PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

29 April 2013

Our ref.: 130093

The General Manager
Pittwater Council
PO Box 882,
Mona Vale NSW 1660

Dear Sir/Madam,

Re: 558A Barrenjoey Road Avalon
Construction Certificate No. 130093

Development application No.: N0693/10

Private Certifiers Australia has issued a Construction Certificate under Part 4A of the Environmental Planning and Assessment Act 1979 for the above premises.

Please find enclosed the following documentation:

- Construction Certificate No. 130093
- Copy of application for Construction Certificate.
- Documentation used to determine the application for the Construction Certificate as detailed in Schedule 1 of the Certificate.
- Cheque for Council's registration fee.

Our client has been advised of the necessity to submit to Council the Notice of Commencement of building works 48 hours prior to the commencement of works.

Should you need to discuss any issues, please do not hesitate to contact the Accredited Building Surveyor Grant Harrington.

Yours faithfully,

RECEIVED
9 MAY 2013
PITTWATER COUNCIL

REC
9
PITTWATER

Grant Harrington
Accredited Building Surveyor
Private Certifiers Australia

$336 Rec: 340356 9/5/13

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

29 April 2013

Our ref.: 130093

Pittwater Coucil
PO Box 882
Mona Vale NSW 1660

Dear Sir/Madam,

Re: 558A Barrenjoey Road Avalon
Construction Certificate No. 130093

Enclosed are two (2) copies of the approved **Construction Certificate** for the subject development and two (2) copies of the stamped plans. One copy of each has been forwarded directly to Pittwater Council for their records.

The Notice of Appointment of Principal Certifying Authority and Commencement of Building Work form is required to be submitted to the Consent Authority (Council) 48 hours prior to commencement of building work. Private Certifiers Australia will *attach this information to your project file, you must also forward a copy of "Notice of Commencement" to Council and if the project is " residential " attach the " home owners warranty or Owner builder certificate ". The lodgement of the notice of commencement form is the responsibility of the owner or applicant to fulfil.*

The PCA role to be undertaken by Private Certifiers Australia will require inspections and certification. Please have the Owner/Builder liaise with our Accredited Building Surveyor Grant Harrington prior to commencement of the work.

Should you need to discuss any issues, please do not hesitate to contact the undersigned on the above numbers.

Yours faithfully,

Grant Harrington
Accredited Building Surveyor
Private Certifiers Australia

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

CONSTRUCTION CERTIFICATE 130093

Issued under Part 4A of the Environmental Planning and Assessment Act 1979 Sections 109C and 81A(5)

APPLICANT DETAILS

Applicant:	Pittwater Coucil
Address:	PO Box 882 Mona Vale NSW 1660
Contact Details:	**Phone:** 99701370 **Fax:**

OWNER DETAILS

Name of person having benefit of the development consent:	Pittwater Coucil
Address:	PO Box 882 Mona Vale NSW 1660
Contact Details:	**Phone:** 99701370 **Fax:**

RELEVANT CONSENTS

Consent Authority/Local Government Area:	Pittwater Council
Development Consent No:	N0693/10, , **Date Issued:** 20/06/2011

PROPOSAL

Address of Development:	558A Barrenjoey Road Avalon NSW 2107
Lot/DP/Zoning:	Lot 202 DP 1107408 Zone:
Building Classification:	9b,5,6
Type of Construction:	C
Scope of building works covered by this Notice:	Alterations and additions to the existing Surf Club building including amenities, cafe and water harvesting tanks- Non conditioned space
Value of Construction Certificate (Incl GST):	$2,400,000.00
Plans and Specifications approved:	Schedule 1
Fire Safety Schedule:	Schedule 2
Exclusions:	First Floor western Wall and Garbage Store under s96 submission
Critical stage inspections;	See attached Notice

CERTIFYING AUTHORITY

Certifying Authority:	Grant Harrington
Accreditation Body:	Building Professionals Board
	Registration No. BPB0170

I certify that work completed in accordance with the documentation accompanying the application for this certificate (with such modifications, if any, verified by me as may be shown on that documentation) will comply with the requirements of the Environmental Planning & Assessment Regulation 2000 as referred to in s.81A(5) of the Environmental Planning & Assessment Act 1979.

The documents listed in Schedule 1 accompanied the application for this certificate.

Dated: 30/04/2013

Grant Harrington
Accredited Building Surveyor
NB: Prior to the commencement of work S81A (2) (b) and (c) of the Environment Planning and Assessment Act 1979 must be satisfied.

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

SCHEDULE 1: APPROVED PLANS AND SPECIFICATIONS

1. Endorsed Architectural plans

PREPARED BY	DOCUMENT	DRAWING NO	REV	DATE
Richard Cole Architecture	Specification	-	-	1/12/2012
Richard Cole Architecture	Title	CC00	-	6/12/2012
Richard Cole Architecture	Site Plan	CC001	O	30/04/2013
Richard Cole Architecture	Demolition Plan - Ground Floor	CC002	O	30/04/2013
Richard Cole Architecture	Demolition Plan - Level 1	CC003	O	30/04/2013
Richard Cole Architecture	Ground Floor Plan	CC004	O	30/04/2013
Richard Cole Architecture	Level 1 Plan	CC005	O	30/04/2013
Richard Cole Architecture	Roof Plan	CC006	O	30/04/2013
Richard Cole Architecture	West & east Elevations	CC007	O	30/04/2013
Richard Cole Architecture	North & south Elevations	CC008	O	30/04/2013
Richard Cole Architecture	Sections	CC009	O	30/04/2013
Richard Cole Architecture	Sections	CC010	O	30/04/2013
Richard Cole Architecture	Sections	CC011	O	30/04/20
Richard Cole Architecture	Level 1 RCP	CC013	O	30/04/2013
Richard Cole Architecture	Ground Floor Plan - Room G.01-G.02 & G.05 & G.06	CC014	O	30/04/2013
Richard Cole Architecture	Ground Floor Wet Areas - Room G.09-G10, G.12-G.13 & Outdoor Showers	CC015	O	30/04/2013
Richard Cole Architecture	Ground Floor Wet Areas - Room G.21 & G.22	CC016	O	30/04/2013
Richard Cole Architecture	Gound Floor Wet Areas Room G.18-G.20	CC017	O	30/04/2013
Richard Cole Architecture	Level 1 Plan - Room 1.01 & 1.09	CC018	O	30/04/2013
Richard Cole Architecture	Level 1 Wet Areas Room 1.02-1.03, 1.06 & 1.08	CC019	O	30/04/2013
Richard Cole Architecture	Wall Sections	CC020	O	30/04/2013
Richard Cole Architecture	Wall Sections	CC021	O	30/04/2013
Richard Cole Architecture	Wall Sections	CC022	O	30/04/2013
Richard Cole Architecture	Plan & Garbage Store Details	CC023	O	30/04/2013
Richard Cole Architecture	Detail Sections	CC024	O	30/04/2013
Richard Cole Architecture	Stair Details	CC025	O	30/04/2013
Richard Cole Architecture	Window Schedule	CC026	O	30/04/2013
Richard Cole Architecture	Window Schedule	CC027	O	30/04/2013
Richard Cole Architecture	Door Schedule	CC028	O	30/04/2013
Richard Cole Architecture	Joinery Details	CC029	O	30/04/2013
Richard Cole Architecture	Perspectives	CR-08	O	30/04/20
Richard Cole Architecture	Perspectives	CR-09	O	30/04/2013
Richard Cole Architecture	Energy Calculator	-	-	30/04/2013
Richard Cole Architecture	Energy Calculator	-	-	30/04/2013
Richard Cole Architecture	Ground Floor RCP	CC012	O	30/04/2013
Richard Cole Architecture	Footing Set out	CC030	O	30/04/2013

2. Endorsed Engineering plans

PREPARED BY	DOCUMENT	DRAWING NO	REV	DATE
Jack Hodgson Consultants Pty Ltd	Form 2 Geotechnical Risk Management	178	-	22/04/2013
itm Design	Hydraulic Services Cover Sheet and Legend	H-00	-	14/11/2012
itm Design	Site Hydr.Services and Sedimentation Control	H-01	B	14/11/2012
itm Design	Ground Floor Sanitary and Stormwater	H-02	B	14/11/2012
itm Design	First Floor Sanitary and Stormwater	H-03	B	14/11/2012
itm Design	Roof Sanitary and Stormwater	H-04	B	14/11/2012
itm Design	Ground Floor Water & Gas	H-05	B	14/11/2012
itm Design	First Floor Water & Gas	H-06	B	14/11/2012
itm Design	Specification	H-07	B	14/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Construction Notes & Drawing Schedule	s1.00	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Footing Plan	s2.00	B	29/11/2012

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 997
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

Barrenjoey Consulting Engineers Pty Ltd	Footing Details	s2.01	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Ground Floor Slab Plan	s3.00	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Ground Floor Bottom Reinforcement Slab Plan	s3.01	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Ground Floor Top Reinforcement Slab Plan	s3.02	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Ground Floor Slab Details Sheet 1	s3.03	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Ground Floor Slab Details Sheet 2	s3.04	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	First Floor Slab and Roof Framing Plan	s4.00	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	First Floor Bottom Reinforcement Slab Plan	s4.01	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	First Floor Top Reinforcement Slab Plan	s4.02	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	First Floor Slab Detail - Sheet 1	s4.03	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	First Floor Slab Detail - Sheet 2	s4.04	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Lower Level Roof Framing Plan	s5.00	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Upper Level Roof Framing Plan	s5.01	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Roof Framing Structural Steel Sections - Sheet 1	s5.02	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Roof Framing Structural Steel Sections - Sheet 2	s5.03	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Roof Sheet Details Sheet 1	s5.04	B	29/11/2012
Barrenjoey Consulting Engineers Pty Ltd	Roof Sheet Details Sheet 2	s5.05	B	29/11/2012

3. Endorsed Other documents

PREPARED BY	DOCUMENT	DRAWING NO	REV	DATE
PCA	143 B Pre Inspection	130093	-	24/04/2013
Pittwater Council	Long Service Levy	503202	-	12/04/2013
Sydney Water	Sydney Water Stamp	5382295	-	10/04/2013
Pittwater Council	Construction Certificate Application	130093	-	27/03/2013
Richard Cole	BCA Section J Changes	-	-	1/04/2013
Viridian	Smart Glass Energy Glazing	-	-	30/04/2013
Richard Cole	Kitchen Compliance	-	-	30/04/2013

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

NOTICE OF APPOINTMENT OF PRINCIPAL CERTIFYING AUTHORITY

Made under Part 4 of the Environmental Planning and Assessment Act 1979 Sections 81A(2)(b1)(i) & 86(1)(a1)(i)

OWNER DETAILS

Name of person having benefit of the development consent:	Pittwater Coucil
Address:	PO Box 882 Mona Vale NSW 1660
Contact Details:	**Phone:** 99701370

RELEVANT CONSENTS

Consent Authority/Local Government Area:	Pittwater Council
Development Consent No:	N0693/10, , **Date issued:** 20/06/2011
Construction Certificate Number: 130093	**Date issued:** 26/04/2013

PROPOSAL

Address of Development:	558A Barrenjoey Road Avalon NSW 2107
Scope of building works covered by this Notice:	Alterations and additions to the existing Surf Club building including amenities, cafe and water harvesting tanks

PRINCIPAL CERTIFYING AUTHORITY

Certifying Authority:	Grant Harrington
Accreditation Body:	Building Professionals Board
	Registration No. BPB0170

The owner has appointed Grant Harrington as the Principal Certifying Authority as stated in the Construction Certificate Application lodged with Private Certifiers Australia for the building works identified in this Notice.

I, Grant Harrington, Accredited Building Surveyor of Private Certifiers Australia located at Suite 6/ 226 Condamine Street PO Box 907 Balgowlah Manly Vale NSW 2093 accept the appointment as the Principal Certifying Authority for the building works identified and covered under the relevant Construction Certificate as stated in this Notice.

Dated: 26/04/2013

Grant Harrington
Principal Certifying Authority

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

NOTICE TO APPLICANT OF MANDATORY CRITICAL STAGE INSPECTIONS

Made under Part 4 of the Environmental Planning and Assessment Act 1979 Sections 81A(2)(b1)(II)

OWNER DETAILS

Name of person having benefit of the development consent:	Pittwater Coucil
Address:	PO Box 882 Mona Vale NSW 1660
Contact Details:	**Phone:** 99701370

RELEVANT CONSENTS

Consent Authority/Local Government Area:	Pittwater Council
Development Consent No:	N0693/10, , **Date Issued:** 20/06/2011
Construction Certificate Number: 130093	**Date issued:** 26/04/2013

PROPOSAL

Address of Development:	558A Barrenjoey Road Avalon NSW 2107
Scope of building works covered by this Notice:	Alterations and additions to the existing Surf Club building including amenities, cafe and water harvesting tanks

CERTIFICATION DETAILS

Principal Certifying Authority:	Grant Harrington
Accreditation Body:	Building Professionals Board
	Registration No. BPB0170

Please telephone **9907-6300** to book a critical stage inspection. A minimum period of 48 hours is to be provided.

*I, **Grant Harrington, Private Certifiers Australia** located at Suite 6/ 226 Condamine Street PO Box 907 Balgowlah Manly Vale NSW 2093 acting as the principal certifying authority hereby give notice in accordance with Section 81A(2)(b1)(ii) of the Environmental Planning and Assessment Act 1979 to the person having the benefit of the development consent that the mandatory critical stage inspections identified in Schedule 1 & Schedule 2 are to be carried out in respect of the building work.*

The applicant, being the person having benefit of the development consent is required under Section 81A(2)(b2)(ii) of the Environmental Planning and Assessment Act 1979 to notify the principal contractor (if not an owner-builder) of the applicable mandatory critical stage inspections specified under this notice.

To allow a principal certifying authority or another certifying authority time to carry out mandatory critical stage inspections, the principal contractor for the building site, or the owner builder, must notify the principal certifying authority at least 48 hours before building work is commenced at the site if a mandatory critical stage inspection is required before the commencement of the work in accordance with Clause 163 of the Environmental Planning & Assessment Regulation 2000.

Failure to request a mandatory critical stage inspections will prohibit the principal certifying authority under with Section 109E(3)(d) of the Environmental Planning and Assessment Act 1979 to issue an occupation certificate.

Dated: 26/04/2013

Grant Harrington
Principal Certifying Authority

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

SCHEDULE 1:
MANDATORY CRITICAL STAGE INSPECTIONS

NO	CRITICAL STAGE INSPECTION	INSPECTOR
1.	Prior to covering of waterproofing in any wet areas, for a minimum of 10% of rooms with wet areas within a building. At least 1 units are to be inspected.	Certifying Authority
2.	Prior to covering any stormwater drainage connections	Certifying Authority
3.	After the building work has been completed & prior to any occupation certificate being issued in relation to the building	Principal Certifying Authority

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

SCHEDULE 2
FIRE SAFETY SCHEDULE

FIRE SAFETY MEASURES	EXISTING STANDARD OF PERFORMANCE	PROPOSED STANDARD OF PERFORMANCE
Emergency lighting		BCA E4.2, E4.4 & AS/NZS 2293.1-2005
Exit signs		BCA E4.5, E4.6. & E4.8, AS/NZS 2293.1-2005
Fire hydrant systems		BCA E1.3 AS2419.1-2005
Hose reel system		BCA E1.4 & AS2441-2005
Portable fire extinguishers & Fire Blankets		BCA E1.6 & AS2444-2001

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Address: Suite 6/ 226 Condamine Street PO Box 907
Balgowlah
Manly Vale NSW 2093
Tel: 02 9907 6300
Fax: 02 9907 6344
Email: grant@pcaservices.com.au
ABN:

MANDATORY AND CRITICAL STAGE INSPECTION REPORT - 143B PRE-APPROVAL INSPECTION

OWNER DETAILS

Name of person having benefit of the development consent: Pittwater Coucil
Address: PO Box 882 Mona Vale NSW 1660
Contact Details: 99701370

RELEVANT CONSENTS

Consent Authority/Local Government Area: Pittwater Council
Development Consent No: N0693/10, , **Date Issued:** 20/06/2011
Construction Certificate Number: 130093 **Date Issued:** 1/01/0001

PROPOSAL

Address of Development: 558A Barrenjoey Road Avalon NSW 2107
Zoning:
Building Classification: 9b,5,6
Type of Construction: C
cope of building works covered by this Notice: Alterations and additions to the existing Surf Club building including amenities, cafe and water harvesting tanks

INSPECTION DETAILS

Principal Certifying Authority: Grant Harrington **No.:** BPB0170
Inspector: Mark Painter **No.:** BPB1950
Inspection date and time: 24/04/2013 **Inspection time:** 1:00 PM

INSPECTION RESULTS

We have attended the above property and completed an inspection. Each area inspection and the inspection result is listed below.

- **Inspection area:** ✓ **143B Pre-Approval Inspection** - Satisfactory

ADDITIONAL COMMENTS

Mark Painter
Inspector

TABLE OF CONTENTS

Table of contents 2
0131 Preliminaries 3
0171 General Requirements 7
0184 Termite management 12
0201 Demolition 13
0221 Site management 15
0222 Earthwork 16
0223 Service trenching 19
0250 Landscape – gardening 20
0271 Pavement base and subbase 23
0274 Concrete pavement 24
0310 Concrete 26
0331 Brick and block construction 33
0342 Light steel framing 39
0352 Structural Steelwork 43
0382 Light timber framing 47
0383 Sheet flooring and decking 51
0421 Roofing 53
0431 Cladding 56
0451 Windows and glazed doors 58
0453 Doors and access panels 60
0454 Overhead doors 63
0455 Door hardware 64
0467 Glass components 65
0471 Insulation and sarking membranes 67
0511 Lining 70
0551 Joinery 73
0572 Miscellaneous fixtures and appliances 77
0611 Plastering 81
0612 Cementitious toppings 85
0621 Waterproofing – wet areas 88
0631 Ceramic tiles 91
0651 Resilient finishes 95
0652 Carpets 97
0655 Timber flooring 99
0656 Floor sanding and finishing 101
0671 Painting 103
0802 Hydraulic design and install 107
0902 Electrical design and install 110
Referenced documents 116

0131 PRELIMINARIES

1 GENERAL

1.1 THE SITE

Site restrictions

Site limitations: Comply with the following restrictions on the use of the site:

Council conditions within the DA consent including but not limited to:

- The site is to be fully secured by a fence to all perimeters to the site to prevent unauthorised access both during the course of the works and after hours.
- Access to the beach for the public is to be maintained at all times.
- No works are to be carried out in Council\'s Road Reserve without the written approval of the Council.
- No skip bins or materials are to be stored on Council\'s Road Reserve.
- Access to the site through an adjoining park/reserve is prohibited without the written approval of the Council

Access: Access on to and within the site, use of the site for temporary works and constructional plant, including working and storage areas, location of offices, workshops, sheds, roads and parking, is restricted to the following areas:

- As shown on drawing CC0001.

Occupied premises

General: For the parts of the site designated as occupied premises in the **Occupied premises schedule**:

- Allow occupants to continue in secure possession and occupancy of the premises for the required period.
- Make available safe access for occupants.
- Arrange work to minimise nuisance to occupants and for their safety.
- Protect occupants against weather, dust, dirt, water or other nuisance, by such means as temporary screens.

Proposals: Submit details of proposed methods.

- Purpose of submission: Information only.

Occupied premises schedule

Occupants	Occupied premises	Period of occupancy
Avalon Surf Club	Temporary accommodation adjacent to the site	The length of the contract.

Protection of persons and property

Temporary works: Provide and maintain required barricades, guards, fencing, shoring, temporary roadways, footpaths, signs, lighting, watching and traffic flagging.

Accessways and services: Do not obstruct or damage roadways and footpaths, drains and watercourses and other existing services in use on or adjacent to the site. Determine the location of such services.

Property: Do not interfere with or damage property which is to remain on or adjacent to the site, including adjoining property encroaching onto the site, and trees.

Rectification
Accessways and services: Rectify immediately any obstruction or damage to roadways and footpaths, drains and watercourses and other existing services in use on or adjacent to the site. Provide temporary services whilst repairs are carried out.

Property: Rectify immediately any interference or damage to property which is to remain on or adjacent to the site, including adjoining property encroaching onto the site, and trees.

Existing services
General: Attend to existing services as follows:

- If the service is to be continued, repair, divert or relocate. Submit proposals.
- If the service crosses the line of a required trench, or will lose support when the trench is excavated, provide permanent support for the existing service. Submit proposals.
- If the service is to be abandoned, remove redundant parts and make safe.

Proposals: Submit proposals for action to be taken with respect to existing services before starting this work. Minimise the number and duration of interruptions.

- Purpose of submission: For review.

1.2 CONSTRUCTION PLANT

Access
Access route: Via existing access driveway from Barrenjoey Road.

Parking
Principal's existing parking areas: Use only designated parking areas.

- Location: Within the site

Use of existing services
General: Existing services may be used as temporary services for the performance of the contract subject to conditions stated in the **Existing services schedule**.

Existing services schedule

Service	Conditions of use
Water	
Electricity	
Sewer	

Temporary services
Requirement: Provide temporary services as required.

Project signboards
General: Provide project-specific signboards and the following:

- Locate where directed.
- Maintain in good condition for duration of the work.
- Obtain permission for removal.
- Remove on completion.

Project signboard description
Location: On Perimeter fencing adjacent to public park

Size: Approximately 1200 x 1200mm

Text, graphics: Provide professional design by graphic designer submitted for approval by architect.

Insert, e.g. name of the project, the owner, contractor, architect, engineer, quantity surveyor.

Other details: Provide the following information:

Client - Avalon Surf Lifesaving Club and Pittwater Council name and logo,

Project Manager Name and Details

Architect Name and Details

Builder Name and Details

Completion Date

Contact number for enquiries.

Provide separate signage acknowledging the contribution of Building Partners and suppliers.

1.3 BUILDING THE WORKS

Surveys

Setting out: Set out works based on the existing building. Confirm setout in relation to existing walls and floor levels and advise of any discrepancies with documentation.

Check surveys: Provide a surveyors certificate to certify the height of floor levels and location of external walls.

Final survey: Provide a surveyors certificate to certify the final location of the external walls and height of the roof.

Survey marks

Definition: The term survey mark means a survey peg, bench mark, reference mark, signal, alignment, level mark or any other mark used or intended to be used for the purpose of setting out, checking or measuring the work.

Care of survey marks: Preserve and maintain the principal's survey marks in their true positions.

Rectification: If the principal's survey marks are disturbed or obliterated, immediately give notice and rectify the disturbance or obliteration.

Safety

Accidents: Promptly notify the contract administrator of the occurrence of the following:

- Accidents involving death or personal injury.
- Accidents involving loss of time.
- Incidents with accident potential such as equipment failure, slides and cave-ins.

Accident reports: Submit reports of accidents.

- Purpose of submission: Information only.

Contractor's representative

General: Must be accessible, and fluent in English and technical terminology.

Subcontracting

General: Submit a complete list of proposed subcontractors and suppliers.

Items supplied by owner

General: Materials and other items identified in the **Items to be supplied schedule** will be supplied free of charge to the contractor for installation in the execution of the works. Unload and take delivery of them, inspect them for defects and then take care of them. If defects are found, advise. Return unused items to the owner.

Notice: Prepare a schedule to indicate when the Items to be Supplied will be required on site.

Items to be supplied schedule

Location	Item	Quantity	Date
Bar / Canteen	Dishwasher	2	
Bar / Canteen	Garbage Sorter	3	
Bar	Fridges	2	
First Aid Room	Underbench fridge	1	

1.4 COMPLETION OF THE WORKS

Reinstatement

General: Before the date for practical completion, clean and repair damage caused by installation or use of temporary work and restore existing facilities used during construction to original condition.

Pest eradication

General: Employ suitably qualified pest exterminators. At practical completion submit a certificate stating that completed works are free of pest types identified in the **Pest eradication treatments schedule**.

Pest eradication treatments schedule

Pest type to be treated	Eradication method
Not Applicable	

Pest type to be treated	Eradication method

Removal of plant
General: Within 10 working days after practical completion, remove temporary works and construction plant no longer required. Remove the balance before the end of the defects liability period.

1.5 MISCELLANEOUS

Contractor and owner to observe confidentiality
Publicity: Do not issue information concerning the project for publication in the media without prior written approval of the owner. Refer to the owner enquiries from the media concerning the project.

Compliance with the law
Requirements of authorities: The owner, before entering into the contract, has given the notices, paid the fees, and obtained the permits, approvals and other authorisations stated in the **Prior applications and approvals schedule**.

Prior applications and approvals schedule

Prior notices given and applications made	Fees paid	Permits, approvals and authorisations received
Development Application	Yes	Pittwater Council Development Consent No: NO693/10
Construction Certificate	Pending	Pending

Authority conditions schedule

Authority	Document	Condition
Pittwater Council	Pittwater Council Development Consent No: NO693/10	Prescribed Conditions A1 to G9

0171 GENERAL REQUIREMENTS

1 GENERAL

1.1 APPLICABILITY

General

Requirement: Conform to *General requirements,* as appropriate, in all worksections.

1.2 GENERAL

Energy efficiency

Comply with Section J requirements of the Building Code of Australia.

Substitution

Identified proprietary items: Identification of a proprietary item does not necessarily imply exclusive preference for the item so identified, but indicates the necessary properties of the item.

Alternatives: If alternatives to the documented products, methods or systems are proposed, submit sufficient information to permit evaluation of the proposed alternatives.

1.3 STANDARDS

Current editions

General: Use referenced Australian or other standards (including amendments), and the BCA including state and territory variations which are current three months before the date of the contract except where other editions or amendments are required by statutory authorities. Any local authority requirements take precedence.

1.4 INTERPRETATION

Definitions:

General: For the purposes of this document the definitions given below apply:

- Owner: Owner has the same meaning as client, principal or proprietor and is the party to whom the contractor is legally bound to construct the works.
- Contractor: Means the same as builder.
- Metallic-coated: Steel coated with zinc or aluminium-zinc alloy via a continuous hot-dip process.
- Hot-dip galvanized: Zinc coated to AS/NZS 4680 after fabrication.
- Professional engineer: As defined by the BCA.
- Proprietary: Proprietary means identifiable by naming manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.
- Provide: Provide and similar expressions mean supply and install and include development of the design beyond that documented.
- Required: Means required by the contract documents, the local council or statutory authorities.
- Supply: Supply, furnish and similar expressions mean supply only.

1.5 SUBSTITUTION

Identified proprietary items

Identification of a proprietary item does not necessarily imply exclusive preference for the item so identified, but indicates the necessary properties of the item.

Alternatives

If alternatives to the documented products, methods or systems are proposed, submit sufficient information to permit evaluation of the proposed alternatives

1.6 BUSHFIRE PROTECTION

General

Bushfire Attack Level (BAL) to AS 3959: Not Applicable

Bushfire resistant design and construction: Not Applicable

2 PRODUCTS

2.1 MANUFACTURERS' OR SUPPLIERS' RECOMMENDATIONS

General

General: Provide and select, if no selection is given, transport, deliver, store, handle, protect, finish, adjust and prepare for use the manufactured items in accordance with the current written recommendations and instructions of the manufacturer or supplier.

Proprietary items/systems/assemblies: Assemble, install or fix to substrate in accordance with the current written recommendations and instructions of the manufacturer or supplier.

Sealed containers

General: If materials or products are supplied by the manufacturer in closed or sealed containers or packages, bring the material or products to point of use in the original containers or packages.

2.2 TIMBER

Forest certification

Timber source: Forest certified to:

The Forest Stewardship Council scheme.

Product labelling: Provide timber labelled with the following:

Woodmark and SmartWood as accredited by the Forest Stewardship Council.

Chain of custody:

FSC certification: To FSC requirements.

Moisture content

General: Make milled products from timbers seasoned:

- To within 3% of the equilibrium moisture content appropriate to the timber and its intended conditions of use.
- With no more than 3% difference between any 2 pieces in any one group.

Acclimatisation

General: Acclimatise timber fitouts by stacking them for two weeks in the in-service conditions with air circulation to all surfaces after the following construction operations are complete:

- Air conditioning operational.
- Lighting operational.
- Site drainage and stormwater works are complete.
- Space fully enclosed and secure.
- Wet work complete and dry.

Unseasoned timber

General: If unseasoned timber is provided, or variation in moisture content is likely, make allowance for shrinkage, swelling and differential movement.

Recycled timber

Grit blasted or re-machined: Remove all nails and screws.

Classification: Visually graded.

Durability

General: Provide timbers with natural durability appropriate to the conditions of use or preservative-treated timbers of equivalent durability.

Natural durability class of heartwood: To AS 5604.

Preservative treatment: To the AS 1604 series.

Minimum requirement: To the **Natural and treated timber durability table**.

Natural and treated timber durability table

Exposure	Natural timber	Treated timber	Remarks
	Required durability class to AS 5604	Required hazard class to AS 1604 series	
Inside, above ground.	Class 4	H1	Treated timber resistant to lyctids.

Exposure	Natural timber	Treated timber	Remarks
	Required durability class to AS 5604	Required hazard class to AS 1604 series	
Completely protected from the weather. Well ventilated			Untreated timber must be protected from termites
Inside, above ground. Protected from wetting with nil leaching. Well ventilated	Class 3	H2	Treated timber resistant to borers and termites. Untreated timber must be protected with a finish
Above ground, exposed to weather. Periodic moderate wetting and leaching	Class 2	H3	Treated timber resistant to borers, termites and moderate decay. Applicable to weatherboards, fascias, pergolas (above ground), window joinery, framing and decking
In-ground	Class 1	H4 (Severe wetting and leaching)	Treated timber resistant to borers, termites and severe decay. Applicable to fence posts, greenhouses, pergolas (in-ground) and landscaping timbers
		H5 (Extreme wetting and leaching and/or critical uses.)	Applicable to retaining walls, piling, house stumps, building poles, cooling tower fill

2.3 STEEL

Durability

General: Provide steel products protected from corrosion to suit the conditions of use.

Internal engineer designed steel members: Remove mill scale, rust, moisture and oil. Coat with a zinc phosphate primer to the manufacturer's instructions.

Corrosion resistance

General: Conform to the following atmospheric corrosivity category as defined in AS/NZS 2312.

Atmospheric corrosivity category: Category E-M

Items that require protection include:

Steel members

Steel cladding, lining, trims and flashings.

Compliance: Conform to the **Corrosion resistance table** or provide proprietary products with metallic and/or organic coatings of equivalent corrosion resistance and as follows:

Built-in products below damp proof course: Stainless steel 316 or engineered polymer.

Corrosion resistance table

Atmospheric corrosivity category to AS/NZS 2312	Heavy steel members including lintels more than 3.2 mm thick	Steel cladding, lining, trims and flashings
E-M	AS 2312:2002 System Designation IZS3	Metallic-coated sheet Substrate: 1397 AZ200 Steel Paint Coating – AS/NZ 2728 Type 4

Galvanizing
General: Galvanize mild steel components (including fasteners) to AS 1214 or AS/NZS 4680, as appropriate, if:

- Exposed to weather.
- Embedded in masonry.
- Exposed to or in air spaces behind external leaves of masonry walls.
- In contact with chemically treated timber.

2.4 PROTECTIVE COATINGS

General
Environment: To AS/NZS 2312 clause 2.3.

Coating designation: To AS/NZS 2312 Table 6.3.

System Designation IZS3

Surface Preparation: Sa2 ½

Inorganic zinc silicate water borne

Paint Refernce Number C01b, C01c

Refer to Section 0352 Structural Steel

CCA (copper chrome arsenic) treated timber
Greasing: Before placing bolts or other metal components in contact with CCA-treated timber, paint contact surfaces or coat in grease or a bituminous coating.

Unseasoned timber
General: Do not fix in contact with steel framing without fully painting the contact surfaces of timber and steel.

2.5 FASTENERS

Self drilling screws
Corrosion resistance: To AS 3566.2 Table 1 and the **Fastener corrosion resistance table.**

Fastener corrosion resistance table

Atmospheric corrosivity category to AS/NZS 2312	Corrosion resistance class	
	Internal	External
E-M	Hot Dip Galvanised	Stainless steel 316

2.6 VAPOUR BARRIER

General
Vapour barrier to slabs: To AS 2870 clause 5.3.3.

Minimum thickness: 0.2 mm.

3 EXECUTION

3.1 WALL CHASING

Holes and chases
General: Make holes and chases required in masonry walls so that the structural integrity of the wall is maintained. Do not chase walls nominated as fire or acoustic rated.

Parallel chases or recesses on opposite faces of a wall: Not closer than 600 mm to each other.

Chasing of blockwork: Chase only core-filled hollow blocks or solid blocks not designated as structural and to the **Concrete blockwork chasing table.**

Concrete blockwork chasing table

Block thickness (mm)	Maximum depth of chase (mm)
190	35
140	25
90	20

3.2 FIXING

General

Suitability: If equipment and services are not suitable for fixing to non-structural building elements, fix directly to structure and trim around penetrations in non-structural elements.

Fasteners

Sufficiency: Use proprietary fasteners capable or transmitting the loads imposed, and sufficient to ensure the rigidity of the assembly.

3.3 FOOTPATHS AND CROSSINGS

General

Requirement: Provide footpaths and kerb crossing to local authority requirements.

3.4 COMPLETION

General

Removal of temporary work, services and plant: Remove temporary work services and construction plant within 10 working days after occupation of the works.

Rectification: Clean and repair damage caused by the installation or use of temporary work and services and restore existing facilities used during construction to original condition.

Final cleaning: Remove rubbish and surplus material from the site and clean the works throughout including interior and exterior surfaces exposed to view. Vacuum clean carpeted and soft surfaces. Clean debris from the site, roofs, gutters, downpipes and drainage systems.

Samples: Remove non-incorporated samples, sample panels and prototypes.

Warranties: Register with manufacturers, as necessary, and provide copies of manufacturers' warranties.

Instruction manuals: Provide the manufacturers' instruction manuals.

Operation: Make sure moving parts operate safely and smoothly.

Surveyor's certificate: Provide a certificate which confirms that the work, including boundary fences, has been correctly located.

Services layout: Provide a plan which shows the location of underground services.

Authorities' approvals: Provide evidence of approval of the local authority or principal accredited certifier and statutory authorities whose requirements apply to the work.

Keys: Provide five keys for each set of locks keyed alike and five keys for each lock keyed to differ.

0184 TERMITE MANAGEMENT

1 GENERAL

1.1 STANDARDS

General
Standard: To AS 3660.1.

Chemical soil barriers – reticulation systems
Type testing: To AS 3660.1 Appendix E.

Termite barrier notice
General: Provide a durable notice permanently fixed in a prominent location to BCA 3.1.3.2(b) and AS 3660.1 Appendix A.

2 SELECTIONS

2.1 SCHEDULE

Termite barriers schedule

Barrier designation	TB1	TB2	TB3
Location	Ground Floor Slab		
Slab	Kordon		
Slab penetrations	Kordon		
Slab control joints and footing/slab joints	Kordon		
Under slabs	None		
Building perimeters	Kordon		
Under suspended floors	Not Applicable		
Timber poles and posts	Not Applicable		

0201 DEMOLITION

1 GENERAL

1.1 STANDARDS

Demolition
Standard: To AS 2601.

1.2 SUBMISSIONS

Records
Dilapidation record: Submit a copy of the dilapidation record of adjacent Council Assets for inspection. Submit to Council the record relating to that property before commencement of demolition.

2 PRODUCTS

2.1 DEMOLISHED MATERIALS

General
Removal: Except for items to be recovered for re-use in the works, or delivery to the owner and materials to be recycled in the works, take possession of demolished materials and remove them from the site. Do not burn or bury demolished materials on the site. Prevent spillage of demolished materials in transit.

Recycling: Where possible, dismantle building components for off site recycling.

3 EXECUTION

3.1 SUPPORT

Temporary support
Existing buildings: Until permanent support is provided, provide temporary support for sections of existing buildings which are to be altered and which rely for support on work to be demolished.

3.2 PROTECTION

Encroachment
General: Prevent the encroachment of demolished materials onto adjoining property, including public places.

Weather protection
General: If walls or roofs are opened for alterations and additions, or the surfaces of adjoining buildings are exposed, provide temporary covers to prevent water penetration. Provide covers to protect existing plant equipment and materials intended for re-use.

Security
General: Provide a fully encompassing site fence to provide security against unauthorised entry to the building.

3.3 DEMOLITION

Dilapidation record
Purpose: Use the dilapidation record to assess the damage and making good arising out of demolition work.

Hazardous materials removal
Standard: To AS 2601 clause 1.6.2.

Procedure for asbestos removal: In accordance with NOHSC 2002 Code of Practice for the Safe Removal of Asbestos.

Notice of completion
General: Give at least 7 working days notice of completion of demolition so that adjacent structures may be inspected following completion of demolition.

Making good: Make good any damage arising out of demolition work. Obtain written acceptance from the owner of each adjoining property of completeness and standard of making good.

4 SELECTIONS

4.1 SCHEDULES

Recovered items for re-use in the works schedule

Item	Location for re-use
Existing Kitchen and appliances	Kitchen – Room 1.08
Shark Alarm	External wall adjacent to canteen
Timber framing	Screens TS-02
Ceiling speakers	Club Lounge and Club Room ceilings
First floor sanitary Items	First Floor bathrooms
Nippers Canteen Appliances and shelving	Nippers Canteen
Club Room AV Projector	Club Room
Club Lounge appliances	Club Lounge
Picture Hanging Track system	Hall of Champions
Ceiling Fans	Office, Meeting Room & Caretaker Flat
Steel Towel Hook rails	Public Change Rooms
Aluminium Seat Brackets	Public and Club Change Rooms

Recovered items for delivery to the owner schedule

Item	Deliver to
Not Applicable	

Demolished material for recycling in the works schedule

Material
Brickwork if suitable for reuse
Timber if suitable for reuse

Demolished material for recycling off-site schedule

Material
Brickwork
Concrete
Glass
Aluminium
Steel
Timber

0221 SITE MANAGEMENT

1 EXECUTION

1.1 CONTROL AND PROTECTION

Erosion control

General: Plan and carry out the work so as to avoid erosion, contamination, and sedimentation of the site, surrounding areas, and drainage systems.

Prevent building sediments from affecting the beach.

Water quality

Wash out: Make sure that wash out does not enter waterways or stormwater drains.

Cross connection: Make sure that there are no cross connections between the stormwater and the public sewerage system.

Dewatering

General: Keep earthworks free of water. Provide and maintain slopes, crowns and drains on excavations and embankments to ensure free drainage. Place construction, including fill, masonry, concrete and services, on ground from which free water has been removed. Prevent water flow over freshly laid work.

1.2 TREE PROTECTION

Standard

General: Comply with the recommendations of those parts of AS 4970 which are referenced in this worksection.

Trees to be retained

Extent: All trees NOT marked for removal.

Tree protection

Tree protection zone: To AS 4970 Section 3.

Tree protective measures: To AS 4970 Section 4.

Work near trees

Harmful materials: Keep the area within the dripline free of sheds and paths, construction material and debris.

Work under trees: Do not remove topsoil from, or add topsoil to, the area within the dripline of the trees.

Hand methods: Use hand methods to locate, expose and cleanly remove the roots on the line of excavation.

1.3 SITE CLEARING

Extent

General: Clear only the following site areas:

- Areas to be occupied by works such as structures, paving, excavation, regrading and landscaping.
- Other areas designated to be cleared.

Clearing and grubbing

Clearing: Remove everything on or above the site surface, including rubbish, scrap, grass, vegetable matter and organic debris, scrub, trees, timber, stumps, boulders and rubble.

Grubbing: Grub out stumps and roots over 75 mm diameter to a minimum depth of 500 mm below subgrade under buildings, embankments or paving, and 300 mm below the finished surface in unpaved areas. Backfill holes remaining after grubbing with sand material to prevent ponding of water. Compact the material to the relative density of the existing adjacent ground material.

Disposal

Spoil: Remove cleared and grubbed material from the site and dispose of legally.

0222 EARTHWORK

1 GENERAL

1.1 STANDARDS

General
Earthworks: To AS 3798.
General: Conform to the recommendations of those parts of AS 3798 which are referenced in this worksection.

1.2 INTERPRETATION

Definitions:
General: For the purposes of this worksection the following definitions apply:

- Site classification: To AS 2870 and BCA 3.2.4.
- Bad ground: Ground unsuitable for the purposes of the works, including fill liable to subsidence, ground containing cavities, faults or fissures, ground contaminated by harmful substances and ground which is, or becomes, soft, wet or unstable.
- Rock: Monolithic material with volume greater than 0.5 m^3 which cannot be removed until broken up rippers or percussion tools.
- Subgrade: The trimmed or prepared portion of the formation on which the pavement, footing or slab is constructed. Generally taken to relate to the upper line of the formation.
- Zone of influence: A foundation zone bounded by planes extending downward and outward from the bottom edge of a footing, slab or pavement and defining the extent of foundation material having influence on the stability or support of the footings, slab or pavement.

2 PRODUCTS

2.1 FILL MATERIALS

General
Suitable material: To AS 3798 clause 4.4 including inorganic, non-perishable material suitably graded and capable of compaction to the documented density.
Unsuitable materials: Do not use unsuitable material for fill in conformance with AS 3798 clause 4.3.

3 EXECUTION

3.1 GEOTECHNICAL

Comply with Geotechnical Engineer's recommendations and instructions.
Refer to Jack Hodgson Consultants "*Risk Analysis & Management for Proposed Additions at Avalon Surf Club*" dated 27th September 2010 and Crozier Geotechnical Consultants "*Report on Geotechnical Investigation for Proposed New Development at Avalon Beach Surf Life Saving Club*" dated March 2012.

As found site conditions
General: If the following are encountered, give notice immediately and obtain instructions before carrying out any further work in the affected area:

- Bad ground.
- Rock.

3.2 REMOVAL OF TOPSOIL

General

Extent: Areas of cut or fill and areas occupied by structures, pavements and embankments.

Maximum depth: 200 mm.

Topsoil stockpiles

General: Stockpile site topsoil intended for re-use and imported topsoil where necessary.

Stockpile heights: Establish stockpiles to maximum height of 1.5 m.

Protection: Protect the topsoil stockpiles from contamination by other excavated material, weeds and building debris.

3.3 EXCAVATION

Extent

Site surface: Excavate over the site to give correct levels and profiles required as the basis for structures, paving and landscaping. Make allowance for compaction or settlement or heaving.

Footings: Excavate for footings to the required sizes and depths. Confirm that the foundation conditions meet the design bearing capacity.

Crawl space: Provide a clear space under timber or steel bearers:

- Minimum clearance: 400 mm.

Rock

General: Do not use explosives.

Existing footings

Requirement: If excavation is required within the zone of influence of an existing footing, use methods including (temporary) shoring and underpinning which maintain the support of the footing and make sure that the structure and finishes supported by the footing are not damaged.

Existing services

Utility services: Contact DIAL BEFORE YOU DIG to identify location of underground utility services pipes and cables.

Bearing surfaces

General: Provide even plane bearing surfaces for loadbearing elements including footings. Step to accommodate level changes. Make the steps to the appropriate courses if supporting masonry.

Reinstatement of excavation

Requirement: If excavation exceeds the required depth, or deteriorates, reinstate with fill to the correct depth, level and bearing value.

Grading

External areas: Grade to give falls away from buildings, minimum 1:100.

Subfloor areas: Grade the ground surface under suspended floors to drain ground or surface water away from buildings without ponding.

3.4 PREPARATION FOR FILLING

Preparation

Stripping: Prepare the ground surface before placing fill (including topsoil fill), ground slabs or load bearing elements to AS 3798 clause 6.1.5. Remove materials which will inhibit or prevent satisfactory placement of fill layers, loose material, debris and organic matter.

3.5 PLACING FILL

Placing fill

Placement: To BCA 3.2.2.

Layers: Place fill in near-horizontal layers of uniform thickness no greater than 150 mm after compaction, deposited systematically across the fill area.

Placing at structures: Place and compact fill in layers simultaneously on both sides of structures, culverts and pipelines to avoid differential loading.

Moisture content: Adjust the moisture content of fill during compaction within the range of 85 – 115% of the optimum moisture content determined by AS 1289.5.1.1 or AS 1289.5.2.1 as appropriate, in order to achieve the required density.

Density: Compact the subgrade and each layer of fill to the required depth and density, as a systematic construction operation and to conform to the **Compaction table**. Shape surfaces to provide drainage and prevent ponding.

Compaction table

Location	Cohesive soils. Minimum dry density ratio (standard compaction) to AS 1289.5.4.1	Cohesionless soils. Minimum density index to AS 1289.5.6.1
Residential: Lot fill, house sites.	95	70
Pavements: Fill to support pavements Subgrade to 300 mm deep	 95 98	 70 75

0223 SERVICE TRENCHING

1 PRODUCTS

1.1 FILL MATERIALS

General

Backfill material: To the *Earthwork* worksection **Fill materials**, free from stones larger than 100 mm maximum dimension and as follows:

- Next to services: Do not place any particles greater in size than 25 mm within 150 mm of services.
- Under paved areas and within 4 m of structures: Coarse sand, controlled low strength material or fine crushed rock.
- In reactive clay: In sites classified M, M-D, H1, H1-D, H2, H2-D, E or E-D to AS 2870, re-use excavated site material at a moisture content within ± 1% of that of the adjoining in situ clay.

2 EXECUTION

2.1 EXISTING SURFACES

Concrete and asphalt pavements

Method: Sawcut trench set out lines for the full depths of the bound pavement layers except where the set out line is located along expansion joints.

Segmental paving units

Removal: Take up segmental paving units both full and cut by hand, between the trench set out lines, and neatly stack on wooden pallets at locations as directed.

2.2 EXCAVATING

Excavation

General: Excavate for underground services in conformance with the following:

- To required lines and levels, with uniform grades.
- Straight between access chambers, inspection points and junctions.
- With stable sides.

Trench widths

General: Keep trench widths to the minimum consistent with the laying and bedding of the relevant service and construction of access chambers and pits.

2.3 TRENCH BACKFILL

General

Timing: Backfill service trenches as soon as possible after laying and bedding the service, if possible on the same working day.

Place fill: To **Placing fill** in the *Earthwork* worksection.

Layers: Compact all material in layers not exceeding 150 mm compacted thickness. Compact each layer to the relative compaction specified before the next layer is commenced.

2.4 SURFACE RESTORATION

General

Reinstatement: Reinstate existing surfaces removed or disturbed by trench excavation to match existing and adjacent work.

0250 LANDSCAPE – GARDENING

3 GENERAL

3.1 STANDARDS

Soils
Site and imported topsoil: To AS 4419.

Potting mixes: To AS 3743.

Composts, soil conditioners and mulches: To AS 4454.

4 PRODUCTS

4.1 MATERIAL

Topsoil
Source: Provide topsoil which contains organic matter, will support plant life and is free from stones, contaminants and weeds.

Site: If available, provide material recovered from the site.

Turf
Supplier: Obtain turf from a specialist grower of cultivated turf.

Quality: Provide turf of even thickness, free from weeds and other foreign matter.

Fertiliser
General: Provide proprietary fertilisers, delivered to the site in sealed bags marked to show manufacturer or vendor, weight, fertiliser type, N:P:K ratio, recommended uses and application rates.

Plants
Health: Supply plants with foliage size, texture and colour at time of delivery consistent with the size, texture and colour shown in healthy specimens of the nominated species.

Vigour: Supply plants with extension growth consistent with that exhibited in vigorous specimens of the species nominated.

Damage: Supply plants free from damage and from restricted habit due to growth in nursery rows.

Pests and disease: Supply plants with foliage free from attack by pests or disease.

5 EXECUTION

5.1 PREPARATION

Weed eradication
Herbicide: Eradicate weeds with a non-residual glyphosate herbicide in any of its registered formulae, at the recommended maximum rate.

Earth mounds
Placing: Place clean filling in layers approximately 150 mm thick compacted to 85% of the dry density ratio of the surrounding soil as determined by AS 1289.5.4.1. Minimise slumping and further internal packing down.

Edges: Construct changes in grade over a minimum width of 500 mm to smooth, gradual and rounded profiles with no distinct joint.

Existing trees: Maintain the natural ground level under the canopy.

Planting beds
Excavated: Excavate to bring the subsoil to at least 300 mm below finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Break up the subsoil to a further depth of 100 mm.

Unexcavated: Remove weeds, roots, building rubbish and other debris. Bring the planting bed to 75 mm below finished design levels.

Services and roots: Do not disturb services or tree roots; if necessary cultivate these areas by hand.

Placing topsoil

General: Spread the topsoil on the prepared subsoil and grade evenly, making the necessary allowances to permit the following:

- Required finished levels and contours may be achieved after light compaction.
- Grassed areas may be finished flush with adjacent hard surfaces such as kerbs, paths and mowing strips.

Topsoil depths

General: Spread topsoil to the following typical depths:

- Excavated planting areas: If using organic mulch, 225 mm. If using gravel mulch, 250 mm.
- Irrigated grassed areas generally: 150 mm.
- Irrigated grassed areas, heavy use (e.g. playing fields, playgrounds, and public parks): 200 mm.
- Non-irrigated grass areas: 100 mm.
- Earth mounds:
  - Mass planted surfaces: 300 mm.
  - Grassed surfaces: 100 mm.
- Top dressing: 10 mm.

5.2 TURFING

General

Species or variety: To match existing

Minimum thickness: 50mm

Supply: Deliver the turf within 24 hours of cutting, and lay it within 36 hours of cutting. Prevent the turf from drying out between cutting and laying. If it is not laid within 36 hours of cutting, roll it out on a flat surface with the grass up, and water as necessary to maintain a good condition.

