium, single pyrolytic low-e, (U-value 5.7 SHGC 0.47)			
WG 7	S	1.2	0	0	none	standard aluminium, single clear, (or U value 7.63, SHGC 0.75)			
WF 1	S	1.7	0	0	none	standard aluminium, single clear, (or			

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 & 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 for the development may be issued

CONSTRUCTION MANAGEMENT PLAN

**237A WHALE BEACH RD
WHALE BEACH**

10-12-2008

**V&D LUZAR PTY LTD
8 CHARLES CRT
NORTH ROCKS
NSW, 2151**

Introduction

V & D Luzar PTY Ltd have been contracted to commence renovation works to the property located at 237A Whale Beach Rd, Whale Bch

The works are expected to commence in January 2009

The works are expected to take approximately eighteen months to complete and during the duration of the works various plant, machinery and trades people will access the above address

The following plan will provide advice regarding the impact of works on the surrounding properties, and the controls implemented by V & D Luzar Pty Ltd to minimize these impacts

Mobile Plant and Construction Traffic

Various mobile plant is intended to be used on the project

This includes cranes, excavators, compressors, concrete pumps and agitators

All mobile plant is able to be placed within the boundary of the property and therefore is not expected to impact on the daily use of the road reserve. It is expected that all plant will access the site from Whale Bch Rd and we should not be required to utilize The Strand to deliver plant or materials to the project.

During deliveries to site, it may at times be unavoidable that the delivery vehicle occupies Whale Bch Rd whilst being unloaded. During this time appropriate traffic control will be provided as required, including stop and go signage and personnel.

Parking for the workforce will be provided within the existing ten car garage, as such it is not expected that any additional vehicles will be parked on the road reserve as a result of the works.

Traffic and Pedestrian Safety

Traffic and pedestrian safety is not expected to be an issue during the construction works at 237A Whale Bch Rd

As previously discussed there is expected to be minimal impact on Whale Bch rd as the majority of plant and personnel will conduct the works from within the boundary of the property

Appropriate traffic and pedestrian control will be implemented at any time the works effect the road reserve. In addition, if at any time the road reserve is required to be accessed for construction purposes a permit will be applied for through the council and all information required attached to the application form

Supervision and Management of Works

V & D Luzar Pty Ltd will provide a dedicated construction supervisor to the project at all times. The supervisor will be rotated depending on the stage of construction as each of our supervisory staff has different fields of expertise.

At no time will workers be allowed to access the site without a direct V& D Luzar Pty Ltd employee being present.

The works will be conducted to comply with all council requirements, relevant Codes of Practice and Australian Standards.

**SYDNEY WATER
APPROVED**

- 1 Position of structure in relation to Sydney Water's assets is satisfactory
- 2 Connections to Sydney Water sewer/water services may only be made following the issue of a permit to a licensed plumber/drainlayer
- 3 It is the owner's responsibility to ensure that all proposed fittings will drain to Sydney Water's sewer
- 4 Any Plumbing and/or Drainage Work to be carried out in accordance with the Sydney Water Act 1994 AS 3500 and the NSW Code of Practice
- 5 Gullies Inspection Shafts and Boundary Traps shall not be placed under any Roof Balcony Verandah Floor or other cover unless otherwise approved by Sydney Water
- 6 Property No **3458264**

Reece Mona Vale
Quick Check Agent on behalf of
SYDNEY WATER

Per

Reece

16.2.09

Project

ALTERATIONS AND ADDITIONS TO 237A WHALE BEACH RD
WHALE BEACH FOR MR & MRS D OTTO

Title

**WORKING DRAWINGS— FIRST FLOOR
& ROOF PLAN**

Scale 1:100

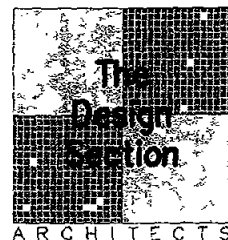
Number DA-01

Date OCT 2007

Drawn GW, DP

The Design Section Pty Ltd Architects
Suite 5/40 Avalon Pde Avalon NSW 2107
PO Box 71 Avalon NSW 2107
Phone 9918 7570 Fax 9973 1805
Email g.watson@designsection.com.au

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GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO 2 - To be submitted with detailed design for construction certificate

Development Application for <u>MR DOUG OTTO</u>
Name of Applicant
Address of site <u>237A WHALE BEACH RD, WHALE BEACH NSW</u>

Declaration made by Structural or Civil Engineer in relation to the incorporation of the Geotechnical issues into the project design

I ROBERT ANGUS on behalf of CUNNELL WAGNER PTY LTD
(insert name) (trading or company name)

on this the 15 12 08
(date)

certify that I am a Structural or Civil Engineer as defined by the Geotechnical Risk Management Policy for Pittwater. I am authorised by the above organization/company to issue this document and to certify that the organization/company has a current professional indemnity policy of at least \$2million. I also certify that I have prepared the below listed structural documents in accordance with the recommendations given in the Geotechnical Report for the above development.

Geotechnical Report Details

Report Title	<u>PROPOSED ALTERATIONS & ADDITIONS 237A WHALE BEACH RD</u>		
Report Date	<u>7 NOVEMBER 2007</u>	Report Ref No	<u>21689WZ</u>
Author	<u>A ZENON</u>		

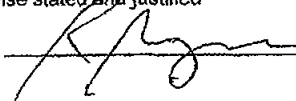
Structural Documents list

<u>BS000 REV03</u>	<u>BS010 REV04</u>	<u>BS020 REV04</u>	<u>BS030 REV04</u>
<u>BS040 REV04</u>	<u>BS050 REV04</u>		

We/I am also aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure taken as at least 100 years unless otherwise stated and justified.

ROBERT ANGUS

(name)



(signature)

Declaration made by Geotechnical Engineer or Engineering Geologist in relation to Structural Drawings

We/I prepared and/or technically verified the abovementioned Geotechnical Report as per Form 1 dated 9/11/07 and now certify that I have viewed the above listed structural documents prepared for the same development ^{we are} and satisfied that the recommendations given in the Geotechnical Report have been appropriate taken into account by the structural engineer in the preparation of these structural documents.

We/I am aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk as indicated in Report.

Signature

Bruce F Walker Date 5/1/09

Name

BRUCE F WALKER

Chartered Professional Status

CPEng FIEAUST

Membership No

199312

For and on behalf of Jeffery and Katauskas Pty Ltd



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G.R.WATSON REGISTERED ARCHITECT 3044. ABN 63 003 578 676

12/12/07

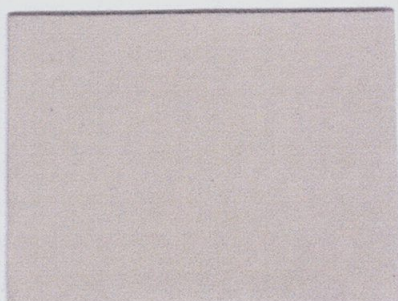
**Alteration and Additions to 237a Whale Beach Rd, Whale Beach for Mr & Mrs
D. Otto**

Schedule of Finishes

WEATHERBOARDS & TIMBER
Dulux Patio Charm



RENDER
Dulux Warm Neutral, Colour Specifier: P13-D3



**SPECIFICATION OF THE WORKS TO BE PERFORMED AND MATERIALS
TO BE USED IN THE CONSTRUCTION OF ALTERATIONS AND ADDITIONS
TO 237A WHALE BEACH ROAD, PALM BEACH
FOR DOUG AND RITA OTTO**

This is the Specification referred to in the Conditions of Contract and Agreement signed by
us and dated this

day of 2008

Proprietors _____

Witness _____

Contractor _____

Witness _____

THE DESIGN SECTION PTY LTD
Architects
5/40 Avalon Parade
AVALON NSW 2107
Telephone 9918 7570