Laying: Lay the turf in the following manner:

- In stretcher pattern with the joints staggered and close butted.
- Parallel with the long sides of level areas, and with contours on slopes.
- To finish flush, after tamping, with adjacent finished surfaces of ground, paving edging, or grass seeded areas.

Tamping: Lightly tamp to an even surface immediately after laying. Do not use a roller.

Fertilising: Mix the fertiliser thoroughly into the topsoil before placing the turf. Apply lawn fertiliser at the completion of the first and last mowings, and at other times as required to maintain healthy grass cover.

Watering: Water immediately after laying until the topsoil is moistened to its full depth. Continue watering to maintain moisture to this depth.

Levels: Where levels have deviated from the design levels after placing and watering, lift turf and regrade topsoil to achieve design levels.

5.3 PLANTING

General

Individual plantings in grassed areas: Excavate a hole to twice the diameter of the root ball and at least 100 mm deeper than the root ball. Break up the base of the hole to a further depth of 100 mm, and loosen compacted sides of the hole to prevent confinement of root growth.

Watering: Thoroughly water the plants before planting, immediately after planting, and as required to maintain growth rates free of stress.

Placing: Remove the plant from the container with minimum disturbance to the root ball, make sure that the root ball is moist and place it in its final position, in the centre of the hole and plumb, and with the top soil level of the plant root ball level with the finished surface of the surrounding soil.

Fertilising-plants: In planting beds and individual plantings, place fertiliser pellets around the plants at the time of planting.

Backfilling: Backfill with topsoil mixture. Lightly tamp and water to eliminate air pockets.

5.4 MULCHING

Placing mulch

General: Place mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels. Spread and roll mulch so that after settling, or after rolling, it is smooth and evenly graded between design surface levels sloped towards the base of plant stems in plantation beds, and not closer to the stem than 50 mm in the case of gravel mulches.

Depths: Spread organic mulch to a depth of 75 mm, and gravel mulch to a depth of 50 mm.

5.5 STAKES AND TIES

Stakes

Material: Hardwood, straight, free from knots or twists, pointed at one end.

Installation: Drive stakes into the ground at least one third of their length, avoiding damage to the root system.

Ties

General: Provide 50 mm hessian webbing ties fixed securely to the stakes, one tie at half the height of the main stem, others as necessary to stabilise the plant.

5.6 COMPLETION

Cleaning

Stakes and ties: Remove those no longer required at the end of the planting establishment period.

Temporary fences: Remove temporary protective fences at the end of the planting establishment period.

0271 PAVEMENT BASE AND SUBBASE

1 PRODUCTS

1.1 BASE AND SUBBASE MATERIAL

Granular material

Requirement: Provide unbound granular materials, including blends of two or more different materials as follows:

- Uniform in grading and physical characteristics.
- Develop structural stability when compacted.

Crushed rock and recycled material class

Requirement: Provide crushed rock and recycled material as documented, from the following classes:

- Class 2: Pavement base material (with no minimum plasticity index) for unbound pavements which may not require a very high standard of surface preparation.
- Class 3: Subbase material for unbound flexible pavements.

2 EXECUTION

2.1 SUBGRADE PREPARATION

General

Requirement: Prepare the subgrade in conformance with the *Earthwork* worksection.

2.2 PLACING BASE AND SUBBASE

General

Weak surfaces: Do not place material on a surface that is weakened by moisture and is unable to support, without damage, the construction plant required to perform the works.

Spreading: Spread material in uniform layers without segregation.

Moisture content: Maintain wet mixed materials at the required moisture content before and during spreading. Add water to dry mixed materials through fine sprays to the entire surface of the layer after spreading, to bring the material to the required moisture content.

Layer thickness: 200 mm maximum and 100 mm minimum (prior to compaction). Provide layers of equal thickness in multilayer courses.

2.3 TOLERANCES

Surface level

General: Provide a finished surface which is free draining and evenly graded between level points.

2.4 SUBBASE AND BASE COMPACTION

General

Construction operation: Compact each layer of fill to the required depth and density, as a systematic construction operation and conform to the **Minimum relative compaction table**.

Minimum relative compaction table

Item description	Minimum dry density ratio (modified compaction) to AS 1289.5.2.1
Subbase	95
Base	98

Compaction requirements

General: Apply uniform compactive effort, over the whole area to be compacted, until the required density is achieved or until failure is acknowledged.

Equipment: Use rollers appropriate to the materials and compaction requirements documented.

0274 CONCRETE PAVEMENT

1 GENERAL

1.1 STANDARDS

General

Specification and supply: To AS 1379.

Materials and construction: To AS 3600.

Guide to residential pavements: To AS 3727.

2 EXECUTION

2.1 GENERAL

Preparation

General: Trim the ground to suit the required thickness of concrete and compact to a firm, even surface.

Prepared subgrade: Blind with sufficient sand to create a smooth surface free from hard projections. Wet the sand just before laying the underlay.

Paving

General: Place and compact concrete paving over a vapour barrier placed over the prepared ground surface.

Grading

General: Grade paving to even falls to drain away from buildings to drainage outlets without ponding. Minimum fall for drainage: 1:100.

Thickness

Minimum:

- Light domestic traffic occasionally up to 3 tonne gross: 100 mm.

Curing

General: Protect fresh concrete from premature drying and from excessively hot or cold temperatures. Maintain the concrete at a reasonably constant temperature with minimum moisture loss for the curing period of 7 days.

Sample

Provide 1m x 1m sample of pavement finish adjacent to the works and notify architect for approval at least 5 days prior to pavement installation.

2.2 JOINTS

Contraction joints

General: Form tooled joints at maximum 2000 mm spacing.

Expansion joints

General: Cast-in 10 mm thick bitumen impregnated fibreboard at maximum 6 m spacing.

Abutment with building

General: Where concrete paving more than 1500 mm wide abuts the wall of a building, cast-in 10 mm thick bitumen impregnated fibreboard between the paving and the wall. Otherwise, turn up the vapour barrier.

2.3 FINISHING METHODS

Broom finishing: Wood float and broom to an even textured transverse scored surface with steel tooled margins. On gradients steeper than 10%, roughen the surface by scoring using a stiff brush or rake.

Exposed aggregate finish: Steel trowel to a smooth surface. After final set use clean water and brushes to remove the surface film of mortar until the aggregate is uniformly exposed without under cutting of the matrix.

Sponge finish: After floating, produce an even textured sand finish by wiping the surface using a damp sponge.

3 SELECTIONS

3.1 SCHEDULE

Concrete pavement schedule

Item	Description
Type (FT-07)	Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.
Manufacturer	
Size	7mm
Aggregate	Blue Metal
Colour	Off White Cement
Sealer	None

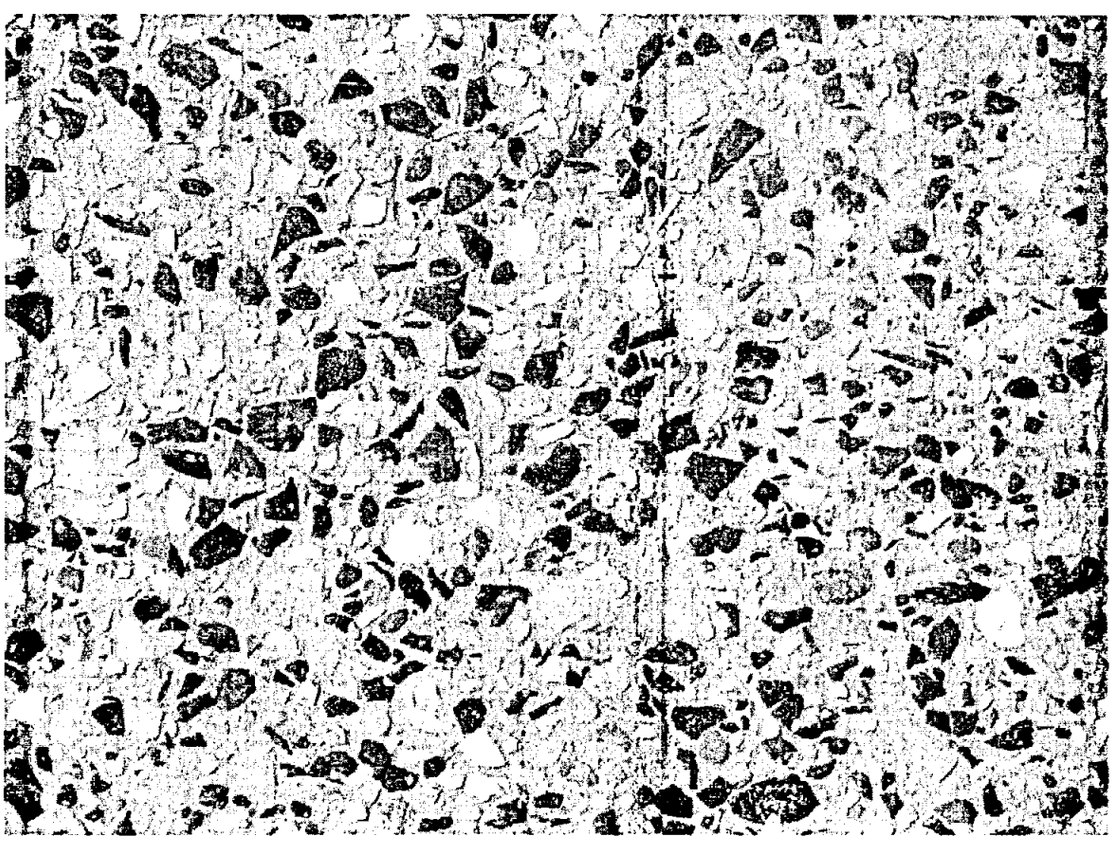


Figure 1: Example of Exposed Aggregate Finish

0310 CONCRETE

1 GENERAL

1.1 STANDARDS

General

Formwork design and construction, formed surfaces: To AS 3610 and AS 3610.1.

Plywood formwork: To AS 6669.

Profiled steel sheeting including shear connectors: To AS 2327.1.

Specification and supply of concrete: To AS 1379.

Concrete materials and construction: To AS 3600.

Residential ground slabs and footings: To AS 2870.

1.2 INTERPRETATION

Definitions

General: For the purposes of this worksection the following definitions apply:

- Ambient temperature: The air temperature at the time of mixing and placing of concrete.
- Average ambient temperature: Average value of the daily maximum and minimum ambient temperatures over the relevant period at a site.
- Weather:
  - . Cold: Ambient shade temperature < 10°C.
  - . Hot: Ambient shade temperature > 30°C.

1.3 TOLERANCES

General

Formed surfaces: In conformance with the surface finish requirements of AS 3610.1 Table 3.3.2 and the following:

- Visible: Class 2.
- Not visible: Class 5.

Unformed surfaces: In conformance with the **Flatness tolerance classes table** for the class of finish nominated using a straight edge placed anywhere on the surface in any direction.

Flatness tolerance class table

Class	Measurement	Maximum deviation (mm)
A	3 m straight edge	3
B	3 m straight edge	6
C	600 mm straight edge	6

1.4 SUBMISSIONS

Design

Formwork: The design of the formwork other than profiled steel sheeting composite formwork is the contractor's responsibility.

Design documentation

Certification: For other than profiled steel sheeting composite formwork, submit certification by a qualified structural engineer experienced in formwork design verifying conformance of the design.

Execution – documentation

Certification: Provide certification by a qualified structural engineer experienced in formwork design and construction verifying conformance of the completed formwork, including the suitability of the formwork for the documented surface finish class.

2 PRODUCTS

2.1 MATERIALS

Cement

Standard: To AS 3972.

Age: Less than 6 months old.

Storage: Store cement bags under cover and above ground.

Pre-mixed concrete supply

Standard: To AS 1379 by the batch production process. Maximum slump: 100 mm.

Polymeric film underlay

Vapour barriers and damp-proofing membranes: To AS 2870 clause 5.3.3.

Curing compounds

Curing compounds: To AS 3799.

2.2 FORMWORK

General

Lost formwork: Without chlorides and without impairing the structural performance of the concrete members.

Steel decking

Material: Hot-dipped zinc-coated sheet steel to AS 1397, minimum G500-Z350.

Profiled steel sheeting composite formwork: Minimum steel grade G550.

Corrosion protection: Zinc coating weight of Z450

Accessories: Adopt material and corrosion protection to match the profiled steel sheeting.

Plywood formwork

Material: Plywood sheeting to AS 6669.

Grade: To meet the design dimensions, loading and surface quality specified to AS 3610 and AS 3610.1.

Joints: Seal the joints consistent with the surface finish class.

Tolerances: To AS 3610.1 Table 3.3.2.

3 EXECUTION

3.1 POLYMERIC FILM UNDERLAY

Location

General: Under slabs on ground including integral ground beams and footings, provide a damp-proofing membrane.

The damp proof membrane comprising 0.5mm thick embossed black polythene film of high impact resistance to meet AS/NZS 2904 shall completely isolate all exposed concrete surfaces from adjacent saline soils and terminate at finished pavement level. The damp-proofing material shall extend up to the finished ground or paving level and be sealed around all penetrations by pipes or plumbing fittings.

3.2 FORMWORK

Preparation

Cleaning: Before placing concrete, remove free water, dust, debris and stains from the forms and the formed space.

Corners

Work above ground: Chamfer at re-entrant angles, and fillet at corners.

- Face of bevel 25 mm.

Void formers

Use: Cast designated ground floor slabs and beams on void formers.

Protection: Keep void formers dry until time of use. Place them on a firm level surface and place reinforcement and concrete with minimum delay.

3.3 REINFORCEMENT

Supports

General: Provide proprietary concrete, metal or plastic supports to reinforcement in the form of chairs, spacers, stools, hangers and ties, as follows:

- To be adequate to withstand construction and traffic loads.
- With a protective coating if they are ferrous metal extending to the surface of the concrete, or are used with galvanized or zinc-coated reinforcement.

Minimum spacing:

- Bars: ≤ 60 diameters.
- Mesh: ≤ 800 mm.

Supports over membranes: Prevent damage to waterproofing membranes or vapour barriers. If appropriate, place a metal or plastic plate under each support.

Projecting reinforcement

General: If starter or other bars project beyond reinforcement mats or cages, through formwork or from cast concrete, provide a plastic protective cap to each bar until it is incorporated into subsequent work.

Tying

General: Secure the reinforcement against displacement by tying at intersections with either wire ties, or clips. Bend the ends of wire ties away from nearby faces of forms or unformed faces so that the ties do not project into the concrete cover.

Minimum requirements

Splices: Splice as follows:

- Mesh sheets: 225 mm.
- Trench mesh: 500 mm.
- Bars: Greater of either 500 mm or 25 x bar diameter.
- Strip footing intersections and corners: Full width of intersecting reinforcement.

Cover: To the **Minimum cover to reinforcement table.**

Minimum cover to reinforcement table

Concrete element	Location	Minimum concrete strength (MPa)	Minimum cover to reinforcement (mm)
Unreinforced concrete	Generally	20	
Reinforced concrete	Unless noted otherwise below	25	20
	Exterior: temperate, near- coastal (1 km to 50 km) and on ground and protected by membrane (bottom cover)	25	30
	On ground and unprotected by membrane (bottom cover)	25	40
	Footings	25	50
	Exterior: tropical, near- coastal (1 km to 50 km) and in contact with fresh water	32	40
	Exterior: coastal (100 m to 1 km) and permanently submerged in salt water	40	45
	Exterior: in tidal or splash zones	50	50

3.4 CONCRETE

Placing

General: Use placing methods which avoid segregation and loss of concrete, and which minimise plastic settlement. Maintain a generally vertical and plastic concrete edge during placement.

Layers: Place concrete in layers ≤ 300 mm thick, such that each succeeding layer is compacted before previous layer has taken initial set. Compact into previous layer.

Compaction

Methods: Use immersion and screed vibrators accompanied by hand methods as appropriate to remove entrapped air and to fully compact the mix.

Vibrators: Do not allow vibrators to come into contact with set concrete, reinforcement or items including pipes and conduits embedded in concrete. Do not use vibrators to move concrete along the forms. Avoid over-vibration that may cause segregation.

Rain

Protection: During placement and prior to setting, protect the surface from damage to achieve the desired finish.

Placing in cold weather

Placing concrete: Maintain the temperature of the freshly mixed concrete at ≥ 5°C.

Formwork and reinforcement: Before and during placing maintain temperature at ≥ 5°C.

Temperature control: Heat the concrete materials, other than cement, to the minimum temperature necessary to make sure that the temperature of the placed concrete is within the limits specified.

Placing in hot weather

Placing concrete: Maintain the temperature of the freshly mixed concrete at ≤ 35°C.

Formwork and reinforcement: Before and during placing maintain temperature at ≤ 35°C.

Temperature control: Select one or more of the following methods of maintaining the specified temperature of the placed concrete at < 35:

- Cover the container in which the concrete is transported to the forms.
- Spray the coarse aggregate using cold water prior to mixing.
- Use chilled mixing water.

Evaporation control barriers: Erect barriers to protect freshly placed concrete from drying winds.

3.5 CURING

General

Requirements: Taking into account the average ambient temperature at site over the relevant period affecting the curing and adopt procedures to ensure the following:

- Curing: Cure continuously from completion of finishing until the total cumulative number of days or fractions of days, during which the air temperature in contact with the concrete is above 10°C, is at least the following:
  - . Fully enclosed internal surfaces: 3 days.
  - . Other concrete surfaces: 7 days.
- End of curing period: Prevent rapid drying out at the end of the curing period.
- Protection: Maintain at a reasonably constant temperature with minimum moisture loss, during the curing period.

Curing compounds

Application: Provide a uniform continuous flexible coating without visible breaks or pinholes, which remains unbroken at least for the required curing period after application.

Substrates: Do not use wax-based or chlorinated rubber-based curing compounds on surfaces forming substrates to applied finishes, concrete toppings and cement-based render.

Hot weather curing

Protection: Provide protection as follows:

- Immediately after finishing, either cover exposed surfaces using an impervious membrane or hessian kept wet until curing begins, or apply a curing compound.

Water curing
General: If water is used, pond or continuously sprinkle in such a way as to not cause damage to the concrete surface, for the required curing period.

3.6 JOINTS

Construction joints
Location: Do not relocate or eliminate construction joints, or make construction joints not documented. If emergency construction joints are made necessary by unforeseen interruptions to the concrete pour, submit a report on the action taken.

999Preparation: Roughen and clean the hardened concrete joint surface. Remove loose or soft material, free water, foreign matter and laitance. Dampen the surface just before placing the fresh concrete and coat with a neat cement slurry.

Slip joints
Requirement: If concrete slabs are supported on masonry, provide proprietary slip joints.

3.7 FORMED SURFACES

General
Damage: Do not damage concrete works through premature removal of formwork.

Provide surface finishes in conformance with the **Formed surface finishes schedule**

Curing
General: If forms are stripped when concrete is at an age less than the minimum curing period, commence curing exposed faces as soon as the stripping is completed.

Surface repairs
Surface repair method: If surface repairs are required, submit proposals.

3.8 UNFORMED SURFACES

Surface finishes
General: Provide surface finishes in conformance with the **Unformed surface finishes schedule.**

Surface repairs
Surface repair method: If surface repairs are required, submit proposals.

3.9 COMPLETION

Formwork removal
Extent: Remove formwork, other than steel profiled reinforcement decking, including formwork in concealed locations, but excepting lost formwork.

Timing: Do not disturb forms until concrete is hardened enough to withstand formwork movements and removal without damage.

Stripping times: Leave formwork for suspended structures in place after pouring concrete for the following periods:

- Vertical surfaces: 2 days.
- Bottom surfaces: 7 days with shoring and backprops left in position for 21 days.

Loading
General: Do not erect masonry walls or other brittle elements on beams and slabs while they are still supported by formwork.

Protection
Protection: Protect the concrete from damage due to construction load overstresses, physical and thermal shocks, and excessive vibrations, particularly during the curing period.

Surface protection: Protect finished concrete surfaces and applied finishes from damage.

Formed surface finishes schedule

Property	Type		
	A	B	
Location	Concrete walls, columns and upturns	Concrete Balcony Floor	
Flatness tolerance class	B	B	
Finish	Off form reinforced concrete structure with Class 2 finish to structural engineer's details. Align joints and plug spacer holes with matching material.	Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with steel trowel finish. Soffit to be Class 2 finish.	
Supplementary finish	Finish with clear water based sealer equal to Cromshield Enhance WSi.	Approved sealer equal to CrommelinEnhance Satin with Crommelin Slip Resistant additive.	
Slip resistance class to AS 4586:2004 Wet pendulum and Dry floor friction Wet / Barefoot Ramp		Class W B	
Slip resistance treatment		As required to achieve slip resistance level.	
Slip resistance tests		Wet pendulum Wet / Barefoot Ramp	

Unformed surface finishes schedule

Property	Type		
	A	B	C
Location	FT-03	FT-06	FT-07
Flatness tolerance class	C	C	C
Primary finish	Reinforced concrete slab to structural engineer's details with steel trowel finish.	Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.	Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.
Supplementary finish	Crommelin Cromshield Enhance Satin sealer with non slip additive.		
Slip resistance class to AS 4586:2004 Wet pendulum and Dry floor friction Wet / Barefoot Ramp	Class W B	Class W B	Class W B
Slip resistance treatment	As required to achieve slip resistance level.	As required to achieve slip resistance level.	As required to achieve slip resistance level.
Slip resistance tests	Wet pendulum Wet / Barefoot Ramp	Wet pendulum Wet / Barefoot Ramp	Wet pendulum Wet / Barefoot Ramp

0331 BRICK AND BLOCK CONSTRUCTION

1 GENERAL

1.1 STANDARDS

General
Materials and construction: To AS 3700-2011.

2 PRODUCTS

2.1 DURABILITY

General
Exposure environment: severe marine to AS3700-2011
Exposure locations: To AS 3770 clause 5.3.1.

2.2 MATERIALS

Bricks and blocks
Standard: To. AS 3700-2011
Minimum age of clay bricks: 7 days.
Salt attack resistance grade: To AS 3770 Table 5.1.

Mortar Class:	M4
Durability Class of Built in Components	R4
Reinforcement Cover:	25

Mortar materials
Sand: Fine aggregate with a low clay content and free from efflorescing salts, selected for colour and grading.
Proportions: To AS 3700- Table 11.1

2.3 BUILT-IN COMPONENTS

General
Durability class of built-in components: To AS 3770 Table 5.1.

Steel lintels
Angles and flats: Sizes to Structural Engineer's details.
Cold-formed lintels: Designed to AS/NZS 4600.
Corrosion protection: To AS/NZS 2699.3.
Galvanizing: Do not cut after galvanizing.

Wall ties
Standard: To AS/NZS 2699.1.
Type: A.
Corrosion protection: To AS/NZS 2699.1.
Material Requirement: R4 Stainless Steel grade AS 1449/316 or AS1449/316L

Connectors and accessories
Standard: To AS/NZS 2699.2.
Corrosion protection: To AS/NZS 2699.2.

Flashings and damp-proof courses
Standard: To AS/NZS 2904.

3 EXECUTION

3.1 GENERAL

Mortar mixing
General: Measure volumes accurately to the documented proportions. Machine mix for at least six minutes.

Protection from contamination
General: Protect masonry materials and components from ground moisture and contamination.

Bond
Type: Stretcher bond.

Building in
Embedded items: Build in wall ties and accessories as the construction proceeds. If it is not practicable to obtain the required embedment wholly in the mortar joint in hollow masonry units, fill appropriate cores with grout or mortar.

Clearance for timber frame shrinkage
General: In timber frame brick veneer construction, leave clearances between window frames and brick sill and between roof frames and the brick veneer as follows:

- Additional clearance: Accommodate additional shrinkage of unseasoned floor timbers.
- Single storey frames and ground floor windows (not for slab on ground): 10 mm.
- Two storey frames and upper floor windows: 20 mm.

Joining to existing
General: Provide a control joint where joining to existing structures. Do not tooth new masonry into existing work unless approved by a professional engineer.

Mortar Joints
Solid and cored units: Lay on a full bed of mortar. Fill perpends solid. Cut mortar flush.

Face-shell bedded hollow units: Fill perpends solid. Cut mortar flush.

Finish: Conform to the following:

- Externally: Tool to give a dense water-shedding finish.
- Internally: If wall is to be plastered, do not rake more than 10 mm to give a key.
- Thickness: 10 mm.

Cutting: Set out masonry with joints of uniform width and the minimum of cutting of masonry units.

Rate of construction
General: Regulate the rate of construction to eliminate joint deformation, slumping or instability.

Rods
Set out: Construct masonry to the following rods:

- 75 mm high units: 7 courses to 600 mm.
- 90 mm high units: 6 courses to 600 mm.
- 190 mm high units: 3 courses to 600 mm.

3.2 FACEWORK

Cleaning
General: Clean progressively as the work proceeds to remove mortar smears, stains and discolouration. Do not erode joints if using pressure spraying.

Acid solution: Do not use.

Colour mixing
Distribution: In facework, distribute the colour range of units evenly to prevent colour concentrations and banding.

Sills and thresholds
General: Solidly bed sills and thresholds and lay them with the top surfaces drain away from the building.

Minimum size of unit: Three quarters full width.

3.3 SUBFLOOR WORK

Bearer piers

Provide engaged or free standing unreinforced masonry piers to support bearers at 1800 mm maximum centres and to the **Bearer pier table**.

Bearer pier table

Type	Minimum size (mm)
Engaged	230 x 110 bonded or tied to walls
Freestanding up to 1500 mm high	230 x 230
Freestanding 1500 to 2700 mm high	350 x 350

Access openings

General: In internal walls, leave door-width openings beneath doorways to give access to underfloor areas.

Air vent location

General: Provide air vents to give adequate cross ventilation to the space under suspended ground floors.

Cavity walls: Provide matching vents in the internal leaves located as near as practicable to the air vents in the external leaves.

Location: Below damp-proof course to internal and external walls.

Minimum provision: 6000 mm^2 net ventilation area per linear metre of wall.

Underpinning

Requirement: Install underpinning while maintaining the building undamaged.

Grouting: Pack dry mix M4 mortar between underpinning and existing structure within 24 and 48 hours of completion of each panel of underpinning.

3.4 CAVITY WORK

Cavity clearance

General: Keep cavities clear at all times.

Cavity fill

General: Fill the cavity with mortar to 1 course above adjacent finished (ground) level. Fall the top surface towards the outer leaf.

Cavity width

General: Provide minimum cavity widths in conformance with the following:

- Masonry walls: 50 mm.
- Masonry veneer walls: 40 mm between the masonry leaf and the loadbearing frame and 25 mm minimum between the masonry leaf and sheet bracing.

Openings

Do not close the cavity at the jambs of external openings.

Wall ties connectors and accessories

Protection: Install to prevent water passing across the cavity.

3.5 DAMP-PROOF COURSES

Location

General: Provide damp-proof courses as follows:

- Timber floors: In the first course below the level of the underside of ground floor timbers in internal walls and inner leaves of cavity walls.
- Cavity walls built off slabs on ground: In the bottom course of the outer leaf, continuous horizontally across the cavity and up the inner face bedded in mortar, turned 30 mm into the inner leaf 1course above.
- Masonry veneer construction: In the bottom course of the outer leaf, continuous horizontally across the cavity. Fastened to the inner frame 75 mm above floor level.

- Walls adjoining infill floor slabs on membranes: In the course above the underside of the slab in internal walls and inner leaves of cavity walls. Project 40 mm and dress down over the membrane turned up against the wall.

Height: Not less than:

- 150 mm above the adjacent finished ground level.
- 75 mm above the finished paved or concrete area.
- 50 mm above the finished paved or concreted area and protected from the direct effect of the weather.

Installation

General: Lay in long lengths. Lap the full width of angles and intersections and 150 mm at joints. Step as necessary, but not more than 2 courses per step for brickwork and 1 course per step for blockwork. Sandwich damp-proof courses between mortar.

Junctions: Preserve continuity of damp-proofing at junctions of damp-proof courses and waterproof membranes.

3.6 FLASHINGS

Location

General: Provide flashings as follows:

- Floors: Full width of outer leaf immediately above slab, continuous across cavity and up the inner face bedded in mortar, turned 30 mm into the inner leaf 2 courses above for brick and 1 course for block. If the slab supports the outer skin and is not rebated, bed the flashing in a suitable sealant.
- Under sills: 30 mm into the outer leaf bed joint 1 course below the sill, extending up across the cavity and under the sill in the inner leaf or the frame. Extend at least 150 mm beyond the reveals on each side of the opening.
- Over lintels to openings: Full width of outer leaf immediately above the lintel, continuous across cavity, turned 30 mm into the inner leaf 2 courses above for brick and 1 course for block or turned up against the frame and fastened to it. Extend at least 150 mm beyond the ends of the lintels.
- At abutments with structural frames or supports: Vertical flash in the cavity from 150 mm wide material, wedged and grouted into a groove in the frame opposite the cavity.
- At jambs: Vertically flash jamb extending 75 mm into the cavity, interleaved with the sill and head flashing at each end. Fix to jambs.
- At roof abutments with cavity walls: Cavity flash immediately above the roof and over-flash the roof apron flashing.

Installation

General: Sandwich flashings between mortar except where on lintels.

Pointing: Point up joints around flashings to fill voids.

Weepholes

Location: Provide weepholes to external leaves of cavity walls in the course immediately above flashings, and cavity fill, and at the bottoms of unfilled cavities.

Form: Open perpends.

Maximum spacing: 1200 mm.

Weephole guards: Provide access barrier.

Type: Weepa – Louvred weephole insert

3.7 WALL TIES

Location

Spacing: To AS 4773.2 clause 9.7 and clause 10.6.

Installation

Embedment: At least 50 mm into mortar ensuring that mortar cover is 15 mm minimum to the outside face of the mortar.

3.8 CONTROL JOINTS

General

Location and spacing: Provide contraction joints, expansion joints and articulation joints to AS 4773.2 Section 7.

Control joint filling

Installation: Clean the joints thoroughly and insert an easily compressible backing material before sealing.

Sealant depth: Fill the joints with a gun-applied flexible sealant for a depth of at least two-thirds the joint width.

Sealant type: External: UV stable.

Flexible masonry ties

Requirement: Provide stabilising ties at control joints and abutting structural elements, including columns, beams and slab soffits.

3.9 REINFORCED AND GROUTED BLOCKWORK

Cleaning core holes

General: Provide purpose-made cleanout blocks or machine cut a cleaning hole at the base of each grouted core.

Location: Locate on the side of the wall which is to be rendered or otherwise concealed.

Cleaning: Rod cores to dislodge mortar fins protruding from the blocks and mortar droppings from reinforcement. Remove through the clean-out blocks.

Grouting

Commencement: Do not commence until grout spaces have been cleaned out and the mortar joints have attained sufficient strength to resist blow-outs.

Height of lift: Limit the height of individual lifts in any pour to make sure that the grout can be thoroughly compacted to fill all voids.

Compaction: Compact by vibration or by rodding.

Topping up: On the completion of the last lift, top up the grout after 10 min to 30 min, and vibrate or rod to mix with the previous pour.

3.10 LINTELS

Installation

General: Do not cut on site. Keep lintels 10 mm clear of heads of frames.

Steel lintels: Pack mortar between any vertical component and supported masonry units. For angles install with the long leg vertical.

Propping: Provide temporary props to lintels to prevent deflection or rotation.

3.11 BAGGING

Preparation

General: Cut joints flush before bagging.

Dry bagging

Application: Apply laying mortar to the surface using a hessian bag or similar. Flush up irregularities, but leave a minimum amount of mortar on the surface.

4 SELECTIONS

4.1 SCHEDULES

Brick and block construction schedule

Property	Code		
	A	B	C
Bricks and blocks			
Type	Concrete Blocks		
Manufacturer	Boral or equal		
Work size	390 x 190 x 90/140/190		
Sill units	N/A		
Colour	Grey Cement		

Property	Code		
	A	B	C
Feature colour	N/A		
Mortar			
Type	M4		
Colour	Grey Cement		
Units joints			
Shape or profile	Flush Joint		

0342 LIGHT STEEL FRAMING

1 GENERAL

1.1 STANDARDS

General

Steel design, fabrication and erection: To AS 4100.

Cold-formed steel: To AS 4600.

Preparation and metal treatment of metal surfaces: To AS 1627 series.

Residential and low-rise steel framing: To NASH.1.

1.2 SUBMISSIONS

Design

General: Where the structural drawings define performance criteria, submit independent design, documentation and certification from a professional engineer, including for the erected work.

Reactions: Provide location and magnitude of reactions to be accommodated by the support structure.

Shop drawings

General: Submit shop detail drawings or product design guide certified by a professional engineer stating that the design has been carried out in accordance with documented project and AS/NZS 4600 requirements for the configurations and loadings.

Roof trusses: Prepare drawings to show:

- On a plan, the truss layout.
- On elevations, the arrangement of members allowing for the accommodation of in-roof services and the size and section type of each member.
- The method of assembly, connection, holding down and bracing.

Wall frames: If wall framing is to be pre-fabricated, prepare drawings to show:

- On plan, the wall layout.
- On elevations, the arrangement of members, and the size and section type of each member.
- The method of assembly, connection, holding down and bracing.

2 PRODUCTS

2.1 COMPONENTS

Cold-formed steel framing

Cold-form sections from metallic-coated steel to AS 1397.

Corrosion protection: To AS 1397-2011 (G2) and AS/NZ 4600:2005 Appendix C.

Internal Studwork Product Name: Rondo Drywall System

Framing members

Cold-formed steel framing: For a proprietary system, comply with NASH.1.

Steel roof trusses type: Approved proprietary system

3 EXECUTION

3.1 GENERAL

Fabrication

Length: Cut members accurately to length so that they fit firmly against abutting members.

Service holes: Form holes by drilling or punching.

Site cut holes: Provide plastic bushes or grommets to site cut holes.

Site work: Do not fabricate on site where welded connections are required.

Fastening

Type: Select from the following:

- Bolting.
- Self-drilling, self-tapping screws.
- Blind rivets.
- Proprietary clinching system.
- Structural adhesives.
- Welding.

Welding

Burning: Avoid procedures that result in greater than localised burning of the sheets or framing members.

Prefabricated frames

General: Protect frames from damage or distortion during storage, transport and erection. Provide temporary protection for members until permanent covering is in place.

Metal separation

General: Install lagging to separate non-ferrous service pipes and accessories from the framing.

Unseasoned or CCA treated timber

General: Do not fix in contact with framing without fully painting the timber and/or the steel.

Earthing

Permanent earthing: Required.

Temporary earthing: Provide temporary earthing during erection until the permanent earthing is installed.

Protection

General: Restore coatings which have been damaged by welding or other causes. Thoroughly clean affected areas to base metal and coat with zinc rich organic primer.

Grommets: Provide grommets to isolate piping and wiring from cold-formed steel framing.

Swarf: Remove swarf and other debris from cold-formed steel framing immediately.

Certification

General: For components, for which independent design certification has been required, provide independent certification for the erected components confirming compliance with the design intent.

3.2 WALL FRAMING

Wall studs

General: Provide studs in single lengths without splices. Place a stud under, or within 40 mm from, each structural load point from roof or ceiling (except for openings). Provide multiple studs at points of concentrated load.

Maximum stud spacing: 600 mm.

Heads to openings

General: Provide lintels appropriate to load and span.

Additional support

General: Provide additional support in the form of noggings, trimmers and studs for support and fixing of lining, cladding, hardware, accessories, fixtures and fittings.

Vermin barriers

General: Provide vermin barriers as follows:

- Brick veneer barrier: Fix 10 mm steel wire mesh to the underside of the bottom plate of external stud walls, extending across the cavity for building into brickwork.

Damp-proof course

General: Provide damp-proof courses under the bottom plate of stud walls built off slabs or masonry dwarf walls, as follows:

- External walls (not masonry veneer): Turn up at least 75 mm on the inside and tack. Project 10 mm beyond the external slab edge or dwarf wall and turn down at 45°.
- Walls of bathrooms, shower rooms and laundries: Turn up at least 150 mm on the wet side and tack to studs.

Installation: Lay in long lengths. Lap full width at angles and intersections and at least 150 mm at joints.

Junctions: Preserve continuity of damp-proofing at junctions of damp-proof courses, sarking and waterproof membranes.

Flashings

Location: Provide flashings to external openings sufficient to prevent the entry of moisture. Form trays at the ends of sill flashings.

Masonry veneer construction: Extend across cavities and build into brickwork.

Prefabricated walling

Assembly: Factory assemble wall frames.

Bracing: Provide details of bracing.

Certification: Obtain certification from a professional engineer for the erected frames.

3.3 ROOF FRAMING

Beam framing

General: Construct framing for flat or pitched roofs where the ceiling follows the roof line, consisting of rafters or purlins supporting both ceiling and roof covering.

Antiponding

Requirement: Fix appropriate members to the tops of framing at the rear of fascias, to prevent sagging of and ponding on the sarking.

Additional support

Requirement: Provide a frame member behind every joint in fibre cement or plasterboard sheeting or lining.

Battens

Requirement: Supply and fix battens suitable for span, spacing and roofing.

3.4 TRUSSES

Fabrication

Assembly: Factory assemble trusses.

Supports for in roof services

Water container or heater: Where a water container or heater is located in the roof space, provide a support platform to AS/NZS 3500.4 clause 5.5.

Marking

General: Permanently mark each truss to show:

- Project identification.
- Manufacturer.
- Tag or number.
- Location.
- Support points.

Installation

General: Fix to support structures, plumb to within H/200, where H is the height at the apex.

Support: Support trusses on the bottom chord at two points only, unless designed for additional support.

Vertical movement: Over internal walls provide at least 10 mm vertical clearance and use bracing methods which allow for vertical movements.

Holding down and bracing: Provide details demonstrating capability to resist lateral and uplift forces.

Certification: Obtain certification from a professional engineer for the erected trusses.

3.5 ROOF TRIM

Fascia, valley gutter and barge boards

Requirement: Supply and fix fascia, valley gutter and barge boards in conformance with the manufacturer's requirements.

3.6 COMPLETION

Cleaning
General: On completion of framing remove debris from any gaps between members.

0352 STRUCTURAL STEELWORK

1 GENERAL

Cross references
Refer to the following worksections:
General requirements, for steel coatings and durability.
Concrete, for concrete bearer supports.
Brick and block construction, for clearance for masonry bearer supports.
Tile finishes, for waterproofing of wet areas.
Painting, for priming of steel before fixing, and repair of zinc-coated steel after cutting and welding.

Standards
Structural steelwork: To AS 4100.
Preparation of metal surfaces: To AS 1627.

2 PRODUCTS

MATERIALS
Cold-formed steel framing
Cold-form sections from metallic-coated steel to AS 1397.
Corrosion protection: To BCA Volume 2 clause 3.4.2.2.

Self-drilling screws
Standard: To AS 3566.1.
Corrosion resistance: Class 2 to AS 3566.2 Table 1.

Flashings and damp-proof courses
Standard: To AS/NZS 2904.

Surface Treatment
Generally fabricated steel shall be free of rust, loose mill scale, dirt, oil and grease.
Prepare steel to PFM056
1. Wash and degrease all surfaces to be coated in accordance with AS1627.1 with a free-rinsing, alkaline detergent, such as Gibson F310B or Gamlen CA No. 1 in strict accordance with the manufacturers written instructions and all safety warnings.
2. Wash with fresh potable water and ensure that all soluble salts are removed in accordance with AS 3894.6 methods A&D.
3. Grind all sharp edges with a power tool to a minimum radius of 2 mm.
4. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air.
5. Abrasive blast clean all steel surfaces to be painted in accordance with AS1627.4 to visual standard AS1627.9 Class 2.5
(equivalent to ISO8501-1, Sa 2.5: Very Thorough Blast-Cleaning). Use a non-metallic medium that will generate a surface profile of
35 to 65 microns (as tested to AS3894.5 Method A.)
6. Commence application within 4 hours of abrasive blast cleaning or before surface becomes contaminated, otherwise repeat abrasive blasting step.
7. Stripe coat welds, bolts, boltholes and all edges with primer before application of full primer coat nominated in the Coating System section of the specification.
8. Prior to application, ensure that the surface is free of contaminants including oil, grease, dirt, dust, salt and any other deleterious materials that will interfere with coating performance.
TREATMENT OF ON SITE WELDING

1. Remove weld spatter.
2. Power tool clean welds to AS1627.2 Class 2 to remove roughness. Remove filings, preferably by vacuum or compressed air.
3. Prime welds immediately with the nominated primer before contamination can reoccur. Ensure that the primer overlaps the sound adjacent coating by not less than 25mm or greater than 50mm.
4. Apply intermediate and topcoats over the primed welds to match the surrounding coating system, overlapping the sound adjacent coating by not less than 25mm or greater than 50mm.

All exposed steel shall be treated with the following protection system. The system shall be in accordance with AS/NZS 2312:1994 Category E-M for Long term protection in a Very High Marine Atmospheric Corrosivity environment and Dulux Duspec AUS13150 and comprise of:

1. First Coat – DULUX Aquagalv at 90 microns
2. Second coat – DULUX FERREKO No. 5 at 60 microns Colour Mid Grey
3. Third Coat – DULUX FERREKO No. 5 at 60 microns Colour Mid Grey

Application techniques should be adjusted to achieve the recommended Dry Film Thickness.

Do not apply paint if Relative Humidity is above 85% or temperature is within 3°C of Dew Point.

Do not apply if the surface temperature is greater than 40°C or below 10°C, or likely to fall below 10°C during the application or drying period.

When using this specification, the Applicator shall maintain records in accordance with AS3894 Parts 10, 11 and 12 and others as required by the Project Manager. These records shall be made available for inspection at any time by the Project Manager or authorised representative and submitted to the Principal Contractor upon completion of work.

NOTE - When brushing and rolling additional coats may be required to attain the specified thickness.

This is an abridged specification and must be read in conjunction with the appropriate Product Data Sheets and relevant Australian Standards.

MIO coatings can vary in colour and appearance depending on application method and viewing angle. Colour can vary from batch to batch. Low gloss MIO coatings are also prone to marring. When brushed, MIO finishes exhibit pronounced brushmarks. Spray application generally achieves the most uniform finish. Touchups are difficult to blend in, particularly if the touch up method differs from the original application method.

Other non-exposed steel not in contact with masonry or concrete shall be abrasive blast cleaned to minimum of AS1627.4 Class 2.5 and hot dip galvanised.

Galvanizing

Galvanize mild steel components (including fasteners) to AS 1214-1983 (Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series)) or AS/NZS 4680-1999 (*Hot-dip galvanized (zinc) coatings on fabricated ferrous articles*), as appropriate, if

- not exposed to weather
- no other finished specified

All surfaces to be abrasive blast cleaned to minimum of AS1627.4 Class 2.5. The zinc coating shall consist of a uniform layer of commercially pure zinc, free from abrasions, cracks, blisters, chemical spots or other imperfections and shall adhere firmly to the surface of the steel.

Quality, thickness and weight of coating of galvanizing shall be in accordance with the Australian Standard for required exposure condition. Uneven coating and drips shall be removed, without damaging the integrity of the coating.

Repair to Surface Treatment

Damage to surface treatment shall be repaired in a manner consistent with the specified surface treatment. Repair site welds and damage to galvanized steel with Dulux Zinc Galv. H.S. or approved premium grade zinc rich coating to manufacturer's specification.

COMPONENTS
General: Where the structural drawings define performance criteria, submit independent design, documentation and certification from a professional engineer.

Reactions: Provide location and magnitude of reactions to be accommodated by the support structure.

3 EXECUTION

Shop Drawings
The builder shall allow for the detailed preparation of shop drawings. The shop drawings shall give complete information necessary for the fabrication of component parts of the structure including the location, type size and extents of all welds and bolt holes. The drawings shall be prepared from the structural engineer's working drawings with reference to the Architectural, and other drawings as required. Holes required in beams for mechanical, electrical or any other services will be positioned by the builder at his own cost. Conformity with the drawings, dimensions, tolerances and hole positions shall be the responsibility of the Builder.

Inspection
The work shall be available for inspection by the architect and engineer throughout fabrication. Final surface treatment is not to be applied until the steelwork has been inspected and approved. Provide reasonable and safe means of access to the steelwork for inspection on site. No variation shall be given for delays due to "awaiting inspection".

CONSTRUCTION GENERALLY
Fabrication
Length: Cut members accurately to length so that they fit firmly against abutting members.

Service holes: Form holes by drilling or punching.

Bushes: Provide plastic bushes or grommets to site cut holes.

Swarf: Remove swarf and other debris from cold-formed steel framing immediately.

Site work: Do not fabricate on site where welded connections are required unless site welding is specified.

Prefabricated frames
General: Protect frames from damage or distortion during storage, transport and erection.

Metal separation
General: Install lagging or timber noggings to separate non-ferrous service pipes and accessories from the framing.

Fastening
Type: Select from the following:

Bolting.

Self-drilling, self-tapping screws.

Blind rivets.

Proprietary clinching system.

Structural adhesives.

Welding
Standard: To AS/NZS 1554.1.

Burning: Avoid procedures that result in greater than localised "burning" of the sheets or framing members.

All welds to be continuous fillet welds ground smooth. The placing, levelling and plumbing of every part of the structure shall be accurate and in accordance with the drawings and to the satisfaction of the Engineer. The builder is responsible for the accurate placing and alignment of steelwork.

Grommets
Provide grommets to isolate piping and wiring from cold-formed steel framing.

Swarf
Remove swarf and other debris from cold-formed steel framing immediately after it is deposited.

Bolted connections

Holes for bolts, both high tensile and otherwise, except holding down bolts, shall be of a diameter greater than the diameter of the relevant bolts as required by the code. All bolts shall be of such a length that no threaded portion shall be within the thickness of the parts joined. At least one washer shall be used beneath each unit and one full thread project past the end of the nut.

Unseasoned or CCA treated timber

General: Do not fix in contact with steel framing without fully painting the timber and/or the steel.

Earthing

Permanent earthing: Required.

Temporary earthing: Provide temporary earthing during erection until the permanent earthing is installed.

Protection

General: Coatings which have been damaged by welding or other causes shall be restored. Thoroughly clean affected areas to base metal and coat with zinc rich organic primer.

Before fixing, prime steel which is not galvanized or metallic-coated.

Grouting Bases

Bases shall be grouted to obtain 100% bearing after the structure has been completely levelled and plumbed. Bedding shall be carried out with Portland cement non-shrink grout and have the specified strength within 28 days. Before grouting the space between the baseplate and concrete shall be washed, blown dry and inspected.

Certification

General: For components for which independent design certification has been required, provide independent certification for the erected components confirming compliance with the design.

0382 LIGHT TIMBER FRAMING

4 GENERAL

4.1 STANDARDS

General
Framing: To Structural engineer's details.
Design: To AS 1720.1.

4.2 SUBMISSIONS

Subcontractors
Prefabricated items: Submit the name and contact details of the proposed manufacturer.

Design
General: Where the structural drawings define performance criteria, submit independent design, documentation and certification from a professional engineer, including for the erected work.

Reactions: Provide location and magnitude of reactions to be accommodated by the support structure.

Floor and wall frame member sizes: Submit a schedule of proposed member sizes, certified as meeting stated project, AS 1684 series and AS 1720.1 requirements for span, spacings, loadings and deflections.

Shop drawings
General: Submit shop detail drawings or product design guide certified by a professional engineer stating that the design has been carried out in accordance with documented project, AS 1684 series and AS 1720.1 requirements for the configurations and loadings.

Roof trusses: Prepare drawings to show the following:

- On a plan, the truss layout.
- On elevations, the arrangement of members allowing for the accommodation of in-roof services and the size and section type of each member.
- Camber of bottom chord.
- The method of assembly, connection, lifting, holding down and bracing.

Wall frames: If wall framing is to be pre-fabricated, prepare drawings to show the following:

- On plan, the wall layout.
- On elevations, the arrangement of members, and the size and section type of each member.
- The method of assembly, connection, lifting, holding down and bracing.

Preservative treatment
CCA treated timber: If proposed to be used, provide details.

5 PRODUCTS

5.1 TIMBER

Fascias and barge boards
As detailed on drawings.:

5.2 SHEET PRODUCTS

Structural plywood
Standard: To AS/NZS 2269.0.
Bond: Type A to AS/NZS 2754.1 (Int).

- .

Wet-processed fibreboard (including hardboard)
Standard: To AS/NZS 1859.4.

5.3 COMPONENTS

Mild steel post bases
Minimum dimensions:
- Stirrup: 75 mm wide x 6 mm thick.
- Dowel: 20 mm diameter heavy tube.

Location: To timber posts supported off concrete slabs or footings.

Finish: Galvanize after fabrication.

Fasteners
Installation: Do not split or otherwise damage the timber.

Coating: Before placing bolts in contact with CCA treated timber, coat the shank of the bolt in a grease or bituminous coating.

Damp-proof course
Material: To AS/NZS 2904.
- Type: 0.55mm thick bitumen coated aluminium

Flashings
Material: To AS/NZS 2904.
- Type: 0.55mm thick bitumen coated aluminium

6 EXECUTION

6.1 TRANSPORT AND DELIVERY

General
Handling and protection: Do not distort or damage timber or timber products.

Moisture content: Maintain the equilibrium moisture content of seasoned timber.

Protection from weather
General: Provide temporary protection for members until permanent covering is in place.

6.2 FLOOR FRAMING

Bearers and joists
Levelling: Level bearers and joists by checking or by packing for the full width of the member with dense corrosion resistant material which is secured in place:
- Maximum thickness of packing: 3 mm.

Spring: Lay bearers and joists to allow for straightening under loading.