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A PRELIMINARIES

A 01 Materials and Workmanship

All materials, workmanship and methods of construction shall comply with the Codes of the Standards Association of Australia, the Building Code of Australia and the provisions of Conditions of Contract

No substitution of materials shall be made without the approval of the Architect

A 02 Responsibility

The builder shall be held responsible for the proper execution of all work and for the care, maintenance and protection of all materials and fittings comprised in any sub-contract

The Builder shall exercise reasonable care and protection but will not be held responsible for any work, materials, equipment or fittings comprised in any separate contract with the Proprietor

THE BUILDER SHALL BE HELD RESPONSIBLE FOR THE WATER-TIGHTNESS OF THE WORKS

A 03 Foreman and Supervision by Builder

Keep a competent Foreman constantly on the works in charge of all trades, and any directions or explanations given by the Architect to the foreman shall be held to have been given to the Builder

Reasonable personal supervision by the Builder shall be provided

The Builder shall be responsible for the co-ordination of all trades and Sub-contractors and shall arrange their work so as to facilitate general progress of the whole of the works in an orderly fashion

A 04 Temporary Services

Power	is available on site
Water	Mains Supply is available on site
Toilet	Provide on site WC and arrange to pay for waste collection

A 05 Discrepancies

Where any variation occurs between the drawings and the Specification the interpretation adopted by the Architect shall be accepted as correct

A 06 Attend Upon and Make Good

Ensure that in addition to any items of work specified in the trade sections, each trade assists, arranges with, leaves holes for, cuts away for, does all chasing and drilling for and makes good after every other, when and where necessary

Make good to all roadways, footpaths and adjoining properties and fences which may become damaged or disturbed as a result of the cartage of materials on to the site, or which may be damaged or distributed as a result of work in connection with the Contract

Clean up the whole of the site affected by the building operations and make good any damage whatsoever caused by the execution of the works and restore to original condition and/or make good to the satisfaction of the Architect

Remove on completion, all surplus materials and rubbish, ease all doors and windows, clean all surfaces and fittings, hand over all keys properly tabulated and leave the whole of the works clean and fit for immediate occupation

A 07 Meaning of Terms

PROPRIETOR	Shall mean Doug and Rita Otto
BUILDER / CONTRACTOR	Shall mean the person, persons, firm or company contracting for the building
ARCHITECT	Shall mean The Design Section Pty Ltd or its appointed representative
STRUCTURAL ENGINEERS	Shall mean Connell Wagner Pty Ltd, 116 Military Road, Neutral Bay NSW 2089
TO BE, TO HAVE, PROVIDE	Shall mean that such items are to be supplied and fixed by the Builder
APPROVED, DIRECTED, SELECTED	Shall mean approved, directed or selected by the Architect
ALLOW	Shall mean the cost of the item or work is at the risk of the Builder
C P	Shall mean chromium plated

G M S	Shall mean galvanised mild steel
S C P	Shall mean satin chromium plated
I D	Shall mean internal diameter
O D	Shall mean outside diameter
F S	Shall mean finished size of timber after dressing
S S	Shall mean stainless steel

B DEMOLITION

B 01 Generally

Demolish the items noted on the drawings and listed below and remove from site All work to comply with AS2601-1991 and the requirements of the WorkCover Authority of New South Wales

B 02 External Demolition

Demolish and remove the following

(a) **Basement Level Yard**

- Terraces to east of house
- Retaining wall as required
- Stairs from northern path

Basement Level House

- Projecting angled walls facing east
- All existing windows
- Break out door DB3 opening

(b) **Lower Ground Floor Level Yard**

- Paths to north and south of house
- Driveway

Lower Ground Floor Level House

- All existing windows
- Break out openings for windows WLG 6, WLG 8, WLG 9

(c) **Ground Floor Level Yard**

- Driveway
- Portion of entry path garden retaining wall
- Retaining walls on west boundary

Ground Floor Level House

- Balustrade to Bedroom 3
- Entry door
- Terrace tiles and mortar bed
- Terrace handrails
- Break out opening for window WG 11
- Steel pergola frame to Terrace

(d) **First Floor Level House**

- All existing windows
- Balustrade to Bedroom 2
- Balustrades to Bedroom 1 and Study Terrace

- Tiles and mortar bed to Terrace
- (e) **Roof Level**
- Pergola over Terrace
 - All existing skylights
 - Roof membranes
 - Break out openings for new and modified skylights

B 03 Internal Demolition

Demolish or remove the following

- (a) **Basement Level**
- All floor finishes including stair treads and risers
 - Concrete floor slab to Pool Terrace Room
 - Floor slab to lift well
 - All doors and frames
 - Break out opening to unexcavated area
 - Stair handrails
 - Walls in Pool Terrace Room and Beach Store
 - All suspended ceilings
- (b) **Lower Ground Floor Level**
- All floor finishes including stair treads and risers
 - All doors and frames
 - Stair handrails
 - Walls in Bedroom 5, Bedroom 6, Wine Cellar and Spa Room
 - Void for lift well
 - Floor slab under Spa Room
 - Floor slab in Garage to take vehicle turntable
 - Garage door
 - All cabinetry
 - All suspended ceilings
- (c) **Ground Floor Level**
- All floor finishes including stair treads and risers
 - Wall in Kitchen / Dining Area
 - Walls in Laundry / catering Kitchen
 - Void for lift well
 - Wall in Bedroom 3
 - Move door openings in WC1 and Ensuite 3
 - Timber stair treads and risers and balustrade
 - All suspended ceilings
 - All cabinetry
- (d) **First Floor Level**
- All floor finishes including stair treads and risers

- Walls in Ensuite 1
- Wall in Bedroom 2
- Walls around lift well
- Void for lift well
- Wall in Ensuite 2
- All suspended ceilings

C EXCAVATION AND SITEWORKS

C 01 Excavation Generally

Provide all planking and strutting to secure and maintain sides of all excavations

Construct runways clear of excavations Keep all excavated areas free from surface and seepage water by pumping or diversion drainage Remove all obstructions and fill solid with approved material

No excavations are to be filled, nor back and special filling done before inspection and approval

Backfill, ram and well consolidate all around finished areas with best of excavated material from site

C 02 Excavation

Allow for all excavation in material "as found" Excavate for

- Swimming pool (pool to be constructed by others)
- Lower Pool Terrace and access stair
- Lower Path to Beach Store
- Footings to Pool Terrace Room east wall
- Lower Pool Terrace Room floor
- Void behind wall of unexcavated area in Basement to provide access behind south and west walls
- Lower floor level in Spa Room
- Recess under vehicle turntable

Excavated material is to be disposed of by Builder

C 03 Geotechnical Report

A Geotechnical Report prepared by Jeffery and Katauskas Pty Ltd accompanies this specification Builder to read report and comply with any recommendations

C 04 Solid Floors

Consolidate fully beneath all new slabs on the ground

C 05 Termite Protection

Install termite protection in accordance with AS3660 1-1995 and provide certification on completion All equal to KORDON

C 06 Fencing

Provide a cyclone wire security fence 1800 high around site Provide fences around trees to be retained and protected

D CONCRETOR

D 01 Generally

All concrete works shall comply with AS2870 – 1996 and the Structural Engineers Drawings

D 02 Footings

Provide concrete footings to all new walls and floor slabs to Engineers details

D 03 Floor Slab on Ground

Provide reinforced concrete slabs over membranes equal to FORTECON lapped, taped at joints, taped to pipes, turned up at edges of slabs to manufacturer's instructions. Screen slabs level or to falls indicated and finish as laid to an even uniform finish as scheduled

D 04 Slab Setdowns

Provide setdowns in slabs for tiled floors adjacent to other finishes

D 05 Formwork

Provide formwork for concrete to the shape, lines, dimensions and for the standard of finish specified. Formwork shall be rigid, tight and substantial and accurately constructed for the formed finishes scheduled. Maintain forms for the periods indicated to Engineer's details. Formwork to be in accordance with AS3610 – 1995. Finish from forms to be ACSE Specification Class 2

D 06 Curing

Keep concrete surfaces moist by approved means for seven (7) days after pouring

D 07 Joints

Provide joints in concrete, and between concrete and brickwork to Engineer's details

D 08 Steel Reinforcing

Provide and fix reinforcing steel and mesh as shown on Engineer's drawings

E BRICKWORK, BLOCKWORK AND STONWORK

E 01 Brickwork Generally

Bricks shall be clay complying with AS21 and AS140 and shall be sound, hard, well burnt and of even size Wet well at time of using and finish up each course

E 02 Mortar

Mortar shall consist on one part cement, three parts sand Aerator may be added Alternatively mortar shall consist of one part cement, one part building lime, three parts sand

E 03 Walls

Build walls plumb, true and level Build in fittings, flashings and fixings Build all walls in STRETCHER BOND Build in wall ties for brick veneer walls every fourth course

Leave weepholes every fourth perpend over flashings Keep wall cavities free from mortar

E 04 Joints

Finish joints struck to take cement render

E 05 Arch Bars and Angle Lintels

Hot dipped galvanised steel flats and angles shall be built in as follows to each 110 thickness of brickwork

For spans up to 1050 provide one 100 x 10 bar

For spans up to 1500 provide one 100 x 76 x 10 angle

For spans up to 2150 provide one 152 x 89 x 8 angle

Bars shall be cambered 10 with 110 bearing each side Angles shall have 230 bearing each side

Paint steelwork to external walls as specified before erection

Wrap bars in galvanised chicken wire where plastered surfaces occur

Refer also Engineer's details

E 06 Dampcourses

Build in dampcourses of SUPER GRADE ALCOR full width of brickwork to all walls, lapped 115 at joints and intersections, and one course above paving or finished ground to boundary and external walls

E 07 Building In

Build in all straps, tiles, plates, metalwork and other fittings required by other trades

E 08 Concrete Blockwork

Provide reinforced concrete block columns to retain beside entry stairs to Pool Terrace and to replace existing retaining walls on west boundary

E 09 Sandstone

Provide and fix exterior sandstone facing to north and south walls of house, to portion of west wall, to columns supporting Bedroom, Terrace and to walls beside driveway and front boundary walls

Sandstone to be equal to GOSFORD SANDSTONE right to white tones Provide samples for approval of colour and finish Stone to be approximately 30 thick, 1200 long, dimensioned to regular courses approximately 600 high with sawn edges and face Lay in vertical tile pattern as indicated, fixed to existing walls with approved SS clips Grout joints in approved cement / lime mortar Mitre external corners

F METALWORKER

F 01 Generally

Except as otherwise specified all steel and structural steelwork shall comply with AS3990 – 1993 and AS4100 – 1990 and with the A C S E Structural Steelwork Specification

Provide all steelwork specified or indicated on the Drawings In particular, provide all steelwork specified in other trades or required to construct and complete the works

The Builder shall satisfy himself as to the accuracy of all dimensions and shall be responsible for the correct setting out of the positions and levels and fittings of all parts of the metalwork

F 02 Structural Steelwork

Supply, fabricate and erect structural steelwork as indicated and to Engineer's details, shoptreated to Engineer's specification before delivery to the site

Submit shop drawings to Engineers for checking in advance of fabrication

F 03 Galvanising

Note that the site has extreme exposure to airborne salt due to its proximity to the ocean

All galvanising must conform to the Engineer's Specifications, and to AS1650 – 1989

F 04 Stainless Steel Columns

Provide fabricated 316 grade SS columns to Living Terrace pergola all to engineer's details Coat with NIACOTE after installation is complete

F 05 Stainless Steel Spigots

Provide and fix SS spigots to support all frameless glass handrails Spigots to be equal to DORMA MIRAGE MI 316 grade satin stainless steel 170 high core drilled into concrete slabs and chemset fixed Coat with NIACOTE protective finish after installation

F 06 Stainless Steel Top Rails

Provide and fix 316 grade SS top rails to all frameless glass balustrades except pool fence Rails to be 32 OD tube, grooved to take glass balustrade Coat with NIACOTE after installation Mitre and weld joints at corners

F 07 Laundry Hanging Rail

Construct hanging rail in Laundry to detail Rail to be 30 OD SS tube with fixing plates at each end

G CARPENTER AND JOINER

G 01 Timbers

Provide timbers of species and grades specified, reasonably straight grained and free from defects. affecting durability, strength or appearance All timber shall be sawn unless otherwise specified Dressed timbers to be seasoned or kiln dried

G 02 Generally

The whole of the carpentry and joinery throughout is to be framed, trimmed and finished in the best and most workmanlike manner all necessary templates, linings, blocks, stops, ironwork and ironmongery to be provided and fixed and all trimming, grooving, rebating, housing, bedding, mitring, throating, etc, incidental to work to be done though not specifically mentioned All joinery timber for doors and frames to be sawn on the quarter

Frame up and finish all work accurately and neatly in the best and most workmanlike manner All frames shall be fully tenoned All external screws shall be brass or S S All timber exposed to view shall be wrot

All joinery to be finished with sandpaper by hand to a perfectly smooth finish to receive painting or clear finish specified

All external nails to be stainless steel

All framing to conform to requirements of AS1684 – 1992 Timber Framing Code, NSW Timber Framing Manual and AS1720 1 – 1988

G 03 Stud Walls

Construct new internal stud walls as indicated Frame up with 90 x 45 pine studs at 450 centres with 90 x 45 top and bottom plates and one row of nogging Brace with plywood or perforated GMS angles Inner skin of brick veneer walls to be strapped to brick walls with GMS ties as specified in BRICKWORK above

G 04 Stair Treads

Construct new timber stair between Ground and First Floors to match existing Treads and risers to be ex 50 thick DAR SILKY OAK Construct to detail with joints biscuted and glued to provide a stable squeak-free stair Cut neatly against wall all to be fine sanded and clear finished Remove and re-fit existing round timber handrail

G 05 Timber Floor

Allow to fine sand and clear finish existing timber floor boards and stair treads in Entry Lobby on Ground Floor

G 06 Door Frames

All door openings are to have new frames fitted Frames to be ex 50 thick TASMANIAN OAK rebated to take door and gauged to finished wall thickness All paint finish Not that the door frames have no heads

G 07 Stair Handrails

Remove all round timber handrails from internal stairs Re-fit rails, sand and clear finish

G 08 Insulation

All drainage lines inside house are to be wrapped with acoustic insulation blankets equal to ROCKWOOL before wall and ceiling linings are fixed in place

G 09 Doors

Provide doors of the types below, complete with hinges specified and hardware scheduled Fit locks, latches and bolts as scheduled, the supply of which is included in the PC Sum

Supply and fit hinges equal to MIGLAS SS CONCEALED DOOR HINGE Allow 3 per door leaf

Note Provide hinges of sufficient throw to achieve 180 degree swings

- (a) **Type A doors** Solid timber doors with SILKY OAK veneer facing and ex 18 thick DAR SILKY OAK edge strips, glued and mitred Clear finish
- (b) **Type B doors** Timber framed doors with 200 x 50 DAR SILKY OAK top rails, stiles and bottom rails, rebated to take 10 6 thick laminated glass Meeting stiles rebated
- (c) **Type C doors** As Type A doors, with 800 x 150 glass vision panel fixed vertically 150 from stile on handle side
- (d) **Type D doors** Solid timber waterproof doors with SILKY OAK veneer facing and ex thick DAR SILKY OAK edge strips, glued and mitred Clear finish
- (e) **Type E doors** In-wall sliding door units Doors to be solid timber with SILKY OAK veneer facing and 18 thick DAR SILKY OAK edge strips, glued and mitred Clear finish