Joints: Locate joints only over supports:
- Minimum bearing of bearers: 50 mm.
- Minimum bearing of joists: 30 mm.

Fixing: Secure bearers and joists to supports to provide restraint against lateral movement.

Joist restraint:
- Unseasoned timber: If joist timber is unseasoned, the span ≥ 3000 mm, and there is no ceiling lining, provide solid blocking between each joist in rows at 1800 mm centres.
- Deep joists: If the joist depth:width ratio is ≥ 4, restrain joists at the ends of the joists over supports and at ≤ 1800 mm centres using either of following as appropriate:
  - Continuous trimming joists.
  - Solid blocking or herringbone strutting.
- Trimmers or blocking dimensions:
  - Depth: Joist depth less 25 mm.
  - Width: ≥ 25 mm.
- Herringbone strutting dimensions: ≥ 38 x 38 mm.

6.3 WALL FRAMING

Wall framing
Bracing material: To Structural engineer's details.

Additional support
General: Provide additional support in the form of noggings, trimmers and studs for fixing lining, cladding, hardware, accessories, fixtures and fittings as required.

Maximum spacing of noggings: 1350 mm centres.

Vermin barriers
General: Provide vermin barriers as follows:

- Brick veneer barrier: Close nail 10 mm galvanized steel wire mesh to the underside of the bottom plate of external stud walls, extending across the cavity for building into brickwork.

Damp-proof course
General: Provide damp-proof courses under the bottom plate of stud walls built off slabs or masonry dwarf walls, as follows to AS/NZS 4200.1:

- External walls (not masonry veneer): Turn up at least 75 mm on the inside and tack. Project 10 mm beyond the external slab edge or dwarf wall and turn down at 45°.
- Walls of bathrooms, shower rooms and laundries: Turn up at least 150 mm on the wet side and tack to studs.

Installation: Lay in long lengths. Lap full width at angles and intersections and at least 150 mm at joints.

Junctions: Preserve continuity of damp-proofing at junctions of damp-proof courses, sarking and waterproof membranes.

Flashings
Location: Provide flashings to external openings sufficient to prevent the entry of moisture. Form trays at the ends of sill flashings.

Masonry veneer construction: Extend across cavities and build into brickwork.

6.4 ROOF AND CEILING FRAMING

Wall plates
Fixing: Fix timber wall plates to masonry, with either straps, bolts or both.

Nailing plates
General: Where timber joists, rafters or purlins bear on or into steel members, provide nailing plates to transfer the design loads, bolted to the steel member at 500 mm maximum centres and 100 mm maximum from the end of the nailing plate.

Beam framing
Ridge straps: Butt ends of rafters together at ridge, and strap each pair together with 900 mm long galvanised steel strap passing over the ridge, triple nailed to each rafter.

Supports for water containers
General: If a water container or heater is located in the roof space, provide a support platform to AS/NZS 3500.4 clause 5.5.

Additional support
General: Provide a frame member behind every joint in fibre cement sheeting or lining.

Anti-ponding boards
Standard: To AS/NZS 4200.2.

6.5 TRUSSES

Fabrication
Camber: Camber bottom chord upward.

Overhangs: Free from spring or splits.

Marking
General: Permanently mark each truss to show:

- Project identification.
- Manufacturer.
- Tag or number.

- Location.
- Support points

Installation

Standard: To AS 4440.

Support: Support trusses on bottom chord at two points only, unless designed for additional support.

Plumb: Within H/200, where H is the height.

Vertical movement: Over internal walls provide at least 10 mm vertical clearance and use bracing methods which allow for vertical movements.

6.6 COMPLETION

Tightening

General: Tighten bolts, screws and other fixings so that joints and anchorages are secure at practical completion.

0383 SHEET FLOORING AND DECKING

1 GENERAL

1.1 STANDARDS

General
Flooring and decking: To AS 1684.2, AS 1684.3 or AS 1684.4, as appropriate.

2 PRODUCTS

2.1 DECKING

New timber decking
Standard:

- Treated softwood to AS 4785.1 Section 4.
- Hardwood to AS 2796.1 Section 4.

2.2 SHEET FLOORING

Plywood
Standard: To AS/NZS 2269.0.
Plywood certified formaldehyde emission level to AS/NZS 2098.11: Class E1.
Grading:

- Veneer: CD.
- Grade: Bond Type A.

Particleboard
Particleboard: To AS 1860.1, Class 1.
Particleboard certified formaldehyde emission level to AS/NZS 2098.11: Class E1.
Compressed fibre cement sheeting
Standard: To AS/NZS 2908.2.
Category: 5.

3 EXECUTION

3.1 GENERAL

Timber decking on steel joists
General: Screw fix seasoned timber battens to the steel joists so that their top surfaces are aligned.

3.2 FIXING SHEET FLOORING

Particleboard flooring
Installation: To AS 1860.2.
Plywood flooring
Installation: To AS 1684.2, AS 1684.3 or AS 1684.4, as appropriate.
Compressed fibre cement flooring
Installation: Lay the length of the sheets at right angles to the joists. Stagger the end joints and locate centrally over joists. Apply adhesive to edges of sheets and firmly butt join together.
Minimum number of spans across support: 2.
Fixing: Pre-drill screw holes with 1 mm clearance over screw diameter and countersink. Fix with corrosion resistant countersunk screws.
Spacing of fasteners:

- Sheet edge and intermediate: < 450 mm.

- Corners and sheet edges: At least 12 mm from sheet edges and 50 mm from corners.

Wet area flooring: Stop screw heads with sealant.

3.3 FIXING DECKING

Timber decking

Installation: Lay in long lengths (minimum 3 spans) double screwed at each bearing with countersunk stainless steel decking screws driven flush. Stagger joints and make them over joists.

Lightly arrise ends of board where butted.

Gap between edges of seasoned boards: 5 mm.

Minimum number of spans across support: 3.

Arrises: Chamfered or rounded.

Finishing: Apply the first 2 coats all round before fixing.

3.4 COMPLETION

Protection

General: Protect surfaces as follows:

Floors: With hardboard or used carpet taped at all butt joints. Do not cover with sheet plastic.

Stair treads: Full timber or plywood casing.

3.5 SCHEDULE

Decking schedule

DK-01	Nom 140 x 25 KD Class 1 HW DAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.
TR-01	Timber framed ramp to structural engineers detail. Nom 140 x 25 KD Class 1 HW DAR decking with pencil round edges. Fix to H3 treated structure at 450 centres. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

0421 ROOFING

1 PRODUCTS

1.1 COMPONENTS

Fasteners
Finish: Prefinish exposed fasteners with an oven baked polymer coating to match the roofing material.

1.2 MATERIALS

Sheet metal roofing
Standard: To AS 1562.1.

Prepainted and organic film/metal laminate products: To AS/NZS 2728.

Corrosion protection: To BCA Table 3.5.1.1a.

Glazed roofing
General: Provide sloped overhead glazing fixed to glazing bars or directly to the roof framing. Provide the necessary trim, flashings and sealants.

Glass selection and installation: To AS 1288.

Certification: Required.

Certification provider: An organisation accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ).

Plastic sheet roofing
Unplasticised polyvinyl chloride (PVC-u) sheet: To AS 4256.2.

Glass fibre reinforced polyester (GRP) sheet: To AS 4256.3.

Polycarbonate: To AS 4256.5.

Skylights
General: To AS 4285.

Skylights (rooflights) in bushfire prone areas: To AS 3959 clause 5.6.5, AS 3959 clause 6.6.5, AS 3959 clause 7.6.5, AS 3959 clause 8.6.5, or AS 3959 clause 9.6.3, as applicable to the site's Bushfire Attack Level (BAL).

Roof ventilators
Roof mounted heat exhaust vents: To AS 2427.

Proprietary roof mounted ventilators or smoke/heat ventilating systems: To AS 2665.

Finish: Match adjacent roofing.

1.3 ROOF PLUMBING

General
Standard: To AS/NZS 3500.3.

General: Provide the flashings, cappings, gutters, rainwater heads, outlets and downpipes necessary to complete the roof system.

Materials
Metal rainwater goods: To AS/NZS 2179.1.

PVC rainwater goods and accessories: To AS/NZS 3500.3.

Proprietary flashings and cappings
Standard: To AS/NZS 2904.

2 EXECUTION

2.1 INSTALLATION

Protection

General: Keep the roofing and rainwater system free of debris and loose material during construction, and leave them clean and unobstructed on completion. Repair damage to the roofing and rainwater system.

Thermal movement

Requirement: Provide for thermal movement in the roof installation and the structure, including movement in joints and fastenings.

Metal separation

Requirement: Prevent direct contact between incompatible metals, and between green hardwood or chemically treated timber and aluminium or coated steel, by either of the following methods:

- Applying an anti-corrosion, low moisture transmission coating to contact surfaces.
- Inserting a separation layer.

2.2 SHEET METAL ROOFING

Roof sheet installation

Eaves: Treat ends of sheets as follows:

- Generally: Close off ribs at tops and bottoms of sheets by mechanical means or with purpose-made fillers or end caps.
- At gutters: Project sheets 50 mm into gutters.

Swarf: Remove swarf and other debris as soon as it is deposited.

Accessories: Provide material with the same finish as roofing sheets.

2.3 PLASTIC SHEET ROOFING

Installation

Standard: To AS 1562.3.

2.4 ROOF PLUMBING

Jointing sheet metal rainwater goods

Sealing: Seal fasteners and mechanically fastened joints. Fill the holes of blind rivets with silicone sealant.

Flashings and cappings

Upstands: Flash projections above or through the roof with two part flashings consisting of an apron flashing and an over-flashing, with at least 100 mm vertical overlap. Provide for independent movement between the roof and the projection.

Wall abutments: Provide overflashings where roofs abut walls, stepped to the roof slope in masonry and planked cladding, otherwise raking and as follows:

- In masonry: Build into the full width of the outer leaf. Turn up within cavity, sloping inward across the cavity and fixed to or built in to the inner leaf at least 75 mm above.

Gutters

Minimum slope of eaves gutters: 1:200.

Minimum width overall of valley gutters: 400 mm.

High-fronted gutters: Provide overflows to prevent back flow into roof or building structure.

Downpipes

General: Prefabricate downpipes to the required section and shape where possible. Connect heads to gutter outlets and, if applicable, connect feet to rainwater drains.

Downpipe support: Provide supports and fixings for downpipes.

3 SELECTIONS

3.1 SCHEDULE

Roofing schedule

RF-01	Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.
RF-03	Ampelite Wonderglas GC gell coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD HW timber framing to structural engineers details. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

Guttering and Downpipe Schedule

GT-01	500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietry corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.
GT-02	200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be 'Windspray".
DP-01	100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"
DP-02	125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray".

0431 CLADDING

1 PRODUCTS

1.1 MATERIALS

Sheet metal cladding
Standard: To AS 1562.1.
Prepainted and organic film/metal laminate products: To AS/NZS 2728.
Timber weatherboards
Hardwood: To AS 2796.1.
- Grade to AS 2796.2: Medium Feature

Softwood: To AS 4785.1.
- Grade: To AS 4785.2: Clear

Fibre cement cladding
Standard: To AS/NZS 2908.2.
Refer to Appendix for Manufacturer's Specification.
Cladding, eaves and soffit linings: Type A Category 3 (modulus of rupture ≥ 7 MPa).
Compressed cladding: Type A Category 5 (modulus of rupture ≥ 18 MPa).
Sheet cladding and Eaves lining: Provide a proprietary system of fibre cement sheets:
- Arrangement: Set out in even panels with joints coinciding with framing.
- Sheet thickness: 9 mm.
- Joints: 10mm wide expressed joints with proprietary gaskets.

1.2 COMPONENTS

Flashing material
Standard: To AS/NZS 2904.

2 EXECUTION

2.1 CONSTRUCTION GENERALLY

Substrates or framing
Requirement: Before fixing cladding check and, if necessary, adjust the alignment of substrates or framing.
Fixing
Method: Screw to steel and timber framing.
Accessories and trim
Requirement: Provide accessories and trim necessary to complete the installation.
Metal separation
Requirement: Prevent direct contact between incompatible metals, and between green hardwood or chemically treated timber and aluminium or coated steel, by either:
- Applying an anti-corrosion, low moisture transmission coating to contact surfaces.
- Inserting a separation layer.

2.2 PROPRIETARY SYSTEMS OR PRODUCTS

Fixing
Product fixing: Fix the following proprietary systems in conformance with the current written recommendations and instructions of the manufacturer or supplier:
- Fibre cement cladding.
- Compressed fibre cement cladding.

2.3 SHEET METAL CLADDING

Cladding sheet installation

Swarf: Remove swarf and other debris as soon as it is deposited.

Accessories: Provide material with the same finish as cladding sheets.

Corner flashing

Requirement: Finish off at corners with purpose-made folded flashing strips.

2.4 TIMBER WEATHERBOARD CLADDING

Preparation

Preservative treatment: For cladding with a natural or stained finish, finish the boards on both sides before installation by dipping or brushing with water-repellent preservative. Do not apply preservative if this is incompatible with a specified pigmented stain finish.

Cut surfaces: Treat freshly cut surfaces with water repellent before fixing.

Installation

Single lengths: Provide single lengths when installed vertically. Whenever possible provide single lengths of boards when installed horizontally.

Fixing at crossings:

- Seasoned milled weatherboards: 2 fixings.
- Unseasoned hardwood, sawn weatherboards, or secret nailed profiles: 1 fixing.

Nailheads: Treat visible nailheads as follows:

- In stained or clear finishes: Drive flush.
- In opaque finishes: Punch below the surface and fill flush with putty after the surface has been primed.

Joints

End grain joints: Install boards so that butt joints are in compression.

Internal and external corners: Butt against a stop bead of thickness at least that of the cladding.

3 SELECTIONS

3.1 SCHEDULE

Cladding schedule

CD-01	Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.
CD-02	9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "C5-M" severe marine environment. Provide 10mm expressed joints on Cemintel Epresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.
CD-03	Nom. 100mm thick random ashlar rock faced sandstone cladding with dry joints. Sandstone equal to Gosford Quarries "Mt White" in whites and browns (no pink).
CD-04	Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Loft". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflectiive foil insulation and R2 bulk insulation.
CD-05	Temporary CD face A-Bond plywood cladding screw fixed to substrate. Wall to be replaced in leasehold fitout.

0451 WINDOWS AND GLAZED DOORS

1 GENERAL

1.1 STANDARDS

General

Selection and installation: To AS 2047.

Glazing

Glass type and thickness: To AS 1288, if no glass type or thickness is nominated.

2 PRODUCTS

2.1 GENERAL

Standards

Flashings: To AS/NZS 2904.

Aluminium extrusions: To AS/NZS 1866.

Glass

Glass types and quality: To AS/NZS 4667.

Safety glasses: To AS/NZS 2208.

Aluminium frame finishes

Powder coating: To AS 3715:

- Grade: Architectural coating.

Anodising: To AS 1231:

- Thickness: ≥ 15 microns to 20 microns.

2.2 COMPONENTS

Louvre window assemblies

General: Provide louvre blades mounted in a metal surround frame or subframe and able to withstand the permissible-stress-design wind pressure for that location without failure or permanent distortion of members, and without blade flutter.

Adjustable louvres: Provide louvre blades clipped into blade holders pivoted to stiles or coupling mullions, linked together in banks, each bank operated by an operating handle incorporating a latching device, or by a locking bar.

Insect screens

Not applicable.

Security

Security grilles and screen doors: To AS 5039.

Installation: To AS 5040.

2.3 HARDWARE

Hardware documented generically

General: Provide hardware of sufficient strength and quality to perform its function, appropriate to the intended conditions of use, compatible with associated hardware, and fabricated with fixed parts firmly joined.

3 EXECUTION

3.1 INSTALLATION

Preglazing

Window assemblies and glazed doors: Supply inclusive of glazing, shop preglazed.

Windows and glazed doors

General: Install windows and glazed doors frames as follows:

- Plumb, level, straight and true within acceptable building tolerances.
- Fixed or anchored to the building structure in conformance with the wind action loading requirements.
- Isolated from any building loads, including loads caused by structural deflection or shortening.
- Allow for thermal movement.

Weatherproofing

Flashings and weatherings: Install flashings, weather bars, drips, storm moulds, caulking and pointing so that water is prevented from penetrating the building between frames and the building structure under prevailing service conditions, including normal structural movement of the building.

Fixing

Packing: Pack behind fixing points with durable full width packing.

Prepared masonry openings: If fixing of timber windows to prepared anchorages is by fastening from the frame face, conceal the fasteners by sinking the heads below the surface and filling the sinking flush with a material compatible with the surface finish.

Trim

General: Submit details of any proposed trim for approval. Provide mouldings, architraves, reveal linings, and other internal trim using materials and finishes matching the window frames. Install to make neat and clean junctions between frames and the adjoining building surfaces.

4 SELECTIONS

4.1 SCHEDULE

Window and glazed door performance schedule

Quality	Value/description
U-value (thermal transmittance, $W/m^2.°C$)	Not required
Solar heat gain coefficient (SHGC)	Not required
Reflectance %	Maximum 25%
WERS Energy rating% – Heating	Not required
WERS Energy rating% – Cooling	Not required
AWA Compliance Certificate	Not required

Windows and glazed doors schedule

WN-01	Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.
WN-02	Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.
DT-01	Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.
DT-02	Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

0453 DOORS AND ACCESS PANELS

1 GENERAL

1.1 INTERPRETATION

Definition

General: For the purposes of this worksection the following definition applies:

- Doorset: An assembly comprising a door or doors and supporting frame, guides and tracks including the hardware and accessories necessary for satisfactory operation.

2 PRODUCTS

2.1 DOOR FRAMES

Aluminium

General: Assembled from aluminium sections, including accessories such as buffers, pile strips, strike plates, fixing ties or brackets and cavity flashing, with provision for fixing documented hardware.

Timber frames

Hardwood: To AS 2796.1.

- Grade: Select.

Softwood: To AS 4785.1.

- Grade: Select.

Joints:

- Morticed head and through tenons.
- Trenched head:
  - Bare faced tenons on jambs.
  - Full let-in jambs.

2.2 DOORS

General

Doors: Proprietary products manufactured for interior or exterior applications and for the finish required.

Flush doors

General: Provide flush doors of balanced construction.

Construction

Door thickness:

- General: 35 mm.
- External doors and doors over 900 mm wide: 40 mm.

Edge strips: Minimum thickness 10 mm. Increase overall thickness to greater than 15 mm to accommodate the full depth of the rebate in rebated doors. Apply to the external edges of door after the facings are bonded to the door framing/core and finish flush with outside surface of the facings.

Tolerance

Squareness: The difference between the lengths of diagonals of a door: ≤ 3 mm.

Twist: The difference between perpendicular measurements taken from diagonal corners: ≤ 3 mm.

Nominal size (mm):

- Height: +2, -2.
- Width: +2, -0.

2.3 ANCILLARY MATERIALS

Flashings
Standard: To AS/NZS 2904.

Weather bars
General: Provide a weather bar under hinged external doors, locate under the centres of closed doors.
Type: Clear anodised aluminium angle.

3 EXECUTION

3.1 GENERAL

Security screen door
Standard: To AS 5040.

Ceiling access
General: Trim an opening and provide a loose access panel of minimum size 600 x 600 mm.

Priming
General: Prime timber door leaves on top and bottom edges before installation.

3.2 FRAMES

General
Frames: Install the frames as follows:
- Plumb, level, straight and true.
- Fixed or anchored to the building structure.
- Isolated from any building loads, including loads caused by structural deflection or shortening.

Aluminium frames
Building in to masonry: Screw galvanized steel brackets twice to jambs and build in.
Fixing to masonry openings: Build in seasoned timber plugs to masonry joints or use proprietary expansion anchors and screw twice through jambs at each fixing.
Fixing to stud frame openings: Screw once to studs at each fixing.

Timber frames
Building in to masonry: Screw galvanized steel brackets twice to jambs and build in.
Fixing to masonry openings: Build in seasoned timber plugs to masonry joints or use proprietary expansion anchors and screw twice through jambs at each fixing.
Fixing to stud frame openings: Back screw twice to jambs at each fixing.
Heads of fasteners: Conceal where possible, otherwise sink the head below the surface and fill the sinking flush with a material compatible with the surface finish.

Finishing
Trim: No Trim unless shown on drawings or approved by architect..

Weatherproofing
Flashings and weatherings: Install flashings, weather bars, drips, storm moulds, caulking and pointing to prevent water from penetrating the building between the door frame and the building structure under the prevailing service conditions, including normal structural movement of the building.

3.3 SLIDING INTERNAL DOORS

Accessories
Face mounted: Provide overhead track supports and head and jamb linings appropriate to the arrangement of the door, and removable pelmets at the head to allow access to the wheel carriages for adjustment.
Wheel carriages: Fully adjustable precision ball race type providing smooth, quiet operation.

Cavity sliding doors
General: Proprietary product comprising steel and timber frame construction with rigid steel top, base and rear supporting members and incorporating the overhead door track, ball race type wheel carriages guides, stops, split jamb linings and removable pelmet.

4 SELECTIONS

4.1 SCHEDULE

Doors schedule

DT-03	Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).
DT-05	Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class 1 HW vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Ferreko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.
DT-06	Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MDZ FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).
DT-07	External Doors – Solid core external grade flush panel door with Dulux Weathershield semi gloss paint finish in Elevate Aluminium 400 Series Centreglaze aluminium frame. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide magnetic door stops to all doors. Colour to be Dulux "Handmade Linen Quarter".
AH-01	Nom. 600x600mm trimless access hatch to be Rondo Panther or equal. Provide all required hardware and accessories. Panel door to finish flush with adjacent ceiling. Paint finish to match ceiling.

0454 OVERHEAD DOORS

1 GENERAL

1.1 STANDARD

General

Garage doors: To AS/NZS 4505.

Bushfire screens and seals: To AS 3959.

2 EXECUTION

2.1 FRAMES

General

Frames: Install the frames as follows:

- Plumb, level, straight and true.
- Fixed or anchored to the building structure.
- Isolated from any building loads, including loads caused by structural deflection or shortening.

3 SELECTIONS

3.1 SCHEDULES

DT-04	Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match exisitng.

0455 DOOR HARDWARE

1 PRODUCTS

1.1 COMPONENTS

Hinges

Requirement: Provide 3 hinges for external doors and door leafs over 2040 mm in height and 600 mm in width. Conform to the **Hinges table.**

Hinges table

Size of door (mm x mm)	Number of hinges (per door leaf)	Size of hinges (steel)
2040 x 920	3	100 x 75 x 2.5 mm
2040/2400 x 1020	4	100 x 100 x 2.5 mm

Locksets

External doors: Rebated mortice lock to each door.

Internal doors:

- Generally: Passage sets.
- Bathrooms, showers and toilets: Privacy sets.
- Sliding patio doors and windows: Key-lockable rebated mortice locks.

Keying

Requirement: Provide key hierarchy of master keys, doors keyed alike and windows keyed alike to Pittwater Council requirements.

2 EXECUTION

2.1 INSTALLATION

Supply

Delivery: Deliver door hardware items, in individual complete sets for each door, as follows:

- Clearly labelled to show the intended location.
- In a separate dust and moisture proof package.
- Including the necessary templates, fixings and fixing instructions.

Mounting height

Door lockset mounting heights: 1000 mm above finished floor to centreline of spindle.

Door stops

Fixing: Fix on the floor, skirting or wall, as appropriate, to prevent the door or door furniture striking the wall or other surface.

Fasteners

Materials: Provide materials compatible with the item being fixed, and of sufficient strength, size and quality to perform their function.

- Concealed fixings: Provide a corrosion resistant finish to concealed fixings.
- Exposed fixings: Match exposed fixings to the material being fixed.

Security: Locate exposed fixings to lock furniture on the inside faces of external doors.

Support: Provide appropriate back support (for example lock stiles, blocking, wall noggings and backing plates) for hardware fixings.

Hinges

Metal frames: Fix hinges using metal thread screws.

Timber doorsets: Install butt hinges in housings equal in depth to the thickness of the hinge leaf (except for hinges designed for mounting without housing), and fix with countersunk screws.

0467 GLASS COMPONENTS

1 GENERAL

1.1 STANDARDS

Materials and installation: To AS 1288.

Safety glasses: To AS/NZS 2208.

1.2 SUBMISSIONS

Balustrade design

Certification: Submit a professional engineers' certificate confirming compliance with AS/NZS 1170.1 clause 3.6.

Sealant compatibility

Compatibility statements: Submit statements from all parties to the installation that certify the compatibility of sealants and glazing systems to all substrates.

2 PRODUCTS

2.1 MIRRORS

Reflective surface

Type: Silver layer deposited on the glass or glazing plastic.

Protective coatings: Electrolytic copper coating at least 5 μm thick, and 2 coats of mirror backing and edge sealing paint having a total dry film thickness of at least 50 μm.

Safety mirror

Type: Vinyl backed Grade A safety mirror.

Safety compliance: To AS/NZS 2208.

Solid backed annealed glass mirrors

Backing: 9 mm waterproof plywood.

Adhesive fixing to backing: Non-acidic silicone adhesive at the rate recommended by the manufacturer.

Installation to backing: Clean the back of the glass panel and apply walnuts of adhesive together with double sided adhesive tape for temporary support and affix directly to the backing.

2.2 SHOWER SCREENS

Type

Proprietary system comprising frames of extruded aluminium, stainless steel, or PVC, assembled around safety glass to form fixed panels and sliding, hinged or pivoted doors.

2.3 GLASS BALUSTRADES

General

Glass: Grade A safety glass to AS 1288 Section 7.

3 EXECUTION

3.1 GLAZED SHOWER SCREENS

Water shedding

General: Provide an assembly which sheds water to the inside without retaining it on the frame surfaces. Seal the edge of the frame to adjoining surfaces with a resilient strip.

Sliding assemblies

Hanging: Hang the sliding sash on stainless steel or nylon sheaves on overhead channel track formed in the frame head, and fit nylon or equivalent bottom guides.

Hardware: Pull handles on both sides of sash, or of leading sash in multiple sash arrangements.

Fixing

Proprietary shower screens: To the manufacturer's recommendations.

4 SELECTIONS

4.1 SCHEDULE

Glass components schedule

BL-01	Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.
MR-01	Adhesive fixed mirror with polished edges.

0471 INSULATION AND SARKING MEMBRANES

1 GENERAL

1.1 INTERPRETATION

Definition
General: For the purposes of this worksection the following definition applies:
- Sarking membrane: Flexible membrane material normally used for waterproofing, vapour proofing or thermal reflectance.

1.2 ENERGY EFFICIENCY

Commitment to energy efficiency required by authorities
Requirements: Section J of the BCA

2 PRODUCTS

2.1 INSULATION MATERIALS

Bulk and reflective insulation
Cellulosic fibre (loose fill): To AS/NZS 4859.1 Section 5.
Mineral wool blankets and cut pieces: To AS/NZS 4859.1, Section 8.
Polyester: To AS/NZS 4859.1 Section 7.
Polyisocyanurate (rigid cellular sheets RC/PIR): To AS 1366.2.
Polystyrene (extruded rigid cellular sheets): To AS 1366.4.
Polystyrene (moulded rigid cellular sheets): To AS 1366.3.
Reflective insulation: To AS/NZS 4859.1, Section 9.
Wool: To AS/NZS 4859.1, Section 6.
Sarking membrane
Standard: To AS/NZS 4200.1.

3 EXECUTION

3.1 GENERAL

Framed wall thermal break strips
Product type: Proprietary item.
Application: To steel or timber framing with lightweight external cladding.
R-value: ≥ 0.2.
Screw fixing: Button head screws at 1 m centres.
Adhesive fixing: Wallboard adhesive walnuts at 1 m centres.
Bulk insulation
Standard: To AS 3999.
General: Make sure batts or blankets are firmly butted with no gaps except as follows:
- Access openings and vents: Do not obstruct.
- Light fittings: To AS/NZS 3000 clause 4.5.

Sarking membrane
Standard: To AS/NZS 4200.2.

3.2 WALL INSULATION

Bulk insulation to framed walls

Product type: Fibre batts.

Batts: Friction fit between framing members. If support is not otherwise provided, staple nylon twine to the framing and stretch tight.

Cavity walls

Product: Rigid cellular insulation board.

Application: To the inner skin.

Fixing: Proprietary plastic clips on pre installed wall ties.

Installation: Horizontally with the tongue to the top edge and firmly against the skin. Keep boards clean and dry and free from mortar and grout. Do not bridge the cavity.

Flashings: Install flashings before installing insulation panels. Prevent entry of water behind the insulation boards.

Vapour permeable wall wrap

Application: Provide wall wrap behind cladding which does not provide a permanent weatherproof seal or may be subject to condensation forming on the internal face, including the following:

- Boards fixed vertically or diagonally.
- Boards or planks fixed in exposed locations where wind driven rain can penetrate the joints.
- Unpainted or unsealed cladding.
- Behind external cladding in bushfire prone areas to AS 3959.
- Masonry veneer.

Installation: Fix wall wrap to all framing members after being pulled taught over the framing. Apply to run horizontally to the outer face of external stud walls from the bottom plate up, over the flashing. Seal across the wall cavity at the top.

Horizontal laps: At least 150 mm wide with the direction of the lap ensuring that water is shed to the outer face of the membrane.

3.3 ROOF INSULATION

Roof sarking

Sarking membrane:

- Installation to AS 2050.
- Location: Provide sarking under tile and shingle roofs.

Vapour barrier

Installation: Lay over the roof support frame with sufficient sag to allow the bulk insulation to achieve its full thickness. Overlap roll edges 150 mm and seal all joints with pressure sensitive adhesive tape.

Bulk insulation – metal roofs

Batts: Fit tightly between framing members.

Blanket for sound insulation: Install over the roof support frame, reflective thermal insulation (if any), and mesh support, so that the blanket is in continuous contact with the underside of the metal roofing sheets.

Bulk insulation to Ceiling insulation

Product type: Fibre batts.

Batts: Friction fit between framing members.

4 SELECTIONS

4.1 SCHEDULE

Insulation schedule

Location	Type	Thickness	R-value	R_w rating
Roof	Fletcher Heavy Duty Permastop Building Blanket	75mm	R1.8	

Location	Type	Thickness	R-value	R_w rating
Ceiling	Fletcher Ceiling Batts	115mm	2.5	
Acoustic Ceiling	Fletcher Pink Sonomatt Blanket	100mm	2.5	
Walls	Fletcher Pink Wall Batts	90mm	2.0	
	Solartex Super 15 Foilboard	15mm	1.5	
Wall Sarking	Double sided heavy duty foil (perforated behind timber cladding) Fletcher Insulmist 800 Antiglare			
Internal partitions	Fletcher ISB Partition Blanket ISB5	85mm		
Floors	Not Applicable			
Slab edge	Not Applicable			
Pipes	Fletcher Pipe Acoustic Lagging			

0511 LINING

1 PRODUCTS

1.1 MATERIALS AND COMPONENTS

Plasterboard
Standard: To AS/NZS 2588.

Fibre cement
Standard: To AS/NZS 2908.2.
Wall and ceiling linings: Type B, Category 2.
Minimum thickness: 4.5 mm.

2 EXECUTION

2.1 CONSTRUCTION GENERALLY

Substrates or framing
General: Before fixing linings check and, if necessary, adjust the alignment of substrates or framing.

Ceiling linings
General: Do not install until at least 14 days after the timber roof structure is fully loaded.

Accessories and trim
General: Provide accessories and trim necessary to complete the installation.

2.2 PLASTERBOARD LINING

Supports
General: Install timber battens or proprietary cold-formed galvanized steel furring channels as follows:

- Where framing member spacing exceeds the recommended spacing.
- Where direct fixing of the plasterboard is not possible due to the arrangement or alignment of the framing or substrate.
- Where the lining is the substrate for tiled finishes.

Installation
Gypsum plasterboard: To AS/NZS 2589.

Joints
Flush joints: Provide recessed edge sheets and finish flush using perforated paper reinforcing tape.
External corner joints: Make joints over metallic-coated steel corner beads.
Control joints: Provide purpose-made metallic-coated control joint beads at not more than 12 m centres in plasterboard linins or 7.2 m centres in fibre cement lining in walls and ceilings and to coincide with structural control joints.
Wet areas: Install additional supports, flashings, trim and sealants as required.
Joints in tiled areas: Do not apply a topping coat after bedding perforated paper tape in bedding compound.

2.3 FIBRE CEMENT LINING

Supports
General: Install timber battens or proprietary cold-formed galvanized steel furring channels as follows:

- Where framing member spacing exceeds the recommended spacing.
- Where direct fixing of the fibre cement is not possible due to the arrangement or alignment of the framing or substrate.
- Where the lining is the substrate for tiled finishes.

Installation

General: Run sheets across the framing members. In flush jointed applications, stagger end jointsin a brick pattern and locate them on framing members, away from the corners of large openings. Provide supports at edges and joints.

Timber framed construction: Nail only or combined with adhesive.

Steel framed construction: Screw only or combined with adhesive.

Wall framing:

- Do not fix to top and bottom plates or noggings.
- In tiled areas: Provide an extra row of noggings immediately above wall-to-floor flashings. Fix sheet at 150 mm centres to each stud and around the perimeter of the sheet.

Ceilings: Fix using screw or screw and adhesive to ceiling furring members. Do not fix sheets to the bottom chords of trusses.

Wet areas: Do not use adhesive fixing alone.

Joints

Flush joints: Provide recessed edge sheets and finish flush using perforated paper reinforcing tape.

External corner joints: Make joints over metallic-coated steel corner beads.

Dry joints: Provide square edged sheet and finish with a UPVC joining section.

Control joints: Provide purpose-made metallic-coated control joint beads at ≤ 7.2 m centres in walls and ceilings and to coincide with structural control joints.

Wet areas: Provide additional supports, flashings, trim and sealants as required.

Joints in tiled areas: Bed perforated paper tape in bedding compound. Do not apply a topping coat.

- Control joints: ≤ 4.2 m centres and space to suit joints required in tiling.
- Internal corners: Reinforce with metallic-coated steel angles. In corners subject to continuous moisture, flash over the angle and under the sheeting with continuous bitumen coated aluminium flashing.

2.4 TRIM

General

General: Provide trim only as shown on drawings. Provide butt or shadowline junctions to make neat junctions between components, finishes and adjacent surfaces. Do not provide trim, such as beads, skirtings, architraves, mouldings and stops without the approval of the architect.

Proprietary items: Provide complete with installation accessories.

3 SELECTIONS

3.1 SCHEDULE

Lining schedule

Item	Description
LN-01	13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".
LN-02	1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with no visible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens.
LN-03	1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior)with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 003 clear.
CL-01	10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White".

Item	Description
	Provide Fletcher R2.5 Ceiling Batts.
CL-02	10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomatt Blanket 100mm acousic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.
CL-03	9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "C5-M" severe marine environment. Provide 10mm expressed joints on Cemintel Epresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.
SK-01	100 x 3mm flush aluminium skirting with clear anodised finish.
SK-02	Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.
SK-03	Ceramic skirting tile to match floor tile. Provide grout to match tile colour.
Architraves	No architraves, wall lining to be butt jointed into door jambs. Provide Rondo stopping bead.
Cornice	No cornice. Provide Rondo shadowline joint to all ceiling/wall junctions.

0551 JOINERY

1 PRODUCTS

1.1 JOINERY MATERIALS AND COMPONENTS

Joinery timber
Hardwood: To AS 2796.3.

Seasoned cypress pine: To AS 1810.

Softwood: To AS 4785.3.

Finished sizes: For milled timbers actual dimensions which are at least the required dimensions, except for dimensions qualified by a term such as nominal or out of to which industry standards for finished sizes apply.

Plywood
Interior use generally: To AS/NZS 2270.

Interior use, exposed to moisture: To AS/NZS 2271.

Non-structural glued laminated timber
Standard: AS 5067.

Wet processed fibreboard (Including hardboard)
Standard: To AS/NZS 1859.4.

Particleboard
Standard: To AS/NZS 1859.1.

Dry processed fibreboard (Including medium density fibreboard)
Standard: To AS/NZS 1859.2.

Decorative overlaid wood panels
Standard: To AS/NZS 1859.3.

Certification
General: Brand panels under the authority of a recognised certification program applicable to the product. Locate the brand on faces or edges which will be concealed in the works.

High-pressure decorative laminate sheets
Standard: To AS/NZS 2924.1.

High-pressure decorative laminate sheet application table
Classes: Provide classes as follows:

Class to AS/NZS 2924.1	Application
HGS or HGP	Kitchen work-tops
VGS or VGP	Kitchen front panels
VLS	Other vertical locations

Thickness (minimum):

- For horizontal surfaces fixed to a continuous substrate: 1.2 mm.
- For vertical surfaces fixed to a continuous substrate: 0.8 mm.
- For post formed laminate fixed to a continuous substrate: 0.8 mm.
- For vertical surfaces fixed intermittently (e.g. to studs): 3.0 mm.
- For edge strips: 0.4 mm.

Stone facings
General: Provide stone or engineered stone slabs within the visual range of approved samples. In natural stone, repair mud veins or lines of separation that are integral to the selected pattern with resin fillers and back lining.

Splashbacks
Provide glass mosaic tiles.

Refer to Section 0631 Ceramic Tiling

1.2 KITCHEN ASSEMBLIES

Standard
General: To AS/NZS 4386.1.

1.3 WARDROBE, CUPBOARD AND DRAWER UNITS

Plinths, carcasses, drawer fronts, shelves and doors
Material: Select from the following:
- Overlaid high moisture resistant particleboard.
- Overlaid high moisture resistant medium density fibreboard.

Thickness: 16 mm.
Bench and cupboard units: 17mm Black Formply plywood with sealed edges and no trade markings
Adjustable shelves: Support on proprietary pins in holes bored at equal centres vertically.
- Spacing: 32 mm.

Fasteners: Conceal with finish.
Drawer fronts: Rout for drawer bottoms.
Drawer backs and sides:
- Material: particleboard with melamine laminate.
- Thickness: 16 mm.

Drawer bottoms:
- Material: particleboard with melamine laminate
- Thickness: 9 mm.

Drawer and door hardware
Hinge types: Concealed metal hinges with the following features:
- Adjustable for height, side and depth location of door.
- Self-closing action with soft close.
- Hold-open function.
- Nickel plated.
- Blum

Slides: Metal runners and plastic rollers with the following features:
- 30 kg loading capacity.
- Closure retention.
- Soft close.
- Nickel plated.
- Blum

Pulls: Edge of joinery panel to be routed out to provide door pull nom. 150mm wide x 20mm deep with round end.
Locks: Hafele Symo lock suited to application. Key to Pittwater Council requirements.

1.4 WORKING SURFACES

Laminated benchtops
Material: 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.
Exposed edges: Square edge exposing plywood substrate sealed with Feast Watson Scandinavian oil with black tint.

2 EXECUTION

2.1 JOINERY

General

Joints: Provide materials in single lengths whenever possible. If joints are necessary, make them over supports.

Framing: Frame and trim where necessary for openings, including those required by other trades.

Accessories and trim

General: Provide accessories and trim necessary to complete the installation.

Fasteners and adhesives

Installation: Secure plinths and carcasses to floors, walls, or both at not more than 600 mm centres.

Visibility: Do not provide visible fixings except in the following locations:

- Inside cupboards and drawer units.
- Inside open units, in which case provide proprietary caps to conceal fixings.

Fix joinery units to substrate as follows:

- Floor mounted units: 600 mm centres max.
- Wall mounted units: To each nogging and/or stud stiffener.

Fixings: Screws with washers into timber or steel framing, or masonry anchors.

Adhesives

General: Provide adhesives to transmit the loads imposed and to ensure the rigidity of the assembly, without causing discolouration of finished surfaces.

Finishing

Junctions with structure: Scribe plinths, benchtops, splashbacks, ends of cupboards, kickboards and returns to follow the line of structure.

Edge strips: Finish exposed edges of sheets with edge strips which match sheet faces.

Benchtops

Installation: Fix to carcass at least twice per 600 mm length of benchtop.

Joint sealing: Fill joints with sealant matching the finish colour and clamp with proprietary mechanical connectors.

Edge sealing: Seal to walls and carcasses with a sealant, which matches the finish colour.

Splash backs

Glass: Fix with non-acidic silicone adhesive. Apply at the rate recommended by the manufacturer.

Installation: Clean the back of the glass panel and apply walnuts of adhesive together with double sided adhesive tape for temporary support, and affix directly to the substrate.

2.2 TIMBER HANDRAILS

Internal Handrail

Provide internal timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD HW rail. Conceal all fixings with matching timber plugs. Finish with Feast Watson Scandinavian Oil.

External Handrail

Provide external timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

3 SELECTIONS

3.1 SCHEDULE

Joinery schedule

Item	Description

Item	Description
HR-01	Internal Timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD HW rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.
HR-02	External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.
JN-02	Existing kitchen joinery to be salvaged and reused. Check & confirm onsite dimensions for installation. Modify and rectify as required.
JF-01	Fabric covered pinboard equal to Designer Pinboards Australia Standard Range Colour Terracotta Red.
JT-01	18mm A bond plywood with nom 6mm thick x 120 wide butt jointed lining boards to match CD-01 adhesive fixed to substrate. No edge strips - stain raw edges black. Boards to run vertically and be aligned across cupboards. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide Madinoz MDZ 144/150 PSS cabinet handle and keyed alike cabinet locks.
JM-01	16mm HMR particleboard with white melamine to both sides and 2mm edge strips.
JP-01	17mm Black Formply plywood with sealed edges and no trade markings. Provide concealed fixings. Handles to doors to be 150 x 20mm routed round end slot as shown on drawings.
JP-03	32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS Interior Mat Plus 003 finish. Provide Angleshoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.
JP-04	35mm flush panel solid core pivot door with Dulux Wash n' Wear semi gloss paint finish. Provide Angleshoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005.
JH-01	Joinery door pull - Edge of joinery panel to be routed out to provide door pull nom. 150mm wide x 20mm deep with round end.
JH-02	Cable entry hole 60 dia Hafele Chrome Plated Matt 631.32.413.
JH-03	Conical Desk Leg Hafele 635.49.971
JH-04	Hafele Joinery Lock
JS-01	Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to stainless steel strutted angle brackets as detailed at mximum 900mm centres with stainless steel screws.
BT-01	34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.
BT-02	30mm thick Grade 304 stainless steel benchtop on HMR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.
BT-03	Reuse existing 30mm thick stainless steel benchtop reconfigured to suit new kitchen. Check and confirm onsite.

0572 MISCELLANEOUS FIXTURES AND APPLIANCES

1 EXECUTION

1.1 PROPRIETARY STAIR SYSTEMS

General

Materials, design and construction: To AS 1657 and BCA 3.9.1.

Straight flight stair assembly: A proprietary system, pre assembled and fixed in place, comprising the following:

- Stair flights with treads and risers.
- Top landing.
- Balustrade to stair flight and landing.

Circular stairs: A proprietary system, mechanically assembled and fixed in place, comprising the following:

- A central steel tube column.
- Prefabricated metal treads sleeved over and cantilevered from the column.
- Top landing.
- Balustrade and handrail to stair and landing.
- Spacers, fixings and accessories necessary to complete the system.

2 SELECTIONS

2.1 SCHEDULES

Appliances and Fixtures schedule

Item	Location	Description	Supplied by	Installed by
Dishwasher	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Oven	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Cooktop	Kitchen	Refer joinery drawings	Proprietor	Builder
Rangehood	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Microwave	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Refrigerator	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Sink	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Mixer	Kitchen	Refer joinery drawings	Reuse Existing	Builder
Integrated Sink	Bar	Refer joinery drawings	Builder	Builder
Mixer	Bar	Refer joinery drawings	Builder	Builder
Dishwasher	Bar	Refer joinery drawings	Proprietor	Builder
Integrated Garbage Sorter	Bar	Refer joinery drawings	Proprietor	Builder

Item	Location	Description	Supplied by	Installed by
Integrated Sink	Canteen	Refer joinery drawings	Builder	Builder
Mixer	Canteen	Refer joinery drawings	Builder	Builder
Integrated Garbage Sorter	Canteen	Refer joinery drawings	Proprietor	Builder
Chest Freezer	Canteen	Refer joinery drawings	Reuse Existing	Builder
Refrigerator	Canteen	Refer joinery drawings	Reuse Existing	Builder
Basin	First Aid	Refer joinery drawings	Builder	Builder
Mixer	First Aid	Refer joinery drawings	Builder	Builder
Underbench Fridge	First Aid	Refer joinery drawings	Proprietor	Builder
Sharps Container	First Aid	Refer joinery drawings	Reuse Existing	Builder
Urinals	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Handbasins	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Basin Mixers	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Shower Mixers	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Shower roses	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Toilets	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Partition system	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Floor Wastes	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Floor Grates	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Hand Dryer and Waste Receptacle	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Soap Dispenser	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Toilet Roll Dispenser	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Foot Tap	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Robe Hooks	Ground Floor Club Washrooms	Refer joinery drawings	Builder	Builder
Handbasins	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Basin Mixers	Ground Floor Public	Refer joinery	Builder	Builder

Item	Location	Description	Supplied by	Installed by
	Washrooms	drawings		
Shower Roses	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Shower Mixers	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Toilets	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Partition systems	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Floor Wastes	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Floor Grates	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Hand Dryer and Waste Receptacle	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Soap Dispenser	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Toilet Roll Dispenser	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Sharps Dispenser	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Robe Hooks	Ground Floor Public Washrooms	Refer joinery drawings	Builder	Builder
Baby Change Table	Ground Floor Disabled WC	Refer joinery drawings	Builder	Builder
Basins	Level 1 Male & Female Bathrooms	Refer joinery drawings	Builder	Builder
Mixers	Level 1 Male & Female Bathrooms	Refer joinery drawings	Reuse Existing	Builder
Urinals	Level 1 Male & Female Bathrooms	Refer joinery drawings	Reuse Existing	Builder
Toilet Partition system	Level 1 Male & Female Bathrooms	Refer joinery drawings	Builder	Builder
Floor Waste	Level 1 Male & Female Bathrooms	Refer joinery drawings	Builder	Builder
Toilet Roll Dispenser	Level 1 Male Bathrooms	Refer joinery drawings	Reuse Existing	Builder
Toilet Roll Dispenser	Level 1 Female Bathrooms	Refer joinery drawings	Builder	Builder
Toilets	Level 1 Male Bathrooms	Refer joinery drawings	Builder	Builder
Toilets	Level 1 Female Bathrooms	Refer joinery drawings	Reuse Existing	Builder
Robe Hooks	Level 1 Male & Female Bathrooms	Refer joinery drawings	Builder	Builder
Toilet	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Shower	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder

Item	Location	Description	Supplied by	Installed by
Basin	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Shower Rose	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Shower mixer	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Floor Waste	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Hand Dryer and Waste Receptacle	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Soap Dispenser	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Toilet Roll Dispenser	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Grab Rails	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Sharps Dispenser	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Baby Change Table	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
Robe Hooks	Level 1 Disabled Bathroom	Refer joinery drawings	Builder	Builder
BBQ	First Floor Terrace	Refer joinery drawings	Proprietor	Builder
Lift	Entry	Refer joinery drawings	Builder	Builder
Projection screen	Club Room	Refer Drawings	Builder	Builder

0611 PLASTERING

1 GENERAL

1.1 INTERPRETATION

Abbreviations
General: For the purpose to this worksection the following abbreviations apply:
- CRF: Cement render – finish.
- CRM: Cement render – medium.
- CRS: Cement render – stronger.
- CRW: Cement render – weaker.
- GPF: Gypsum plaster – finish.

2 PRODUCTS

2.1 MATERIALS AND COMPONENTS

Accessories
Beads: Provide metal proprietary sections manufactured to be fixed to substrates and/or embedded in the plaster to form and protect plaster edges and junctions.

Lath: Provide a proprietary product manufactured from raised expanded metal for use with plaster.

Admixtures
Plasticisers or workability agents: Do not use in cement plasters.

Aggregates
Sand: Fine, sharp, well-graded sand with a clay content between 1% and 5% and free from efflorescing salts.

Plaster for autoclaved aerated concrete
General: Provide a proprietary product manufactured for use with the wall system.

Bonding products
General: Provide proprietary products manufactured for bonding cement-based plaster to solid substrates.

Cement
Standard: To AS 3972.

Type: GP.

Colouring products
General: Provide proprietary products manufactured for colouring cement plaster.

Integral pigment proportion: ≤ 5% by mass of cement.

Cornice cement
General: Provide a proprietary product manufactured for use with the cornice.

Cornices
Cast plaster: Proprietary item.

Gypsum plaster
General: Provide a proprietary product containing calcium sulfate hemihydrate with additives to modify setting.

Lime
Limes for building: To AS 1672.1.

Lime putty
General: Prepare lime putty as follows:
- Stand dry hydrate of lime to AS 1672.1 and water for 24 hours or more without drying out.
- Stand quicklime and water for 14 days or more without drying out.

Metal lath

Internal: Expanded metal to AS 1397 coating class Z350.

External: Stainless steel or PVC.

Mixes

General: Select a mix ratio to suit the conditions of application in conformity with the **Mixes table.**

Measurement: Measure binders and sand by volume using buckets or boxes. Do not allow sand to bulk by absorption of water.

Plaster mixing: Machine mix ≥ 3 < 6 minutes.

Strength of successive coats: Make sure successive coats are no richer in binder than the coat to which they are applied.