G 10 Door Schedule

Confirm all door sizes on site Fix hardware Allow to fix doorstops to all doors
Note that all doors will be carried to ceiling height Where adjacent rooms have
different ceiling heights, frames will extend to higher ceiling level, and a fixed panel
to match door will be fitted between the two ceiling levels

Door	Size	Type	Hardware Fixed by Builder
DF1	2700 x 820	A	Mortise latchset
DF2	2700 x 820 (2 pieces)	D	Mortise latchset
DF3	2700 x 1000	A	Mortise latchset
DF4	2700 x 820	A	Mortise latchset
DG1	2700 x 790 (2 pieces)	A	Mortise privacy set
DG2	2700 x 820	A	Mortise latchset
DG3	X 720	A	Mortise privacy set
DG4	2400 x 1500	D	Mortise deadlock with electric striker
DG5	X 820	C	Flush pulls
DLG1	X 820	A	Mortise deadlock with electric strike
DLG2	X 820	A	Mortise latchset
DLG3	2700 x 820 (2 pieces)	D	Mortise latchset
DLG4	2500 x 720 (2 pieces)	D	Mortise latchset
DLG5	2500 x 720	E	Flush pulls
DLG6	2500 x 820	A	Mortise latchset
DLG7	2500 x 820	A	Mortise latchset
DLG8	2500 x 720 (2 pieces)	D	Mortise latchset
DLG9	2700 x 820 (2 pieces)	A	Mortise latchset
DB1	2400 x 2500 pair	B	Flush pulls, flush bolts
DB2	2400 x 1400 pair	B	Flush bolts, mortise latchsets
DB3	Anodised aluminium glazed door		Mortise deadlock with electric striker
DB4	2400 x 720	D	Mortise privacy set
DB5	2500 x 720	A	Mortise privacy set
DB6	2400 x 720	E	Flush pulls
DB7	2400 x 820	A	Mortise latchset
DB8	2400 x 820	D	Mortise lockset
DB9	2400 x 820	A	Mortise lockset
DB10	2400 x 820	A	Mortise lockset
DB11	2400 x 820	D	Mortise lockset

G 11 Weatherboards

Demolish all existing weatherboards Replace with 150 x 25 DAR shiplap MERBAU
boards, profiled to match existing Note two different profiles Nail boards to studs,
pre-drill end nails Punch and fill Stain finish

G 12 Ceiling Plywood

Provide and fix timber ceilings to Living Room and Bedroom 1

Ceilings to be 13 thick plywood with SILKY OAK veneer facing Edges to be stripped with ex 18 wide DAR SILKY OAK gauged to ply thickness Glue fix and mitre corners All clear finish

G 13 Passenger Lift

Builder to co-operate with contractor who will provide and fit passenger lift as specified below under ELECTRICIAN

G 14 Gas Fireplace

Supply and fit gas fireplace to Bedroom 1 Fireplace to be JETMASTER 850 Low Line Single Sided unit

G 15 Bathroom Hardware

Allow to fit the following bathroom hardware, the supply of which is allowed in the Schedule of Monetary Sums

(a)	toilet paper holders, to be selected	10 off
(b)	spare paper holders VOLA 14	10 off
(c)	heated towel rails. DCS FINELINE	14 off
(d)	towel rails, to be selected	5 off
(e)	towel shelf. to be selected	2 off
(f)	robe hooks	14 off

G 16 Beach Shower Room Timber Seat

Construct a timber seat as follows

Perimeter frame to be 75 x 38 DAR glued and screwed to 50 x 50 DAR inner frame set flush with bottom of perimeter frame Nail fix 75 x 25 DAR slats to inner frame with 6 gaps between slab Fixing nails to be nailed from underneath Support seat on 38 x 38 SHS SS frame trenched into brick wall to provide cantilever All timber SILKY OAK

G 17 Cupboards and Cabinets

Supply and fit new cupboards and cabinets to

- Bedroom 1

- Walk-in Robe
- Rita's Office
- Kitchen
- Catering Kitchen
- Laundry
- Pool Terrace Room
- Beach Store

All cupboards to be first quality, constructed of MDF or HMR board Exterior to all cupboards to be SILKY OAK VENEER clear polyurethane finish with 13 FS solid timber edge strips mitred at corners and gauged to thickness

Interior shelves to be MDF board minimum ²⁵18 thick white melamine finish with matching laminate edge strips where exposed Where noted on drawings in Bedroom 1, interiors to be HOOP PINE clear finish

Kickboards to be waterproof plywood All hinges equal to BLUM 170 degree All drawers to run on BLUMOTION fittings

Benchtops, nosings etc to be as noted on drawings, generally CORIAN, stainless steel 316 grade or laminate Corian to be fitted by supplier – licensed applicators only

Allow to fit HAFELE EURO CARGO 45 SORTER bins to Kitchens as indicated

Provide No 2 cutlery inserts each to Kitchen and Catering Kitchen

G 18 Vanity Units

Provide and fit vanity benches and cupboards as detailed to

- Ensuite 1
- Ensuite 2
- Ensuite 3
- Ensuite 4
- Ensuite 5
- Ensuite 6
- WC1
- WC2
- Beach Shower Room

Construction to be generally as in G 17 above

G 19 Wardrobes

Provide and fit wardrobes and cupboards to detail Provide to

- Walk-in Wardrobe

- Bedroom Lobby Cupboard
- Bedroom 2 Wardrobe
- WC1 Cupboard
- Bedroom 3 Wardrobe
- Bedroom 4 Wardrobe
- Bedroom 5 Wardrobe
- Bedroom 6 Wardrobe

Wardrobes generally to have 35 thick hollow core doors with SILKY OAK veneer and ex 18 thick solid SILKY OAK timber edge beads mitred at corners

Wardrobe interiors to be MDF board with HOOP PINE veneer Shelves to be 25 thick veneered MDF board

Provide proprietary SS hanging rails and fittings to detail

G 20 Bed to Bedroom 1

Construct bed to Bedroom 1 Provide 90 x 42 FS SILKY OAK fascia, rebated to take 16 MDF top SILKY OAK veneered Base to be 18 MDF board SILKY OAK veneered, mitred at corners Screw fix base to floor Fix 38 x 38 SHS frame to base to support bed top All clear finish

G 21 Wine Cellar

Allow the PC Sum scheduled for fitting out of wine cellar Noted that floor, wall and ceiling finishes to be provided by Builder

G 22 Driveway Gates and Pedestrian Entry Gate

Construct new gates generally to match existing Internal frame to be hot dipped GMS with facing timber to match house Weatherboards as specified above

G 23 Screen Wall to Driveway

Construct a new timber screen wall to the south side of the driveway Studs to be 90 x 45 treated pine at 450 centres with 90 x 45 top and bottom rails and one row nogging Face with weatherboards to match house Cap wall top and ends with 150 x 75 DAR MERBAU chamfered on exposed face

H ROOF AND ROOF PLUMBER

H 01 Roof Generally

The work specified comprises the supply and fixing of roofing indicated, together with the provision of all labour, plant, services and accessories necessary to provide a completely watertight roof. All work to be in accordance with AS/NZS 1561.1 – 1992 and AS/NZS 2179.1 – 1994 and the manufacturers or suppliers written instructions.

H 02 Roof Membrane

Existing membranes to be demolished. Apply 3 layers of approved torch-on bituminous membrane with trafficable finish. Dress up around all upstands and carry to top of upstand. Apply bond-breakers where required at corners.

H 03 Cappings

Supply and fit zinc cappings to tops of parapet roofs, dressed over membranes and external wall finishes.

H 04 Downpipes

Downpipes and rainwater heads will be reused.

H 05 Leaf Guards

Provide leaf guards over tops of downpipes.