Mixes table – Cement render

Mix type	Substrate		Upper and lower limits of proportions by volume		
			Cement	Lime	Sand
-Single or multi-coat systems with integral finishing treatments -Base coats in multi-coat systems with cement or gypsum finishes	CRS	Dense and smooth concrete and masonry	1 1	0 0.5	3 4.5
	CRM	Regular clay or concrete masonry	1 1	0.5 1	4.5 6
	CRW	Lightweight concrete masonry and other weak substrates	1 1	1 2	6 9
Second coat - Internal	CRF	Cement render base coats	1 1	1 2	6 9
Second coat - External	CRF	Cement render base coats	1 1	1 2	5 6

Mix table – Gypsum finish coat, by volume

Mix type	Substrate		Upper and lower limits of proportions by volume			
			Gypsum	Cement	Lime putty	Sand
Gypsum finish coats	GPF	Cement render base coats	1 1	- -	1.5 2	- -

Control joint products

General: Provide proprietary products manufactured for use with the plastering system and to accommodate the anticipated movement of the substrates and/or the plaster.

Water

General: Clean and free from any deleterious matter.

2.2 SPECIALIST PLASTER FINISHES

Polymer modified render

Basecoat render: Proprietary polymer modified cementitious render supplied as a complete plastering system.

Finish coats: Proprietary trowelled on coloured and textured polymer modified finish coats.

3 EXECUTION

3.1 SUBSTRATE

Substrates

General: Provide substrates as follows:

- Clean and free from any deposit or finish which may impair adhesion of plaster.
- If framed or discontinuous, support members in full lengths without splicing.
- If solid or continuous, remove excessive projections and fill voids and hollows with plaster stronger than the first coat and not weaker than the substrate.

Absorbent substrates: If suction is excessive, control it by dampening but avoid over-wetting and do not plaster substrates showing surface moisture.

Dense concrete: If not sufficiently rough to provide a mechanical key, roughen by scabbling or the like to remove 2 mm of the laitance and expose the aggregate then apply a bonding treatment.

Painted surfaces: Remove paint and hack the surface at close intervals.

Untrue substrates: If the substrate is not sufficiently true to ensure conformity with the thickness limits for the plaster system, or has excessively uneven suction resulting from variations in the composition of the substrate, apply additional coats without exceeding the thickness limits for the substrate or system.

Beads

Location: Fix beads as follows:

- Angle beads: At all external corners.
- Drip beads: At all lower terminations of external plaster.
- Beads for control of movement: At all control joints.
- Stop beads: At all terminations of plaster and junctions with other materials or plaster systems.

Joints in beads: Provide dowels to maintain alignment.

Mechanical fixing to substrate: ≤ 300 mm centres.

Bonding treatment

General: If bonding treatment is required, throw a wet mix onto the background as follows:

- Cement plaster: 1 part cement to 2 parts sand.
- Gypsum plaster: 1 part gypsum to 2 parts sand.

Curing: Keep continuously moist for ≥ 5 days and allow to dry before applying plaster coats.

Thickness: From ≥ 3 < 6 mm.

Embedded items

General: If there are water pipes and other embedded items, sheath them to permit thermal movement.

Lath

Location: Provide lath as follows:

- Chases: If chases or recesses are 50 mm wide or greater, fix metal lath extending ≥ 75 mm beyond each side of the chase or recess.
- Metal and other non-porous backgrounds: Fix metal lath to provide a key.

3.2 APPLICATION

Plastering

Base coats: Scratch-comb each base coat in two directions when it has stiffened.

Metal lath: Press the plaster through the apertures of expanded metal lath and wings of beads.

Finishing treatments

Plain:

- Bag: Rub the finish coat when set firm with a hessian pad to achieve a finish mainly free from sand.
- Carborundum stone: Rub the finish coat when set hard with a carborundum stone to achieve a finish free from sand.
- Foam float: Float finish coat on application with a wood or plastic float to an even surface and finish with a foam float to achieve a fine sand textured finish.

- Steel trowel: Steel trowel finish coat to a smooth dense surface which is not glass-like and is free from shrinkage cracks and crazing.
- Wood or plastic float: Float the finish coat on application to an even surface with a wood or plastic float.

Incidental work

General: Return plaster into reveals, beads, sills, recesses and niches. Plaster faces, ends, and soffits of projections in the substrate, such as string courses, sills, pilasters and corbels. Run neatly finished throating on soffits of external projections. Trim around openings. Plaster exposed internal surfaces of built-in cupboards.

Joining up

General: If joining up is required, make sure joints are imperceptible in the finished work after decoration.

Control joints

General: Provide joints in the finish to coincide with control joints in the substrate. Make sure that the joint in the substrate is not bridged during plastering.

Size:

- Depth: Extend the joint right through the plaster and reinforcement to the substrate.
- Width: 3 mm, or the same width as the substrate joint, whichever is greater.

Damp-proof courses: Do not continue plaster across damp-proof courses.

Plastering on metal lath: Provide control joints to divide the plastering area into rectangular panels 10 m^2 or less.

V-joints: Provide V-joints, cut right through the plaster to the substrate, at the following locations:

- Abutments with metal door frames.
- Abutments with other finishes.
- Junctions between different substrates.

Decorative joints

General: Apply decorative joints in the second coat of two coat work as required.

Plaster thickness

General: Conform to the **Plaster thickness table**.

Plaster thickness table

Substrate	Cement render, total thickness of single or multi-coat work (mm)	Gypsum/lime plaster (mm)
Brickwork and blockwork	12 min	3 max
Lightweight concrete and blocks	12 min	3 max
Metal lath measured from the face of the lath.	18 min	3 max

Temperature

General: If the ambient temperature is 10°C or less or 30°C or more make sure that the temperature of mixes, substrates and reinforcement at the time of application are between 5°C and 35°C.

Tolerances

General: Finish plane surfaces within a tolerance of 6 mm in 2400 mm, determined using a 2400 mm straight edge placed anywhere in any direction. Finish corners, angles, edges and curved surfaces within equivalent tolerances.

3.3 COMPLETION

Curing

General: Prevent premature or uneven drying out and protect from the sun and wind.

Keeping moist: If a proprietary curing agent is not used, keep the plaster moist as follows:

- Base coats and single coat systems: Keep continuously moist for 2 days and allow to dry for 5 days before applying further plaster coats.
- Finish coats: Keep continuously moist for 2 days.

0612 CEMENTITIOUS TOPPINGS

1 PRODUCTS

1.1 MATERIALS

Admixtures
Standard: To AS 1478.1.

Aggregates
Coarse aggregate: Nominal single size ≤ 1/3 topping thickness.

Fine aggregate: Fine, sharp, well-graded sand with a low clay content and free from efflorescing salts.

Bonding products
General: Provide proprietary products manufactured for bonding cement-based toppings to concrete substrates.

Cement
Standard: To AS 3972.

- Type: GP.

Water
General: Clean and free from any deleterious matter.

2 EXECUTION

2.1 PREPARATION

Substrates
General: Provide substrates as follows:

- Clean and free from any deposit which may impair adhesion of monolithic or bonded toppings.
- Remove excessive projections and fill voids and hollows with a mix not stronger than the substrate or weaker than the topping.
- Roughen hardened concrete by scabbling or the like to remove 2 mm of the laitance and expose the aggregate.

Bonded toppings
General: Before laying topping wash the substrate with water and provide a bonding product or treat as follows:

- Keep wet for 2 hours or more.
- Remove surplus water and brush on neat cement or a clean slurry of cement and water.
- Place the topping while the slurry is wet.

2.2 APPLICATION

Laying
General: Spread the mix and compact. Strike off, consolidate and level surfaces to finished levels.

Monolithic toppings: Lay while concrete subfloor is plastic and the surface water is no longer visible.

Toppings over 50 mm thick:

- Lay in two layers of equal thickness.
- Place a layer of reinforcement between the layers of toppings. Lap reinforcement 200 mm and tie. Do not create four way laps.

2.3 SURFACE FINISHES

Finishing methods – primary finish
Machine float finish:

- After levelling, consolidate the surface using a machine float.

- Cut and fill and refloat immediately to a uniform, smooth, granular texture.
- Hand float in locations inaccessible to the machine float.

Steel trowel finish: After machine floating finish as follows:

- Produce a smooth surface relatively free from defects using power tools.
- When the surface has hardened sufficiently produce the final consolidated finish free of trowel marks and uniform in texture and appearance using steel hand trowels.

Wood float finish: After machine floating use wood or plastic hand floats to produce the final consolidated finish free of float marks and uniform in texture and appearance.

Broom finish: After machine floating draw a broom or hessian belt across the surface to produce a coarse even-textured slip-resistant transverse-scored surface.

Scored or scratch finish: After screeding, give the surface a coarse scored texture using a stiff brush or rake drawn across the surface before final set.

Sponge finish: After machine floating, obtain an even textured sand finish by wiping the surface using a damp sponge.

Finishing methods – supplementary finish

Abrasive blast: After steel trowelling, abrasive blast the cured surface to provide texture or to form patterns without exposing the coarse aggregate using fine hard, sharp graded abrasive particles.

Coloured applied finish: Apply a proprietary liquid or dry shake material to a steel trowel finished surface in conformance with the manufacturer's written requirements.

Stamped and coloured pattern paved finish: A complete proprietary finishing system.

Burnished finish: Continue steel trowelling until the concrete surface attains a polished or glossy appearance.

Exposed aggregate: After steel trowelling, grind the cured surface of the concrete to expose the coarse aggregate.

Slip resistant treatment

Surface treatment: Apply silicon carbide granules after floating and before the topping surface has set, and trowel into the surface so that the granules remain exposed.

Application rate: 1 kg/m^2 evenly distributed.

Surface colouring

General: Apply the colouring product after floating and before the topping surface has set and trowel into the surface so that it is even in colour.

Surface treatment

General: Apply the surface treatment after floating and before the topping surface has set.

Temperature

General: Make sure that the temperature of mixes, substrates and reinforcement are, at the time of application, ≥ 5°C or ≤ 35°C.

Severe temperature: If the ambient shade temperature is greater than 38°C, do not mix topping.

2.4 CONTROL OF MOVEMENT

General

General: Provide control joints as follows:

- Over structural control joints.
- To divide complex room plans into rectangles.
- Around the perimeter of the floor.
- At junctions between different substrates.
- To divide large topping finished areas into bays.

Depth of joint: Right through to the substrate.

Sealant width: 6 – 25 mm.

Depth of sealant: One half the joint width, or 6 mm, whichever is the greater.

2.5 JOINT ACCESSORIES

Weather bars

General: Provide a corrosion resistant metal weather bar under hinged external doors. Locate under the centres of closed doors.

Floor finish dividers

General: Finish cementitious toppings at junctions with differing floor finishes with a corrosion resistant metal dividing strip suitable fixed to the substrate, with top edge flush to the finished floor. If changes of floor finish occur at doorways make the junction directly below the centre of the closed door.

2.6 COMPLETION

Curing

General: Prevent premature or uneven drying out and protect from the sun and wind.

Curing: Use a curing product or, as soon as it has set sufficiently, keep the toppings moist by covering with polyethylene film for at least seven days.

0621 WATERPROOFING – WET AREAS

1 GENERAL

1.1 STANDARDS

Wet areas
Waterproofing: To AS 3740.

2 PRODUCTS

2.1 PRODUCTS

Membranes
Standard: To AS/NZS 4858.

Membrane systems
Requirement: Provide a proprietary membrane system certified as suitable for the intended external waterproofing by the following:

- Certificate: . A current BRANZ Appraisal Certificate

Bond breakers
Requirement: Compatible with the flexibility class of the membrane to be used.
Material: Purpose made bond breakers tapes and closed cell foam backing rods or fillets of sealant.

Sealants
Requirement: Waterproof, flexible, mould-resistant and compatible with host materials.

3 EXECUTION

3.1 PREPARATION

Substrates
General: Provide substrates as follows:

- Clean and free of any deposit or finish which may impair adhesion of membranes.
- If walls are plastered, remove loose sand.
- If walls or floors are framed or discontinuous, support members in full lengths without splicing.
- If floors are solid or continuous:
  - . Remove excessive projections.
  - . Fill voids and hollows > 10 mm with abrupt edges with a cement:sand mix not stronger than the substrate nor weaker than the bedding.
  - . Fill depressions < 10 mm with a latex modified cementitious product with feathering eliminated by scabbling the edges.
  - . Fill cracks in substrates wider than 1.5 mm with a filler compatible with the membrane system.

External corners: Round or arris edges.

Moisture content
Concrete substrates: Cure for > 21 days.
Moisture content: Verify that the moisture content of the substrate is compatible with the water vapour transmission rate of the membrane system by testing to AS/NZS 2455.1 Appendix B.
Test type:

- Hygrometer test: Seal a hygrometer to the substrate for > 16 hours and measure the relative humidity of the air between the instrument and the slab.

Falls
Substrate: If the membrane is directly under the floor finish, make sure the fall in the substrate conforms to the fall nominated for the finish.

Water stop angles
Requirement: Provide water stop angles at door thresholds and shower enclosures to support the waterproof membrane at junctions between waterproofed and non-waterproofed areas.

Bond breakers
Requirement: After the priming of surfaces, provide bond breakers at all wall/floor, hob/wall junctions and at control joints where the membrane is bonded to the substrate.

Sealant fillet bond breakers:

- Application: Form a triangular fillet or cove of sealant to internal corners within the period recommended by the membrane manufacturer after the application of the primer.
- Widths: 8 mm minimum to vertical corners. 10 – 12 mm to horizontal corners.

Backing rod bond breakers: Do not use.

3.2 APPLICATION

Protection
General: Protect membrane from damage during installation and for the period after installation until the membrane achieves its service characteristics that resist damage.

Extent of waterproofing
Waterproof or water resistant surfaces: To requirements of BCA 3.8.1.2.

Vertical membrane terminations
Upstands: At least 150 mm above the finished tile level of the floor or 25 mm above the maximum retained water level, whichever is the greater.

Anchoring: Secure sheet membranes along the top edge.

Edge protection: Protect edges of the membrane.

Waterproofing above terminations: Waterproof the structure above the termination to prevent moisture entry behind the membrane using tiler's angle and finish overlaps.

Doorjambs and architraves
Requirement: Where the bottom of doorjambs and architraves do not finish above the floor tiling, waterproof their surfaces below tile level to provide a continuous seal between the perimeter flashing to the wall/floor junction and the water stop angle.

Drainage connections
Floor wastes: Turn membrane down 50 mm minimum into the floor waste drainage flanges and adhere to form a waterproof connection.

Enclosed showers with hobs
Internal membranes: Extend membrane over the hob and into the room at least 50 mm.

Unenclosed showers
Requirement: Extend membrane at least 1500 mm into the room from the shower rose outlet on the wall.

Membrane vertical penetrations
Pipes, ducts, and vents: Provide separate sleeves for all pipes, ducts, and vents and have fixed to the substrate.

Membrane horizontal penetrations
Sleeves: Provide a flexible flange for all penetrations, bonded to the penetration and to the membrane.

Curing of liquid applied systems
General: To the manufacturers instructions.

Curing: Allow membrane to fully cure before tiling. Allow acrylic membranes to cure at least 7 days before tiling over.

Overlaying finishes on membranes
Requirement: Protect waterproof membranes with compatible water-resistant surface materials that not cause damage to the membrane.

Bonded or partially bonded systems: If the topping or bedding mortar requires to be bonded to the membrane, provide sufficient control joints in the topping or bedding mortar to reduce the movement over the membrane.

3.3 COMPLETION

Protection

General: Keep traffic off membrane surfaces until bonding has set or for 24 hours after laying, whichever period is the longer.

Reinstatement: Repair or replace faulty or damaged work. If the work cannot be repaired satisfactorily, replace the whole area affected.

Warranty

Waterproofing: Cover materials and workmanship in the terms of the warranty in the form of interlocking warranties from the supplier and the applicator.

- Form: Against failure of materials and execution under normal environment and use conditions.
- Period: As offered by the supplier.

0631 CERAMIC TILES

1 GENERAL

1.1 STANDARDS

Tiling

General: Comply with the recommendations of those parts of AS 3958.1 which are referenced in this worksection.

Slip resistance

Classification: To AS/NZS 4586.

Slip resistance measurement of existing installations: To AS/NZS 4663.

2 PRODUCTS

2.1 TILES AND ACCESSORIES

Tiles

Coves, nosings and skirtings: Provide matching stop-end and internal and external angle tiles moulded for that purpose.

Exposed edges: Purpose-made border tiles with the exposed edge (whether round, square or cushion) glazed to match the tile face. If such tiles are not available, mitre tiles on external corners.

Accessories

General: If available, provide tile accessories such as round edge ceramic tiles, cove tiles, step treads and nosings to stairs, landings, and thresholds, skirtings, sills, copings and bath vents, which match the surrounding tiles, composition, colour and finish.

2.2 MATERIALS

Adhesives

Standard: To AS 2358 and AS 4992.1.

PVA (polyvinyl acetate)-based adhesives: Do not use in wet areas or externally.

Mortar materials

Cement type to AS 3972: GP.

Sand: Fine aggregate with a low clay content selected for grading, sharp and free from efflorescing salts.

Bedding mortar

Proportioning: Select proportions from the range 1:3 to 1:4 cement:sand by volume to obtain satisfactory adhesion. Provide minimum water.

Water

General: Clean and free from any deleterious matter.

Grout

Cement-based proprietary grout: Mix with water. Fine sand may be added as a filler in wider joints.

Terra cotta tiles: Provide proprietary polymer modified grout.

General purpose cement based grout: Mix with fine sand. Provide minimum water consistent with workability.

Pigments for coloured grout: Colourfast fillers compatible with the grout material. For cement-based grouts, provide lime-proof natural or synthetic metallic oxides compatible with cement.

3 EXECUTION

3.1 SUBSTRATES

Drying and shrinkage
General: Before tiling, allow at least the following times to elapse (for initial drying out and shrinkage) for these substrates:

- Concrete slabs: 42 days.
- Concrete blockwork: 28 days.
- Toppings on slabs and rendering on brick or blockwork: A further 21 days.
- Rendering on swimming pool shell: A further 28 days minimum.

3.2 PREPARATION

Substrates without wet area membranes
General: Make sure substrates are as follows:

- Clean and free of any deposit or finish which may impair adhesion or location of tiles.
- If framed or discontinuous, support members are in full lengths without splicing.
- If solid or continuous:
  - . Excessive projections are removed.
  - . Voids and hollows > 10 mm with abrupt edges are filled with a cement:sand mix not stronger than the substrate or weaker than the bedding.
  - . Depressions < 10 mm are filled with a latex modified cementitious product with feathering eliminated by scabbling the edges.

Absorbent substrates: If suction is excessive, control it by dampening but avoid over-wetting and do not apply mortar bedding to substrates showing surface moisture.

Dense concrete: If not sufficiently rough to provide a mechanical key, roughen by scabbling or the like to remove 3 mm of the surface and expose the aggregate; then apply a bonding treatment.

Substrates with wet area membranes
General: Make sure substrates are as follows:

- Clean and free of any deposit or finish which may impair adhesion or location of tiles.
- Compatible with all components of the floor system.

3.3 TILING GENERALLY

Sequence
General: Fix wall tiles before floor tiles.

Cutting and laying
Cutting: Cut tiles neatly to fit around fixtures and fitting and at margins where necessary. Drill holes without damaging tile faces. Cut recesses for fittings such as soap holders. Rub edges smooth without chipping.

Laying: Return tiles into sills, reveals and openings. Butt up to returns, frames, fittings, and other finishes. Strike and point up beds where exposed. Remove tile spaces before grouting.

Variations
General: Distribute variations in hue, colour, or pattern uniformly, by mixing tiles or tile batches before laying.

Protection
Floor tiles: Keep traffic off floors until the bedding has set and attained its working strength.

Floor finish dividers
General: Finish tiled floors at junctions with differing floor finishes with a corrosion-resistant metal dividing strip fixed to the substrate. If changes of floor finish occur at doorways, make the junction directly below the closed door.

3.4 SETTING OUT

Tile joints
Joint widths: Set out tiles to give uniform joint widths within the following limits:

- Floors:
  - . Dry pressed tiles: 3 mm.
  - . Extruded tiles: 6 mm.
  - . Vitrified: 3 mm.
  - . Quarry tiles: 6 to 12 mm.
- Mounted mosaics: To match mounting pattern.
- Walls:
  - . Dry pressed tile: 1.5 mm.
  - . Extruded tile: 6 mm.

Joint alignment: Set out tiling with joints accurately aligned in both directions and wall tiling joints level and plumb.

Joint position: Set out tiles from the centre of the floor or wall to be tiled and, if possible, make sure cut tiles are a half tile or larger.

Fixtures: If possible, position tiles so that holes for fixtures and other penetrations occur at the intersection of horizontal and vertical joints or in the centre of tiles.

Falls and levels

General: Grade floor tiling to even and correct falls generally and to floor wastes and elsewhere as required. Make level junctions with walls. If falls are not required, lay level.

Fall, general: 1:100 minimum.

Fall, in shower areas: 1:60 minimum.

Change of finish: Maintain finished floor level across changes of floor finish including carpet.

3.5 BEDDING

Preparation of tiles

Adhesive bedding: Fix tiles dry; do not soak.

Mortar bedding: Soak porous tiles in water for half an hour and then drain until the surface water has disappeared.

Terra cotta tiles: Use pre-sealed tiles or apply a breathable sealer and lay dry. If a final sealed finish is selected, use a compatible laying sealer.

Bedding

General: Use bedding methods and materials which are appropriate to the tile, the substrate, the conditions of service, and which leave the tile firmly and solidly bedded in the bedding material and adhered to the substrate. Form falls integral with the substrate.

3.6 GROUTED AND SEALANT JOINTS

Grouted joints

General: Commence grouting as soon as practicable after bedding has set. Clean out joints as necessary before grouting.

Face grouting: Fill the joints solid and tool flush. Clean off surplus grout. Wash down when the grout has set. When grout is dry, polish the surface with a clean cloth.

Sealant joints

General: Provide sealant joints filled with sealant and finished flush with the tile surface as follows:

- Where tiling is cut around sanitary fixtures.
- At corners of walls in showers.
- Around fixtures interrupting the tile surface, for example pipes, brackets, bolts and nibs.
- At junctions with elements such as window and door frames and built-in cupboards.

Material: Anti-fungal modified silicone.

Width: 5 mm.

Depth: Equal to the tile thickness.

4 SELECTIONS

4.1 SCHEDULE

Ceramic and stone tile schedule

Keynote	Description	Slip resistance tests	Slip resistance
FT-02	Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W / B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HN6704 available from Harvey Norman Commercial.	Slip resistance class to AS 4586:2004 Wet pendulum and Dry floor friction Wet / Barefoot Ramp	Class W B
CT-01	Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HN9009-C available from Harvey Norman Commercial. Provide white grout joints.		

0651 RESILIENT FINISHES

1 PRODUCTS

1.1 MATERIALS

Wet processed fibreboard (hardboard) underlay
Standard: To AS/NZS 1859.4.

Classification: General purpose medium board, manufactured specifically as flooring underlay.

Thickness: 5.5 mm.

2 EXECUTION

2.1 GENERAL

Substrates
Cleaning concrete surfaces: Mechanically remove the following surface treatments:

- Sealers and hardeners.
- Curing compounds.

Cleaning timber surfaces: Remove oil, grease and traces of applied finishes.

Concrete substrate correction: Remove projections and fill voids and hollows with a levelling compound compatible with the adhesive.

Timber substrate correction: Remove projections. If conformance to a flatness tolerance of 3 mm in 3000 mm, determined using a 3000 mm straight edge placed anywhere in any direction can not be achieved, fix an underlay in brick pattern with joints avoiding substrate joints.

Fixtures: Remove door stops and other fixtures, and refix in position undamaged on completion of the installation.

Moisture content
General: Do not commence installation unless:

- Concrete: The moisture content of the concrete has been tested to AS/NZS 2455.1 Appendix B and the values in clause 2.4.2 (c) have been obtained.
- Plywood and timber: the moisture content of battens/joists or plywood substrate has been tested to AS/NZS 1080.1 and values obtained as follows:
  - . Air conditioned buildings: 8 to 10%.
  - . Intermittently heated buildings: 10 to 12.5%.
  - . Unheated buildings: 12 to 15%.

2.2 SHEET AND TILE INSTALLATION

Sheet set out
General: Set out sheets to give the minimum number of joints. Run sheet joints parallel with the long sides of floor areas, vertically on non-horizontal surfaces.

Tile set out
General: Set out tiles from centre of room. If possible cut tiles at margins only, to give a cut dimension of at least 100 mm x full tile width. Match edges and align patterns. Arrange the material so that any variation in appearance is minimised.

Joints
Non-welded: Butt edges together to form tight neat joints showing no visible open seam.

Cold welding: Apply seaming compound 100 mm wide to the substrate centrally under the seam. Roll the seam until the compound is forced up into the joint. Clean off flush using a damp cloth.

Junctions
General: Scribe neatly up to returns, edges, fixtures and fittings. Finish flush with adjoining surfaces.

2.3 COMPLETION

Protection of sheet materials

General: Keep traffic off floors until bonding has set or for 24 hours after laying, whichever period is the longer. Do not allow water in contact with the finish for 7 days.

Reinstatement: Repair or replace faulty or damaged work. If the work cannot be repaired satisfactorily, replace the whole area affected.

Cleaning

General: Clean the finished surface. Buff and polish. Before the date for practical completion, mop and leave the finished surface clean and undamaged on completion.

3 SELECTIONS

3.1 SCHEDULE

Resilient finishes schedule

Item	Description
FT-09	Vinyl flooring installed to manufaturer's instructions. Flooring to be Polyflor XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.
SK-04	Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

0652 CARPETS

1 PRODUCTS

1.1 MATERIALS

Carpet
Minimum class: Contract Heavy Duty use under the Australian Carpet Classification Scheme.
Total VOC limit:
- Generally: 0.5 mg/m^2.
- Compliance: To the Environmental Classification Scheme operated by the Carpet Institute of Australia.

Wet processed fibreboard (hardboard) underlay
Standard: To AS/NZS 1859.4.
Classification: General purpose medium board, manufactured specifically as flooring underlay.
Thickness: 5.5 mm.

Soft underlay alternatives
Standard: To AS 4288.

Hot-melt adhesive tape
General: Glass fibre and cotton thermoplastic adhesive coated tape 60 mm wide on a 90 mm wide metal foil base and backed with silicon-coated release paper.

Preformed gripper strips
General: Domestic grade plywood carpet gripper strip with 3 rows of rust-resistant angled pins of length appropriate to the carpet type.

Edge strips
Type: Proprietary clear anodised aluminium
Location: At exposed edges of the carpet and at junctions with different floor finishes or finishes of different thickness. Where edge strips occur at doorways, locate the junctions directly below the closed door.

2 EXECUTION

2.1 GENERAL

Substrates
Cleaning concrete surfaces: Mechanically remove the following surface treatments:
- Sealers and hardeners.
- Curing compounds.

Cleaning timber surfaces: Remove oil, grease and traces of applied finishes.
Concrete substrate correction: Remove projections and fill voids and hollows with a levelling compound compatible with the adhesive.
Timber substrate correction: Remove projections. If conformance to the a flatness tolerance of 6 mm in 3000 mm, determined using a 3000 mm straight edge placed anywhere in any direction can not be achieved, fix an underlay in brick pattern with joints avoiding substrate joints.
Fixtures: Remove door stops and other fixtures, and refix in position undamaged on completion of the installation.

Moisture content
General: Do not commence installation of flooring unless:
- Concrete substrate: The moisture content of the concrete has been tested to AS/NZS 2455.1 Appendix B and values in AS/NZS 2455.1 clause 2.4.2(c) have been obtained.
- Plywood and timber: The moisture content of battens/joists or plywood substrate has been tested to AS/NZS 1080.1 and values obtained as follows:

- Air conditioned buildings: 8 to 10%.
- Intermittently heated buildings: 10 to 12.5%.
- Unheated buildings: 12 to 15%.

2.2 LAYING CARPET

Standard

General: To AS/NZS 2455.1.

Setting out

General: Lay the carpet in continuous lengths without cross joins in the body of the area. If unavoidable cross joins at doorways, create the joins directly below the closed doors.

Joints in underlay: Make sure joints in underlay do not coincide with carpet joints. Do not carry underlay over carpet grippers or edge strips.

Seaming methods

Woven carpet: Machine or hand sew.

Tufted carpet: Provide hot-melt adhesive tapes.

Carpet installation

Gripper strip: To AS/NZS 2455.1 clause 3.5.

Direct stick method. To AS/NZS 2455.1 clause 3.6.

2.3 SCHEDULE

Carpet schedule

Item	Description
FT-04	Selected 100% wool broadloom carpet on approved underlay. Carpet to be Cavalier Bremworth Dashes II Commercial Loop Pile carpet colour "Amalgam" 278. Provide clear anodised aluminium threshhold strips to joints with other flooring.
FT-08	Water resistant carpet on approved underlay installed to manufacturer's instructions. Carpet to be Autex Decord "Tussock" polypropylene fibre carpet. Provide clear anodised aluminium threshhold strips to joints with other flooring.

0655 TIMBER FLOORING

1 GENERAL

1.1 TOLERANCES

Tolerances
Maximum deviation of the finished floor surface: 3 mm under a 3 m straight edge laid in any direction.

2 PRODUCTS

2.1 GENERAL

Forest certification
Adhesive
Ventilation: Provide adequate ventilation appropriate for moisture curing.

2.2 STRIP FLOORING

Recycled timber
Standard: To FWPA PN06.1039.
- Grading: To Section 5.

New timber
General: Conform to the **Grading table**.

Grading table

Product	Standard	Grade
Hardwood	AS 2796.2	High Feature Grade if available for the species selected, otherwise Select Grade.
Seasoned cypress pine	AS 1810	1
Softwood – pinus ssp	AS 4785.2	Appearance
Softwood – other	AS 4785.2	Select

Identification
General: Identify timber using branding or certification.
Branding: Locate the brand mark on faces or edges which will be concealed in the works.

3 EXECUTION

3.1 PREPARATION

Storage
General: Deliver timber flooring to site in unbroken wrapping or containers and store so that its moisture content is not adversely affected.

3.2 SUPPORT FIXING – STRIP FLOORING

Battens for strip flooring on steel joists
General: Screw fix seasoned battens along the steel joists with countersunk screws so that their top surfaces are aligned.

3.3 FLOOR FIXING

Room environment
General: During fixing and stabilising, operate the heating system of radiant heated or air conditioned rooms at 1.5°C above normal maximum temperature.

Adhesive

Strip flooring: Use a urethane elastomer adhesive in addition to nails as follows:

- Intermittently supported flooring: 6 mm bead along each joist or batten.

Nailing

General: Make sure the boards are in contact with the subfloor at the time of nailing, particularly where boards are machine nailed. Skew nail in a uniform pattern. If nails are to be less than 12 mm from ends of sheets or boards, pre-drill nail holes 0 – 1 mm undersize.

Secret nailing: Do not use boards of more than 85 mm cover width, and use one nail or staple skewed at 45°. Do not cramp more than one board at a time.

Sinking: Punch nails 3 mm below finished surfaces and fill the sinking flush with a material tinted to match the flooring which is compatible with the floor finish.

Top nailing: For boards more than 65 mm cover width, use two nails skewed 10 degrees in opposite directions. Do not cramp more than 800 mm width of boards at one time.

Control joints

Perimeters: Provide 10 mm wide joints against vertical building elements.

Floors less than 6 x 6 m: Partially cramp strip flooring to allow a 1 mm gap every 600 mm or 1.5 mm every metre.

Floors over 6 x 6 m: Additionally, divide floors into maximum dimensions of 6 m with joints 4 mm wide filled with a flexible sealant compatible with the applied finish.

Strip flooring

General: Blend floor boards from more than one pack to distribute the colour range and grade features throughout the floor.

Installation: Lay in straight and parallel lines with each board firmly butted to the next and firmly in contact with the subfloor. Cramp sufficient only to bring the boards together and no more than 800 mm of flooring at any one time.

Fixing to softwood joists, battens or underlay: Apply adhesive in addition to nailing.

Set-out: Locate joints in boards so that they are evenly and symmetrically distributed and as follows:

- General: Staggered and at least 450 mm apart.
- Butt joints: Centrally on supports.
- End-matched joints: Not in adjacent boards.
- Minimum number of spans across supports: 2.

3.4 COMPLETION

Protection

General: Provide protection as follows:

- Floors: With hardboard taped at all butt joints. Do not cover with sheet plastic.
- Stair treads: Full timber or plywood casing.

4 SELECTIONS

4.1 SCHEDULE

Timber Flooring schedule

Item	Description
FT-01	Semi sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.
FT-10	Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane

Item	Description
	Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

0656 FLOOR SANDING AND FINISHING

1 GENERAL

1.1 STANDARDS

Floor sanding and finishing
General: To AS 4786.2.

2 PRODUCTS

2.1 FINISH

Filler
General: Non-oil based and compatible with the coating system.
Coating system
Proprietary floor finish system: Peerless Jal "Hydrothane Sport"
Quality: Provide premium quality lines.
Combinations:
- Do not combine clear finishes from different manufacturers in a coating system.
- Provide only the combinations of filler, stain and sealer recommended by the manufacturer of the top coats.

Delivery: Deliver all products to the site in the manufacturer's labelled and unopened containers.

3 EXECUTION

3.1 PREPARATION

Lighting
General: Provide supplementary lighting to allow close examination of the entire process.
Substrate
General: Do not commence sanding until:
- Adhesives have cured.
- Floor heating has been switched off for 48 hours.
- Filler has dried as indicated by the colour fading.

Before finishing: Make sure substrates are clean and free of any deposit which may impair the following:
- Application of the coating system.
- Adhesion of resilient finishes.

Preparation
General: Punch nails 3 mm below the surface. Remove tacks. Fill open grained timber with materials compatible with those used in subsequent finishing operations.

3.2 SANDING

Basic sanding – general
General: Remove irregularities caused by cupping or mismatching of the flooring materials, with a drum type sanding machine and coarse abrasives.

Basic sanding – strip flooring

General: First cut at 45° to the length of the boards, second cut at 90° to the first cut, and third cut parallel to the length of the boards.

Boundary areas: Bring to the same surface condition as the main sanded area, using disc sanding.

Inaccessible areas: Hand scrape to produce an even, plane surface.

Stopping and filling

General: Select a colour to produce an average match with the final coated timber in tone, colour and texture.

Fill minor cracks and stop punched nails with a putty knife.

Fill deeper holes in layers > 6 mm allowing each fill to dry. Make sure cavities are filled slightly above the surface without air pockets.

Flood fill porous timber with the cloth application of water based filler diluted to a creamy consistency.

Finish sanding – strip flooring

General: After basic sanding, cut twice parallel to the length of the boards using increasingly fine abrasives. If hard surfaces show excessive scratching apply an initial cut at 90° to the grain direction.

Boundary areas: Bring to the same surface condition as the main sanded area, using disc sanding.

Inaccessible areas: Hand scrape to produce the same surface condition as the main sanded area.

Water based coating system: Sand with a final grade of paper of minimum F220 screen back.

Cleaning

General: After each sanding operation remove all dust by all of the following:

- Removal from cracks by hand.
- Vacuum cleaning.
- Tack rag cleaning.

3.3 COATING SYSTEM

Wet paint warning

General: Place notices conspicuously and do not remove them until the coating system has cured and hardened.

Application

General: Apply the coating system in conformance with the manufacturer's printed instructions. Maintain a wet edge throughout the whole area.

Sanding

General: Fine sand between coats only within the depth of the finish, and remove dust.

Finishing cork floors

Sealer: After sanding, finish with 3 coats of clear floor sealer.

Timber floor coating system

Coating: If edge bonding of strip flooring is known to occur, apply a sealer compatible with the final coat.

Final coats: 2 coats of water based polyurethane applied with a continuous wet edge and to the manufacturer's instructions.

3.4 COMPLETION

Cleaning

General: Vacuum clean the area and protect with fabric drop sheets. Do not use plastic sheeting.

0671 PAINTING

1 GENERAL

1.1 STANDARDS

Painting
General: Comply with the recommendations of those parts of AS/NZS 2311 which are referenced in this worksection.

2 PRODUCTS

2.1 PAINTS

Paint brand
Quality: If the product is offered in a number of levels of quality, provide premium quality lines.

Low VOC emitting paints
VOC limits for low odour/low environmental impact paint types:

- Primers and undercoats: < 65 g/litre.
- Low gloss white or light coloured latex paints for wall areas: < 16 g/litre.
- Coloured low gloss latex paints: < 16 g/litre.
- Gloss latex paints for timber doors and trims: < 75 g/litre.

Combinations
General: Do not combine paints from different manufacturers in a paint system.

Clear timber finish systems: Provide only the combinations of putty, stain and sealer recommended by the manufacturer of the top coats.

Delivery
General: Deliver paints to the site in the manufacturer's labelled and unopened containers.

Putty and fillers
Material: To the recommendation of the paint system manufacturer as suitable for the substrate and compatible with the primer.

Tinting
General: Provide only products which are colour tinted by the manufacturer or supplier.

3 EXECUTION

3.1 SAMPLES

Provide a 1x1 square metre sample of each colour and finish specified in the location to be painted and submit for approval at least 7 days prior to commencement of painting. Allow for an additional 5 sample panels for revised colour selection.

3.2 PREPARATION

Order of work
Other trades: Before painting, complete the work of other trades as far as practicable within the area to be painted, except for installation of fittings, floor sanding and laying flooring materials.

Clear finishes: Complete clear timber finishes before commencing opaque paint finishes in the same area.

Protection
General: Before painting, clean the area and protect it against dust entry. Use drop sheets and masking to protect finished surfaces or other surfaces at risk of damage during painting.

Internal and external fixtures and furniture: Remove door furniture, switch plates, light fittings and other fixtures before starting to paint, and refix in position on completion of painting.

Adjacent surfaces: Protect adjacent finished surfaces liable to damage from painting operations.

Wet paint warning

General: Place notices conspicuously and do not remove them until the paint is dry.

Repair

General: Clean off marks, paint spots and stains progressively and restore damaged surfaces to their original condition. Touch up new damaged decorative paintwork or misses with the paint batch used in the original application.

Substrates

General: Prepare substrates to receive the painting systems.

Cleaning: Clean down the substrate surface. Do not cause undue damage to the substrate or damage to, or contamination of, the surroundings.

Filling: Fill cracks and holes with fillers, sealants, putties or grouting cements as appropriate for the finishing system and substrate, and sand smooth.

Clear finish: Provide filler tinted to match the substrate.

Clear timber finish systems: Prepare the surface so that its attributes will show through the clear finish without blemishes, by methods which may involve the following:

- Removal of bruises.
- Removal of discolourations, including staining by oil, grease and nailheads.
- Bleaching where necessary to match the timber colour sample.
- Puttying.
- Fine sanding (last abrasive no coarser than 220 grit) to show no scratches across the grain.

Unpainted surfaces

Standard: To AS/NZS 2311 Section 3.

Previously painted surfaces

Preparation of a substrate in good condition: To AS/NZS 2311 clause 7.4.

Preparation of a substrate in poor condition: To AS/NZS 2311 clause 7.5.

Preparation of steel substrates with protective coatings: To AS/NZS 2312 Section 10 and AS 1627.1.

3.3 PAINTING

Light levels

General: ≥ 400 lux.

Paint application

Standard: To AS/NZS 2311 Section 6.

Timing: Apply the first coat immediately after substrate preparation and before contamination of the substrate can occur. Apply subsequent coats after the manufacturer's recommended drying period has elapsed.

Priming before fixing

General: Apply one coat of wood primer (2 coats to end grain) to the back of the following before fixing in position:

- External fascia boards.
- Timber door and window frames.
- Bottoms of external doors.
- Associated trims and glazing beads.
- Timber board cladding.

Spraying

General: If the paint application is by spraying, use conventional or airless equipment which does the following:

- Satisfactorily atomises the paint being applied.
- Does not require the paint to be thinned beyond the maximum amount recommended by the manufacturer.
- Does not introduce oil, water or other contaminants into the applied paint.

Paint with known health hazards: Not permitted on site.

Sanding
Clear finishes: Sand the sealer using the finest possible abrasive (no coarser than 320 grit) and avoid cutting through the colour. Take special care with round surfaces and edges.

Repair of galvanizing
General: For galvanized surfaces which have been subsequently welded, or which have been welded, prime the affected area.

Primer: Organic zinc rich coating for the protection of steel to AS/NZS 3750.9 Type 2.

Tinting
General: Tint each coat of an opaque coating system so that each has a noticeably different tint from the preceding coat, except for top coats in systems with more than one top coat.

Services
General: If not embedded, paint new services and equipment, except chromium, anodised aluminium, GRP, UPVC, stainless steel, non-metallic flexible materials and normally lubricated machined surfaces. Repaint proprietary items only if damaged.

3.4 PAINT SYSTEMS

Paint system description
Generally: The paint system is referred to by its final coat.

Primers and undercoats: Provide primers and undercoats recommended by the manufacturer of the selected final coat as suitable for the substrate and the final coat.

Number of coats: Unless specified as one or two coat systems, each paint system consists of at least 3 coats.

Selection: Provide paint systems that conforms to the **Paint final coat table**.

Paint final coat table

Final coat	Applicable Australian Standard
Interior	
Flat latex	AS 3730.1
Floor varnish – moisture cured	AS 3730.27
Floor varnish – two pack isocyanate cured	AS 3730.27
Low gloss latex	AS 3730.3
Semi gloss latex	AS 3730.2
Gloss latex	AS 3730.12
Exterior	
Full gloss solvent-borne	AS 3730.6
Flat latex	AS 3730.7
Low gloss latex	AS 3730.8
Gloss latex	AS 3730.10
Stain, lightly pigmented	AS 3730.28
Latex stain, opaque	AS 3730.16
Semi gloss latex	AS 3730.9
Paving	
Paving paint, semi gloss	AS 3730.29
Paving paint, gloss	AS 3730.29

4 SELECTIONS

4.1 SCHEDULES

Interior painting schedule

Item	Manufacturer and final paint coat	Colour
Exposed Steelwork	Dulux Ferreko No. 5	Mid Grey

Item	Manufacturer and final paint coat	Colour
Plasterboard & Plaster	Dulux Wash & Wear Low Sheen	Natural White B1
Cement Render	Dulux Wash & Wear Low Sheen	Natural White B1
Wet Area Walls & Ceilings	Dulux Wash & Wear Kitchen & Bathroom Low Sheen	White on White B22
Painted Masonry	Dulux Wash & Wear Low Sheen	Natural White B1
Ceilings	Dulux Once Ceiling Flat	Natural White B1
Clear Finished Timber	Sikkens Cetol TS Interior Mat Plus	Clear 003
Off Form Concrete	None	
Timber Handrails	Sikkens Cetol TS Interior Mat Plus	Clear 003
Painted Doors	Dulux Aquanamel Semi Gloss	Olive Reserve A221 / Orangeade A100 Confirm on site
Veneer Plywood	Sikkens Cetol TS Interior Mat Plus	Clear 003
Formply	None	
Reveals and Trim	Dulux Aquanamel Semi Gloss	Natural White B1

Exterior painting schedule

Item	Manufacturer and final paint coat	Colour
Exposed Steelwork	Dulux Ferreko No. 5	Mid Grey
FC Cladding	None	
Weatherboard Cladding	Timber solutions CE 102 Clear Wood Preservative	
FC Eaves lining	None	
Cement Render	Dulux Weathershield Matt Acrylic	Handmade Linen Quarter
Painted Masonry	Dulux Weathershield Matt Acrylic	Handmade Linen Quarter
Stone Walls	None	
Clear Finished Timber	Timber solutions CE 102 Clear Wood Preservative	
Off Form Concrete Walls	Cromelin Barricade NS	
Off Form Concrete Soffit	None	
Timber Handrails	Sikkens Cetol Filter 7	Light Oak 006

0802 HYDRAULIC DESIGN AND INSTALL

5 GENERAL

5.1 STANDARDS

General

Plumbing and drainage: To AS/NZS 3500.1, AS/NZS 3500.2, AS/NZS 3500.3, AS/NZS 3500.4, AS/NZS 3500.5 and the PCA.

Authorised products: Listed in the WaterMark Product Database, unless otherwise required by the Network Utility Operator.

6 EXECUTION

6.1 INSTALLATION

Connections to Network Utility Operator mains

General: Excavate to locate and expose the connection points and connect to the Network Utility Operator mains. On completion, backfill and compact the excavation and reinstate surfaces and elements which have been disturbed such as roads, pavements, kerbs, footpaths and nature strips.

Piping

General: Install piping in straight lines and to uniform grades. Arrange and support the piping so that it remains free from vibration and water hammer, while permitting thermal movement. Keep the number of joints to a minimum. Prevent direct contact between incompatible metals.

Embedded pipes: Do not embed pipes that operate under pressure in concrete or surfacing material.

Concealment: If practicable, conceal piping and fittings requiring maintenance or servicing so that they are accessible within non-habitable enclosed spaces such as roof spaces, subfloor spaces and ducts. Keep pipelines in subfloor spaces at least 150 mm above ground and make sure access can be provided throughout for inspection. Provide at least 25 mm clearance between adjacent pipelines (measured from the piping insulation where applicable).

Building penetrations: If piping or conduit penetrates building elements, provide metal or PVC-U sleeves formed from oversized pipe sections.

Cover plates: If exposed piping emerges from wall, floor or ceiling finishes, provide cover plates of non-ferrous metal, finished to match the piping, or of stainless steel.

Pipe support materials: The same as the piping, or galvanized or non-ferrous metals, with bonded PVC-U or glass fibre woven tape sleeves where needed to separate dissimilar metals.

6.2 FINISHES

General

General: Finish exposed piping, including fittings and supports as follows:

- In internal locations such as toilet and kitchen areas: Chrome plate copper piping to AS 1192 service condition 2, bright.
- Externally and steel piping or worn fittings internally: Paint.
- In concealed but accessible spaces (including cupboards and non-habitable enclosed spaces): Leave copper and plastic unpainted except for required identification marking. Prime steel piping and iron fittings.
- Valves: Finish valves to match connected piping.

6.3 COLD AND HEATED WATER

Standards

General: To AS/NZS 3500.1, AS/NZS 3500.4 or AS/NZS 3500.5.

Copper pipe: To AS 4809.

Pipe material
General

Cold water: Copper

Heated Water: Copper

Insulation in addition to that required by AS/NZS 3500: Insulate all heated water piping

Tap positions
Requirement: Locate hot tap to the left of, or above, the cold water tap.

Fittings and accessories
General: Provide the accessories and fittings necessary for the proper functioning of the plumbing systems, including taps, valves, outlets, pressure and temperature control devices, strainers, gauges and pumps.

Water heaters
Location: Locate water heaters where they can be maintained or replaced without damaging adjacent structures, fixtures or finishes.

Standards:

- Electric water heaters: To AS/NZS 4692.1.
- Minimum energy performance: To AS/NZS 4692.2.
- Gas hot water heaters: To AS 4552 and AS 4552.2. If a flue damper is available for the water heater supplied, provide one.
- Solid fuel heaters: To AS/NZS 2918.

Tariff: Install so that the heating system qualifies for the tariff concession or subsidy offered by the statutory authority.

Isolating valves: Provide isolation valves to water heaters.

Water heater type: Instantaneous Gas

- Manufacturer: Refer to Hydraulic Engineer's details

Heated water temperature
Standard: To AS/NZS 3500.4.

Solar and heat pump systems
General: Provide a proprietary automatic water heater comprising solar collector and storage container, with or without supplementary heating unit and including connections, controls and necessary fittings.

Standard: To AS/NZS 2712.

Temperature
Maximum temperature at ablution outlets: 50°C.

Maximum recommended temperature at kitchen sinks and laundry tubs: 60°C.

Cleaning
General: On completion, flush the pipelines using water and leave pipelines clean.

6.4 STORMWATER

Standard
General: To AS/NZS 3500.3 or AS/NZS 3500.5.

Cleaning
General: During construction, use temporary covers to openings and keep the system free of debris. On completion, flush the system using water and leave it clean.

Pipe laying
General: Lay pipelines with the spigot ends in the direction of flow.

Downpipe connections
General: Turn up drain branch pipelines to finish 50 mm above finished ground or pavement level.

Subsoil drains
Connection: Connect subsoil drains to the stormwater drainage system.

Trench width: Minimum 450 mm.

Subsoil drains: Provide proprietary perforated plastic pipe.

Filter fabric: Provide a polymeric fabric formed from a plastic yarn containing stabilisers or inhibitors to make the filaments resistant to deterioration due to ultraviolet light.

Filter sock: Provide a polyester permeable sock capable of retaining particles of 0.25 mm size. Securely fit or join the sock at each joint.

Pits

Cover levels: Locate the top of covers or gratings, including frames as follows:

- In paved areas: Flush with the paving surface.
- In landscaped areas: 25 mm above finished surface.
- Gratings taking surface water runoff: Set to receive the runoff without ponding.

6.5 WASTEWATER

Standards

General: To AS/NZS 3500.2 or AS/NZS 3500.5.

Cleaning

During construction: Use temporary covers to openings and keep the system free of debris.

On completion: Flush the system using water and leave it clean.

Vent pipes

Staying to roof: If fixings for stays penetrate the roof covering, seal the penetrations and make watertight. Confirm location of all vent pipes prior to installation. Discharge vents to concealed location on walls where possible.

Terminations: Provide bird-proof vent cowls made of the same material and colour as the vent pipe.

6.6 RAINWATER TANKS

Standards

Metal tanks and rainwater goods: To AS/NZS 2179.1.

Design and installation: To the recommendations of SAA HB 230.

Rainwater tanks

General: Provide connection and services for future installation of rainwater tank to location shown on hydraulic engineer's drawings.