J PLUMBER AND DRAINER

J 01 Generally

Carry out the works to conform to AS/NZS 3500, the rules and regulations of Sydney Water and the requirements of Local Council. and in this respect, allow for all requirements when tendering. Make all applications, including application to Sydney Water. pay all fees and deposits, make all necessary tests, and execute the plumbing and drainage work to the satisfaction of the Architects. All fixtures shall be installed in accordance with the Manufacturer's instructions. Supply all fittings and accessories necessary to make a first class finish.

Relocate water and gas meters to new location as directed.

J 02 Plumbing Layout

The Builder shall be responsible for taking all dimensions on site. The drawings are diagrammatic only, and the layout of the systems and fittings shall be confirmed with the Architects before work is commenced.

J 03 Stormwater Drainage

Connect new stormwater drainage lines and tanks to the existing stormwater disposal system. Provide and connect No 2 WATERPOINT CLASSIC 4500 litre rainwater tanks east of swimming pool. Connect to existing system, modified with thrust blocks and supporting brackets. All drainage pipes to be 100 diameter sewer grade PVC. Provide and fit pump adjacent to tanks with supply line out of tanks to connect to pool re-filling hose cock, and to garden hose cocks as scheduled below.

J 04 Sewer Drainage

Extend existing sewer drainage system to connect to

- Beach Shower Room
- Pool Terrace Room
- WC2
- Spa Room
- Ensuite 6
- Ensuite 5
- Ensuite 4
- Kitchen
- Catering Kitchen
- Laundry
- Ensuite 3
- WC1

- Ensuite 2
- Ensuite 1

Drains to be 100 diameter sewer grade PVC Fit all reflux valves, gully traps and fitting as required and discharge to mains sewer

Connect swimming pool drainage to sewer system

J 05 Sanitary Plumbing

Supply and fix all waste, soil and vent pipes from all fittings as described and indicated including flashings for vents, all inspection openings, bends, reducers, junction pieces, supports for piping, vent cowls, floor waste, and connections to drains

J 06 Cold Water Service

Relocate existing water meter and extend cold cocks and water heaters to main supply in capillary fittings throughout, all soldered to copper tubes of the appropriate size Allow to provide 38 diameter supply pipe from water meter to first branch line, and 25 diameter pipes from first branch to secondary branch lines

Conceal all pipes and securely fix to structure Bury pipes externally 300 minimum below ground Pipes exposed adjacent to fittings shall be SCP with SCP wall plates Provide external screwed brass hose cocks and standpipes where indicated, and hose cock over gully

Refer SCHEDULE 2 and connect cocks therein

J 07 Hot Water Service

Provide No 3 new gas storage water heaters in approved locations

Piping to be copper as for cold water service with all pipes pre-lagged

Install each unit on 100 thick concrete base pad

Refer Schedule 2 Fit all cocks scheduled

J 08 Pipework in Slabs

No pipework for hot and cold water services shall be laid in structural floor slabs

J 09 Pipe Fixings

All pipework shall be supported so that it is free to move without causing stresses in the pipework or pipe joints. All water piping shall be securely fastened clear of structure. The works shall be free of system noises and water hammer.

J 10 Plumbing Fittings

Install plumbing fittings as scheduled and indicated. Provide cement grading and outlet beneath bath, terminated with SCP flange.

J 11 Floor Wastes

Provide and fix floor wastes to all wet rooms. Wastes to be 100 x 100 IPLEX SMARTILE Code D1 01 STILESS 100 with SS surround frame and lift out tile tray. Shower wastes to be SS grated drains of appropriate length equal to VEITCH shower channels 60 wide.

J 12 Gas Service

Supply and fit a new gas meter in approved location. Extend in concealed capillary fittings and copper tube throughout. Supply and fix all necessary couplings, connections, tail pipes, pits etc to complete the service. Excavate, backfill and make good all surfaces affected.

Extend gas service to Kitchen and Catering Kitchen, BBQ points on Pool Terrace, Living Terrace, Bedroom 1 fireplace and hot water heaters in yard (3 off).

J 13 Sydney Water Certificate

Obtain the Certificate of SATISFACTORY COMPLETION and deposit with Architect prior to Practical Completion.

J 14 Solar Pool Heating

Allow to fit pipes supplied by others from lower ground level adjacent to pool, to new solar heating supplied and fitted by others on roof.

K PLASTERBOARD FIXER

K 01 Generally

Carry out work in accordance with AS/NZS2588 – 1998 and AS/NZS 2589 1 – 1997

K 02 Plasterboard

Provide 10 thick GYPROCK SUPA-CEIL lining to ceilings as scheduled in SCHEDULE OF FINISHES below and 10 thick GYPROCK lining to new stud walls and adhesive-fixed to existing rendered walls. Sheets to be recessed edge, nailed and glued, all set true level and square. Tape joints, stop holes, flush joints with joining plaster sanded down to a smooth and even surface. Reinforce corners with perforated angles. All in accordance with manufacturer's printed instructions.

K 03 Wet Area Plasterboard

To Wet Room ceilings provide plasterboard equal to GYPROCK AQUACHEK 13 thick. Apply strictly in accordance with manufacturers detail manual. Sheets to be recessed edge, screw fixed, all set level, true and square. Tape joints, stop holes, flush joints with joining plaster sanded to a smooth and even surface.

K 04 Cornices

Junctions between walls and ceilings to be finished with RONDO SHADOWLINE stopping angles Code P50. There will be no cornices.

K 05 Perforated Angles

Reinforce corners of plasterboard with perforated SS angles.

K 06 Suspended Ceilings

Provide a suspended ceiling system equal to RONDO for all ceilings under concrete slabs. Provide and fit a grid of primary and secondary sections with all clips, brackets and suspension rods as required.

K 07 Beam Boxing

Allow to box around steel beams in Basement level ceilings.

L PLASTERER

L 01 Generally

Carry out all work in accordance with AS CA 27 Finish surfaces true. flat, plumb, square and free from imperfections

L 02 Materials

Cement lime render shall consist of three (3) parts of sand to one (1) part cement with 10 percent lime added

Cement render shall consist of three (3) parts of sand to one (1) part cement

Plaster shall be gypsum plaster gauged with lime in the ratio 3 1

L 03 Preparation

Prepare surfaces to give adequate bond, thoroughly saturate before application Any drummy plastering shall be removed and replaced

L 04 External Cement Render

Render one coat 13 thick cement render applied with wood float and sponge finish to all exposed new external brick and concrete surfaces

L 05 Internal Cement Render

Render one coat 13 thick cement render wood float finish to brick walls to be tiled Ensure all render is true and corners are vertical

Render one 13 thick cement lime render scratch coat to other new internal brick walls. to take 3 thick set plaster steel trowel finish

L 06 Junction of Materials

At all junctions of different materials eg brick to concrete. form cut joints deep enough to ensure free movement

M TILER

M 1 Generally

Carry out all tiling in accordance with AS3958 1 – 1991 and AS3958 2 Carry out waterproofing in wet areas in accordance with AS3740 – 1994

M 02 Tiles

Tiles will be SAN SEBASTIAN Limestone supplied by ARTEDOMUS. Tel 9557 5060. Contact Dwayne

- Internal floor tiles to be 600 x 600 x 20 thick honed finish
- External floor tiles to be 600 x 600 x 20 thick sandblasted finish
- Internal wall tiles to be 600 x 600 x 12 thick honed finish
- Internal slabs to be full height with widths varying to match drawings Slabs 20 thick honed finish for floors and walls
- Stair treads to be 30 thick slabs honed finish internal, sandblasted finish external Nosings square cut with pencil round edges Provide and fit approved SS anti-slip strips to leading edges of stair treads grooved into stone slabs

Note that delivery time will be 12 – 14 weeks after placing order

Joints to be minimal width to approval

M 03 Laying of Tiles

- (a) Allow to seal to supplier's recommendation Direct glue **floor tiles** and slabs with approved adhesive to waterproof membranes applied over mortar beds graded to falls Cut neatly around floor wastes and into grated drains Finish tiles at junctions with dis-similar finishes with aluminium trim angle fixed to floor slabs