6.7 GAS

Standard

Reticulated gas systems: To AS/NZS 5601.1.

Buried pipes

Warning tape: During backfilling, lay plastic warning tape 300 mm above and for the full length of buried gas pipes.

- Type: Minimum 100 mm wide, with GAS PIPE UNDER marked continuously.

Commissioning

General: On completion of installation and testing, turn on isolating and control valves and purge and charge the installation.

7 SELECTIONS

7.1 SCHEDULE

Sanitary fixtures schedule

Item	Location	Manufacturer	Type	Colour/finish

Refer to drawings.

0902 ELECTRICAL DESIGN AND INSTALL

1 GENERAL

1.1 STANDARDS

General

Electrical installation: To AS/NZS 3008.1.1 and SAA HB 301.

Telecommunications cabling: To AS/ACIF S008, AS/ACIF S009, AS/NZS 3080, SAA HB 29 and SAA HB 252.

Domestic electricity meter enclosures: To AS 6002.

1.2 INTERPRETATION

Abbreviations

General: For the purposes of this worksection the following abbreviations apply:

- ED S&IR: The Electricity Distributor's Service and Installation Rules.
- RCD: Residual Current Device.

Definition

General: For the purposes of this worksection the following definitions apply:

- Telephony: Speech and low band frequencies (= 100 kHz).

2 EXECUTION

2.1 GENERAL

Applications and compliance

General: Submit all necessary applications for electricity supply. Liaise with the electricity distributor and comply with the ED S&IR.

Consumers mains and metering

General: Provide consumers mains and connect them to the electricity distributor mains.

Electricity distributor's requirements: Provide metering, protection, and control equipment as required by the ED S&IR.

Switchboards

Standard: To AS/NZS 3439.3.

Construction: Enclosed type with a hinged lid. Provide circuit breakers and RCDs.

Location: Verify that the location selected is compliant before proceeding.

Maximum demand and spare capacity

General: Calculate the maximum demand of the installation in accordance with AS/NZS 3000 and provide a copy of the calculations.

Spare capacity: Provide the following:

- > 10% spare capacity in mains and submains.
- > 25% spare capacity in final subcircuits.

Load balancing: Spread electrical load equally across circuits to prevent overloading and inadvertent circuit breaker operation.

Fixed and stationary appliances: Treat socket outlets supplying fixed or stationary appliances likely to cause an RCD to trip due to earth leakage currents in accordance with AS/NZS 3000. Do not connect to circuits that supply socket outlets intended for hand held or portable appliances.

Spare spaces: Provide switchboards with ≥ 25% spare positions for future single phase circuit breakers.

Accessories

General: Provide accessories necessary for a complete installation including but not limited to switches, dimmers, socket outlets, and telecommunications outlets. All accessories located in close proximity shall be of the same manufacture, size and material.

Mounting: Flush mount accessories to the wall (or ceiling) unless noted otherwise. Provide proprietary wall boxes in masonry and wall brackets in stud walls.

Wet areas: Position accessories in locations containing baths showers or other fixed water containers to comply with the requirements of AS/NZS 3000.

Wiring

Concealed cables and conduits: Provide conduits as necessary to allow wiring replacement without structural work or the removal of cladding, lining, plaster or cement rendering.

Sequence of work: Install conduits and cables before the installation of wall and ceiling linings, and before any external landscaping works.

Installation: Do not penetrate damp-proof courses. Arrange wiring such that it does not bridge the cavity in external masonry.

Conduit sizes: Provide conduits of sufficient internal diameter and arranged so that cables are not subject to undue mechanical stress during installation.

Minimum conduit diameter: 20 mm.

Conduits for future use: Provide a non-metallic drawstring having a breaking strain > 100 kg.

Luminaires

Standard: to AS/NZS 60598.1.

Non-specified luminaires: Provide a bayonet cap batten holder and lamp at each lighting point location where no luminaire is documented.

Minimum energy performance standards:

- General: To AS/NZS 4783.2 and AS/NZS 4782.2.
- Self ballasted lamps: To AS/NZS 4847.2.
- Incandescent lamps: To AS 4934.2.

Lighting control systems

General: Locate grouped dimmers and control devices for future access. Provide ventilation and acoustic treatment to suit the device characteristics.

Appliances

General: Provide final subcircuits and terminate at fixed appliances, hot water units, packaged air conditioning and other plant and equipment.

Telecommunications

Submissions: Submit required applications for telecommunications services to the telecommunications services carrier and liaise with the carrier.

Installations requiring telephony only: To AS/ACIF S009.

Small office/home office installations: Category 6, to AS/ACIF S009 and AS/NZS ISO/IEC 15018 and in accordance with the recommendations of SAA HB 29.

Television systems

General: Provide an analogue and digital television distribution system to AS/NZS 1367 and conforming to the recommendations of Digital Broadcasting Australia.

Antennas: Provide and locate antennas to receive all locally available free-to-air television stations.

Network Systems

General: Provide a coaxial cabling system suitable for satellite or cable network operator's services.

Conduits for future cabling: ≥ 25 mm diameter with drawstrings.

Public Address System

Provide a public address system connected to internal and external speakers.

Intruder alarm system

General: Provide intruder alarm system.

Standard: To AS/NZS 2201.1.

Smoke detection

General: Provide smoke detectors to the requirements of the Building Code of Australia. Connect smoke detectors to mains power.

Labelling

General: Provide labels including control and circuit equipment ratings, functional units, notices for operational and maintenance personnel, incoming and outgoing circuit rating, sizes and origin of supply.

Telecommunications cables: Label telecommunications cables, cross connects and outlets in accordance with the requirements of AS/NZS 3080, and SAA HB 29.

Label colours

Generally: Black lettering on white background except as follows:

- Main switch and caution labels: Red lettering on white background.
- Danger, warning labels: White lettering on red background.

2.2 COMPLETION

Testing and certification

Electrical installations: Test to AS/NZS 3017. Provide a certificate showing test results and certifying compliance with AS/NZS 3000.

Telecommunications cabling: To AS/NZS ISO/IEC 15018 and the recommendations of SAA HB 29. Test the cable link performance in accordance with the recommendations of SAA HB 29 at the maximum frequency and data rate for the cable class, and the cable category. Provide a certificate showing test results and certifying compliance with AS/NZS ISO/IEC 15018.

Submission: Provide Telecommunications Cabling Advice (TCA1).

Television and audio systems: To AS/NZS 1367. Test the complete television and audio system. Provide a certificate showing test results and certifying compliance.

3 SELECTIONS

3.1 SCHEDULES

Accessory schedule

Type	Manufacturer	Catalogue or model no.
Light switches SW-01	Clipsal	Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.
External Light Switches SW-07	Clipsal	External switch nominally 1000AFFL to centreline. Switch to be Clipsal WS226.
Socket Outlets SW-05	Clipsal	Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.
External Socket Outlets SW-06	Clipsal	Double external GPO nominally 300 to CL AFFL. GPO's to be Clipsal WSC227/2 or equal.
Telecommunications outlet – telephony SW-11	Clipsal	Telephone switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.
Telecommunications outlet – data SW-10	Clipsal	Data switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base

Luminaire schedule

Type	Manufacturer	Catalogue or model no.
LT-01	LED Shopper	10W LED recessed dimmable panel ceiling light from LED Shopper 6500K colour temperature.
LT-02	Zamtas	160W LED flood light ZM-FL-160W-NAN-120D from ZAMTAS Led Lights. 6500K colour temperature
LT-03	Environmental LED Lighting Solutions	LED track lighting - Round from Environmental LED Lighting Solutions. 6500K colour temperature
LT-04	LED Shopper	18W Spotlight from LED Shopper. 6500K colour temperature
LT-05	LED Shopper	9W Uplight from LED Shopper. 6500K colour temperature
LT-06	Superlight	LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature
LT-07	Matt Blatt	Pendant light. Replica Poul Henningsen Snowball Light – Exact from Matt Blatt with E27 LED bulb. 6500K colour temperature
LT-11	Superlight	External 15W LED spotlight - Superlight SL6465-15. 6500K colour temperature
LT-12	Clipsal	Wall mounted external grade light sensor with timer.
LT-13	Superlight	Wall mounted external up / down light - Superlight 6W LED SL6192-15 silver finish. 6500K colour temperature
LT-14	Tovo Lighting	Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.
EX-01		Exit sign to comply with AS2293.1-2005.

Systems schedule

Type	Description
Smoke detection system	To AS 3786-1993 (Smoke Alarms). Hard wired with battery backup. Approve type and location with architect prior to installation. Refer RCP for locations
Cable/satellite network operator	Foxtel
Intruder alarm system	Provide a back to base alarm system.
Lighting control systems	Dimmers to locations shown on drawings.
System automation	Not Applicable
Public Address System	Provide a Public address system with outlets and speakers to locations shown on drawings.
Photovoltaic Solar Panel	Provide spare conduits, ducts and risers to permit future installation of grid connected Photovoltaic Solar Panels.
Projector PJ-01	Existing Projector to be reused.
Projector Screen PJ-02	Ceiling mounted automatic retractable projection screen equal to Grandview 150" 3320 x 1865 GR SB150H with Hideaway Ceiling

Type	Description
	Mount HER30HID375 available from Harvey Norman Commercial.
Lift LF-01	Restricted usage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietory lift system to be Easy Living Domuslift XL Model DL-1C/XL configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft1500mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 720mm wide x 360deep x 1500mm high. Power - single phase. Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturer's instructions.
Spare conduits	Provide spare between levels in concrete structure.

REFERENCED DOCUMENTS

AS/ACIF S008	2006	Requirements for authorised cabling products
AS/ACIF S009	2006	Installation Requirements for Customer Cabling (Wiring Rules)
AS/NZS 1080		Timber - Methods of test
AS/NZS 1080.1	1997	Moisture content
AS/NAS 1163	2009	Structural steel hollow sections
AS/NZS 1170		Structural design actions
AS/NZS 1170.1	2002	Permanent, imposed and other actions
AS 1214	1983	Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series)
AS 1231	2000	Aluminium and aluminium alloys – Anodic oxidation coatings
AS 1288	2006	Glass in buildings – Selection and installation
AS 1289	2009	Methods of testing soils for engineering purposes
AS 1289.5.1.1	2003	Soil compaction and density tests- Determination of dry density/moisture content relation of a soil using standard compactive effort
AS 1289.5.2.1	2003	Soil compaction and density tests - Determination of the dry density/moisture content relation of a soil using modified compactive effort
AS 1289.5.4.1	2007	Soil compaction and density tests - Compaction control test - Dry density ratio, moisture variation and moisture ratio
AS 1289.5.6.1	1998	Soil compaction and density tests - Compaction control test - Density index method for a cohesionless material
AS 1324		Air filters for use in general ventilation and airconditioning
AS 1324.2	2003	Methods of test
AS 1366		Rigid cellular plastics sheets for thermal insulation
AS 1366.2	1992	Rigid cellular polyisocyanurate (RC/PIR)
AS 1366.3	1992	Rigid cellular polystyrene – Moulded (RC/PS – M)
AS 1366.4	1989	Rigid cellular polystyrene – Extruded (RC/PS-E)
AS/NZS 1367	2007	Coaxial cable systems for the distribution of analogue television and sound signals in single and multiple unit installations
AS 1379	2007	Specification and supply of concrete
AS 1397	2011	Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminum and magnesium
AS 1478		Chemical admixtures for concrete, mortar and grout
AS 1478.1	2000	Admixtures for concrete
AS/NZS 1546		On-site domestic wastewater treatment units
AS/NZS 1546.1	2008	Septic tanks
AS/NZS 1546.2	2008	Waterless composting toilets
AS/NZS 1546.3	2008	Aerated wastewater treatment units
AS/NZS 1547	2012	On-site domestic wastewater management
AS 1562		Design and installation of sheet roof and wall cladding
AS 1562.1	1992	Metal
AS 1562.3	2006	Plastic
AS/NZS 1571	1995	Copper – Seamless tubes for airconditioning and refrigeration
AS 1604	Various	Specification for preservative treatment
AS 1627	Various	Metal finishing - Preparation and pretreatment of surfaces
AS 1627.1	2003	Removal of oil, grease and related contamination
AS 1657	1992	Fixed platforms, walkways, stairways and ladders - Design, construction and installation
AS 1668		The use of mechanical ventilation and air-conditioning in buildings
AS/NZS 1668.1	1998	Fire and smoke control in multi-compartment buildings
AS 1668.2	2002	Ventilation design for indoor air contaminant control
AS 1672		Limes and limestones
AS 1672.1	1997	Limes for building
AS/NZS 1677		Refrigerating systems
AS/NZS 1677.2	1998	Safety requirements for fixed applications
AS 1684		Residential timber-framed construction
AS 1684.2	2010	Non-cyclonic areas
AS 1684.3	2010	Cyclonic areas
AS 1684.4	2010	Simplified – Non-cyclonic areas
AS 1720		Timber structures
AS 1720.1	2010	Design methods
AS 1810	1995	Timber - Seasoned cypress pine - Milled products
AS/NZS 1859		Reconstituted wood-based panels – Specifications
AS/NZS 1859.1	2004	Particleboard
AS/NZS 1859.2	2004	Dry-processed fibreboard
AS/NZS 1859.3	2005	Decorative overlaid wood panels
AS/NZS 1859.4	2004	Wet-processed fibreboard
AS/NZS 1860		Particleboard flooring
AS/NZS 1860.1	2002	Specifications
AS 1860.2	2006	Installation
AS 1866	1997	Aluminium and aluminium alloys - Extruded rod, bar, solid and hollow shapes
AS 1926		Swimming pool safety
AS 1926.1	2007	Fencing for swimming pools
AS 1926.2	2007	Location of fencing for private swimming pools
AS 2047	1999	Windows in buildings – Selection and installation
AS 2049	2002	Roof tiles

AS 2050	2002	Installation of roofing tiles
AS 2070	1999	Plastics materials for food contact use
AS 2082	2007	Timber - Hardwood - Visually stress-graded for structural purposes
AS/NZS 2098		Methods of test for veneer and plywood
AS/NZS 2098.11	2005	Determination of formaldehyde emissions for plywood
AS/NZS 2179		Specifications for rainwater goods, accessories and fasteners
AS/NZS 2179.1	1994	Metal shape or sheet rainwater goods, and metal accessories and fasteners
AS/NZS 2201		Intruder alarm systems
AS/NZS 2201.1	2007	Client's premises - Design, installation, commissioning and maintenance
AS/NZS 2208	1996	Safety glazing materials in buildings
AS/NZS 2269		Plywood – Structural
AS/NZS 2269.0	2008	Specification
AS/NZS 2270	2006	Plywood and blockboard for interior use
AS/NZS 2271	2004	Plywood and blockboard for exterior use
AS/NZS 2311	2009	Guide to the painting of buildings
AS/NZS 2312	2002	Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings
AS 2327		Composite structures
AS 2327.1	2003	Simply supported beams
AS 2358	1990	Adhesives – For fixing ceramic tiles
AS 2427	2004	Smoke/heat release vents
AS/NZS 2455		Textile floor coverings – Installation practice
AS/NZS 2455.1	2007	General
AS/NZS 2588	1998	Gypsum plasterboard
AS/NZS 2589	2007	Gypsum linings – Application and finishing
AS 2601	2001	The demolition of structures
AS 2663		Textiles – Fabrics for window furnishings
AS 2663.1	1997	Uncoated fabrics
AS 2663.2	1999	Coated curtain fabrics
AS 2665	2001	Smoke/heat venting systems – Design, installation and commissioning.
AS/NZS 2699		Built in components for masonry construction
AS/NZS 2699.1	2000	Wall ties
AS/NZS 2699.3	2002	Lintels and shelf angles (durability requirements)
AS/NZS 2712	2007	Solar and heat pump water heaters - Design and construction
AS/NZS 2728	2007	Prefinished/prepainted sheet metal products for interior/exterior building applications – Performance requirements
AS 2754	2008	Adhesives for timber and timber products
AS 2754.1(Int)	2008	Adhesives for manufacture of plywood and laminated veneer lumber (LVL)
AS 2796		Timber – Hardwood – Sawn and milled products
AS 2796.1	1999	Product specification
AS 2796.2	2006	Grade description
AS 2796.3	1999	Timber for furniture components
AS 2858	2008	Timber - Softwood – Visually stress - graded for structural purposes
AS 2870	2011	Residential slabs and footings
AS 2876	2000	Concrete kerbs and channels (gutters) - Manually or machine placed
AS/NZS 2904	1995	Damp-proof courses and flashings
AS/NZS 2908		Cellulose-cement products
AS/NZS 2908.2	2000	Flat sheets
AS/NZS 2918	2001	Domestic solid fuel burning appliances – Installation
AS/NZS 2924		High pressure decorative laminates – Sheets made from thermosetting resins
AS/NZS 2924.1	1998	Classification and specifications
AS/NZS 3000	2007	Wiring rules
AS/NZS 3008		Electrical installations – Selection of cables
AS/NZS 3008.1.1	2009	Cables for alternating voltages up to and including 0.6/1 kV – Typical Australian installation conditions
AS/NZS 3017	2007	Electrical installations – Testing and inspection guidelines
AS/NZS 3080	2003	Telecommunications installations - Generic cabling for commercial premises (ISO/IEC 11801:2002, MOD)
AS 3439		Low-voltage switchgear and controlgear
AS 3439.3	2002	Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use – Distribution
AS/NZS 3500		Plumbing and Drainage
AS/NZS 3500.1	2003	Water services
AS/NZS 3500.2	2003	Sanitary plumbing and drainage
AS/NZS 3500.3	2003	Stormwater drainage
AS/NZS 3500.4	2003	Heated water services
AS/NZS 3500.5	2000	Domestic installations
AS 3566		Self-drilling screws for the building and construction industries
AS 3566.2	2002	Corrosion resistance requirements
AS 3600	2009	Concrete structures
AS 3610	1995	Formwork for concrete
AS 3610.1	2010	Documentation and surface finish
AS 3660		Termite management
AS 3660.1	2000	New buildings
AS/NZS 3666		Air-handling and water systems of buildings – Microbial control
AS/NZS 3666.1	2011	Design, installation and commissioning
AS 3705	2003	Geotextiles - Identification, marking, and general data

AS 3715	2002	Metal finishing – Thermoset powder coatings for architectural applications of aluminium and aluminium alloys
AS 3727	1993	Guide to residential pavements
AS 3730		Guide to the properties of paints for buildings
AS 3730.1	2006	Latex - Interior - Flat
AS 3730.2	2006	Latex - Interior - Semi-gloss
AS 3730.3	2006	Latex - Interior - Low-gloss
AS 3730.6	2006	Solvent-borne - Exterior - Full gloss enamel
AS 3730.7	2006	Latex - Exterior - Flat
AS 3730.8	2006	Latex - Exterior - Low-gloss
AS 3730.9	2006	Latex - Exterior - Semi-gloss
AS 3730.10	2006	Latex - Exterior – Gloss
AS 3730.12	2006	Latex - Interior - Gloss
AS 3730.16	2006	Latex - Timber finish - Exterior
AS 3730.27	2006	Floor varnish - Two pack - Isocyanate cured
AS 3730.28	2006	Wood stain - Solvent-borne - Exterior
AS 3730.29	2006	Solvent-borne - Exterior/interior - Paving paint
AS 3740	2010	Waterproofing of domestic wet areas
AS 3743	2003	Potting mixes
AS/NZS 3750		Paints for steel structures
AS/NZS 3750.9	2009	Organic zinc-rich primer
AS 3798	2007	Guidelines on earthworks for commercial and residential developments
AS 3799	1998	Liquid membrane-forming curing compounds for concrete
AS 3818		Timber - Heavy structural products - Visually graded
AS 3818.2	2010	Railway track timbers
AS/NZS 3823		Performance of electrical appliances –Airconditioners and heat pumps
AS/NZS 3823.1.1	1998	Non-ducted airconditioners and heat pumps – Testing and rating for performance
AS/NZS 3823.1.2	2001	Test methods – Ducted airconditioners and air-to-air heat pumps – Testing and rating for performance
AS/NZS 3823.2	2011	Energy labelling and minimum energy performance standard (MEPS) requirements
AS 3958		Ceramic tiles
AS 3958.1	2007	Guide to the installation of ceramic tiles
AS 3959	2009	Construction of buildings in bushfire prone areas
AS 3972	2010	General purpose and blended cements
AS 3999	1992	Thermal insulation of dwellings – Bulk insulation – Installation requirements
AS 4100	1998	Steel structures
AS/NZS 4200		Pliable building materials and underlays
AS/NZS 4200.1	1994	Materials
AS/NZS 4200.2	1994	Installation requirements
AS 4254	2002	Ductwork for air-handling systems in buildings
AS 4256		Plastic roof and wall cladding materials
AS 4256.2	2006	Unplasticized polyvinyl chloride (uPVC) building sheets
AS 4256.3	2006	Glass fibre reinforced polyester (GRP)
AS 4256.4	2006	Unplasticized polyvinyl chloride (uPVC) wall cladding boards
AS 4256.5	2006	Polycarbonate
AS/NZS 4266		Reconstituted wood-based panels - Methods of test
AS/NZS 4266.16	2004	Formaldehyde emission - Dessicator method
AS 4285	2007	Skylights
AS 4288	2003	Soft underlays for textile floor coverings
AS/NZS 4386		Domestic kitchen assemblies
AS/NZS 4386.1	1996	Kitchen units
AS 4419	2003	Soils for landscaping and garden use
AS 4440	2004	Installation of nailplated timber trusses
AS 4454	2012	Composts, soil conditioners and mulches
AS/NZS 4455		Masonry units, pavers, flags and segmental retaining wall units
AS/NZS 4455.1	2008	Masonry units
AS/NZS 4455.2	2010	Pavers and flags
AS/NZS 4455.3	2008	Segmental retaining wall units
AS/NZS 4505	1998	Domestic garage doors
AS 4552		Gas fired water heaters for hot water supply and/or central heating
AS/NZS 4552.2	2010	Minimum energy performance standards for gas water heaters
AS/NZS 4586	2004	Slip resistance classification of new pedestrian surface materials
AS/NZS 4600	2005	Cold-formed steel structures
AS 4654		Waterproofing membrane systems for exterior use- Above ground level
AS 4654.1	2009	Materials
AS 4654.2	2009	Design and installation
AS/NZS 4663	2004	Slip resistance measurement of existing pedestrian surfaces
AS 4667	2000	Quality requirements for cut-to-size and processed glass
AS/NZS 4680	2006	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles
AS/NZS 4692		Electric water heaters
AS/NZS 4692.1	2005	Energy consumption, performance and general requirements
AS/NZS 4692.2	2005	Minimum Energy Performance Standard (MEPS) requirements and energy labelling
AS 4766	2006	Polyethylene storage tanks for water and chemicals
AS 4773		Masonry in small buildings
AS 4773.1	2010	Design
AS 4773.2	2010	Construction
AS/NZS 4782		Double-capped fluorescent lamps – performance specifications

AS/NZS 4782.2	2004	Minimum Energy Performance Standard (MEPS)
AS/NZS 4783		Performance of electrical lighting equipment – Ballasts for fluorescent lamps
AS/NZS 4783.2	2002	Energy labelling and minimum energy performance standards requirements
AS 4785		Timber - Softwood - Sawn and milled products
AS 4785.1	2002	Product specification
AS 4785.2	2002	Grade description
AS 4785.3	2002	Timber for furniture components
AS 4786		Timber flooring
AS 4786.2	2005	Sanding and finishing
AS 4809	2003	Copper pipe and fittings – Installation and commissioning
AS/NZS 4847		Self-ballasted lamps for general lighting services
AS/NZS 4847.2	2010	Minimum Energy Performance Standards (MEPS) requirements
AS/NZS 4858	2004	Wet area membranes
AS/NZS 4859		Materials for the thermal insulation of buildings
AS/NZS 4859.1	2002	General criteria and technical provisions
AS/NZS 4934		Incandescent lamps for general lighting service - Test methods
AS 4934.2	2011	Minimum Energy Performance Standards (MEPS) requirements
AS 4970	2009	Protection of trees on development sites
AS 4992		Ceramic tiles - Grouts and adhesives
AS 4992.1	2006	Terms, definitions and specifications for adhesives
AS 5039	2008	Security screen doors and security window grilles
AS 5040	2003	Installation of security screen doors and window grilles
AS 5067	2003	Timber - Non-structural glued laminated - Performance and production requirements
AS/NZS 5601		Gas Installation
AS/NZS 5601.1	2010	General installations
AS 5604	2005	Timber – Natural durability ratings
AS 6002	1999	Domestic electric meter enclosures
AS 6669	2007	Plywood - Formwork
AS/NZS ISO/IEC 15018	2005	Information technology - Generic cabling for homes
AS/NZS 60598		Luminaires
AS/NZS 60598.1	2003	General requirements and tests
ATS 5200		Technical specification for plumbing and drainage products
ATS 5200.460	2005	Grey water diversion device (GWDD)
SAA HB 29	2007	Communications Cabling Manual, Module 2: Communications Cabling Handbook
SAA HB 40		The Australian Refrigeration and Air Conditioning Code of Good Practice
SAA HB 40.1	2001	Reduction of emissions of fluorocarbon refrigerants in commercial and industrial refrigeration and airconditioning applications
SAA HB 40.2	2001	Reduction of Emissions of Fluorocarbons in Residential Airconditioning Applications
SAA HB 230	2008	Rainwater tank design and installation handbook
SAA HB 252	2007	Communications Cabling Manual, Module 3: Residential communications cabling handbook
SAA HB 276	2004	A guide to good practice for energy efficient installation of residential heating, cooling & air conditioning plant & equipment
SAA HB 301	2001	Electrical installations - designing to the Wiring Rules
SAA HB 326	2008	Urban greywater installation handbook for single households
AIRAH DA09	1998	Load estimation and psychrometrics
ASTM C534	2011	Standard Specification for Preformed Flexible Elastomeric Cellular Thermal Insulation in Sheet and Tubular Form
BCA 3.1.3.2(b)		Acceptable construction – Site preparation – Termite risk management – Installation of termite barriers
BCA 3.2.2		Acceptable construction – Footings and slabs - Preparation
BCA 3.2.4		Acceptable construction - Site classification
BCA 3.4.2.2		Acceptable construction – Framing – Steel framing – General
BCA Table 3.5.1.1a		Acceptable corrosion protection for sheet roofing
BCA 3.8.1.2		Acceptable construction - Health and amenity - Wet areas
BCA 3.9.1		Acceptable construction - Safe movement and access - Stair construction – General requirements
NASH 1	2005	Residential and low-rise steel framing. Part 1: Design criteria
PCA	2012	Plumbing code of Australia
FWPA PN.1039	2008	Interim industry standard recycled timber – visually graded recycled decorative products

itm design pty ltd
consulting hydraulic engineers

6 / 3 apollo street
warriewood nsw 2102
po box 1438
mona vale nsw 1660
abn 25 092 366 624

tel (02) 9997 1566
fax (02) 9997 3266
markus@itmdesign.com.au

Richard Cole Architecture
Att.: Penny / Richard

Date 14th of November 2012
File 12 – 90 / cert 1001.doc

project: avalon surf club
da: n0693 / 10
re: certificate of design for hydraulic, fire hose reel + fire hydrant systems

I hereby certify that the above design is in accordance with normal engineering practice and meets the requirements of the relevant Australian Standards and relevant conditions of the Development Consent.

In particular the design is in accordance with the following:

Fire Hydrant System:	AS 2419.1 (2005) & BCA Clause E1.3
Fire Hose Reel System	AS 2441 (2005) & BCA Clause E1.4
Sanitary and Stormwater Plumbing & Drainage:	AS 3500.2 (2003) + AS 3500.3 (2003)
Domestic Hot & Cold Water Services:	AS 3500.4 (2003) + AS 3500.1 (2003)
Natural Gas Services:	AS 5601 (2004)
Council's Stormwater Requirements	

Specifically the design is in accordance with the following DA conditions:
B.1, C.3 + C.6

List of certified drawings
H – 00 to H – 07 (all Revision 'B' dated 14th of November 2012)

I am an appropriately qualified and competent professional Hydraulic Engineer and a member of the AHSCA (Association of Hydraulic Services Consultants Australia) and as such can certify that the design and performance of the design systems complies with the above.

- name of certifying company	- itm design pty ltd
- name of certifier	- Markus Lachele
- phone	- (02) 9997 1566
- mobile	- 0411 869 504
- fax	- (02) 9997 3266
- position within company	- Director
- qualification of certifier	- Dip. Hydraulic Engineer and a member of the AHSCA (Association of Hydraulic Services Consultants Australia)

Signature:. . . . . .

Date: 14th of November 2012
Markus Lachele, Director, itm design pty ltd
Hydraulic Engineer AHSCA

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

PART B Declaration made by Geotechnical Engineer or Engineering Geologist and/or Coastal Engineer (where applicable) in relation to the incorporation of the Geotechnical issues into the project design

I, BEN WHITE (insert name) on behalf of Jack Hodgson Consultants Pty Ltd (trading or company name)

on this the 22ND APRIL, 2013 (date)

certify that I am a Geotechnical Engineer or Engineering Geologist and/or Coastal Engineer as defined by the Geotechnical Risk Management Policy for Pittwater – 2009 and 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 reviewed the design plans and structural design plans in accordance for the Construction Certificate Stage and that I am satisfied that:

Please mark appropriate box

☒ the structural design meets the recommendations as set out in the Geotechnical Report or any revision thereto
☒ the structural design has considered the requirements set out in the Geotechnical Report for Excavation and Landfill both for the excavation/construction phase and the final installation in accordance with Clause 3.2 (b)(iv) of the Geotechnical Risk Management Policy

Geotechnical Report Details :

Report Title: RISK ANALYSIS & MANAGEMEMENT FOR PROPOSED ADDITIONS AT AVALON SURF CLUB – MV 27216

Report Date: 27TH SEPTEMBER, 2010

Author: BEN WHITE

Documentation which relates to or is relied upon in report preparation:

ARCHITECTURAL PLANS PREPARED Y WOODHEAD ARCHITECTS NUMBERED 10205802AR-DA 2000-2004 DATED 6TH OCTOBER, 2010
STRUCTURAL PLANS PREPARED BY BARRENJOEY CONSULTING ENGINEERS PTY LTD JOB NO : 110208-S1.00 D, S2.00-S2.01 D, S3.00D S301-S.304 C, S4.00-S4.04 C, S5.00-S5.06 C & S 6.00 C DATED 7TH JANUARY, 2103

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.

BEN WHITE (name) (signature)

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.in the Report and that reasonable and practical measures have been identified to remove foreseeable risk

Signature

Name Ben White

Chartered Professional Status M.Sc Geol AusIMM CP Geol

Membership No. 222757

Company Jack Hodgson Consultants Pty Ltd

PITTWATER COUNCIL

Pittwater Council

VOUCHER No:

503202

REMITTANCE ADVICE

Postal Address
PO Box 882
Mona Vale NSW 1660

Telephone (02) 9970 1111
Facsimile (02) 9970 7150

PITTWATER COUNCIL
13/5 VUKO PLACE
WARRIEWOOD NSW 2102

Cheque No.: 503202
Creditor Id: PITCOU
Page : 1 of 1

DATE: 12 Apr 2013

DATE	INVOICE	AMOUNT	DISCOUNT	TOTAL
11 Apr 2013	LSL 2013	Long Service Levy Payment for AvalonSLSC		8,400.00

Cheque Amount: $8,400.00

PLEASE DETACH BEFORE BANKING

PRIVATE CERTIFIERS AUSTRALIA
Certainty through precision

Building Regulations Consultants • Principle Certifying Authority
Construction Certification • Fire Upgrade Surveys • Planning

CONSTRUCTION & OCCUPATION CERTIFICATE APPLICATION

Made under the *Environmental Planning and Assessment Act 1979*
Sections 81A(2), 109C(1)(b) Class 2-9

IDENTIFICATION OF BUILDING

Lot, DP/MPS etc LOT 202 DP 1107408

Address 588A BARRENJOEY ROAD

Suburb/Town AVALON Post Code 2107

DESCRIPTION OF DEVELOPMENT
Detailed Description: ALTERATIONS & ADDITIONS TO THE EXISTING SURF CLUB BUILDING INCLUDING AMENITIES, CAFE & WATER HARVESTING TANKS.

TYPE OF APPLICATION
Tick Appropriate boxes
I apply for the following part 4a certificate

- ☑ Construction Certificate
- ☐ Interim Certificate
- ☐ Final Certificate
- ☐ Change of Building Use of an Existing Building
- ☐ Occupation/Use of a New Building

APPLICANT

Name JOHN BERRY Company PITTWATER COUNCIL

Address 5 VUKO PLACE

Suburb/Town WARRIEWOOD Post Code 2102

Phone B/H 9970 1370 Fax No

Mobile 0407 226 569

Email john_berry@pittwater.nsw.gov.au

RECEIVED
27 MAR 2013
BY:

*When are the works expected to start: 6TH MAY 2013

As the applicant, I/we hereby;

1. *Submit this Construction & Occupation Certificate Application under the Environmental Planning & Assessment Act 1979, with Private Certifiers Australia and appoint Grant Harrington as the Principal Certifying Authority for the building work identified in this application.*
2. *Appoint Grant Harrington of Private Certifiers Australia as the Principal Certifying Authority for the building work identified in this application.*
3. *And allow Grant Harrington to submit the notice of commencement to council if required on my behalf.*

Signature of applicant: Sign Date 27·3·13

CONSENT TO ALL OWNER(S)

(As the owner or the owners representative am duly authorised to appoint PCA under 109E of the EPA Act for a Construction and an Occupation Certificate)

Name JOHN BERRY Company PITTWATER COUNCIL

Address 5 VUKO PLACE

Suburb or town WARRIEWOOD Post Code 2102

Phone B/H 9970 1370 Fax No

Mobile 0407 226 569 Email

I/We as the owner of the above building/property,

1. *Consent to the Appointment of Grant Harrington as the PCA (Principal Certifying Authority) and approve of the PCA or their representative to lodge the Notice of Commencement on our behalf with council to authorize the commencement of works on site. I am duly authorized under 109E of the EPA Act to appoint the PCA for the project;*
2. *Submit this Construction and Occupation Certificate Application under the Environmental Planning & Assessment Act 1979, for determination by the Principal Certifying Authority.*

Signature of Owner **Sign** **Date**

POSTAL ADDRESS
All documentation should be posted to:

Name JOHN BERRY

Company PITTWATER COUNCIL

Address PO BOX 882

Suburb MONA VALE Post Code 1660

VALUE OF WORK

Estimated Cost of work: $ 2,400,000

GST: $ 240,000

For developments over $5 million, a Quantity Surveyors Certificate verifying the cost must be submitted on lodgement of the application.

DEVELOPMENT CONSENT

Development Consent No No. N0693/10

Date of Determination Date 20TH JUNE 2011

BUILDING CODE OF AUSTRALIA BUILDING CLASSIFICATION

Nominated on the Development Consent Class 8B & 6

RESIDENTIAL and/or COMMERCIAL BUILDING WORK

Please provide the name of the Principal Contractor for the works.

Name of Builder KEYSTONE PROJECT GROUP

Address UNIT 6, 11-21 UNDERWOOD RD HOMEBUSH

Telephone 9764 6311 Fax 9764 6322

Contractor License No.

REQUIRED ATTACHMENTS

- Note 1 details the information that must be submitted with an application for a construction certificate for proposed building works
- Note 2 details the additional information that may be submitted with an application for a construction certificate for proposed residential building work.

Schedule 1 information to be
Collected for ABS Particulars of the proposal

DESCRIPTION

What is the area of the land (m^2) 3000m²

Gross floor area of existing building (m^2) 1300m²

What are the current uses of all or parts of the building(s)/land?

(If vacant state vacant)

Location	Use
AVALON	

Does the site contain a dual occupancy? NO

What is the gross floor area of the proposed addition or new building (m^2)

What are the proposed uses of all parts of the building(s)/land?

Location	Use

Number of pre-existing dwellings ONE

Number of dwellings to be demolished ONE

How many dwellings are proposed? ONE

How many storeys will the building consist of? TWO

MATERIALS TO BE USED

Walls	Code		Roof	Code	
Brick veneer	12	✓	Aluminium	70	
Full brick	11		Concrete	20	
Single brick	11		Concrete tile	10	
Concrete block	11	✓	Fibrous cement	30	
Concrete/ masonary	20		fibreglass	80	
Concrete	20		Masonry/terracott a shingle tiles	10	
Steel	60	✓	Slate	20	
Fibrous cement	30		Steel	60	✓
Hardiplank	30		Terracotta tile	10	
Timber/weatherboard	40		Other	80	
Cladding aluminium	70		Unknown	90	
Curtain glass	50	✓			
Other					
Unknown	90				

Floor	Code		Frame	Code	
Concrete	20	✓	Timber	40	
Timber	10		Steel	60	✓
Other	80		Other	80	
Unknown	90		Unknown	90	

Schedule 2 – Existing Essential Fire Safety Measures
Part 1 of 2

Item No.	Existing Measure	Is this measure Installed in the Building? Yes / No	If yes, enter the current standard of performance (eg: ORD 70 Clause 19.2 or BCA Clause E1.5 &AS 2118.1-1999)
1	Access Panels, doors and hoppers to fire resisting shaft		
2	Automatic fail safe devices		
3	Automatic fire detection and alarm system		
4	Automatic fire suppression system (sprinkler)		
5	Automatic fire suppression system (others – specify)		
6	Emergency lighting		
7	Emergency lifts		
8	Emergency warning and intercommunication system		
9	Exit signs		
10	Fire control centres and rooms		
11	Fire dampers		
12	Fire doors		
13	Fire hydrant systems		
14	Fire seals (protecting openings in fire resisting components of the building)		
15	Fire shutters		
16	Fire windows		
17	Hose reel system		
18	Light weight construction		
19	Mechanical air handling systems		
20	Paths of travel stairways passageways or ramps		
21	Perimeter vehicle access for emergency vehicles		
22	Portable fire extinguishers		
23	Pressurising system		
24	Required (automatic) exit doors		
25	Safety curtains in proscenium openings		
26	Smoke and Heat Vents		
27	Smoke Control System		
28	Smoke dampers		
29	Smoke detectors and heat detectors		
30	Smoke doors		
31	Solid-Core doors		
32	Stand-By Power Systems		
33	Wall wetting sprinkler and drencher systems		
34	Warning and operational signs		
35	OTHERS - Specify		

This is an accurate statement of all existing Fire Safety Measures implemented in the whole building.

Signed ..... (Owner/ Agent) Name ..... Date .....

Schedule 3 – Proposed Essential Fire Safety Measures
Part 2 of 2

Item No.	Proposed New Measure	Is this measure Installed in the Building? Yes or No	If yes, enter the current standard of performance (eg: BCA Clause E1.5 & AS2118.1-1999)
1	Access Panels, doors and hoppers to fire resisting shaft		
2	Automatic fail safe devices		
3	Automatic fire detection and alarm system	✓	
4	Automatic fire suppression system (sprinkler)		
5	Automatic fire suppression system (others – specify)		
6	Emergency lighting	✓	AS 2293.1
7	Emergency lifts		
8	Emergency warning and intercommunication system		
9	Exit signs	✓	AS2293.1
10	Fire control centres and rooms		
11	Fire dampers		
12	Fire doors		
13	Fire hydrant systems	✓	AS2419.1
14	Fire seals (protecting openings in fire resisting components of the building)		
15	Fire shutters		
16	Fire windows		
17	Hose reel system	✓	AS2441.
18	Light weight construction		
19	Mechanical air handling systems		
20	Paths of travel stairways passageways or ramps		
21	Perimeter vehicle access for emergency vehicles		
22	Portable fire extinguishers & Fire Blankets in Kitchen	✓	AS2444
23	Pressurising system		
24	Required (automatic) exit doors		
25	Safety curtains in proscenium openings		
26	Smoke and Heat Vents		
27	Smoke Control System		
28	Smoke dampers		
29	Smoke detectors and heat detectors		
30	Smoke doors		
31	Solid-Core doors		
32	Stand-By Power Systems		
33	Wall wetting sprinkler and drencher systems		
34	Warning and operational signs		
35	OTHERS - Specify		

This is an accurate statement of all proposed Fire Safety Measures to be installed/ modified in the whole building.

Signed ..... (Owner/ Agent) Name ..... John Berry ..... Date 27.3.13

NOTES
For Completing Construction Certificate Application

Note 1

The following information must accompany applications for a construction certificate for building and subdivision work.

Building Work

In the case of an application for a construction certificate for **building work**:

a) Copies of compliance certificates relied upon

b) Four (4) copies of detailed plans and specifications

The plan for the building must be drawn to a suitable scale and consist of a general plan and a block plan. The general plan of the building is to:

- show a plan of each floor section
- show a plan of each elevation of the building
- 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
- indicate the height, design, construction and provision for fire safety and fire resistance (if any).

Where the proposed building work involves any alteration or addition to, or rebuilding of, an existing building the general plan is to be coloured or otherwise marked to the satisfaction of the certifying authority to adequately distinguish the proposed alteration, addition or rebuilding.

Where the proposed building work involves a modification to previously approved plans and specification the general plans must be coloured or otherwise marked to the satisfaction of the certifying authority to adequately distinguish the modification.

The specification is:

- to describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply
- state whether the materials proposed to be used are new or second hand and give particulars of any second-hand and give particulars of any second-hand materials to be used.

c) Where the application involves an alternative solution to meet the performance requirements of the BCA, the application must also be accompanied by:

- details of the performance requirements that the alternative solution is intended to meet, and
- details of the assessment methods used to establish compliance with those performance requirements.

d) Evidence of any accredited component, process or design sought to be relied upon.

e) Except in the case of an application for, or in respect of, a class 1a or class 10 building:

- 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
- 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.

The list must describe the extent, capacity and basis of design of each of the measures concerned.

Note 2

Home Building Act Requirements

In the case of an application for a construction certificate for residential building work (within the meaning of the *Home Building Act 1989*) attach the following:

a) In the case of work by a licensee under that Act:
   (i) a statement detailing the licensee's name and contractor licence number, and
   (ii) documentary evidence that the licensee has complied with the applicable requirements of that Act*, or

b) In the case of work done by any other person:
   (i) a statement detailing the person's name and owner-builder permit number, or
   (ii) a declaration signed by the owner of the land, to the effect that the reasonable market cost of the labour and materials involved in the work is less than the amount prescribed for the purposes of the definition of ***owner-builder work*** in section 29 of that Act.
   (iii)

*A certificate purporting to be issued by an approved insurer under Part 6 of the *Home Building Act 1989* to the effect that a person is the holder of an insurance contract issued for the purposes of that Part, is sufficient evidence that the person has complied with the requirements of that Part.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

2nd April 2013

Mr. Mark Painter
PCA Australia
By email

ALTERATIONS AND ADDITIONS TO AVALON SURF LIFESAVING CLUB

Dear Mark,

Following your email of 2/4/13 please find attached to this email an amended set of plans. The following amendments have been incorporated:

1. Sanitary Compartments for People with Ambulant Disabilities have been added to ground and first floor bathrooms.
2. Door clearances have been increased to doors: DF02, DF05 and DF13.

Please note the following in relation to your marked up plans:

1. Handrails as shown on drawing CC025 comply with the requirements of AS 1428.1 2009. Handrails generally comply with Figure 26(D) by turning horizontally through 90 degrees to the wall. The handrail at the base of the external stair on the beach side turns through a total of 180 degrees and returns fully to the wall.
2. Fire Hose reels are provided to the ground floor and first floor adjacent to the lift.
3. The building is not air conditioned. Heating is provided by infra-red gas heaters and cooling by cross ventilation and ceiling fans. In relation to Section J, I have summarized the applicable sections below. Sections J1, J2 and J3 do not apply.
4. Compliance with required Fire Hazard Properties for wall and floor linings is also addressed below.
5. Glazing Reflectivity for Viridian Smartglass Neutral Panoramic is 9%.
6. In relation to Condition C10 of the DA Consent, there was no DA Access Report required or provided.

NSW J(B)1 Compliance with BCA provisions

Class 3 and Class 5 to 9 buildings must comply with all of the provisions of the national J that are applicable to the relevant classifications, except as varied by NSW J3.1 Application of Part and NSW J8.2 Access for maintenance.

J0.1 Application of Section J

Performance Requirements JP1, JP2 and JP3 are satisfied by complying with—

(a) for reducing the heating or cooling loads—

(i) of sole-occupancy units of a Class 2 building or a Class 4 part of a building, J0.2 and J0.3; and

(ii) of a Class 2 to 9 building, other than the sole-occupancy units of a Class 2 building or a Class 4 part, Parts J1, J2 and J3; and

(b) for air-conditioning and ventilation, Part J5; and

(c) for artificial lighting and power, Part J6; and

(d) for hot water supply and swimming pool and spa pool plant, Part J7; and

(e) for facilities for maintenance and monitoring, Part J8.

PART J1 BUILDING FABRIC

J1.1 Application of Part

The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 2 to 9 building other than—

(a) a Class 7, 8 or 9b building that does not have a conditioned space; or

PART J2 GLAZING

J2.1 Application of Part

The Deemed-to-Satisfy Provisions of this Part apply to elements forming the envelope of a building other than—

(a) a sole-occupancy unit of a Class 2 building or a Class 4 part of a building; or

(b) a Class 7, 8 or 9b building that does not have a conditioned space; or

PART J3 BUILDING SEALING

J3.1 Application of Part

The Deemed-to-Satisfy Provisions of this Part apply to elements forming the envelope of a Class 2 to 9 building, other than—

(a) a building in climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler; or

(b) a permanent building opening, in a space where a gas appliance is located, that is necessary for the safe operation of a gas appliance; or

(c) a Class 6, 7, 8 and 9b building that does not have a conditioned space; or

PART J6 ARTIFICIAL LIGHTING

J6.2 Artificial lighting

Refer to attached Lighting Calculators for compliance.

PART J7 HOT WATER SUPPLY

J7.2 Hot water supply

A hot water supply system for food preparation and sanitary purposes, other than a solar hot water supply system in climate zones 1, 2 and 3, must be designed and installed in accordance with Section 8 of AS/NZS 3500.4.

Refer to Hydraulic Engineers details.

PART J8 ACCESS FOR MAINTENANCE AND FACILITIES FOR MONITORING

J8.3 Facilities for energy monitoring

(a) A building or sole-occupancy unit with a floor area of more than 500 m2 must have the facility to record the consumption of gas and electricity.

(Floor area is approximately 1450 sqm – gas and electricity meters provided)

FIRE HAZARD PROPERTIES

Provide details that the proposed floor finishes and wall linings are in accordance with the BCA and Spec C1.10. This relates to the smoke developed and spread of flame of the lining.

C1.10 Fire Hazard Properties

(a) The fire hazard properties of the following linings, materials and assemblies in a Class 2 to 9 building must comply with Specification C1.10:
(i) Floor linings and floor coverings.
(ii) Wall linings and ceiling linings.
(iii) Air-handling ductwork.
(iv) Lift cars.

(c) The requirements of (a) do not apply to a material or assembly if it is—
(i) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or
(ii) a fire-protective covering; or
(iii) a timber-framed window; or
(iv) a solid timber handrail or skirting; or
(v) a timber-faced solid-core door or timber-faced fire door; or
(vi) an electrical switch, socket-outlet, cover plate or the like; or
(vii) a material used for—
(A) a roof insulating material applied in continuous contact with a substrate; or
(B) an adhesive; or
(C) a damp-proof course, flashing, caulking, sealing, ground moisture barrier, or the like; or
(viii) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or
(ix) a clear or translucent roof light of glass fibre reinforced polyester if—
(x) a face plate or neck adaptor of supply and return air outlets of an air handling system; or
(xi) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or
(xii) a joinery unit, cupboard, shelving, or the like; or

3. Floor linings and floor coverings
A floor lining or floor covering must have—
(a) a critical radiant flux not less than that listed in Table 2 *(2.2 required)*; and
(b) in a building not protected by a sprinkler system complying with Specification E1.5, a maximum smoke development rate of 750 percent-minutes; and
(c) a group number complying with Clause 6(a)(ii), for any portion of the floor covering that is continued more than 150 mm up a wall. *(not applicable)*

Table 3 WALL AND CEILING LINING MATERIALS (Material Groups permitted)

Class of building	Fire-isolated exits and fire control rooms	Public corridors		Specific areas		Other areas
	Wall/ceiling	Wall	Ceiling	Wall	Ceiling	Wall/ceiling
Class 9b other than *schools*						
Unsprinklered	1	1	1	1, 2	1, 2	1, 2, 3
Sprinklered	1	1, 2	1, 2	1, 2,	1, 2, 3	1, 2, 3

Class of building	Fire-isolated exits and fire control rooms	Public corridors		Specific areas		Other areas
	Wall/ceiling	Wall	Ceiling	Wall	Ceiling	Wall/ceiling
				3		

For the purpose of this Table—

1.	"Sprinklered" means a building fitted with a sprinkler system complying with Specification E1.5.	
2.	"Specific areas" means within—	
	(a)	for Class 2 and 3 buildings, a *sole-occupancy unit*; and
	(b)	for Class 5 buildings, open plan offices with a minimum floor dimension/floor to ceiling height ratio > 5; and
	(c)	for Class 6 buildings, shops or other building with a minimum floor dimension/floor to ceiling height ratio > 5; and
	(d)	for Class 9a *health-care buildings*, *patient care areas*; and
	(e)	for Class 9b theatres and halls, etc, an auditorium; and
	(f)	for Class 9b *schools*, a classroom; and
	(g)	for Class 9c *aged care buildings*, *resident use areas*.