Cement grout floor joints with ASA GROUT ADDITIVE mixed to approved colour

Tile under all vanity units and cupboards

- (b) **Wall tiles and slabs** to be fixed with approved adhesive to rendered walls Joints to be finished with approved colour grout

No tiles behind mirrors or cabinets

Confirm all tile setouts with Architect before commencing work

M 04 Membranes

Membranes to be applied to certain areas before tiling To floors of all Wet Rooms, all Basement level floors, all external decks and verandahs, apply membrane equal to DURAM MULTITHANE UV primed with AZCOSEAL installed and certified by specialist applicators Membranes must be applied to all floors over graded mortar beds, and to external decks to base concrete slab as well as over mortar bed

Apply to entire floor, and to walls full height in showers, above and below baths and minimum 200 above floor at wall junctions Carry membranes over floor waste flanges and into waste pipe

N GLAZING

N 01 Generally

Provide glazing in accordance with BCA and AS1288 – 2006 and AS/NZS2208 – 1996 Safety glazing shall be laminated glass UNO All glass will be clear unless noted on Schedule Obscure window glass to be equal to PILKINGTONS WHITE LAMINATED Note that BASIX requires the use of specific glass as noted on the Schedule

- Single Pyrolytic Low-E Glass
- Glass with U-value 7 63 and SHGC 0 75

The glass supplier will be required to certify that these requirements have been met

N 02 Aluminium Framed Windows

Supply and fix aluminium framed windows and doors as indicated on WINDOW SCHEDULE Frames to be equal to LIDCO extrusions, generally commercial extrusions Finish with clear anodising equal to A A F EVERSIELD COASTAL Allow for all fixing angles, sealants as required Measure as built openings and provide neat fit Provide folded aluminium sill liners of matching colour

Note that the site is exposed to severe weather and all joints between aluminium sections should be continuous silicon sealed Test job on completion for weather tightness and rectify any problems promptly All opening sashes to be fitted with approved draft excluder strips

Provide keyed locks to sliding and hinged doors, hinges and strike plate to entry doors Handles to sliding doors to be approved SS D handles All frameless double hung window to be equal to ANEETA

Note that all opening windows to be screened with black insect mesh in powdercoat aluminium frames unless noted otherwise

Awning windows to be fitted with lockable window winders equal to LANE, with **stainless steel chain** External case to be clear anodised aluminium

N 03 Mirrors

Mirrors to be 6 polished plate, silvered and copper backed with polished edges, bevelled 25 wide Sizes as directed on Wet Room details Fix with double sided adhesive tape and mastic seal edges to prevent moisture penetration

Allow to fit mirrors to

- (a) Dressing Room and Doug and Rita's wardrobes

		7 off	Sizes 2600 x 1900, 2600 x 1100 (2 off), 2600 x 1350, 2600 x 750, 2500 x 2450, 2600 x 220
(b)	Rita's Office	1 off	Size 1600 x 1200
(c)	Ensuite 1	1 off	Size 2700 x 2150
(d)	Ensuite 2	2 off	Sizes 1500 x 1100, 1100 x 400
(e)	Ensuite 3	2 off	Sizes 1600 x 1200, 1200 x 400
(f)	WC1	1 off	Size 2500 x 1400
(g)	Ensuite 4	2 off	Sizes 1600 x 1350, 1350 x 400
(h)	Ensuite 5	2 off	Sizes 1600 x 1100, 1100 x 400
(i)	Ensuite 6	2 off	Sizes 1600 x 1350, 1350 x 400
(j)	Spa Room	8 off	Sizes 1400 x 1200 (3 off), 1800 x 1200 (2 off), 2400 x 600 (2 off), 2400 x 800
(k)	WC2	2 off	Sizes 1750 x 1500, 1750 x 400
(l)	Beach Shower Room	1 off	Size 1200 x 1000
(m)	Beach Store	3 off	Sizes 1500 x 800, 800 x 800, 800 x 400

Note that sizes are approximate, and must be confirmed on site

N 04 Shower Screens

Supply and fix toughened glass shower screens fixed with SS patch brackets and hinges All edges rounded and polished Seal junctions with floor and wall Provide screens to

Ensuite 1	1 fixed panel, 1 door both obscure acid etched
Ensuite 2	2 fixed panels, 1 door all clear
Ensuite 3	2 fixed panels, 1 door all clear
Ensuite 4	1 fixed panel clear
Ensuite 5	1 fixed panel clear
Ensuite 6	1 fixed panel clear
Spa Room	1 fixed panel clear
Beach Shower Room	2 fixed panels, 1 door clear

Doors to swing 180 degrees

Provide and fit approved SS D handles to each side of doors

N 05 Frameless Glass Balustrades

Provide and fix frameless glass balustrades to Bedroom 1, Office Terrace, Dining Area, Living Terrace, WG 7 void (2 off), Bedroom Terrace Support on SS spigots as specified in METALWORKER above Provide SS continuous top rail as specified where required by AS 1288

Provide frameless glass gate to swimming pool fence 1200 high with bottom pivot fixing, self closing action and childproof catch

Allow approximately 50 gap between panels

Provide and fix frameless glass balustrade to timber stair between Ground and First Floors Support on SS spigots with re-used timber top rail

N 06 Glass Splashbacks

Provide and fix back painted glass splashbacks to Kitchen (1 off), Laundry (1 off) and Catering Kitchen (2 off) Glass to be toughened STARFIRE type, back painted to selected colour Provide colour sample for approval All edges rounded and polished Fix with mirror tape to walls and seal joint with bench tops with approved SIKA mastic

N 07 Sliding Cupboard Doors

Provide and fix obscure glass sliding doors to Catering Kitchen overhead cupboards Doors to be supported on clear anodised aluminium top and bottom rails, with roller bearing runners

N 08 Glass Cupboard Doors

Provide and fix frameless acid etched toughened glass doors to Pool Terrace Room overhead cupboards and to Spa Room vanity Hang on patch hinges Edges rounded and polished

N 09 Roof lights

Roof lights shall be equal to SKYDOME, manufactured by SKYDOME INDUSTRIES Ltd, Tel 9745 1522, sizes as set out below Surround shall be non-ventilated Base shall be manufactured from 316 stainless steel Glazing shall be XT HEATSTOP Pearlescent 4 5 thick double glazed Sizes to outside of concrete hob are as follows

SK1, SK2, SK3, SK4	1250 x 1250
SK8, SK9, SK10, SK11, SK12	900 x 900

Low profile barrel vaults as follows

SK6	approx 10m x 1.5m
SK7	approx 5.5m x 700

N 08 Cleaning Down

Clean down all glass on completion

O PAINTER

O 01 Materials

All paints shall be DULUX All clear polyurethane internal finishes to be WATTYL

Bring materials onto job in original containers with labels intact and seals intact and seals unbroken Mix and apply in accordance with manufacturer's instructions

Primers, undercoats, knotting, stopping and filling shall be as recommended by the manufacturer of the finishing coat

All finishing colours and tints shall be as selected by the Architects Allow for ceilings generally to be different colours from walls Some walls may have contrast colours from other walls

O 02 Application of Paint

Prepare ground and apply materials to form complete coverage uniform in texture, colour and opacity Cover to be to the satisfaction of the Architect Maintain adequate protection for surfaces and finishes

Apply materials only in weather and conditions suitable for the production of good results and only after adjacent finishes are complete and dry Allow adequate drying time between coats

O 03 Preparation

Do all necessary stopping after priming coats has been applied Rub down all surfaces to a smooth finish prior to the application of each successive coat of paint

O 04 Finishes

Refer SCHEDULE 3 for details

O 05 Extent of Work

Allow to paint all new and existing work internally and externally

O 06 Sample Panels

Allow to paint samples of paint colours 1.5m wide floor to ceiling for approval or change of colour before painting

P ELECTRICIAN

P 01 Generally

Provide electrical installation in accordance with AS1670 1 – 1995, AS/NZS4018 – 1997 and AS300 – 1991 Wiring Rules and the requirement of Energy Australia Arrange for the disconnection of the mains, the connection of new mains at the proper times Pay all charges in connection therewith Forward all notices, arrange all necessary inspections and tests, pay all fees and deposits associated with the works, supply and install all necessary fittings, materials and accessories whether individual specified herein or not

P 02 Supply

Provide new supply from street pole all underground Provide all new wiring

Provide consumers mains of adequate capacity for the loading specified herein Provide and install switches and meter with controls clearly identified in neat lettering and circuits described in Schedule Mount same to requirements of Sydney Electricity with meter box in approved location and circuit board in Basement Electrical Room Provide external isolation switch to enable Supply Authority to turn off power supply without entering dwelling

Provide separate circuit for all refrigeration GPO's

Provide RCD's except to refrigerators

P 03 Fittings

Allow to connect the following fittings

Allow the PC Sum scheduled for supply of

Smoke detectors	4 off
Ovens	1 off
Steam Ovens	1 off
Warming Drawers	1 off
Microwave Ovens	3 off
Dishwashers	4 off
Fridge Drawers	3 off
Wine Cabinet	1 off
Refrigerators	3 off
Rangehoods	2 off
Electric Grill	1 off
Electric Deep Fryer	1 off
Gas Hobs (electric start)	2 off
Gas Wok Hob (electric start)	1 off

Induction Cooktops	2 off
Teppan Yaki Grill	1 off
Water Chillers	2 off
Water Heater / Chillers	1 off
Heated Towel Rails	14 off
Clothes Washing Machine	2 off
Clothes Dryer	2 off
Drying Cabinet	1 off
Ice Machine	1 off
Garbage Compactor	1 off
Exhaust Fans Ducted	13 off
Air Conditioners	17 off
Floor Heating	all floors
Passenger Lift	1 off
Vehicle Turntable	1 off
Garage Sliding Door motorised	1 off
Stormwater Tank Pumps	2 off
Swimming Pool Equipment	1 off
Spa Bath Pump	1 off
Jetmaster Gas Fireplace	1 off
Electric Blind Motors	60 off
Driveway Doors motorised	2 off
Pedestrian gate release	1 off

P 04 Accessories

Provide selected colour flush rocker switches, selected colour flush power points, dimmers, ceiling roses, lamp holders and selected colour round flex. Install switches at 1050 above floor and GPO's etc at 300 above floor unless otherwise indicated. Confirm these layouts on site with Architect before commencing the work.

Switches and GPOs to be HPM MS FLAT SERIES SS

P 05 Wiring

The wiring system shall be Smart Wiring to design and specification of CASTLE GROUP PTY LTD. Wiring in slabs and masonry walls to be in conduits. Wiring externally shall be run in high impact PVC buried minimum 300 below ground.

P 06 Lights

Allow the PC sum scheduled for the supply of light fittings. Allow to connect internal and external lighting points with fittings and lamps as indicated.

P 07 Power

Provide double and single general purpose outlets and special purpose outlets permanently wired as indicated

P 08 Telephone

Provide wiring to telephone points as indicated, terminated in telephone wall plugs
Arrange for TELSTRA to connect to revised telephone system

Allow for No 4 separate phone lines

All as detailed by CASTLE GROUP PTY Ltd

P 09 Television

Allow to connect a television antenna and pay TV dish supplied and fixed by Owners

Allow to connect all cabling as detailed and specified by CASTLE GROUP PTY LTD

P 10 Subfloor Heating

Allow to connect power to subfloor heating in all rooms with tiled or carpet floors
Provide heating cables in floor mortar beds or beneath carpet underlay equal to DEVI supplied by FLOOR HEAT AUSTRALIA PTY Ltd Provide and fit electronic thermostats to approved locations

P 11 Air Conditioning

Allow to connect 3 phase power to No 17 air conditioning units supplied and fitted by TEMPGUARD AIR CONDITIONING PTY Ltd Allow the PC Sum scheduled for the supply and fitting of air conditioning units

P 12 Security System

Cooperate with CASTLE GROUP who will install back-to-base security and intercom system, connected to smoke alarms

P 13 Vehicle Turntable

Allow to connect power to a vehicle turntable supplied by FLEETWOOD VEHICLE TURNTABLES PTY Ltd Allow the PC Sum scheduled for the supply and installation of the turntable

P 14 Passenger Lift

Allow to connect power to a DOMUSLIFT EASY LIVING HOME ELEVATORS PTY LTD Allow the PC Sum scheduled for the supply and installation of the lift

P 15 Solar Panels

Allow to connect power supply to 24V 210W MONO-CRYSTALLINE solar panels mounted on roof Allow to supply and fit No 57 panels on proprietary racking system as provided by TODAE PTY Ltd, Tel 1300 138 483. Contact LEE STONE (lee.stone@todae.com.au) with a grid connect installation

1 SCHEDULE OF FINISHES

External Finishes

ROOF	Torch-on membrane
HOUSE WALLS	Sandstone Weatherboard stained Render painted
WALL BETWEEN DRIVE AND ENTRY PATH. WALL FACING STREET	Sandstone
WINDOWS	Aluminium anodized
FASCIAS	FC painted
BEDROOM TERRACE SOFFIT	Villaboard painted
LIVING TERRACE, DRIVEWAY TERRACE, BEDROOM TERRACE, POOL TERRACE. OFFICE TERRACE	Limestone
BALUSTRADES	Frameless glass SS rails
LIVING TERRACE PERGOLA	SS posts and beams Timber stained
DRIVEWAY	Concrete broom finish
DRIVEWAY AND PEDESTRIAN GATES	Weatherboards stained

Internal Finishes

BEDROOM 1 WALK-IN ROBES DRESSING ROOM RITA’S OFFICE BEDROOM 2 BEDROOM 3 BEDROOM 4 BEDROOM 5	Floor	Carpet
	Walls	Granosite painted Plasterboard painted
	Ceiling	Plasterboard painted Note Bedroom 1 ceiling timber, veneer clear finish
	Windows	Aluminium anodized
	Door Jambs	Timber painted

BEDROOM 6 BEDROOM LOBBY CLOAK ROOM	Doors	Timber veneer Clear finish
ENTRY HALL KITCHEN LIVING ROOM CATERING KITCHEN CORRIDOR HALL POOL TERRACE ROOM CELLAR	Floor	Limestone tiles
	Wall	Granosite painted
	Ceiling	Plasterboard painted Note Living Room ceiling timber. clear finish
	Windows	Aluminium anodized
	Door Jambs	Timber painted
	Doors	Timber veneer Clear finish
ENSUITE 1 ENSUITE 2 LAUNDRY WC1 ENSUITE 3 ENSUITE 4 ENSUITE 5 ENSUITE 6 SPA ROOM BEACH STORE BEACH SHOWER ROOM WC2	Floor	Limestone tiles Limestone slabs
	Walls	Limestone tiles Limestone slabs
	Ceilings	Plasterboard painted
	Doors	Timber veneer Clear finish
	Door Jambs	Timber painted
	Windows	Aluminium anodized
STAIRS – BASEMENT TO GROUND FLOOR	Floor	Limestone slabs treads and risers
	Walls	Granosite painted Plasterboard painted
	Ceilings	Plasterboard painted
	Soffits	Granosite painted
	Handrails	Timber clear finish
ELECTRIC ROOM SERVICE ROOM	Floor	Concrete painted
	Walls	Render painted
	Ceiling	Concrete painted
	Doors	Timber painted
	Door jambs	Timber painted
	Window	Aluminium anodized