4.
Wall and ceiling linings

(a) For the purposes of this Clause, the *group number* of a material is determined by either—

(i) physical testing in accordance with AS ISO 9705; or

(ii) prediction in accordance with Clause 3 of Specification A2.4 using data obtained by testing the material at 50 kW/m^2 irradiance in the horizontal orientation with edge frame in accordance with AS/NZS 3837.

(b) The *group number* of a material is as follows when tested or predicted in accordance with sub-clause (a):

(i) A Group 1 material is one that does not reach *flashover* when exposed to 100 kW for 600 seconds followed by exposure to 300 kW for 600 seconds.

(ii) A Group 2 material is one that reaches *flashover* following exposure to 300 kW within 600 seconds after not reaching *flashover* when exposed to 100 kW for 600 seconds.

(iii) A Group 3 material is one that reaches *flashover* in more than 120 seconds but within 600 seconds when exposed to 100 kW.

(iv) A Group 4 material is one that reaches *flashover* within 120 seconds when exposed to 100 kW.

(c) A material used as a finish, surface, lining or attachment to a wall or ceiling must be a Group 1, Group 2 or Group 3 material used in accordance with Table 3 and for buildings not fitted with a sprinkler system complying with Specification E1.5, have—

(i) a *smoke growth rate index* not more than 100; or

(ii) an *average specific extinction area* less than 250 m^2/kg.

FLOOR TYPES:

FT-01 Semi sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards. (Tallowwood CRF>4.5, SDR <750) http://www.timber.net.au/index.php/fire-safety-fire-hazard-properties-c1.10a.html

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W / B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HN6704 available from Harvey Norman Commercial. Not Applicable

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B. Not Applicable

FT-04 Selected 100% wool broadloom carpet on approved underlay. Carpet to be Cavalier Bremworth Dashes II Commercial Loop Pile carpet colour "Amalgam" 278. Provide clear anodised aluminium threshhold strips to joints with other flooring. (CRF>2.2, SDR<750) http://www.cavbrem.com.au/OnlineStore/TestCertificates/CSIRO%20Fire%20Assessment.pdf

FT-05 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with steel trowel finish and approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive slip resistance to AS 4586 Class W / B. Soffit to be class 2 finish. Not Applicable

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish. Not Applicable

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish. Not Applicable

FT-08 Water resistant carpet on approved underlay installed to manufacturer's instructions. Carpet to be Autex Decord "Tussock" polypropylene fibre carpet. Provide clear anodised aluminium threshhold strips to joints with other flooring. (CRF>4.9, SDR<750) http://autex.com.au/files/files/731_Widetrack_Datasheet.pdf

FT-09 Vinyl flooring installed to manufaturer's instructions. Flooring to be Polyflor XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip. (CRF>8.0, Commercial usage) http://polyflor.com.au/pdf/XLPU%20PS.pdf

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards. (Tallowwood CRF>4.5, SDR <750) http://www.timber.net.au/index.php/fire-safety-fire-hazard-properties-c1.10a.html

LININGS:

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White". (10-13mm plasterboard – Group 1, ASEA<250 CSR Red Book Pg A13 Table A11)

LN-02 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with no visible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens. (Group 3, ASEA 82.4 m2/kg) http://www.australply.com.au/index.php/technical/fire-resistance

LN-03 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior)with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 003 clear. (Group 3, ASEA 82.4 m2/kg) http://www.australply.com.au/index.php/technical/fire-resistance

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts. (10-13mm plasterboard – Group 1, ASEA<250 CSR Red Book Pg A13 Table A11)

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomatt Blanket 100mm acousic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets. (10-13mm perforated plasterboard – Group 1, ASEA<250 CSR Red Book Pg A13 Table A11)

Please do not hesitate to contact the office if you have any queries.

Yours faithfully,

Richard Cole
RICHARD COLE ARCHITECTURE

30-04-2013

Affordable energy efficient glass with active insulation technology

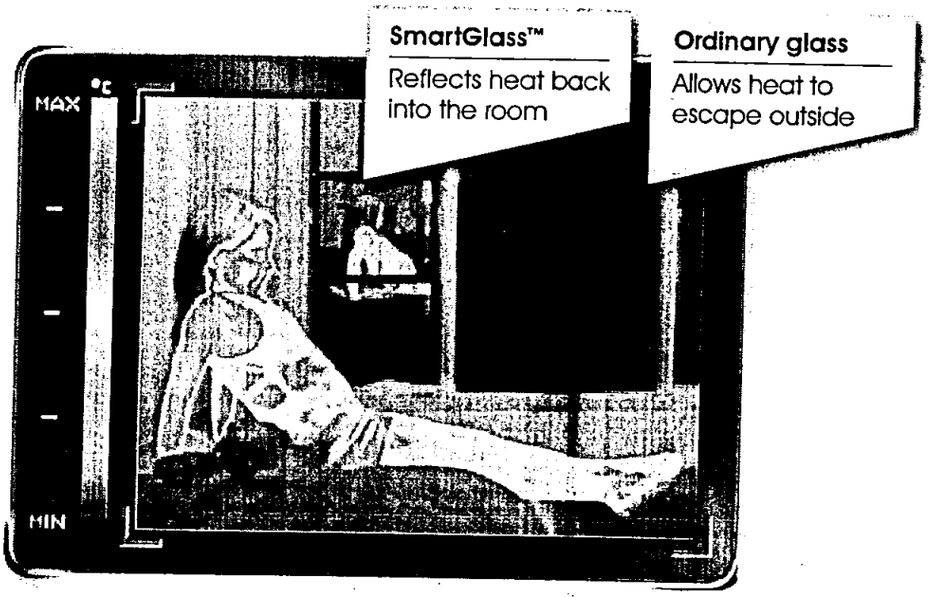
Description

SmartGlass is a range of single glazed toughenable Low E products offering insulation and a choice of solar protection with low reflectivity ideally suited to the demands of Australian residential applications. SmartGlass provides excellent performance and versatility for single glazed windows.

SmartGlass has been selected for Australian climate conditions to assist in achieving energy Star Ratings for home designs, whilst still capturing natural light and views. Manufactured using hardcoat Low E coating for excellent durability and ease of processing and handling.

Features and Benefits

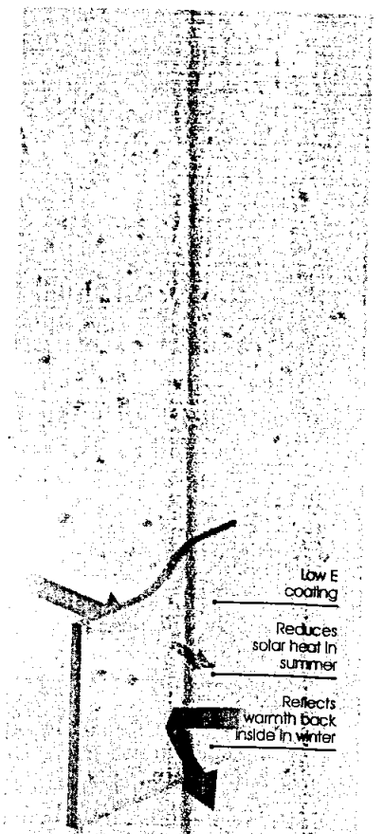
- Low E insulation with a choice of solar protection performance for residential applications
- Provides a straight forward energy efficient alternative to ordinary glass
- Durable pyrolytic Low E coating ideal for single glazing
- Low reflectivity
- Can be toughened for Grade A Safety glass
- Suitable for most standard single glazed window frames



As you can see in this actual thermal image, SmartGlass reflects heat back into the room, helping keep occupants warm when it's cold outside. Compare this to the ordinary glass window, where heat freely escapes to the outside.

Product*	Visible trans. %	Visible reflex.% (external)	Visible reflex.% (internal)	Solar trans. %	Solar reflex. %	UV trans. %	U Value (W/m²°C)	Shading coeff.	SHGC
SP10 Clear – Polaris	81	11	12	65	10	48	3.6	0.80	0.69
SP30 Neutral – Panoramic	63	9	10	45	8	41	3.7	0.62	0.53
SP40 Green – Oasis	61	8	10	28	6	12	3.7	0.47	0.40
SP50 Grey – Stellar	30	5	8	23	6	13	3.7	0.42	0.36

*6mm glass thickness.



Applications

- New homes
- Residential renovations
- Replacement and retrofit glazing

Maximum sizes

- SP50 Grey 3302 x 2438mm
- SP10 Clear, SP30 Neutral and SP40 Green 5100 x 3210mm

How to specify

- **Select glass name**
  SmartGlass
- **Select thickness – process**
  4* or 6mm – annealed
  4* or 6mm – toughened
  *Grey not available in 4mm
- **Select colour**
  Refer to product range chart

Product	Thickness (mm) 4	6
SP10 Clear		
SP30 Neutral		
SP40 Green		
SP50 Grey		

Viridian
New World Glass

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

AVALON SURF LIFE SAVING CLUB RENOVATION

KITCHEN COMPLIANCE
DA CONSENT CONDITIONS

30th April 2013

11. The construction, fit out and finishing of the kitchen and food handling and storage areas must comply with: Australian Standard 4674 2004 Design, construction & fit-out of food premises, and The Food Safety Standard 3.2.3 (as part of the Food Standards Code) required by the Food Regulation 2004.

Compliance with these standards shown in notation on drawing CC019.

12. Walls in and adjoining food handling areas must be of solid masonry construction (no voids or cavities) and finished as specified in table 3.2 of AS 4674-2004 Design, construction & fit-out of food premises.

Adjoining walls are masonry as shown on drawing CC005

13. Floors shall be: (a) appropriate for the area; (b) able to be effectively cleaned; (c) laid in accordance with the relevant Standards (see AS 3958.1 for ceramic tiles) so that there is no likelihood of pooling water and harbourage of pests.

Floors are commercial grade vinyl as follows:
FT-09 Vinyl flooring installed to manufacturer's instructions. Flooring to be Polyflor XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

14. Coving shall be a minimum of 25mm radius at the floor wall joint, this will increase to a minimum of 50mm when splayed at 45 degrees. No feather edge skirting is permitted. Where vinyl or similar sheeting is installed and the sheeting is turned up to form a cove, a solid preformed coving fillet shall be used to support the sheeting.

See above

15. Cupboards, cabinets and counter construction must be free of voids, cracks and crevices and designed so they can be easily cleaned and not give harbourage for vermin. They should be fitted a minimum of 150mm above the floor level or situated on a solid plinth a minimum of 75mm in height and meet the same specifications as the floor and be coved.

Notation provided on drawing CC019

16. Fixtures, fittings and equipment shall be designed and constructed in accordance with the requirements given in Table 4.3 & 4.4 of AS 4674-2004 Design, construction & fit-out of food premises.

Notation provided on drawing CC019

17. The ceiling over all food handling areas (including over the servery and bar) must be non-perforated and finished free of open joints, cracks and crevices. The ceiling shall be finished with a sealant that is of light colour, washable and an impervious material. Drop panel type ceilings are not appropriate for these areas.

Ceiling specified as the following – shown on drawing CC013
CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

18. Hand washbasins must be provided in the food servery/preparation area, preferably installed with hands free taps. A hand wash basin should ideally be located within 5 metres of any food handling and be easily accessible and useable.

19. Hand washbasins must be provided with:

1. *an adequate supply of potable warm running water delivered through a single spout;*
2. *a supply of liquid soap; and*
3. *single use hand towel*

Handwash basin added to kitchen
20. Premises shall be provided with equipment for cleaning and sanitizing as specified within Tables 4.1 and 4.2 of AS 4674-2004 Design, construction & fit-out of food premises.

Cleaning equipment to be provided by club

21. Dishwashers and glass washers that are used for sanitizing food contact

surfaces and eating and drinking utensils must comply with AS 2945.

Dishwasher model to be provided

22. Grease arrestors and access openings to the sanitary drainage must not be located within any food preparation and/or handling area.

Grease arrestor location shown on hydraulic drawings external to building

23. All service pipes, conduits and electrical wiring shall be either concealed in floors, walls, ceilings or plinths or be fixed on brackets so as to provide at least 25mm clearance between the pipe and the adjacent vertical surface and 100mm between the pipe and the adjacent horizontal surface.

All service pipes, conduits and electrical wiring to be concealed

24. All food preparation areas and areas where food is displayed must be suitably protected from the likelihood of contamination.

Complies

25. All shelving, cupboards, doors and the like must be impervious and easy to clean on all exposed surfaces and as far as practicable be constructed and installed to prevent vermin harbourage.

Notation shown on drawing CC019

26. A commercial kitchen must be provided with a kitchen exhaust hood complying with AS/NZS 1668.1:1998 (Fire and smoke control in multicompartment buildings and AS 1668.2-1991 (Mechanical ventilation for acceptable indoor-air quality) where (a) any cooking apparatus has (i) a total maximum electrical power input exceeding 8 kW; or (ii) a total gas power input exceeding 29 MJ/h; or (b) the total maximum power input to more than one apparatus exceeds (i) 0.5 kW electrical power; or (ii) 1.8 MJ gas, per m2 of floor area of the room or enclosure.

Kitchen is NOT a commercial food preparation kitchen. To be used for domestic scale preparation, heating up and serving of externally catered food.

30/04/13

LIGHTING CALCULATOR FOR USE WITH J6.2(B) VOLUME ONE (First issued with NCC 2012)

Help screen

Main Menu

Multiple Lighting Systems Calculator

Adjustment Factors

Building name/description
ALTERATIONS & ADDITIONS TO AVALON BEACH SURF LIFE SAVING CLUB

2. *Enter Storey*
LEVEL 1

Classification
Class 9b

PRIVATE CERTIFIERS AUSTRALIA
Construction Cert. No: 130093 Approved Date 30 MAY 2013
Certifying Authority: Grant Harrington
Accreditation No: BPB 0170

Number of rows preferred in table below 13 *(as currently displayed)*

ID	Description	Floor area of the space	Perimeter of the space	Floor to ceiling height	Design Illumination Power Load	Location	Adjustment Factor 1: Adjustment Factor	Adjustment Factor 1: Fixed Dimming Percentage: Floor area controlled	Adjustment Factor 1: Fixed Dimming Percentage: Percentage of power	Adjustment Factor 1: Design Lumen Depreciation Factor	Adjustment Factor 2: Adjustment Factor	Adjustment Factor 2: Fixed Dimming Percentage: Floor area controlled	Adjustment Factor 2: Fixed Dimming Percentage: Percentage of power	Adjustment Factor 2: Design Lumen Depreciation Factor	CALCULATED OUTCOMES: Illumination Power Load Allowance	CALCULATED OUTCOMES: Lighting System Share of % of Allowance Used
1	1.01 Office	20.5 m²			40 W	Office - artificially lit to an ambient level of 200 lx or more									185 W	3% of 44%
2	1.02 Female Toilets	11.8 m²			28 W	Toilet, locker room, staff room, rest room and the like									71 W	1% of 44%
3	1.03 Male Toilets	11.7 m²			28 W	Toilet, locker room, staff room, rest room and the like									70 W	1% of 44%
4	1.04 Caretaker	20.2 m²			40 W	Service area, cleaner's room and the like	(e) Manual dimming system								106 W	2% of 44%
5	1.05 Meeting Room	22.7 m²			48 W	Board room and conference room	(e) Manual dimming system								239 W	4% of 44%
6	1.06 Access WC	5.7 m²			10 W	Toilet, locker room, staff room, rest room and the like									34 W	1% of 44%
7	1.07 Corridor	15.2 m²			30 W	Corridors									122 W	2% of 44%
8	1.08 Kitchen	17.6 m²			98 W	Kitchen and food preparation area									141 W	2% of 44%
9	1.09 Bar	23.7 m²			143 W	Restaurant, café, bar, hotel lounge and a space for the serving and consumption of food or drinks									427 W	7% of 44%
10	1.10 Club Lounge	102.3 m²			960 W	Restaurant, café, bar, hotel lounge and a space for the serving and consumption of food or drinks	(e) Manual dimming system								1938 W	33% of 44%
11	1.11 Hall of Champions	51.6 m²			75 W	Corridors									413 W	7% of 44%
12	1.12 Club Room	189.9 m²			960 W	Auditorium, church and public hall	(e) Manual dimming system								1999 W	34% of 44%
13	Stair	22.7 m²			145 W	Corridors									182 W	3% of 44%
	Total	2605 W													*Total*	

if inputs are valid



IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THE LIGHTING CALCULATOR
The Lighting Calculator has been developed by the ABCB to assist in developing a better understanding of lighting energy efficiency parameters. While the ABCB believes that the Lighting Calculator, if used correctly, will produce accurate results, the calculator is provided "as is" and without any representation or warranty of any kind, including that it is fit for any purpose or of merchantable quality, or functions as intended or at all. Your use of the Lighting Calculator is entirely at your own risk and the ABCB accepts no liability of any kind.

Copyright © 2012 - Australian Government, State and Territory Governments of Australia. All Rights Reserved

30/04/2013

LIGHTING CALCULATOR FOR USE WITH J6.2(B) VOLUME ONE (First issued with NCC 2012)

Help screen

Main Menu | Multiple Lighting Systems Calculator | Adjustment Factors

Building name/description
ALTERATIONS & ADDITIONS to AVALON BEACH SURF LIFE SAVING CLUB

2. Enter Storey
Ground

Classification
Class 9b

Number of rows preferred in table below: 23 (as currently displayed)

ID	Description	Floor area of the space	Perimeter of the space	Floor to ceiling height	Design Illumination Power Load	Location	Adjustment Factor 1: Adjustment Factor	Adjustment Factor 1: Fixed Dimming Percentage: Floor area controlled	Adjustment Factor 1: Fixed Dimming Percentage: Percentage of power	Adjustment Factor 1: Design Lumen Depreciation Factor	Adjustment Factor 2: Adjustment Factor	Adjustment Factor 2: Fixed Dimming Percentage: Floor area controlled	Adjustment Factor 2: Fixed Dimming Percentage: Percentage of power	Adjustment Factor 2: Design Lumen Depreciation Factor	CALCULATED OUTCOMES: Illumination Power Load Allowance	CALCULATED OUTCOMES: Lighting System Share of % of Allowance Used
	G-01 Canteen	20.4 m²			32 W	Kitchen and food preparation area									163 W	3% of 21%
	G-02 Store	30.5 m²			72 W	Wholesale storage and display area									305 W	6% of 21%
	G-03 Gym	60.7 m²			108 W	Auditorium, church and public hall									607 W	11% of 21%
	G-04 IRB/Board/Nipper Store	133.1 m²			72 W	Wholesale storage and display area									1331 W	24% of 21%
	G-05 Patrol	13.9 m²			36 W	Toilet, locker room, staff room, rest room and the like									83 W	2% of 21%
	G-06 First Aid	12.6 m²			72 W	Health-care - examination room	(e) Manual dimming system								133 W	2% of 21%
	G-07 Entry	12.0 m²			100 W	Entry lobby from outside the building									180 W	3% of 21%
	G-07a Services	2.7 m²			18 W	Control room, switch room, and the like									24 W	0% of 21%
	G-08 Corridor	15.5 m²			54 W	Corridors									124 W	2% of 21%
	G-09 Male Wash	7.2 m²			36 W	Toilet, locker room, staff room, rest room and the like									43 W	1% of 21%
	G-10 Male WC/Shower	26.1 m²			72 W	Toilet, locker room, staff room, rest room and the like									157 W	3% of 21%
	G-11 Cupboard	2.5 m²			18 W	Wholesale storage and display area									25 W	0% of 21%
	G-12 Female WC/Shower	24.9 m²			72 W	Toilet, locker room, staff room, rest room and the like									149 W	3% of 21%
	G-13 Female Wash	5.8 m²			18 W	Toilet, locker room, staff room, rest room and the like									35 W	1% of 21%
	G-14 Boats	70.2 m²			72 W	Wholesale storage and display area									702 W	13% of 21%
	G-15 ATV Patrol Gear	47.7 m²			72 W	Wholesale storage and display area									477 W	9% of 21%
	G-16 Lifeguard	20.6 m²			36 W	Toilet, locker room, staff room, rest room and the like									124 W	2% of 21%
	G-18 Access WC	5.4 m²			18 W	Toilet, locker room, staff room, rest room and the like									32 W	1% of 21%
	G-19 Female Toilets	19.1 m²			36 W	Toilet, locker room, staff room, rest room and the like									115 W	2% of 21%
	G-20 Female Change Room	41.6 m²			54 W	Toilet, locker room, staff room, rest room and the like									250 W	5% of 21%
	G-21 Male Change Room	41.6 m²			54 W	Toilet, locker room, staff room, rest room and the like									250 W	5% of 21%
	G-22 Male Toilets	25.3 m²			36 W	Toilet, locker room, staff room, rest room and the like									152 W	3% of 21%
	Under Stair Store	6.1 m²			18 W	Wholesale storage and display area									61 W	1% of 21%

Total 1176 W

Total

if inputs are valid

IMPORTANT NOTICE AND DISCLAIMER IN RESPECT OF THE LIGHTING CALCULATOR
The Lighting Calculator has been developed by the ABCB to assist in developing a better understanding of lighting energy efficiency parameters. While the ABCB believes that the Lighting Calculator, if used correctly, will produce accurate results, the calculator is provided "as is" and without any representation or warranty of any kind, including that it is fit for any purpose or of merchantable quality, or functions as intended or at all. Your use of the Lighting Calculator is entirely at your own risk and the ABCB accepts no liability of any kind.

Copyright © 2012 - Australian Government, State and Territory Governments of Australia. All Rights Reserved

ALTERATIONS AND ADDITIONS
558A BARRENJOEY ROAD, AVALON BEACH
for AVALON S.L.S.C.

PRIVATE CERTIFIERS AUSTRALIA
Construction Cert. No: 130093 Approved Date 30 MAY 2013
Certifying Authority: Grant Harrington
Accreditation No: BPB 0170

GENERAL

G1 - These drawings are to be read in conjunction with all architectural and other consultants drawings and specifications. Any discrepancies are to be referred to all parties and rectified before proceeding with the works.
G2 - Dimensions shall not be obtained by scaling from these drawings.
G3 - During construction the structure shall be kept in a stable condition and no part shall be over stressed.
G4 - All materials and workmanship are to be in accordance with the current Australian Standards, OH&S requirements, and the by-laws and ordinances of any relevant statutory authority.

FOUNDATIONS

F1 - The foundation material is to be **SOUND ROCK, MIN BEARING CAPACITY OF 5MPa.**
F2 -The foundation material is to be **inspected, verified and approved** by a **Geotechnical Consultant** as being in accordance with the above and that it is sound and consistent with minimal possibility of differential settlement across the development.
F3 - Should variable foundation material be encountered the engineer is to be contacted and it is likely all foundations are to be piered to similar material of the greatest bearing capacity and that additional detailing of the foundation reinforcement will be required.
F4 - Any excavation works are to include measures to ensure the temporary and long term stability of any existing structure within its vicinity.
F5 - All foundations shall be a minimum 300mm into the approved material unless otherwise noted.
F6 - Foundation depth dimensions are a minimum only and final depth will be dependent on the adequacy of the bearing material.
F7 - All organic matter and top soil shall be removed from the underside of all slabs and foundations.
F8 - Any soft or questionable excavated areas are to be brought to the attention of the Geotechnical Consultant and may require controlled filling.
F9 - Any filling shall be to the approval of the Geotechnical Consultant and will generally be granular material compacted in not more than 150mm layers to a minimum dry density ratio of 98%.

CONCRETE

C1 - All workmanship and materials shall be in accordance with AS3600.
C2 - Concrete quality shall be verified by tests.
C3 - All concrete shall have a slump of 80mm and maximum aggregate size of 20mm.
C4 - Concrete strength and cover shall be as detailed on the plans.
C5 - Size of concrete members do not include thickness of applied finishes.
C6 - Beam depths are written first and include slab thickness if any.
C7 - No penetrations are to be made to the concrete members without the written approval of the engineer.
C8 - No water is to be added to the concrete prior to placement.
C9 - All construction joints shall be located to the approval of the engineer.
C10 - Fire rating requirements and adequacy is to be reviewed and specified by others.
C11 - All concrete members are to be cured by keeping the surfaces continuously wet for a period of 3 days followed by the prevention of loss of moisture for a further 7 days.
C12 - All concrete elements shall be compacted to form a dense homogenous mass using mechanical vibrators.
C13 - All formwork shall be installed and stripped in accordance with AS3610.
C14 - All formwork is to be free of debris prior to pouring of concrete.
C15 - Exposed finished concrete surfaces (such as polished floors etc) will require additional top reinforcement (SL102) and specialist curing / shrinkage controlling additives as per the concrete suppliers recommendations.
C16 - All parties are to acknowledge that exposed finished concrete surfaces (such as **polished floors** etc) will be **susceptible to cracking.**

REINFORCEMENT

R1 - All reinforcement shall be Grade D500.
R2 - Top reinforcement is to be continuous over supporting elements and lapped between supporting elements only.
R3 - Bottom reinforcement is to be continuous between supporting elements and lapped at supporting elements only.
R4 - Reinforcement is represented diagrammatically only and is not necessarily shown in its true projection.
R5 - Welding of reinforcement is not permitted.
R6 - All reinforcement shall be supported on bar chairs at max 750mm spacing.
R7 - Reinforcement shall be tied at alternate intersections.
R8 - Reinforcement bars are to lap a minimum length equal to 40 times the bar diameter (ie min 480mm for N12 bars, 640mm for N16 bars) .
R9 - Reinforcement fabric is to lap 1 complete square plus 25mm.

STEEL

S1 - All workmanship and materials shall be in accordance with AS4100.
S2 - Hot rolled plates shall comply with AS 3678.
S3 - Hot rolled sections shall comply with AS3679.
S4 - Cold formed sections shall comply with AS4600.
S5 - Welded and seamless hollow sections shall comply with AS1163.
S6 - Unless noted otherwise all welds shall be 6mm continuous fillet from E4xx electrodes, unless noted otherwise.
S7 - Unless noted otherwise all bolts shall be M16 high strength structural bolts grade 8.8, snug tightened, uno.
S8 - Unless noted otherwise all connections shall be 3M16 bolts, 10mm plate and 6mm continuous weld.
S9 - All structural steel work shall have the following level of corrosion protection adequate for beach front conditions similar to as outlined below and to be reviewed and specified by the manufacturer. All coatings/finishes shall be applied in accordance with the manufacturers specifications and recommendations including surface preparation.

a) Remove all surface contamination such as oil, grease, dirt, acid or alkali etc. by washing with an alkali based detergent and fresh potable water prior to any further surface preparation being carried out. Refer to AS 1627.1 Part 1.4.4. - 1.4.6.
b) Round off all rough welds, sharp edges, including bolt holes to a 2mm radius and remove all weld spatter or slag.
c) Remove all surface contamination such as oil, grease, dirt, acid or alkali etc. by cleaning to AS 1627.1. Round off all rough welds, sharp edges, including bolt holes to a 2mm radius and remove all weld spatter or slag. All surfaces to be treated are to be dry abrasive blast cleaned to As 1627.9 Class 2.5, near white metal. Remove all spent abrasive and residual dust by using dry compressed air, sweeping with a clean brush or vacuum cleaning prior to application of the coating. Avoid handling blast steel with bare hands. The surface should be inspected prior to coating to ensure no contamination is present and no surface defects exist. If so, rectification is required before any coating is applied. Apply initial coating within four (4) hour period after blasting or before any surface deterioration occurs.
d) Remove all abrasive, foreign matter and residual by using dry compressed air, sweeping with a clean brush or vacuum cleaning prior to application of the coating. The coating should be initially be applied by brush to all welds, edges, bolt holes and cleats to ensure complete coverage is achieved.
e) First coat - Dulux Aquagalv @ 90 microns
Intermediate coat - Dulux Ferreko No.5. @ 60 microns
Top coat - Dulux Ferreko No.5 @ 60 microns

S10 - All work shop drawings are to be reviewed and approved by the Engineer.

TIMBER

T1 - All workmanship and materials shall be in accordance with AS1720 and AS1684.
T2 - All exposed timber shall be H3 treated or of durability class 1.
T3 - All timber in contact with the ground shall be H4 treated or of durability class 1.
T4 - All exposed cuts shall be treated to achieve H3 or H4 requirements.
T5 - All softwood shall be minimum F7.
T6 - All hardwood shall be a minimum F14.
T7 - All bolt hole s shall be exact size and washers shall be 2.5 x the bolt diameter.

MASONRY

M1 - All workmanship and materials shall be in accordance with AS3700.
M2 - An approved slip joint material is to be placed over all load bearing masonry supporting a concrete slab and laid on smooth brick work or a trowed mortar finish, this material may constitute two layers of greased metal.
M3 - Masonry shall be constructed on suspended concrete structures only after all propping has been removed and the concrete has achieved its specified strength.
M4 - Control joints are to be placed in all walls at a maximum of 8m centres and between new and existing structures or closer as deemed necessary by the engineer. The joints are to be 10mm wide and sealed with an approved flexible sealant, with ties at 600mm centres vertical.
M5 - Concrete blocks shall have a minimum compressive strength of 15 MPa.
M6 - Core filling shall be 20 MPa concrete with 10mm aggregate, 230mm slump and compacted adequately.
M7 - Concrete blocks used in retaining wall construction are to be Double Web H blocks.
M8 - Maximum pour height for unrestrained blockwork is 1.8m.
M9 - All masonry components are to be tied at not more than 600mm centres to adjacent steel or concrete columns.

INSPECTIONS

I1 - Barrenjoey Consulting Engineers shall only inspect works within its capacity as an Engineering Consultancy and will not carry out Mandatory Critical Stage inspections.
I2 - Barrenjoey Consulting Engineers will not inspect or certify foundation material adequacy, see F2.
I2 - All inspections are to be carried out at the request of the projects Principal Certifying Authority, or should independent certification be required at the request of the client or builder.
I3 - Typical inspections include -
Foundation reinforcement
Slab on ground reinforcement
Suspended concrete reinforcement
Steel and Timber structures
Completed Stormwater Management systems
I4 - The client shall be responsible for any fees for inspections regardless of whom requested them.
I5 - All re inspection required due to no compliance with issued drawings or that deemed necessary by Barrenjoey Consulting Engineers shall be charged to the client.
I6 - No certification will be given for works not inspected by Barrenjoey Consulting Engineers.
I7- 48 Hrs notice is required for any inspection within the Sydney region and 72 Hrs notice is required for any inspection outside of this region.

DESIGN LIFE OF THE STRUCTURE

D1 - The design life of all elements as specified within these documents correspond to that equired by the Building Code of Australia and the relevant Australian Standard.
D2 - The Design Life of elements relevant to slope stability maybe extended to that required by Pittwater Councils Interim Risk Management Policy by the implementation of a rigorous maintenance and inspection schedule together with additional concrete strength and cover specifications as detailed within these plans.

DESIGN WIND SPEED

Wind loads are in accordance with AS 1170 as follows :
Basic wind velocity = 33 m/s

DRAWING SCHEDULE

S1.00 - GENERAL NOTES
S2.00 - FOOTING PLAN
S2.01 - FOOTING DETAILS
S3.00 - GROUND FLOOR SLAB PLAN
S3.01 - GROUND FLOOR BTM REINFORCEMENT SLAB PLAN
S3.02 - GROUND FLOOR TOP REINFORCEMENT SLAB PLAN
S3.03 - GROUND FLOOR SLAB DETAILS
S4.00 - FIRST FLOOR SLAB PLAN
S4.01 - FIRST FLOOR BTM REINFORCEMENT SLAB PLAN
S4.02 - FIRST FLOOR TOP REINFORCEMENT SLAB PLAN
S4.03 - FIRST FLOOR SLAB DETAILS SHEET 1
S4.04 - FIRST FLOOR SLAB DETAILS SHEET 2
S5.00 - LOWER ROOF FRAMING PLAN
S5.01 - UPPER ROOF FRAMING PLAN
S5.02 - ROOF FRAMING STEEL SECTIONS SHEET 1
S5.03 - ROOF FRAMING STEEL SECTIONS SHEET 2
S5.04 - ROOF FRAMING STEEL DETAILS SHEET 1
S5.05 - ROOF FRAMING STEEL DETAILS SHEET 2
S5.06 - ROOF FRAMING STEEL DETAILS SHEET 3
S6.00 - STAIR ELEVATIONS

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

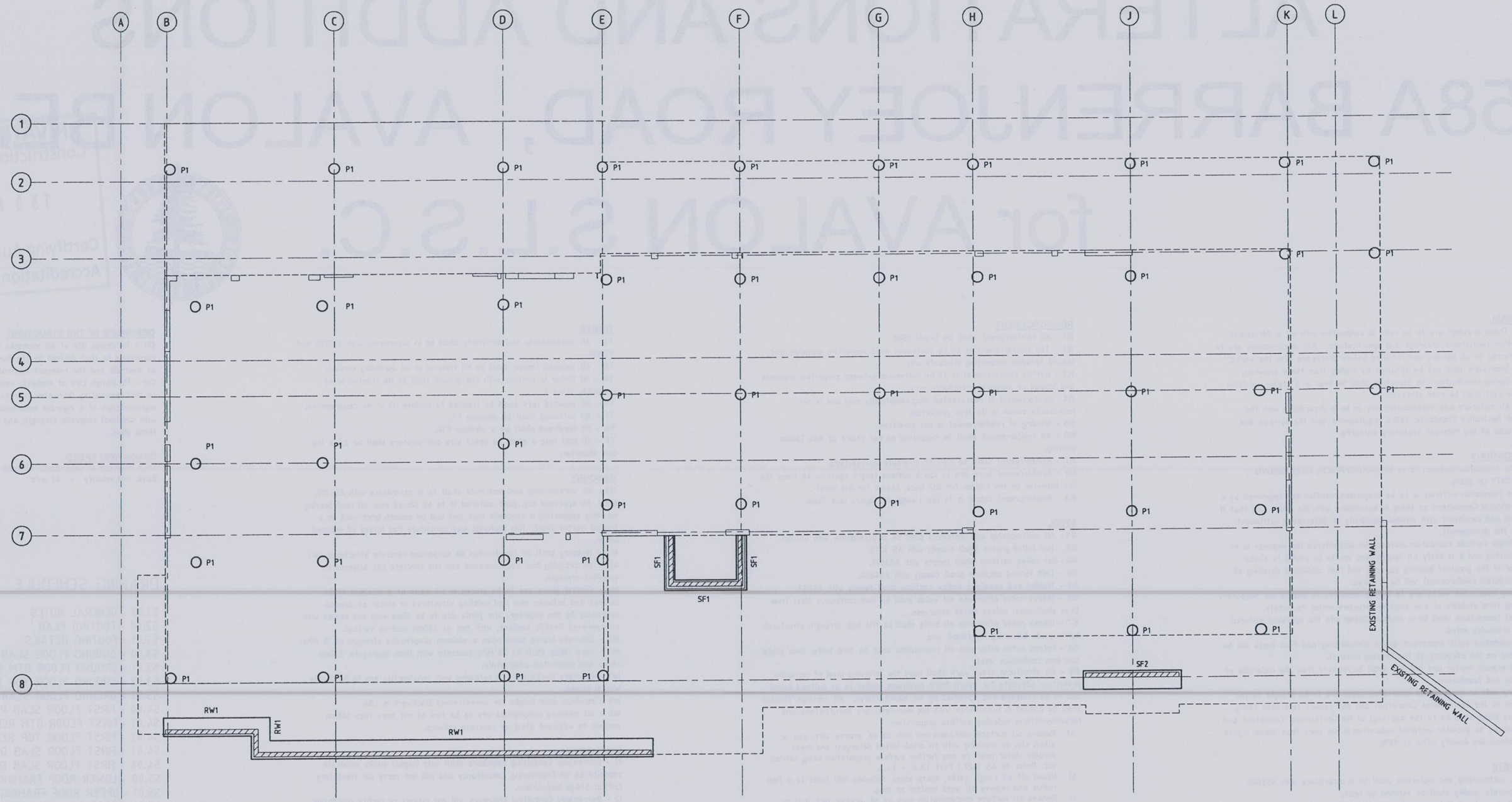
Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P: 9918 6264 F: 9918 5841
M: 0418 620 330
E: lucasboc@bigpond.com
ABN: 13 124 694 917
ACN: 124 694 917

Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
CONSTRUCTION NOTES AND DRAWING SCHEDULE

Job No : 110208
Drawing No : S1.00 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



FOOTING PLAN

NOTE :

P1 450Ø PIER (SOCKET 900 INTO SOUND ROCK 5 MPa BEARING CAPACITY)
5-N24 VERT. BARS, R10-300 TIES

SF1 450 x 450 STRIP FOOTING
SF2 800 x 450 STRIP FOOTING

RW1 190 BLOCKWORK RETAINING WALL

F'c - 40 MPa, 50mm COVER

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

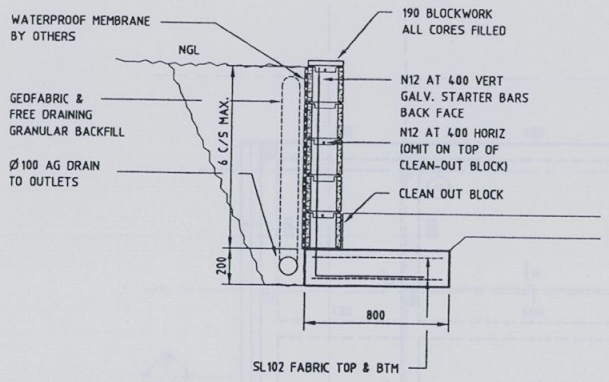
Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
FOOTING PLAN

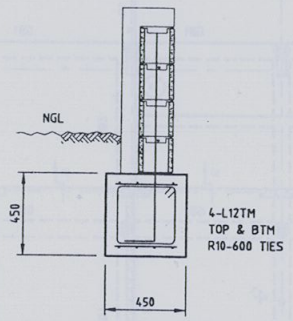
Job No : 110208

Drawing No : S2.00 B

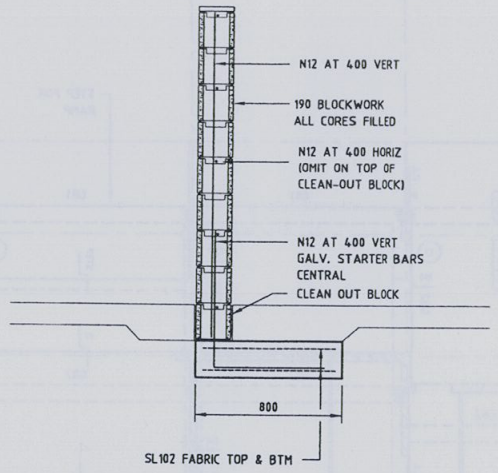
Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



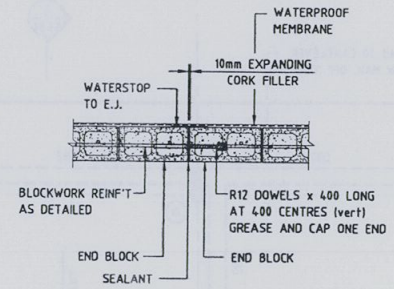
TYPICAL RETAINING WALL RW1 DETAIL



TYPICAL STRIP FOOTING SF1 DETAIL

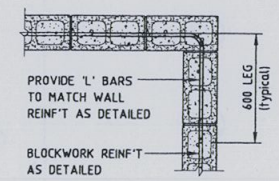


TYPICAL STRIP FOOTING SF2 DETAIL

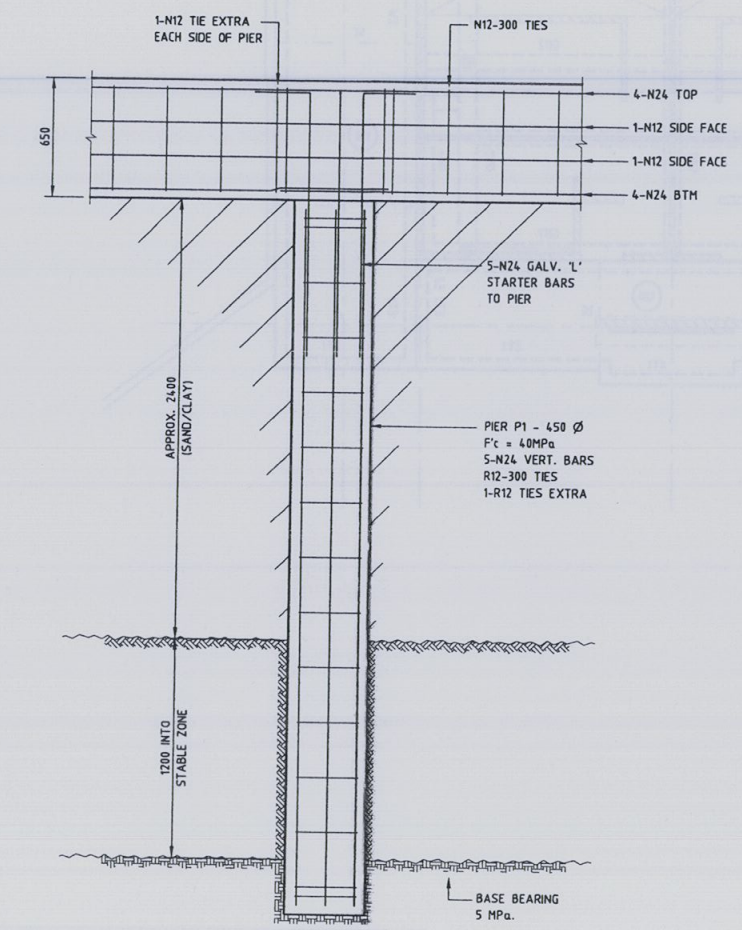


TYPICAL BLOCKWORK VERTICAL EXPANSION JOINT

UNLESS OTHERWISE NOTED ON PLAN
JOINTS SHALL BE LOCATED AT 8000 CENTRES max.



TYPICAL BLOCKWORK CORNER DETAIL



TYPICAL PIER TO BEAM DETAIL

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

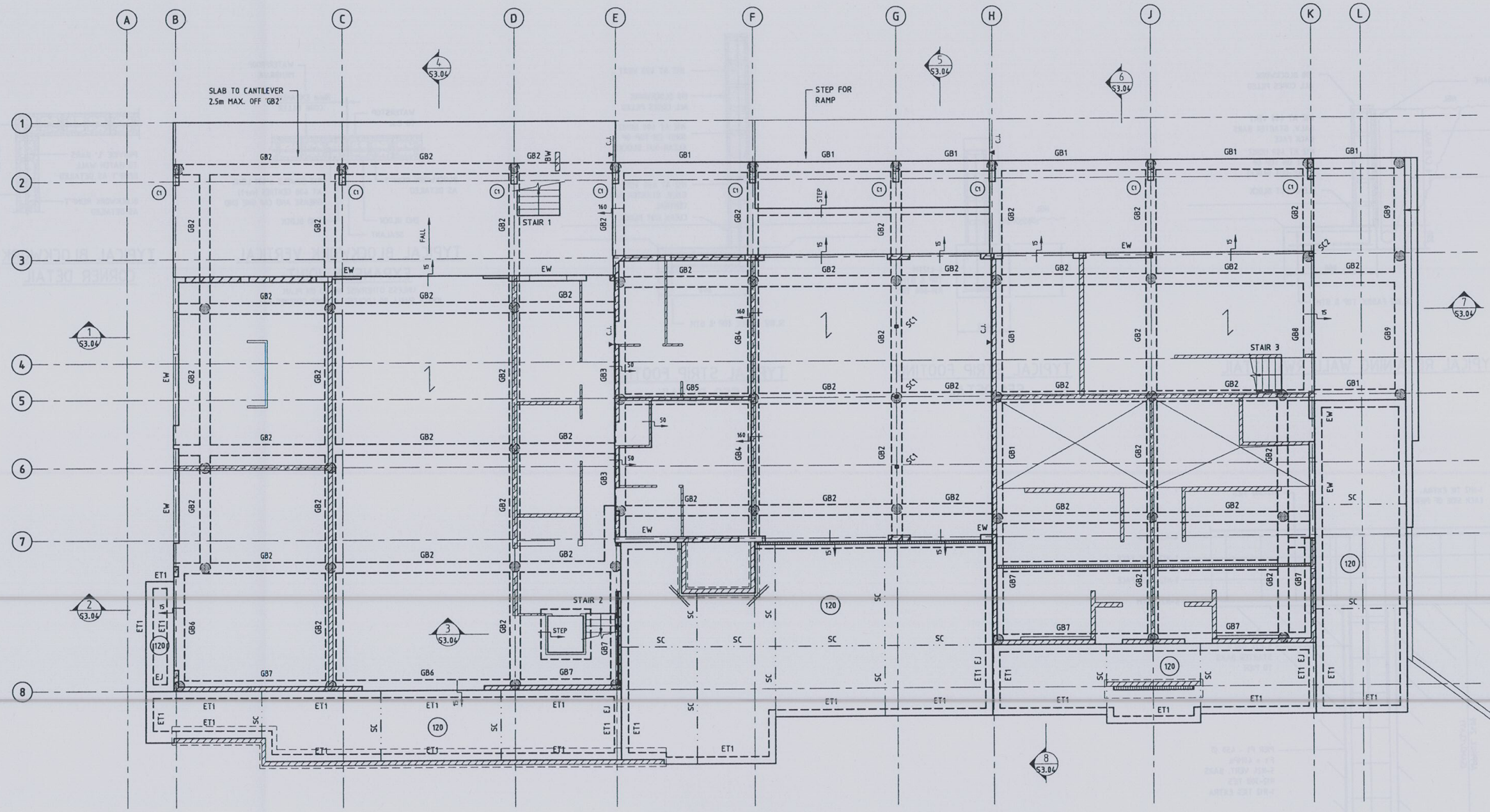
Drawing :

FOOTING DETAILS

Job No : 110208

Drawing No : S2.01 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA. CPEng NPER Director



GROUND FLOOR SLAB PLAN

NOTE : SUSPENDED SLAB / SLAB ON FILL FORM

200 THICK SLAB UNO, F'c = 40 mPa
PLACED ON A WATERPROOF MEMBRANE
30mm INTERNAL COVER 45mm EXTERNAL COVER
SLAB REINFORCED WITH N16-200 TOP & BTM EACH WAY

DENOTES SPAN DIRECTION
FOR SLAB PRIMARY REINFORCEMENT

GB1 to GB9 - 650 x 450 CONCRETE BEAM
4-N24 TOP & BTM, R10-300 TIES

C1 - 900 x 250 CONCRETE COLUMN OVER
8-N24 VERT. BARS, R10-150 TIES

SC1 - 125 x 6.0 SHS GALV. OVER

SC2 - 200 x 6.0 SHS GALV. OVER

BW - 190 BLOCKWORK TO U/S STAIR OVER

EW - EXISTING WALL

CJ - CONTROL JOINT

(200) DENOTES SLAB THICKNESS

ADDITIVES - THE CONCRETE SLAB IS TO INCLUDE A SHRINKAGE COMPENSATING ADDITIVE SUCH AS 'SIKA CONTROL 40' OR EQUIVALENT

NOTE : EXTERNAL SLAB ON GROUND

120 THICK SLAB UNO,
PLACED ON A WATERPROOF MEMBRANE
OVER A 30mm SAND BLINDING UNO.
SLAB REINFORCED WITH SL82 FABRIC CENTRAL
CONCRETE STRENGTH F'c=32MPa
30mm INTERNAL COVER 45mm EXTERNAL COVER

EJ - EXPANSION JOINT

ET1 - 250 x 250 EDGE THICKENING

SC - SAW CUT

NOTE :
FIRE RATING OF STEELWORK BY OTHERS

NOTE :

EXISTING WALLS TO BE ADEQUATELY PROPPED / SHORED DURING CONSTRUCTION.

ISSUED FOR TENDER

0 1 2 3 4 5

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

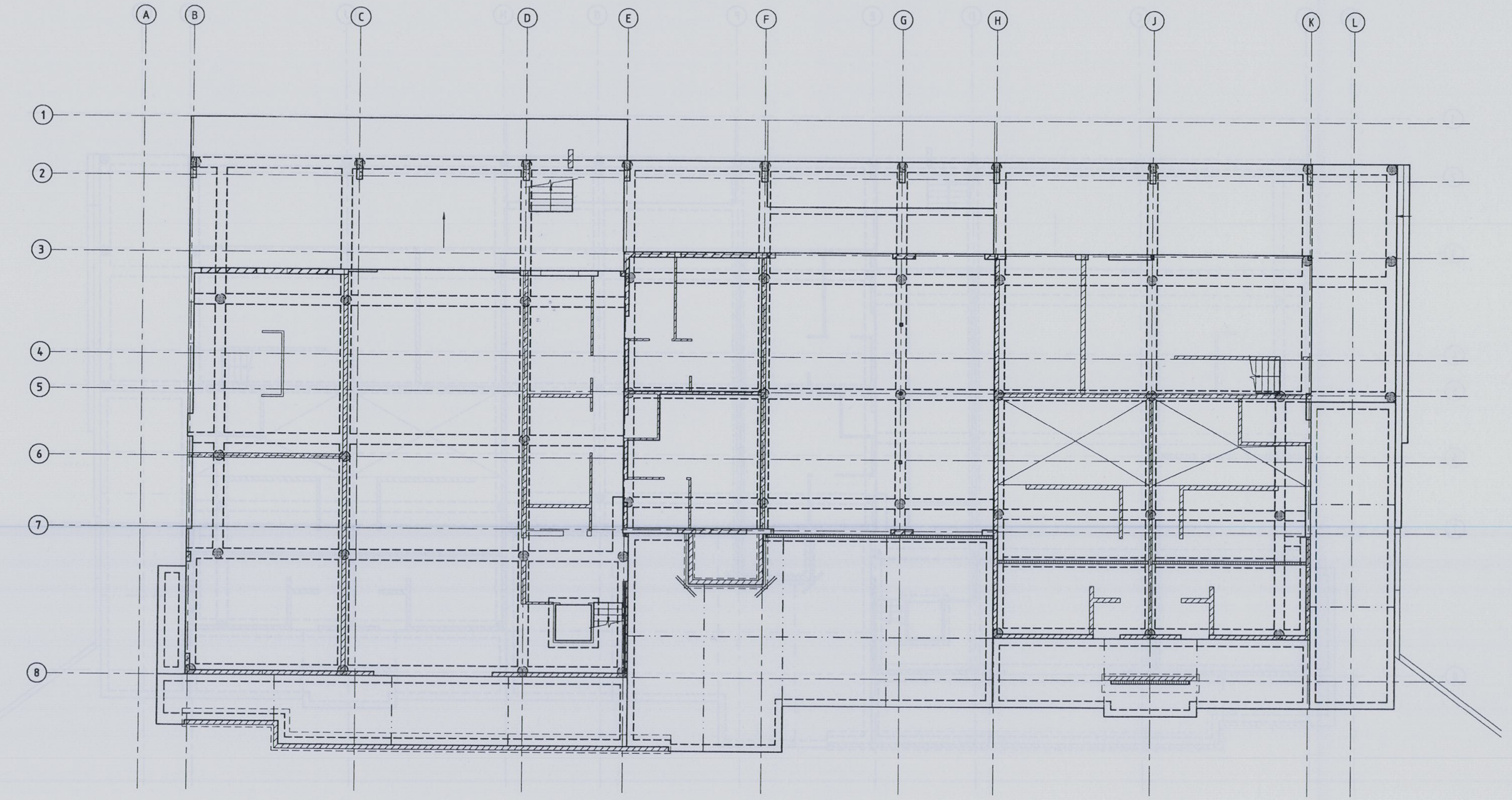
GROUND FLOOR SLAB PLAN

Job No : 110208

Drawing No : S3.00 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director



GROUND FLOOR BOTTOM REINFORCEMENT SLAB PLAN

SLAB REINFORCED WITH N16-200 E.W.

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

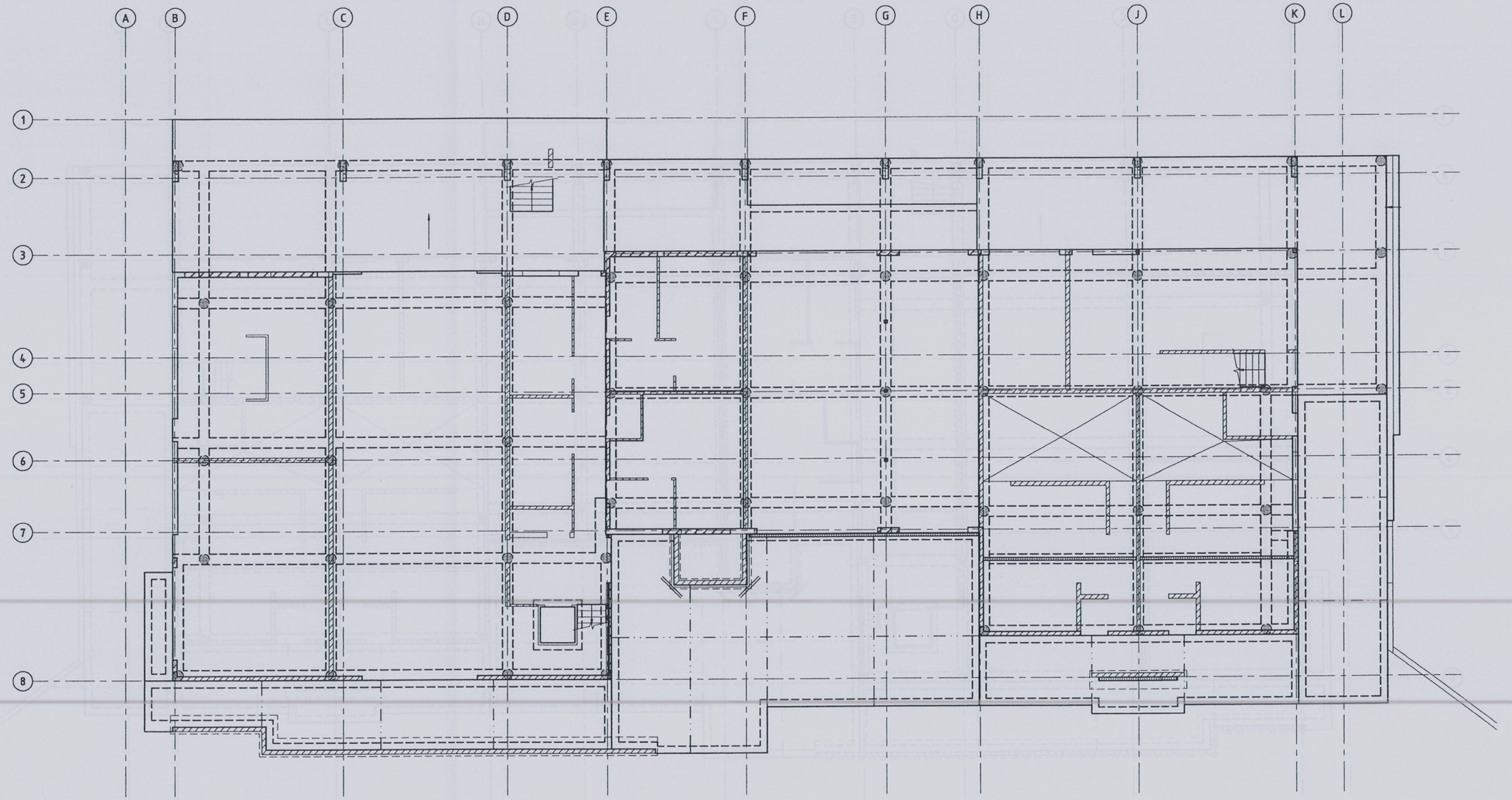
GROUND FLOOR BOTTOM
REINFORCEMENT SLAB PLAN

Job No : 110208

Drawing No : S3.01 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director



GROUND FLOOR TOP REINFORCEMENT SLAB PLAN

SLAB REINFORCED WITH N16-200 E.W.

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.L.M.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.L.M.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 8264 F : 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

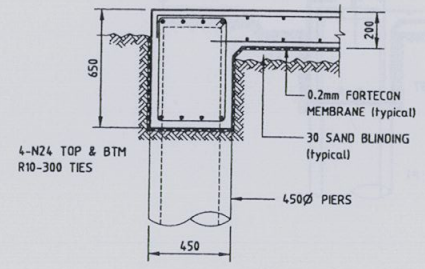
GROUND FLOOR TOP
REINFORCEMENT SLAB PLAN

Job No : 110208

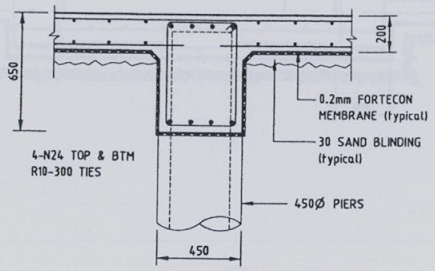
Drawing No : S3.02 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

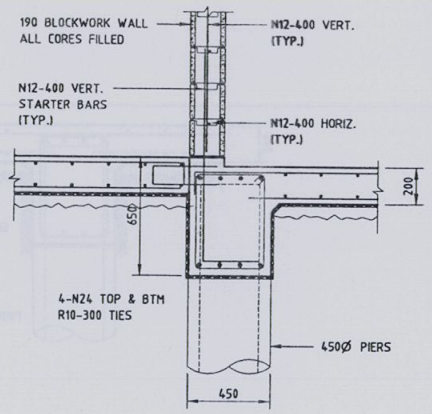
PER
Lucas Molloy MIEA CPEng NPER Director



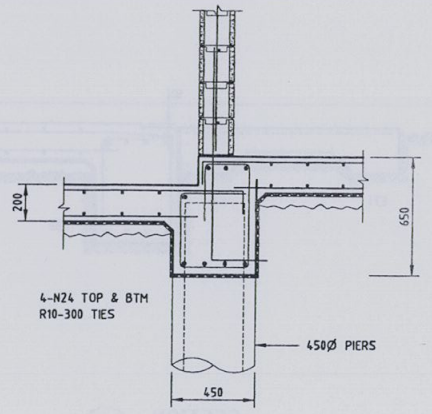
GB1 DETAIL



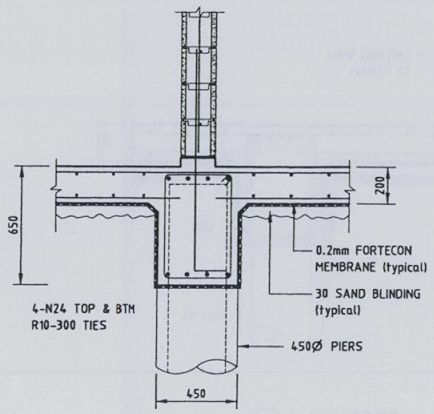
GB2 DETAIL



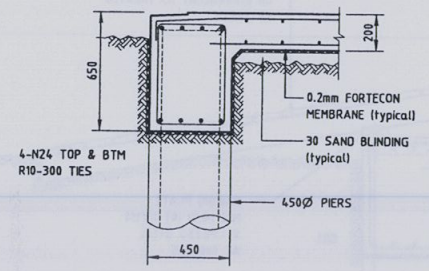
GB3 DETAIL



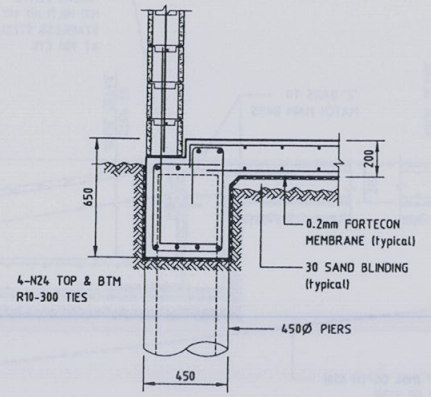
GB4 DETAIL



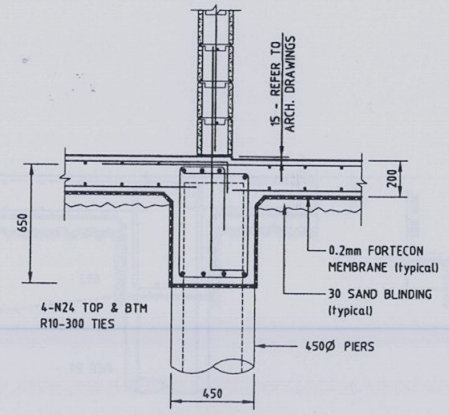
GB5 DETAIL



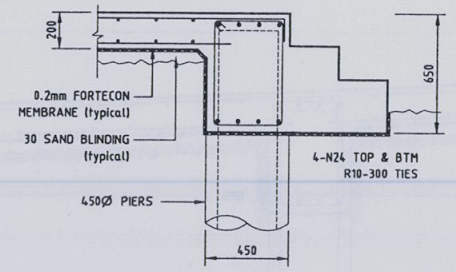
GB6 DETAIL



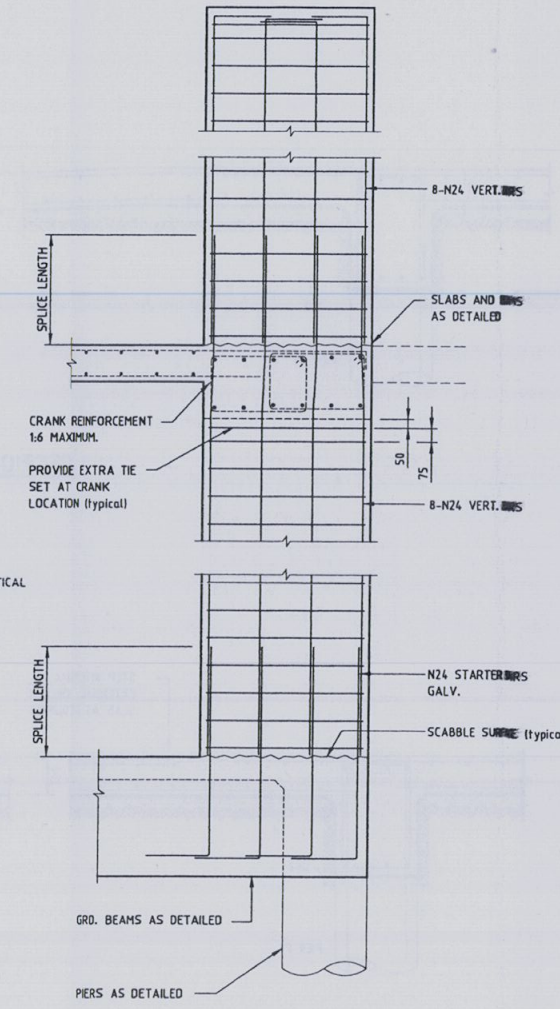
GB7 DETAIL



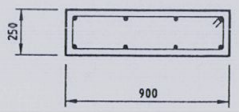
GB8 DETAIL



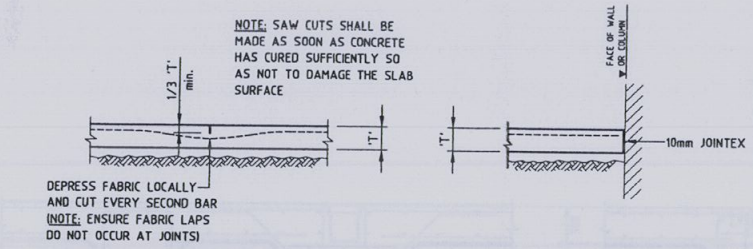
GB9 DETAIL



TYPICAL COLUMN C1 DETAIL

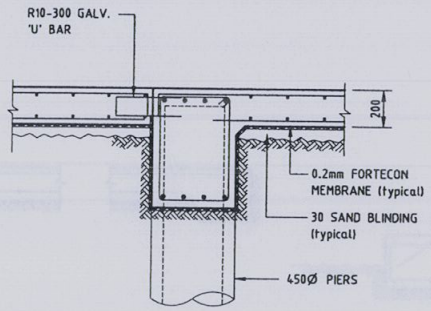


COLUMN C1
8-N24 BARS VERTICAL
R10 AT 150 TIES.

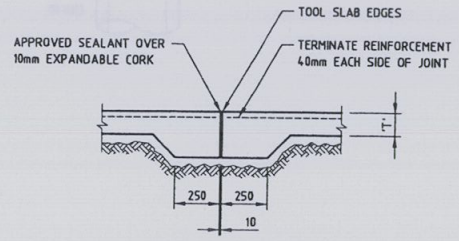


SAW CUT JOINT
NOTED SC ON PLAN

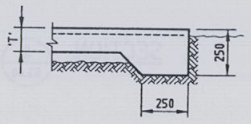
ISOLATION JOINT
TYPICAL AT ALL WALLS AND COLUMNS



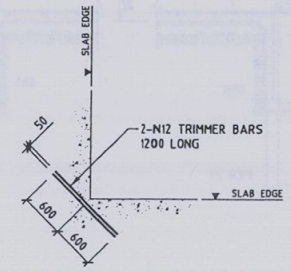
CONSTRUCTION JOINT
NOTED CJ ON PLAN



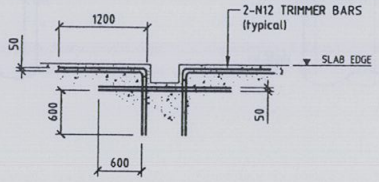
EXPANSION JOINT
NOTED EJ ON PLAN



EDGE BEAM TYPE 'ET1'



RE-ENTRANT CORNER - INTERNAL



EDGE PENETRATION

TYPICAL TRIMMING DETAILS

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.E.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.E.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN 13 124 694 917
ACN 124 694 917

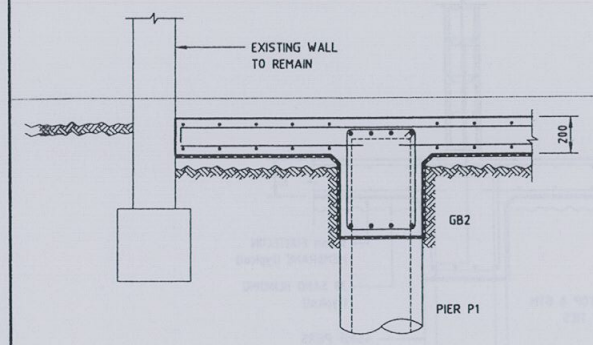
Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
GROUND FLOOR SLAB DETAILS
SHEET 1

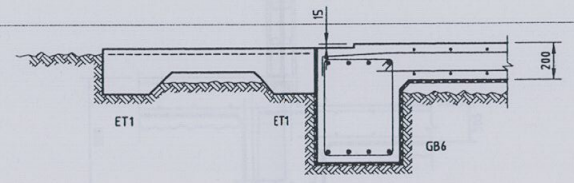
Job No : 110208

Drawing No : S3.03 B

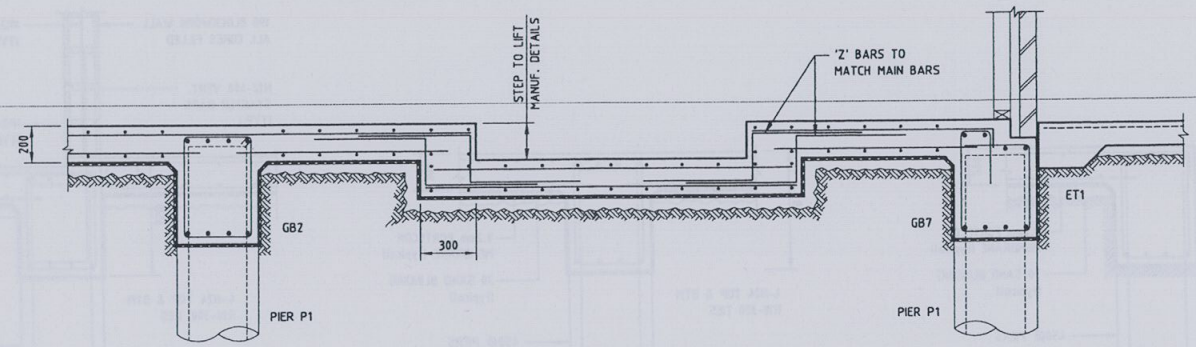
Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



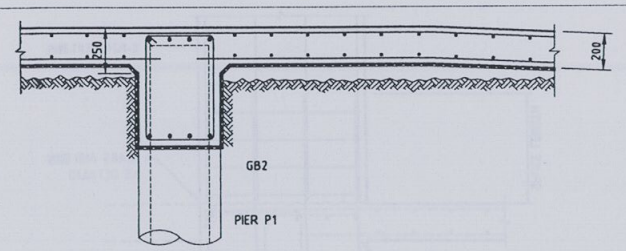
SECTION 1 / S3.00

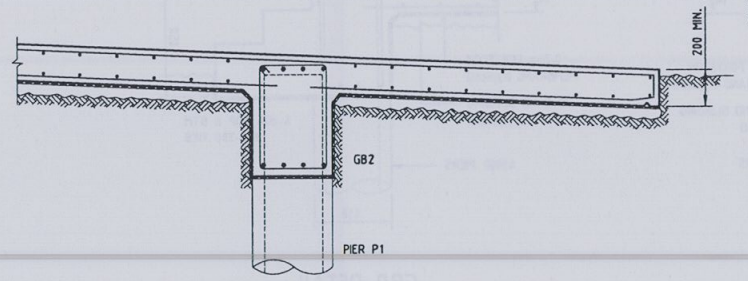


SECTION 2 / S3.00

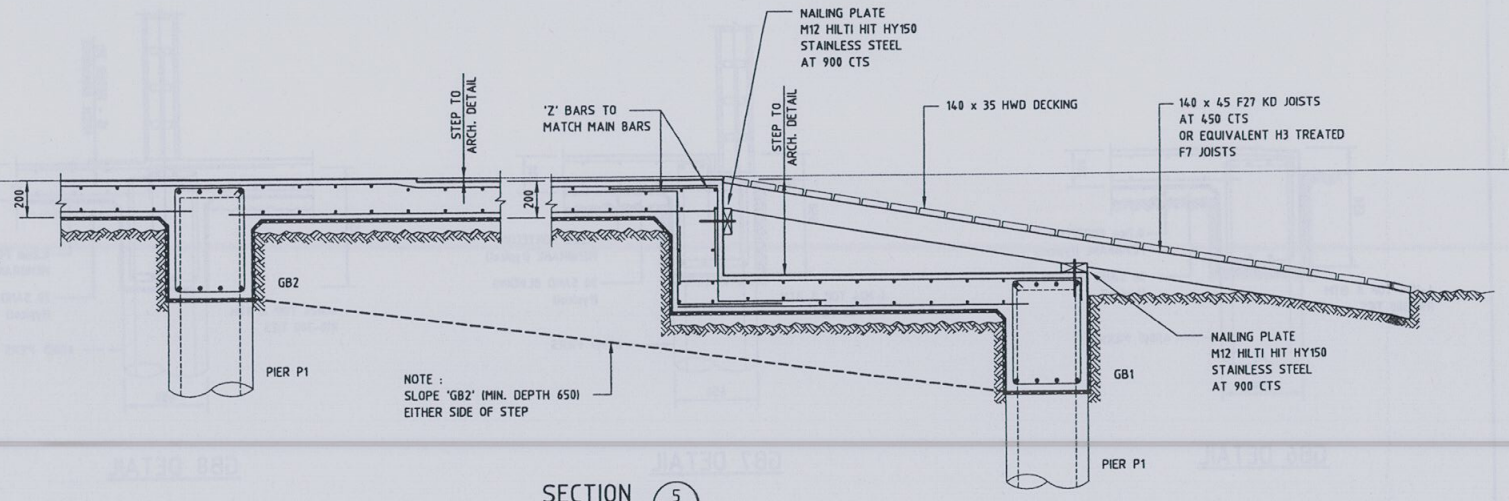


SECTION 3 / S3.00

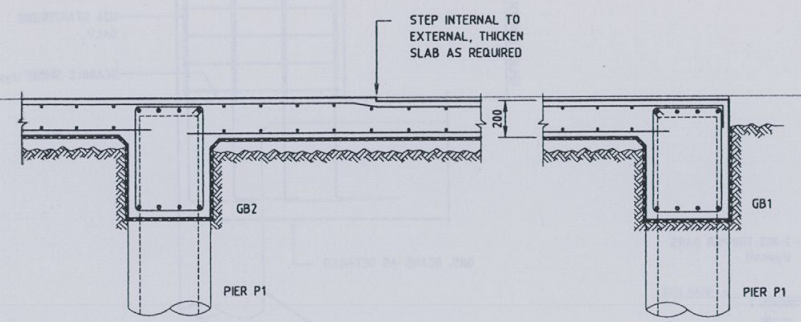




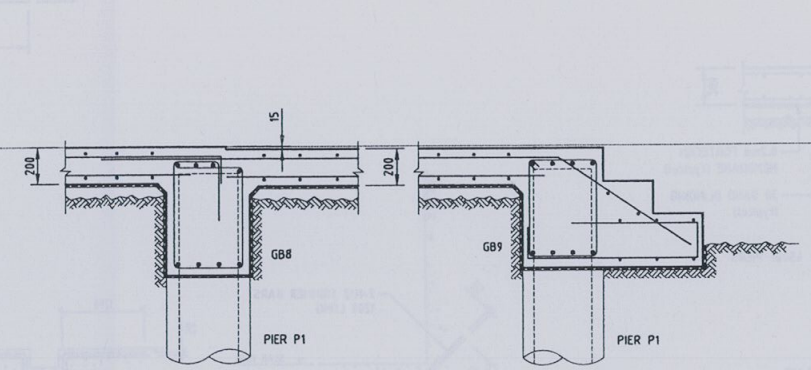
SECTION 4 / S3.00



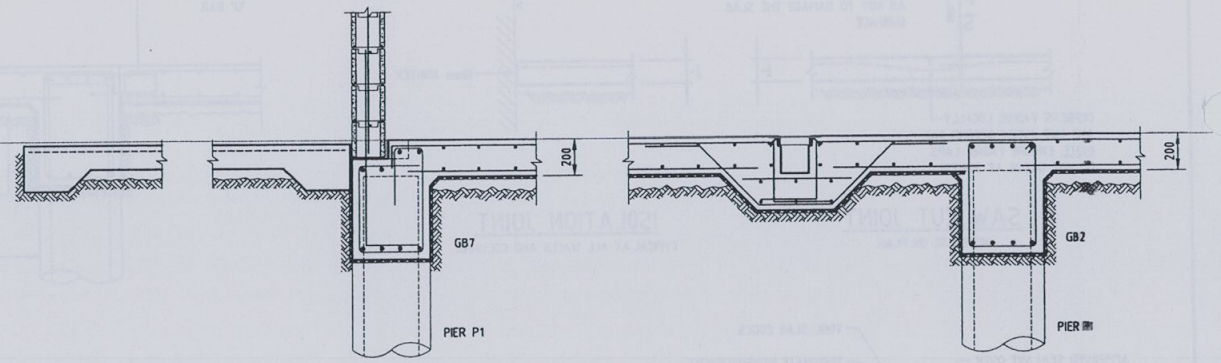
SECTION 5 / S3.00



SECTION 6 / S3.00



SECTION 7 / S3.00



SECTION 8 / S3.00

ISSUED FOR TENDER

REV.	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 8264 F 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

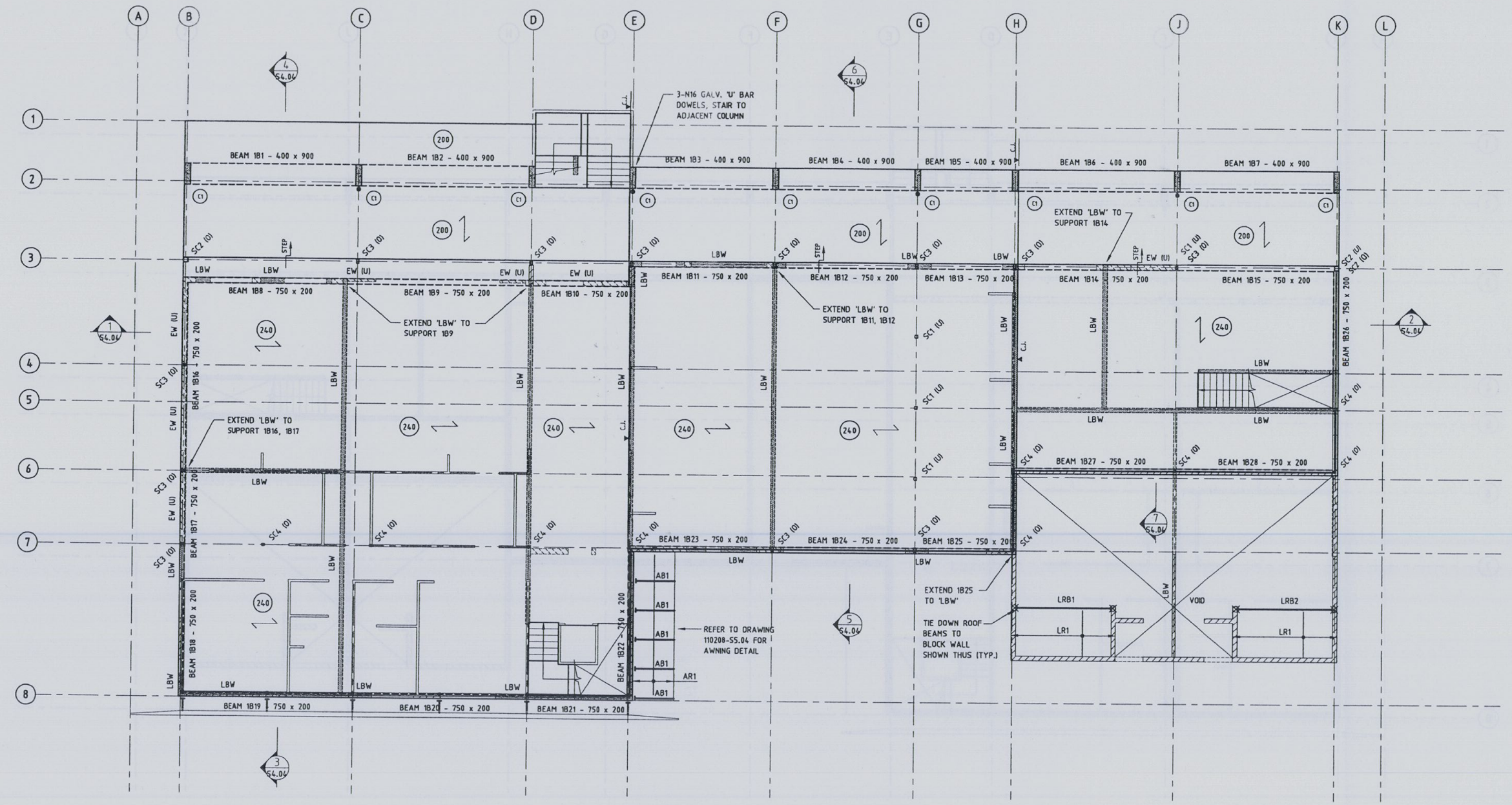
GROUND FLOOR SLAB DETAILS
SHEET 2

Job No : 110208

Drawing No : S3.04 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director



FIRST FLOOR SLAB AND ROOF FRAMING PLAN

NOTE :

240 THICK SLAB UNO. F'c = 40 mPa
30mm INTERNAL COVER 45mm EXTERNAL COVER

SLAB REINFORCED WITH N16-150 E.W.
TOP & BTM. EXTRA BARS AS SHOWN ON PLAN

ADDITIVES - THE CONCRETE SLAB IS TO INCLUDE A SHRINKAGE COMPENSATING ADDITIVE SUCH AS 'SIKA CONTROL 40' OR EQUIVALENT

⟷ DENOTES SPAN DIRECTION FOR SLAB PRIMARY REINFORCEMENT

181 TO 187 - 400 x 800 CONCRETE BEAM
6-N24 TOP & BTM, R10-300 TIES
188 TO 1826 - 750 x 200 CONCRETE BEAM
4-N24 TOP & BTM, R10-150 TIES + N12-200 SIDE FACE REINF.

C1 - 800 x 250 CONCRETE COLUMN
8-N24 VERT. BARS, R10-150 TIES

CJ - CONSTRUCTION JOINT

LBW - 190 BLOCKWORK WALL, REINFORCED N12-400 VERT & HORIZ. ALL CORES FILLED

EW (U) - EXISTING WALL UNDER, NON-LOAD BEARING PROVIDE COMPRESSIBLE MATERIAL TO TOP OF WALL

(200) DENOTES SLAB THICKNESS

SC1 - 125 x 6.0 SHS GALV.
SC2 - 200 x 6.0 SHS GALV.
SC3 - 200 x 100 x 6.0 RHS GALV.
SC4 - 89 x 6.0 SHS GALV.

LRB1, LRB2 - 250 PFC
LR1 - 90 x 45 HYSPAN LVL RAFTERS AT 600 CTS

AB1 - FABRICATED 'T' BEAM FROM 10 PLATE
AR1 - 50 x 45 HWD BATTENS AT 600 CTS

NOTE :
FIRE RATING OF STEELWORK BY OTHERS

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

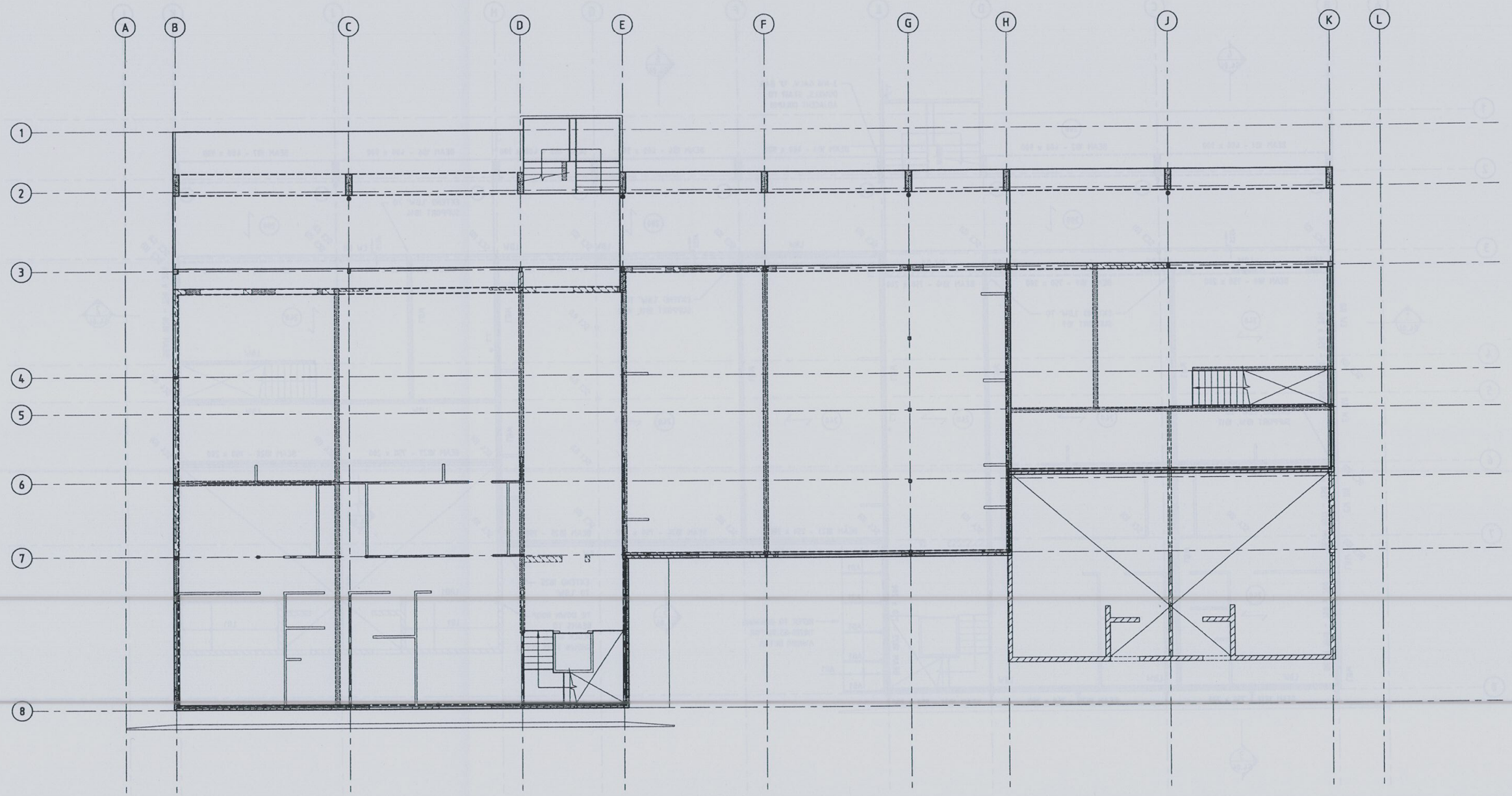
Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
FIRST FLOOR SLAB AND ROOF FRAMING PLAN

Job No : 110208

Drawing No: S400 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



FIRST FLOOR BOTTOM REINFORCEMENT SLAB PLAN

SLAB REINFORCED WITH N16-150 E.W.

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon now 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

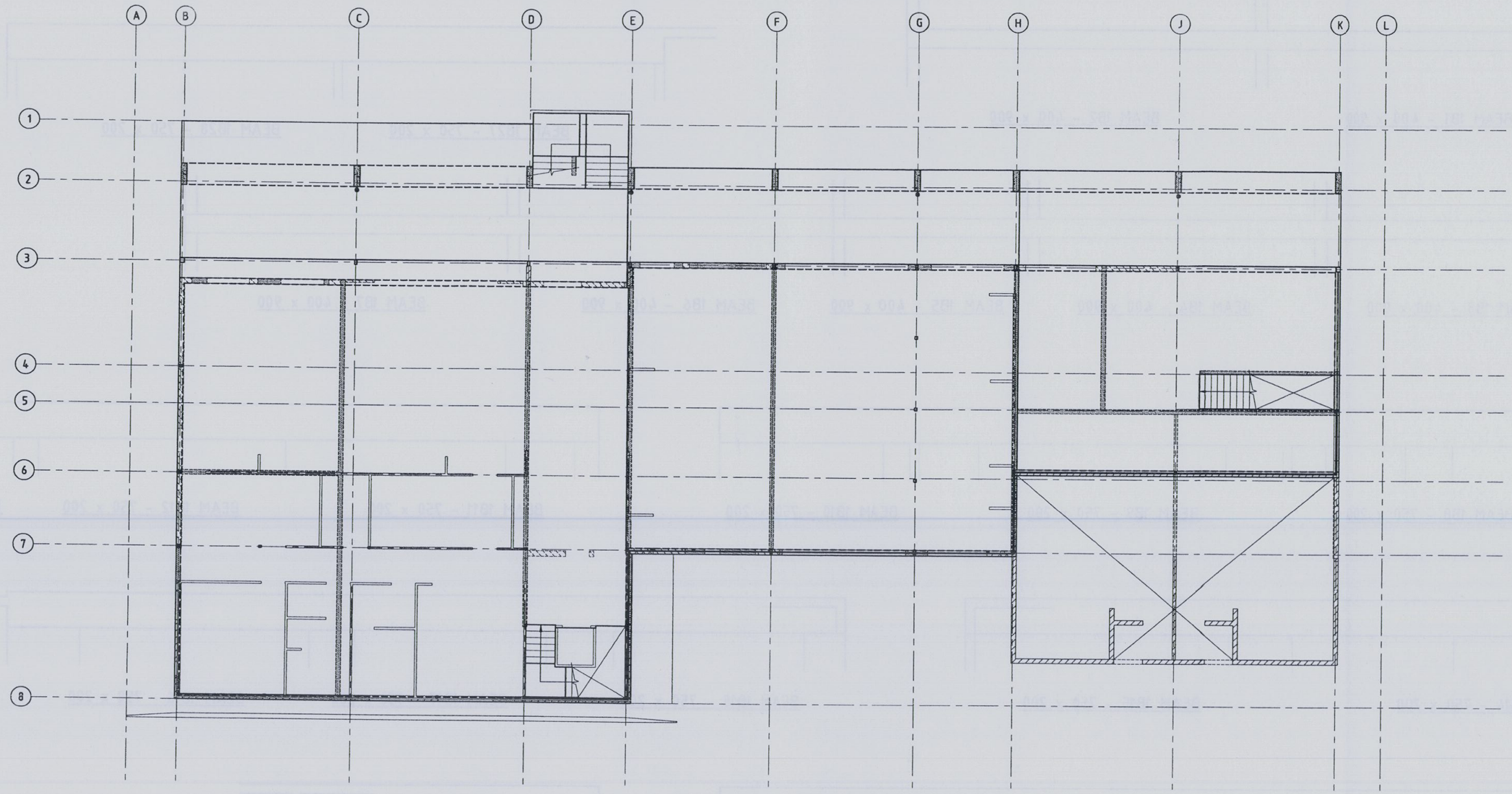
FIRST FLOOR BOTTOM
REINFORCEMENT SLAB PLAN

Job No : 110208

Drawing No : S4.01 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director



FIRST FLOOR TOP REINFORCEMENT SLAB PLAN

SLAB REINFORCED WITH N16-150 E.W.

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 8264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN 13 124 694 917
ACN 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

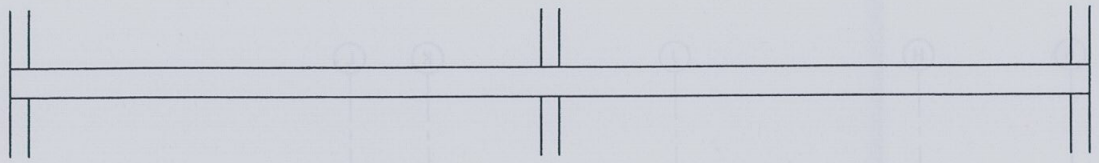
FIRST FLOOR TOP
REINFORCEMENT SLAB PLAN

Job No : 110208

Drawing No : S4.02 B

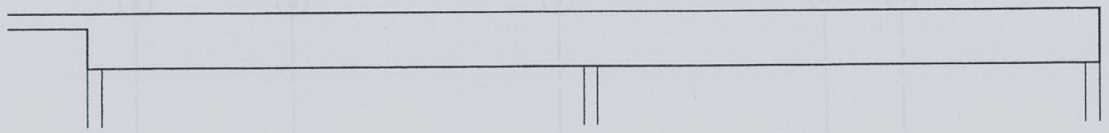
Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director



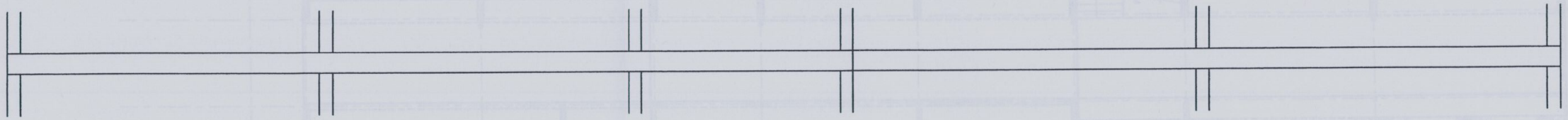
BEAM 1B1 - 400 x 900

BEAM 1B2 - 400 x 900



BEAM 1B27 - 750 x 200

BEAM 1B28 - 750 x 200



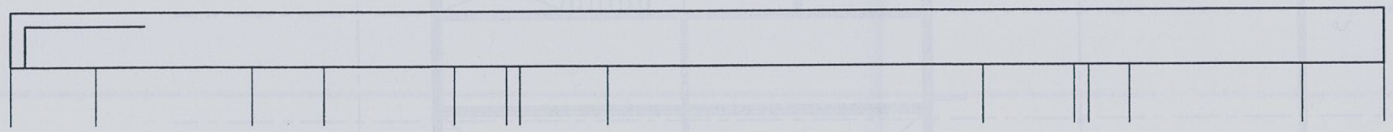
BEAM 1B3 - 400 x 900

BEAM 1B4 - 400 x 900

BEAM 1B5 - 400 x 900

BEAM 1B6 - 400 x 900

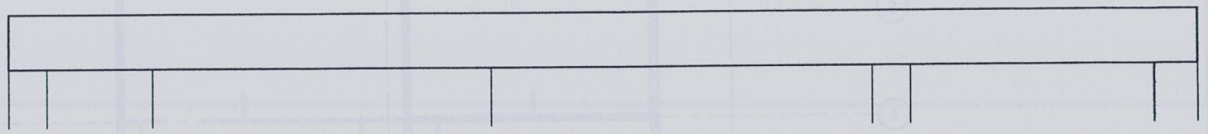
BEAM 1B7 - 400 x 900



BEAM 1B8 - 750 x 200

BEAM 1B9 - 750 x 200

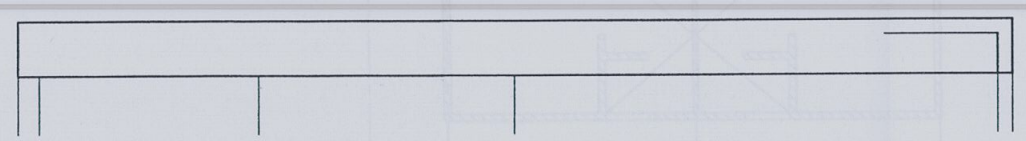
BEAM 1B10 - 750 x 200



BEAM 1B11 - 750 x 200

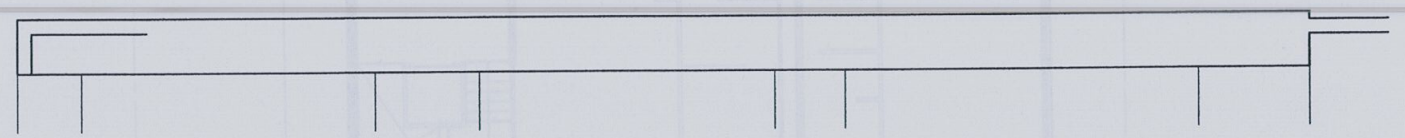
BEAM 1B12 - 750 x 200

BEAM 1B13 - 750 x 200



BEAM 1B14 - 750 x 200

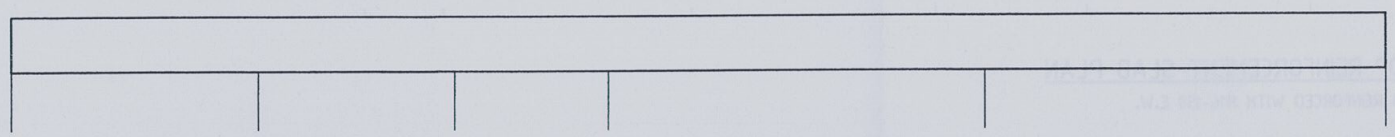
BEAM 1B15 - 750 x 200



BEAM 1B18 - 750 x 200

BEAM 1B17 - 750 x 200

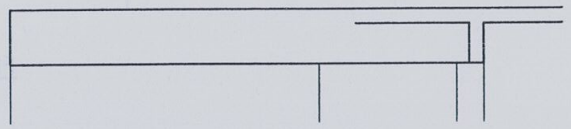
BEAM 1B16 - 750 x 200



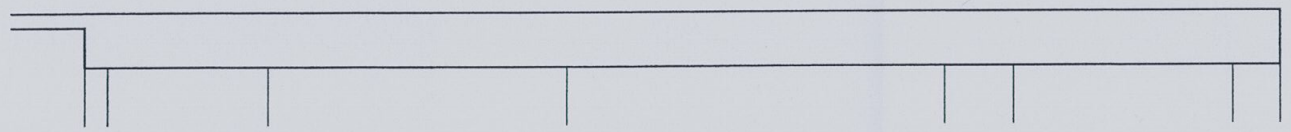
BEAM 1B19 - 750 x 200

BEAM 1B20 - 750 x 200

BEAM 1B21 - 750 x 200



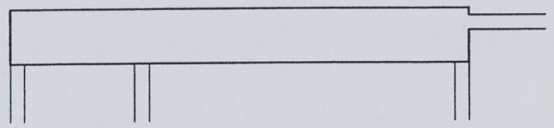
BEAM 1B22 - 750 x 200



BEAM 1B23 - 750 x 200

BEAM 1B24 - 750 x 200

BEAM 1B25 - 750 x 200



BEAM 1B26 - 750 x 200

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.M.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.M.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

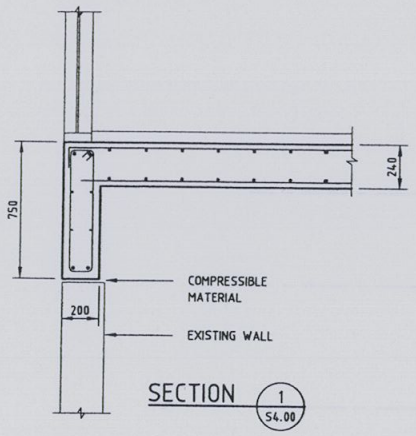
Drawing :

FIRST FLOOR SLAB
DETAILS - SHEET 1

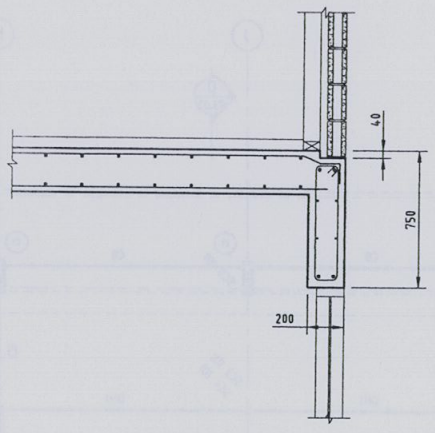
Job No : 110208

Drawing No : S4.03 B

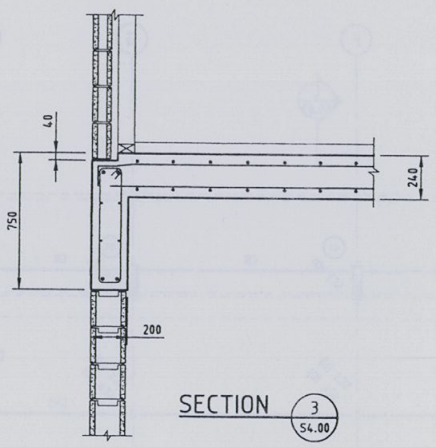
Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