2 SCHEDULE OF PLUMBING FIXTURES AND COCKS

All fixtures and cocks to be **supplied by Builder** unless noted to be selected Note AQUA sinks are integrated Corian basins as constructed by SCF Interiors, Tel 9417 4144, Ref Kyla Steven

<u>Fitting</u>	<u>Location</u>	<u>Type</u>	<u>Cocks</u>
BATH	Ensuite 1	SPA IL BAGNO ALESSI ONE LAUFEN 241970	Floor mounted mixer To be selected
SHOWER	Ensuite 1	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
SHOWER	Ensuite 1	Bush Rose	Mixer BATHE METRIS S
WC	Ensuite 1	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour White In-wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
BASIN 2 off	Ensuite 1	Integrated CORIAN basins	VOLA mixer and spout to be selected, 2 off
SHOWER	Ensuite 2	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
WC	Ensuite 2	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
BASIN	Ensuite 2	AQUA Sink	VOLA mixer to be selected
SHOWER	Ensuite 3	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
WC	Ensuite 3	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In-	Control cock in cistern

		wall cistern with GEBERIT SIGMA 50 push access plate	
BASIN	Ensuite 3	AQUA Sink	VOLA mixer to be selected
BASIN	WC1	OMVIVO GEO WASH PLANE	VOLA mixer to be selected
WC	WC1	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
SHOWER	Ensuite 4	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
WC	Ensuite 4	AQUA Sink	VOLA mixer to be selected
BASIN	WC1	OMVIVO GEO WASH PLANE	VOLA mixer to be selected
SHOWER	Ensuite 5	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
BASIN	Ensuite 5	AQUA Sink	VOLA mixer to be selected
WC	Ensuite 5	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
SHOWER	Ensuite 6	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
BASIN	Ensuite 6	AQUA Sink	VOLA mixer to be selected
WC	Ensuite 6	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern

SHOWER (2 off)	BEACH SHOWER ROOM	HANSGROHE RAINDANCE S150 with rail AKTIVA A8 UNICA A	Mixer BATHE METRIS S
BASIN	BEACH SHOWER ROOM	AQUA Sink	VOLA mixer to be selected
WC	BEACH SHOWER ROOM	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
BASIN	WC2	AQUA Sink	VOLA mixer to be selected
WC	WC2	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
BEACH SHOWER	Pool Terrace	MONSOON Shower Rose SS	MONSOON mixer SS
SPA BATH	Spa Room	HOESCH SANTEE Drop in spa bath Colour white	Spout and mixer to be selected
BASIN	Spa Room	AQUA Sink	VOLA mixer to be selected
WC	Spa Room	VILLEROY & BOCH SUBWAY COMPACT WALL HUNG PAN Colour white In- wall cistern with GEBERIT SIGMA 50 push access plate	Control cock in cistern
SINK (2 off)	Pool Terrace Room	OLIVERI PRO SERIES Code 113/OU and 116/OU	Selected spout and mixer (2 off)
ZIP HYDROTAP	Pool Terrace Room	ZIP HYDROTAP chilled under- bench unit	HYDROTAP system on font
DISHWASHER	Pool Terrace Room	MIELE Code G 2872 SCVI integrated	Hot and cold control cock
REFRIGERAT OR	Pool Terrace Room	FISHER & PAYKEL French Door Code RF610 ADUX	Cold control cock

SINK (2 off)	Kitchen	OLIVERI PRO SERIES Code 113/OU and 116/OU	Selected spout and mixer (2 off)
ZIP HYDROTAP	Kitchen	ZIP HYDROTAP chilled under-bench unit	HYDROTAP system on font
DISHWASHER	Kitchen	MIELE Code G 2872 SCVI integrated	Hot and cold control cock
SINKS (2 off)	Catering Kitchen	SS integrated bowls	Selected spout and mixer (2 off)
DISHWASHER (2 off)	Catering Kitchen	MIELE Code G2872 SCVI integrated	Hot and cold control cock
SINK	Catering Kitchen	Round SS integrated bowls	Selected spout and mixer
COOKTOP HOBS (2 off)	Catering Kitchen	GAGGENAU VARIO gas hob Code VB 421-210AU	Gas fittings
WOK HOB	Catering Kitchen	GAGGENAU VARIO gas wok hob Code VG411-210AU	Gas fittings
REFRIGERATOR	Catering Kitchen	MIELE by Owner	Cold control cock
STEAM OVEN	Catering Kitchen	GAGGENAU COMBI steam oven Code BS274-130	Cold control cock
ZIP HYDROTAP	Catering Kitchen	ZIP HYDROTAP boiling and chilled under bench single unit	HYDROTAP system No font
WASHING MACHINE	Laundry	MIELE HONEYCOMB CARE Code W4466WPS	
TUB	Laundry	CLARK single 70 litre SS FLUSHLINE	Mixer spout to be selected
ICE MACHINE	Laundry	FROSTLINE ice machine Code IM44/15	Cold control cock
HOT WATER HEATERS 2 off	Service Room	RHEEM heavy duty gas Code 621275 275 litre storage	Cold control cocks Gas fittings
WATER TANK PUMPS		ONGA pump and water switch with first flush diverter, de-sludging valve, action switch master automatic mains water	

		diversion unit	
GAS POINTS 2 off	Living Terrace Pool Terrace	BBQ's by Owner	Bayonet fittings
FIREPLACE	Bedroom 1	JETMASTER 850 Low Line Single Sided	Gas fittings
MAINS PRESSURE HOSE COCKS 6 off	Living Terrace Bedroom Terrace Pool Terrace Yard - 3 selected locations	Mounted on walls 600 high	Threaded brass hose cocks
STORMWATER HOSE COCKS 4 off	Near Pool Outside Garage Yard – 2 selected locations	Mounted on walls 600 high	Threaded brass hose cocks

3 SCHEDULE OF PAINT FINISHES

All paints Dulux U N O

External Painting

Cement Render	1 coat acrylic primer 2 coats Weathershield low sheen acrylic
Metalwork	1 coat etching primer 1 coat undercoat 1 coat full gloss enamel
Timber	1 coat acrylic primer 2 coats Weathershield gloss acrylic
Timber Stained	3 coats SIKKENS clear and tinted

Internal Painting

Plasterboard	1 coat Acrylic sealer 2 coats Wash and Wear low sheen acrylic
Villaboard Cement Render	1 coat Acrylic sealer 2 coats Weathershield low sheen acrylic
Set Plaster	1 coat sealer 2 coats Weathershield low sheen acrylic Wash-and-Wear
Timber painted	1 coat primer 1 coat undercoat 1 coat full gloss enamel
Timber flooring	3 coats SYNTEKO CLASSIC 50 satin clear finish
Timber clear finish	3 coats satin Instant Estapol

4 SCHEDULE OF MONETARY SUMS

Spec Ref	Item	S (Supply) F (Fix)	Allowance
G 17 G	Door Hardware	S	\$ 10,000
P 03	Electrical fittings	S	\$ 120,000
	Oven		
	Steam oven		
	Warming Drawer		
	Microwave Ovens		
	Dishwashers		
	Fridge Drawers		
	Wine Cabinet		
	Refrigerators		
	Rangehoods		
	Electric Grill		
	Electric Deep Fryer		
	Gas Hob		
	Gas Wok Hob		
	Induction Cooktops		
	Teppan Yaki Grill		
	Clothes Washing Machine		
	Clothes Dryer		
	Drying Cabinet		
	Ice Machine		
	Garbage Compactor		
	Driveway gate motors		
P 03	Air Conditioners	S&F	\$ 100,000
P 03	Turntable	S&F	\$ 20,000
P 03	Passenger Lift	S&F	\$ 70,000
P 06	Lights	S	\$ 70,000
G	Cellar Fit Out	S&F	\$ 20,000