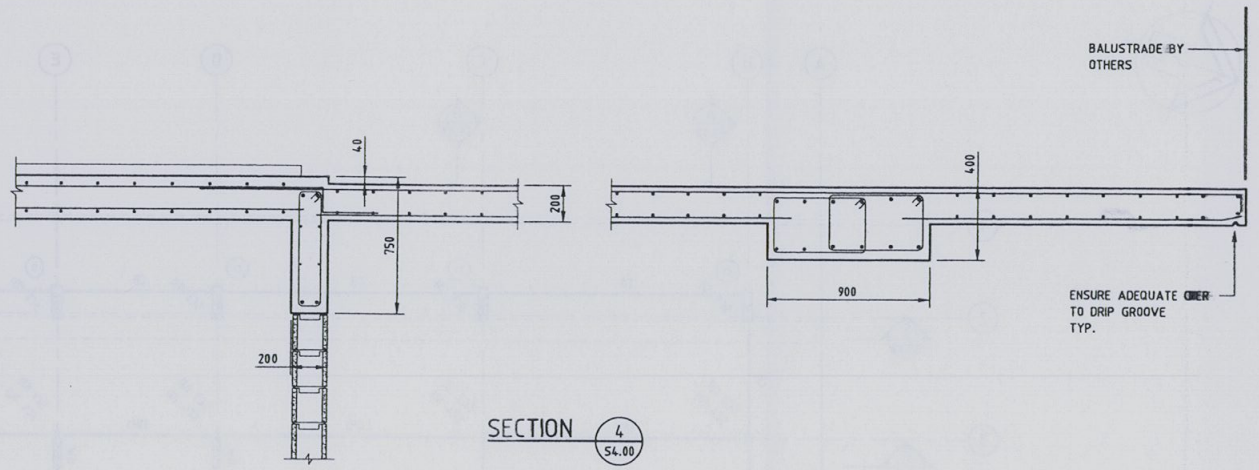
SECTION 1 / 54.00



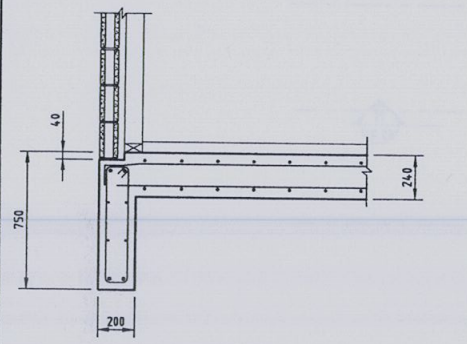
SECTION 2 / 54.00



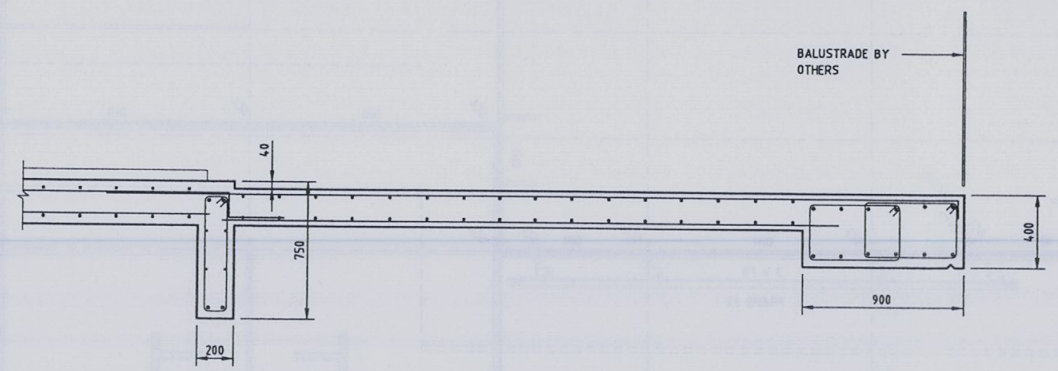
SECTION 3 / 54.00



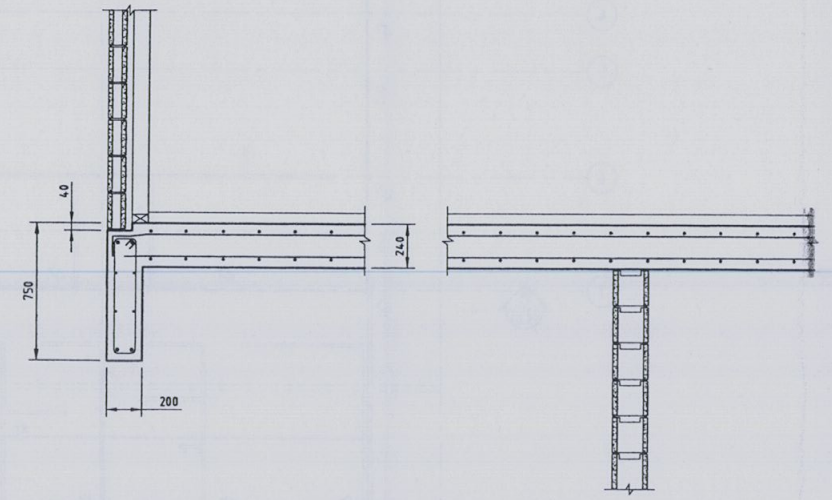
SECTION 4 / 54.00



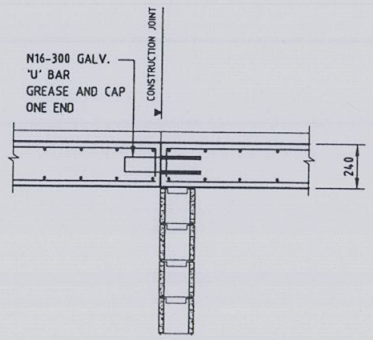
SECTION 5 / 54.00



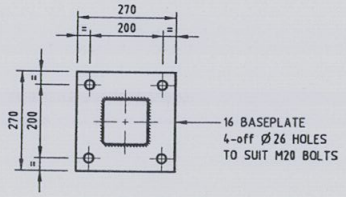
SECTION 6 / 54.00



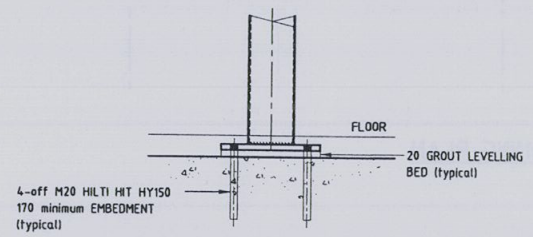
SECTION 7 / 54.00



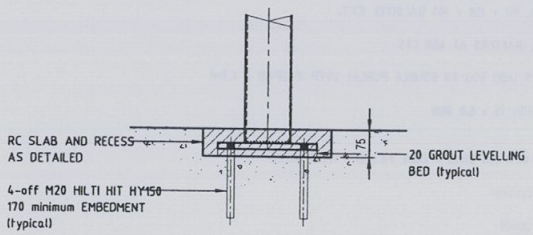
CONSTRUCTION JOINT
NOTED CJ ON PLAN



PLAN

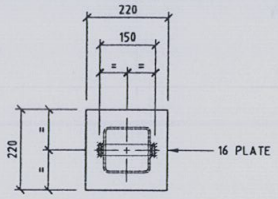


SECTION - FOOTING / SLAB

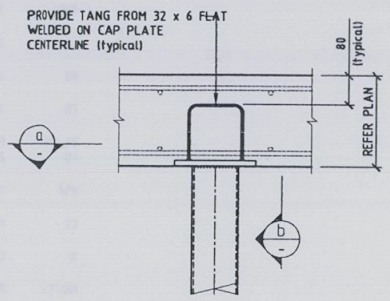


SECTION - SLAB (RECESSED)

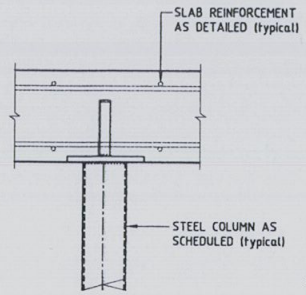
TYPICAL COLUMN BASEPLATE
(125 SHS)



SECTION a / -



TYPICAL COLUMN CAP PLATE
125 SHS



SECTION b / -

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

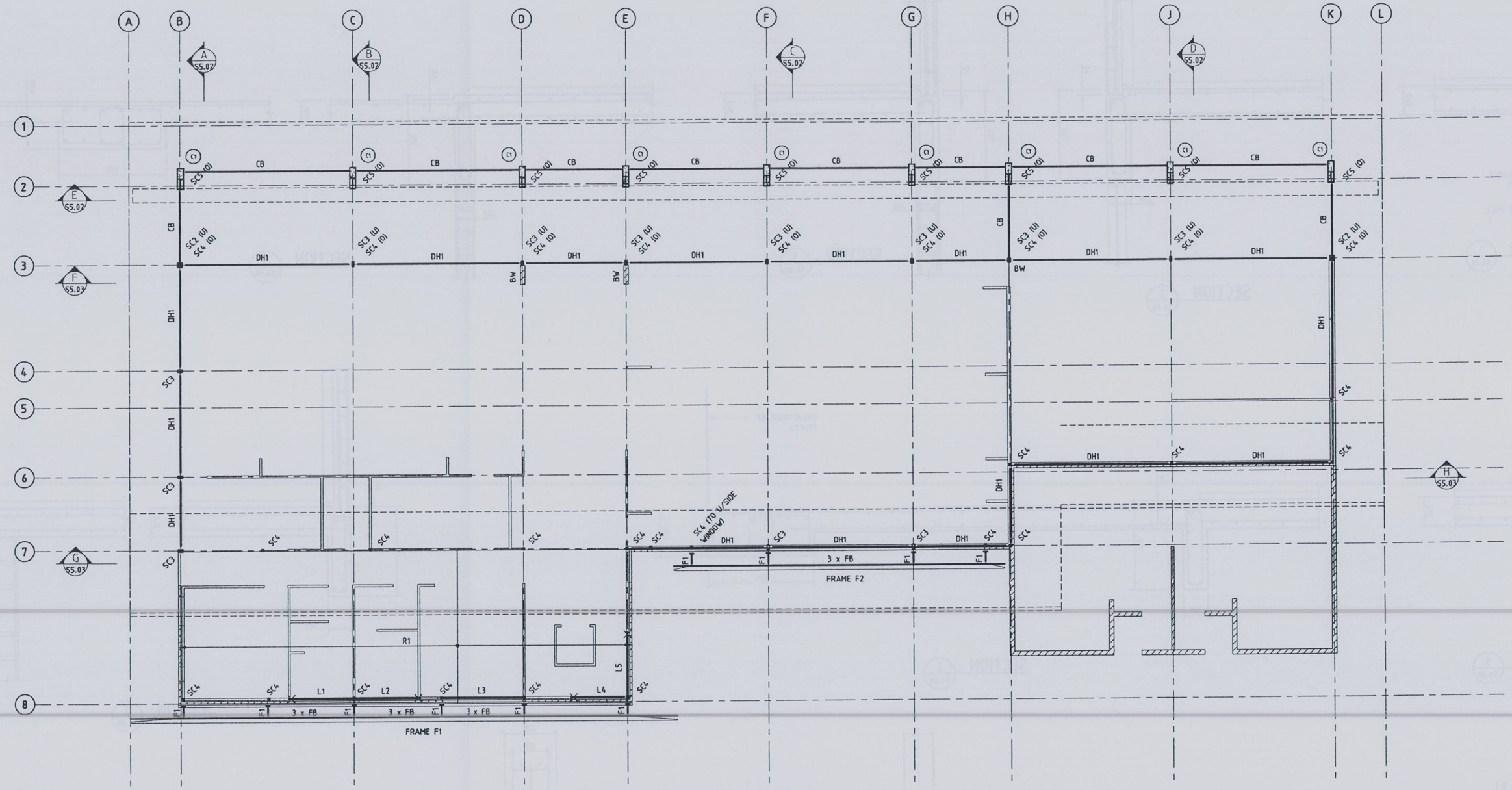
Drawing :

FIRST FLOOR SLAB
DETAILS - SHEET 2

Job No : 110208

Drawing No : S4.04 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



LOWER ROOF FRAMING PLAN

NOTE :

SC1	125 x 6.0 SHS GALV.
SC2	200 x 6.0 SHS GALV.
SC3	200 x 100 x 6.0 RHS GALV.
SC4	89 x 6.0 SHS GALV.
SC5	STEEL PLATE COLUMN FROM 20 PLATE
DH1	200 x 100 x 6.0 RHS (ON FLAT) ▭
L1 - L5	240 x 63 HYSPAN LVL INT + 150 x 100 GALINTEL EXT.
R1	150 x 45 HYSPAN LVL RAFTERS AT 450 CTS
CB	200 PFC ON FLAT AXIS (ADD ROD TO DOUBLE PURLIN OVER IF SPAN > 4.9m)
F1, F2	FABRICATED FRAME FROM 75 x 6.0 SHS
FB	200 x 100 x 6.0 RHS
BW	190 BLOCKWORK COLUMN x 800 LONG - CORE FILLED + REINFORCED
C1	800 x 250 CONCRETE COLUMN
X	DOUBLE STUDS + TIE DOWN
NOTE :	PLY BRACE ALL WALL FRAMING

NOTE :
FIRE RATING OF STEELWORK BY OTHERS

ISSUED FOR TENDER

0 1 2 3 4 5

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5[illegible]
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

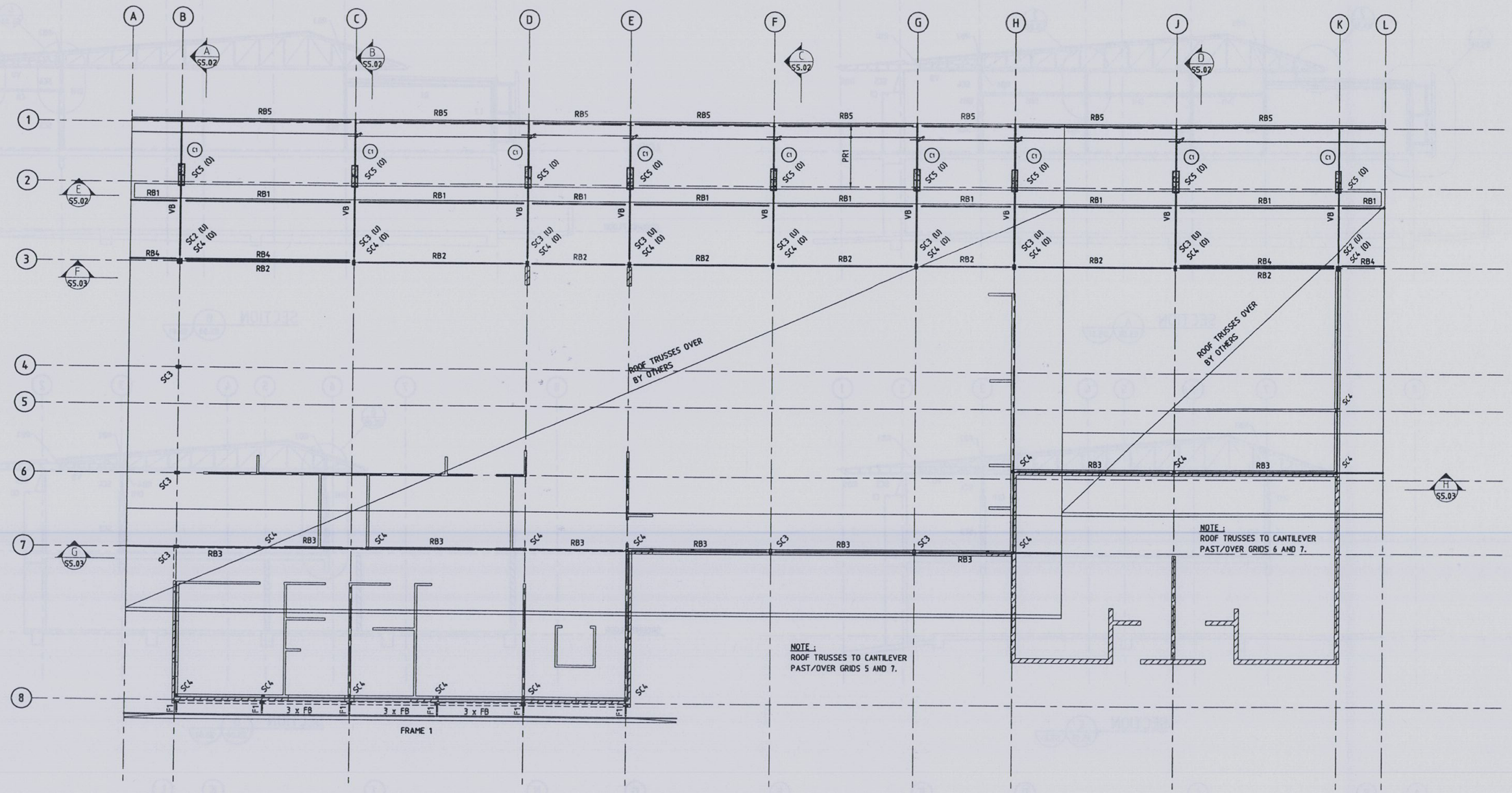
Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
LOWER LEVEL ROOF
FRAMING PLAN

Job No : 110208

Drawing No : S5.00 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



UPPER ROOF FRAMING PLAN

NOTE :

SC1	125 x 6.0 SHS GALV.
SC2	200 x 6.0 SHS GALV.
SC3	200 x 100 x 6.0 RHS GALV.
SC4	89 x 6.0 SHS GALV.
SC5	STEEL PLATE COLUMN FROM 20 PLATE
PR1	240 x 45 HYSPAN LVL PURLINS AT 450 CTS
VB	250UC89
RB1	250UB37
RB2	GIRDER TRUSSES BY OTHERS
RB3	310UB46
RB4	250UB37 (CANTILEVER TO EAVE)
RB5	200 PFC (NON STRUCTURAL FEATURE BEAM)

TRUSSES OVER BY OTHERS

NOTE :
FIRE RATING OF STEELWORK BY OTHERS

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

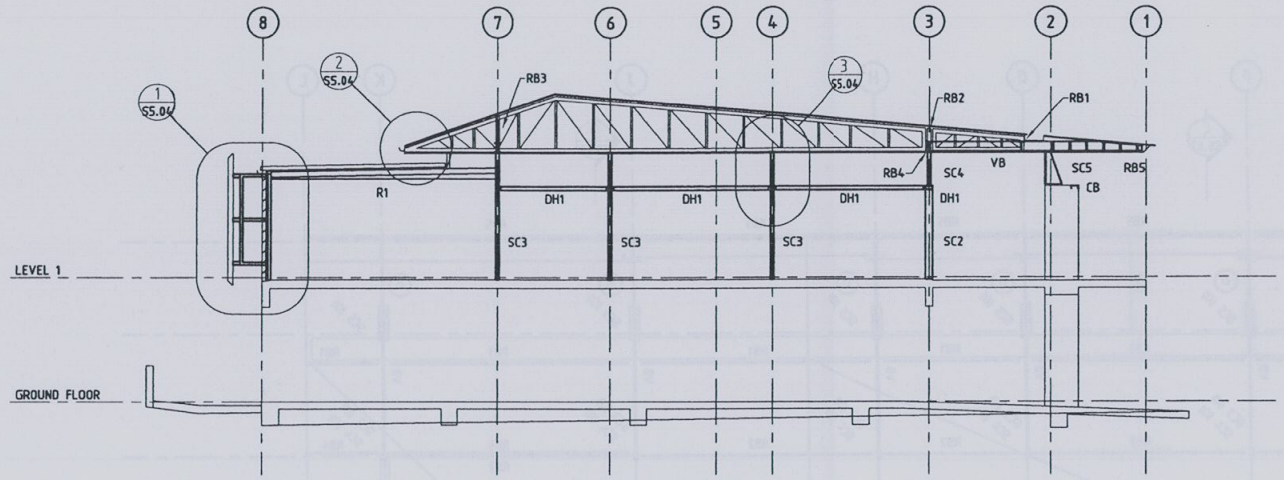
Project :
ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :
UPPER LEVEL ROOF
FRAMING PLAN

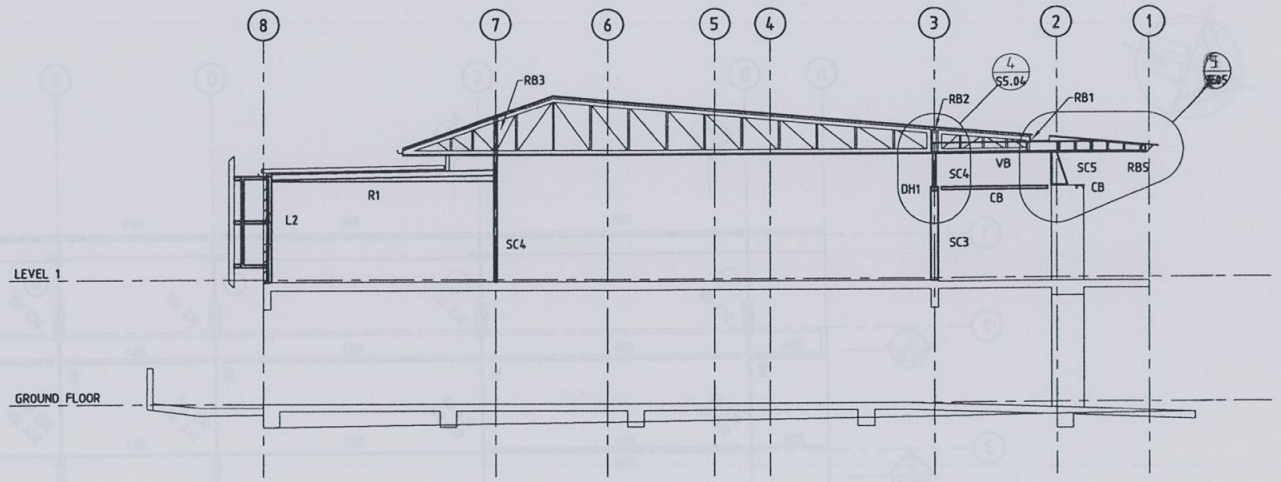
Job No : 110208

Drawing No : S5.01 B

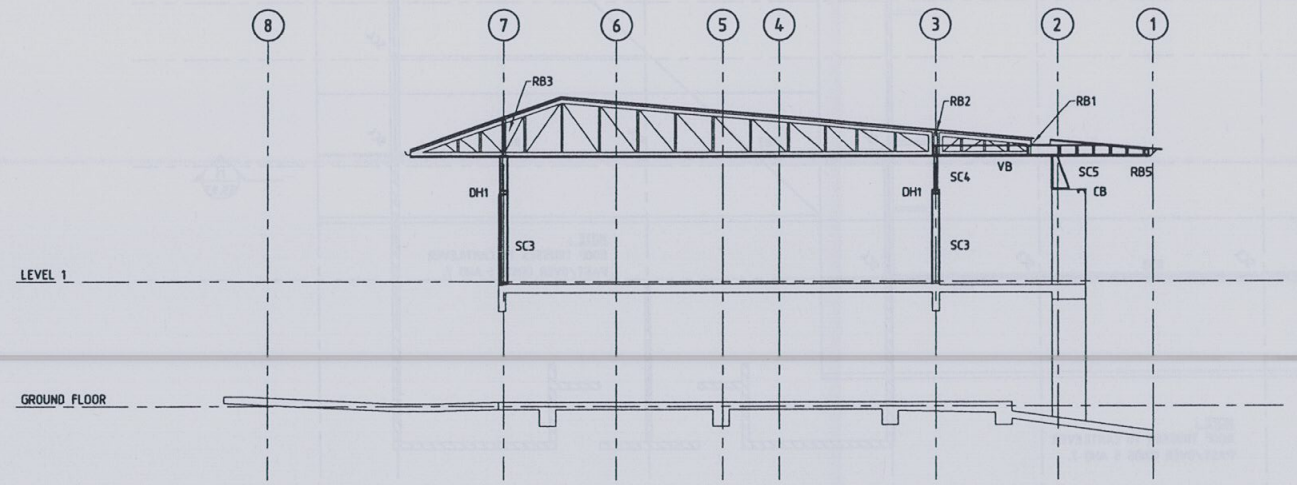
Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director



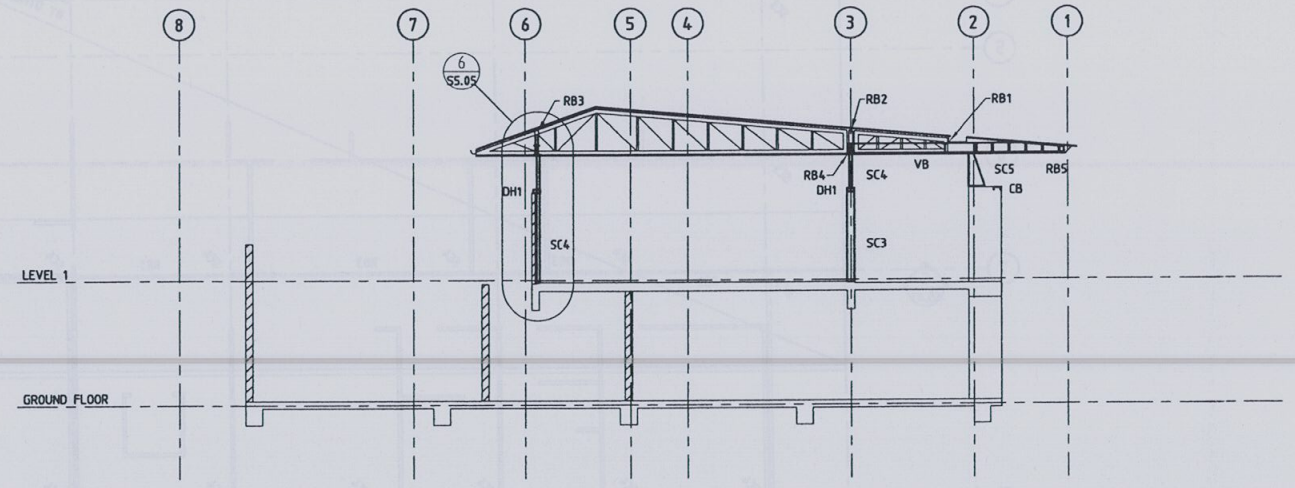
SECTION A S5.00 S5.01



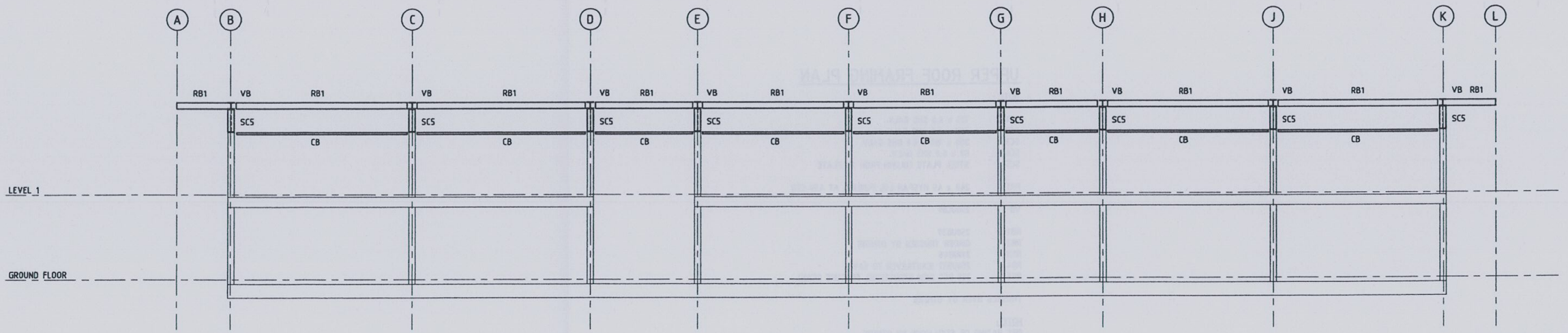
SECTION B S5.00 S5.01



SECTION C S5.00 S5.01



SECTION D S5.00 S5.01



SECTION E S5.00 S5.01

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

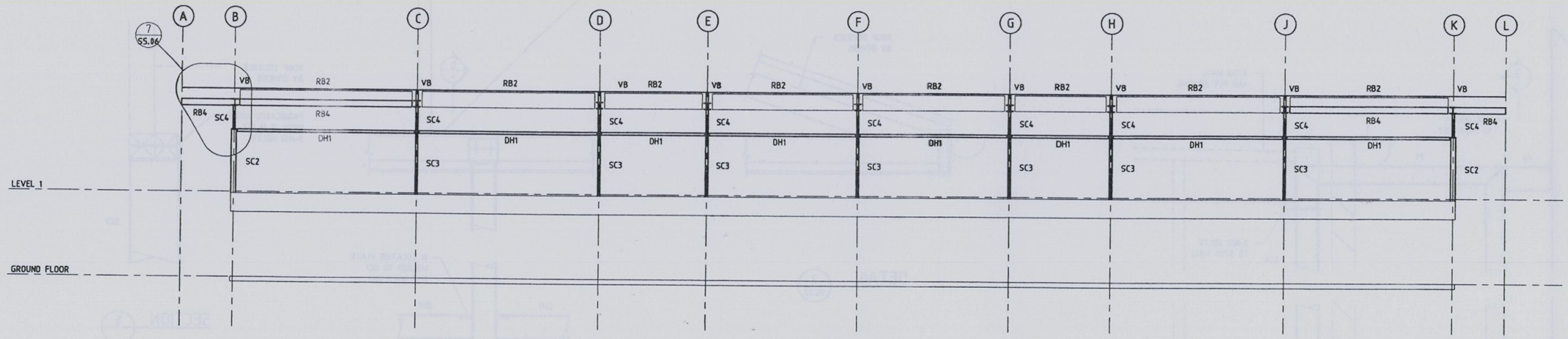
ROOF FRAMING STRUCTURAL
STEEL SECTIONS - SHEET 1

Job No : 110208

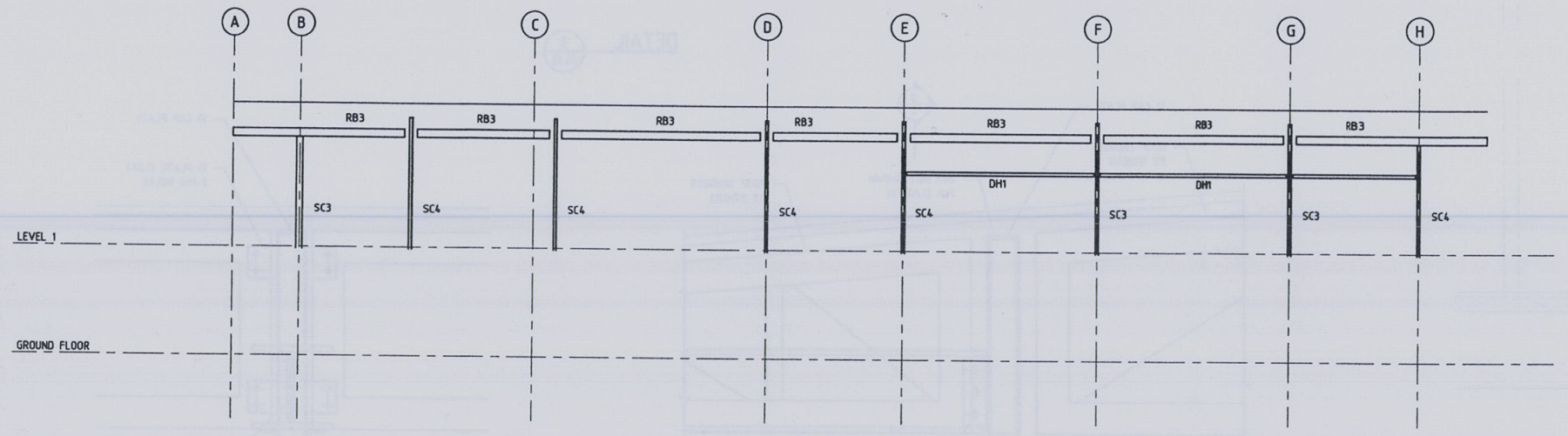
Drawing No : S5.02 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

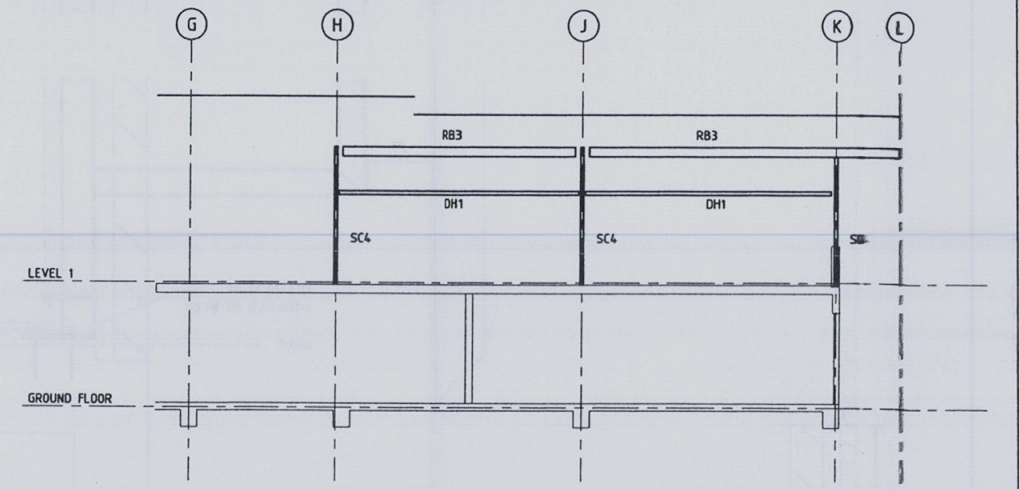
PER
Lucas Molloy MIEA CPEng NPER Director



SECTION F S5.00 S5.01



SECTION G S5.00 S5.01



SECTION H S5.00 S5.01

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasbce@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

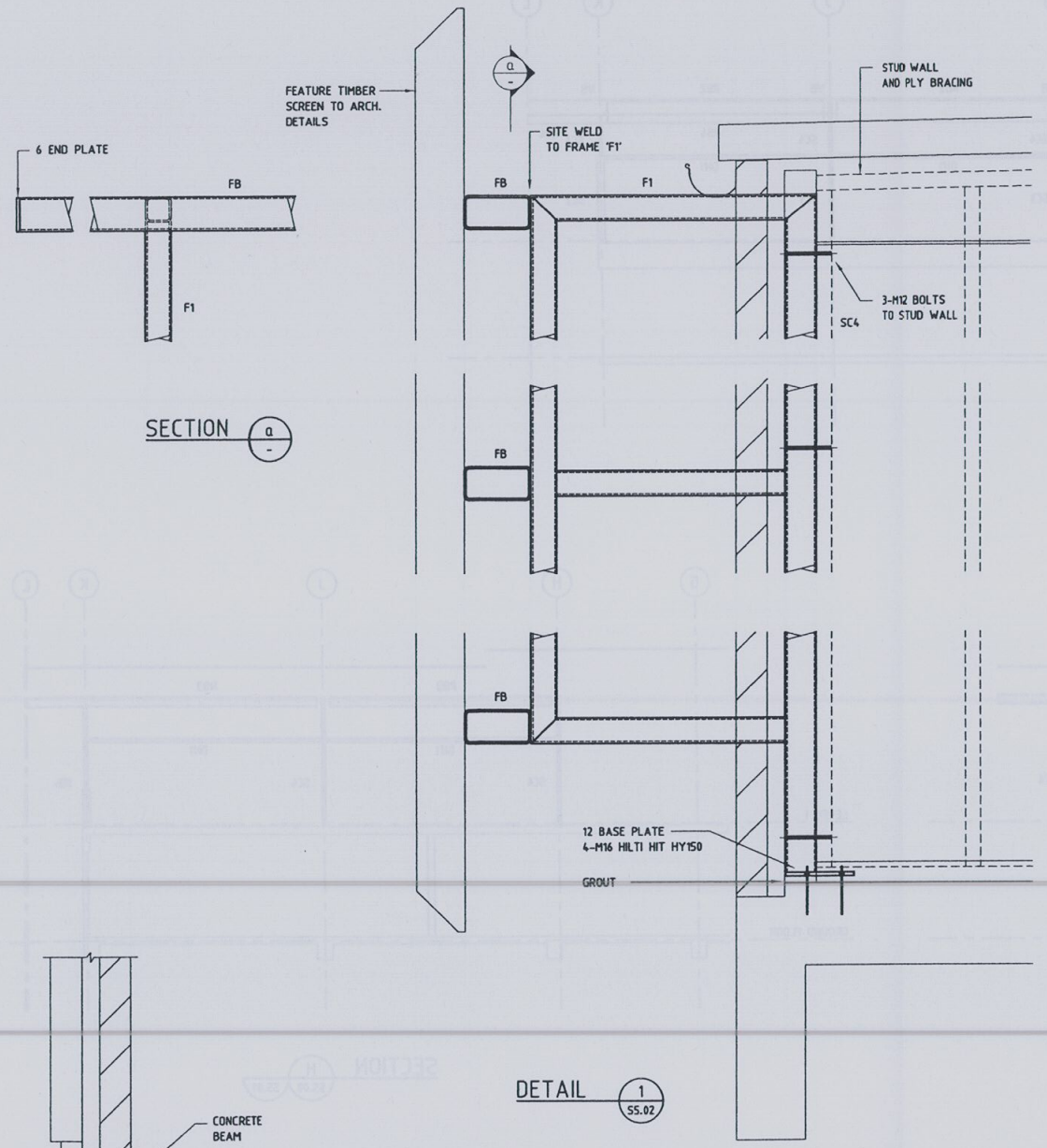
ROOF FRAMING STRUCTURAL
STEEL SECTIONS - SHEET 2

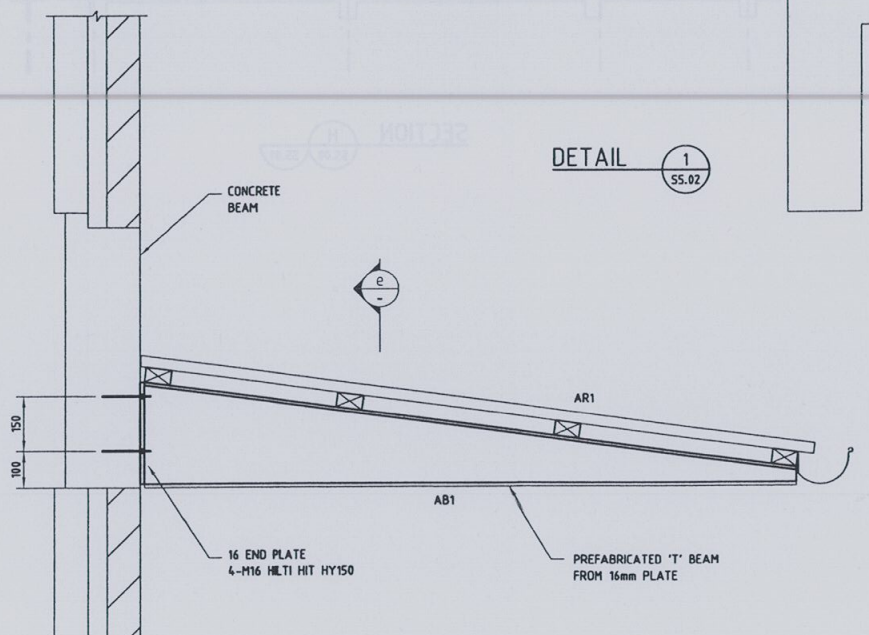
Job No : 110208

Drawing No : S5.03 B

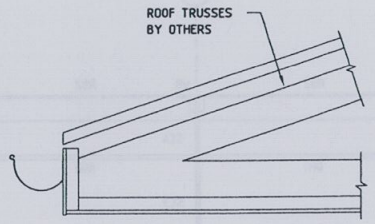
Document certification
Barrenjoey Consulting Engineers Pty Ltd

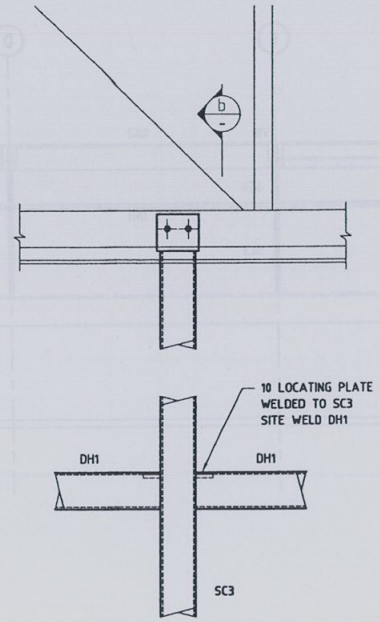
PER
Lucas Molloy MIEA CPEng NPER Director

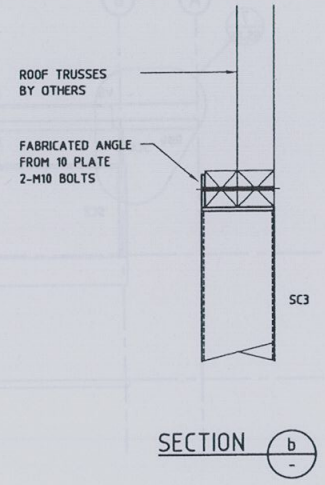


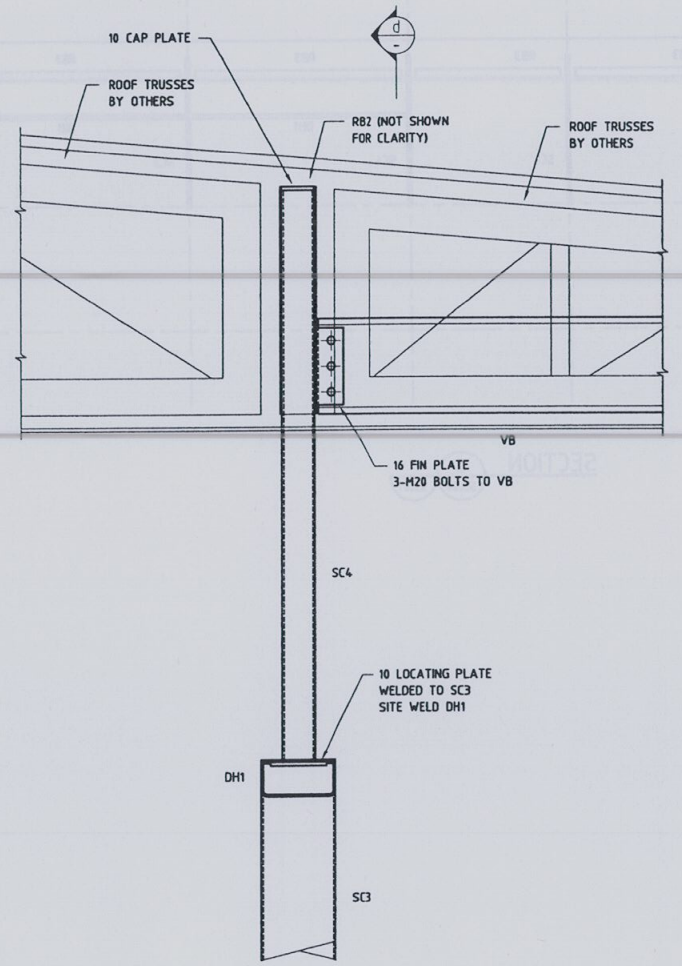


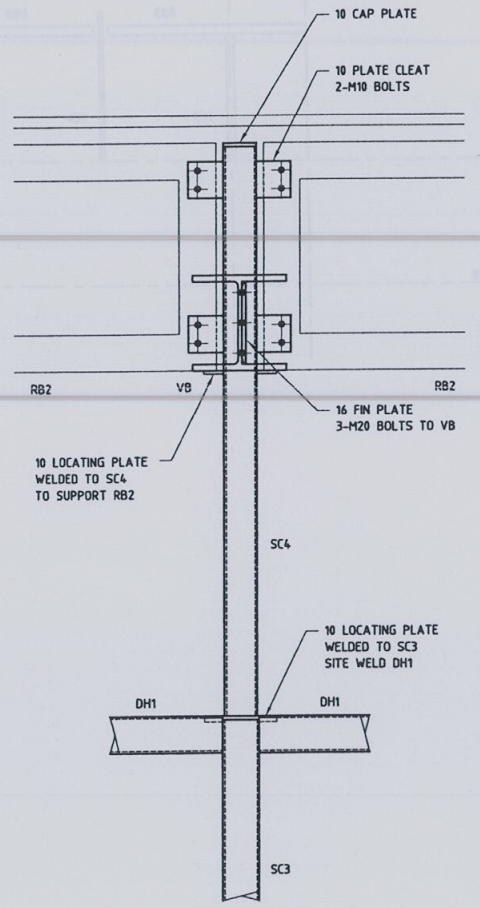
TYPICAL FRONT ENTRY AWNING DETAIL











ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.H.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.H.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 9918 5841
M : 0418 620 330
E : lucasboe@bigpond.com
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

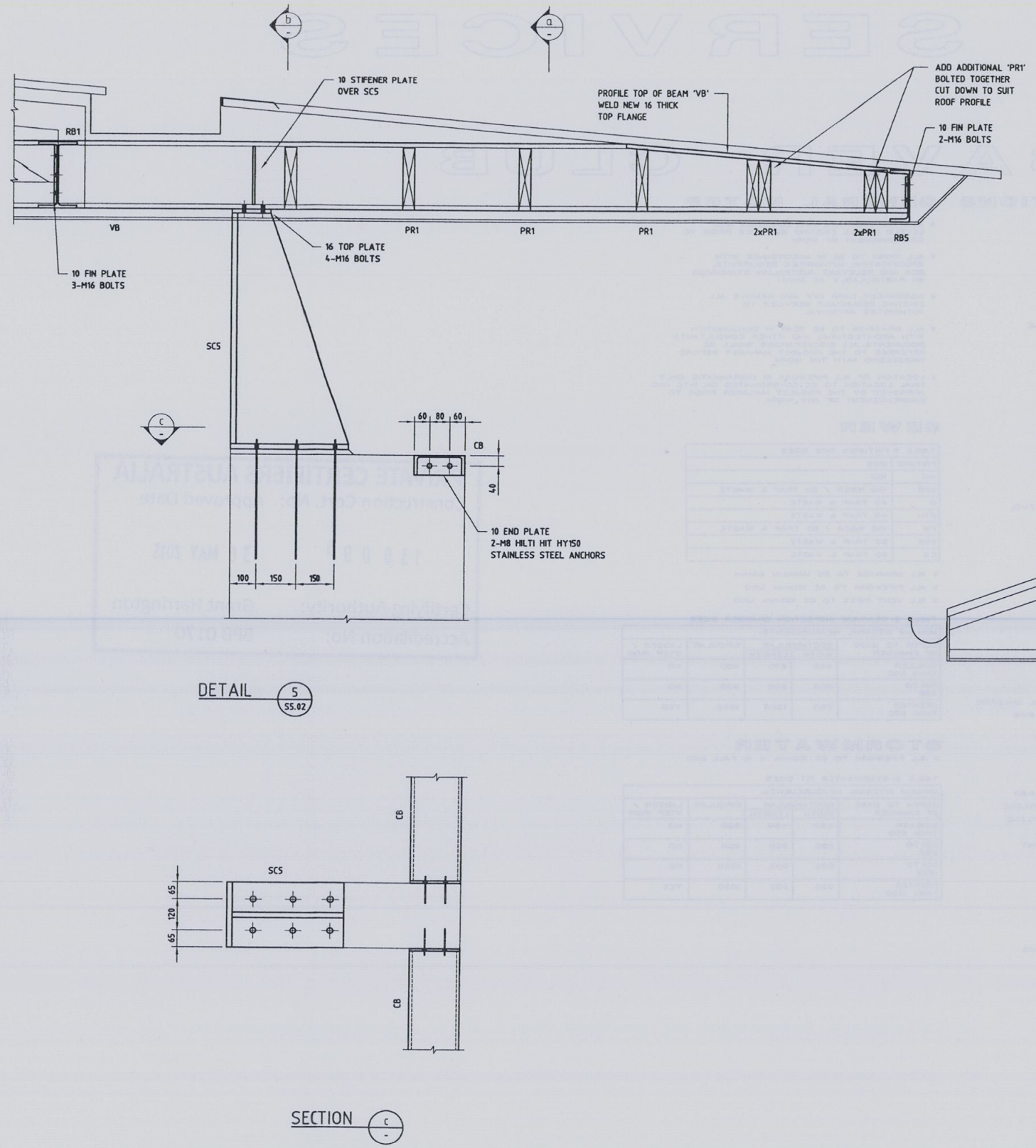
Drawing :

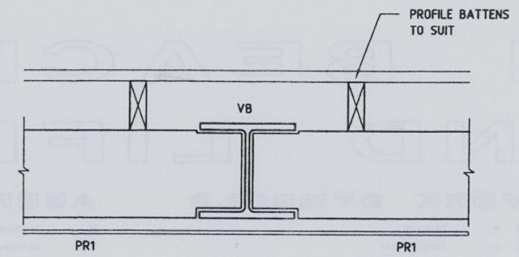
ROOF STEEL DETAILS
SHEET 1

Job No : 110208

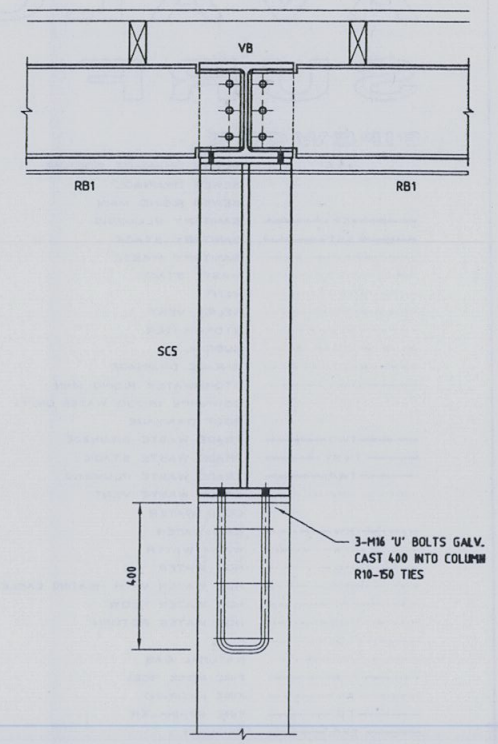
Drawing No : S5.04 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd
PER
Lucas Molloy MIEA CPEng NPER Director

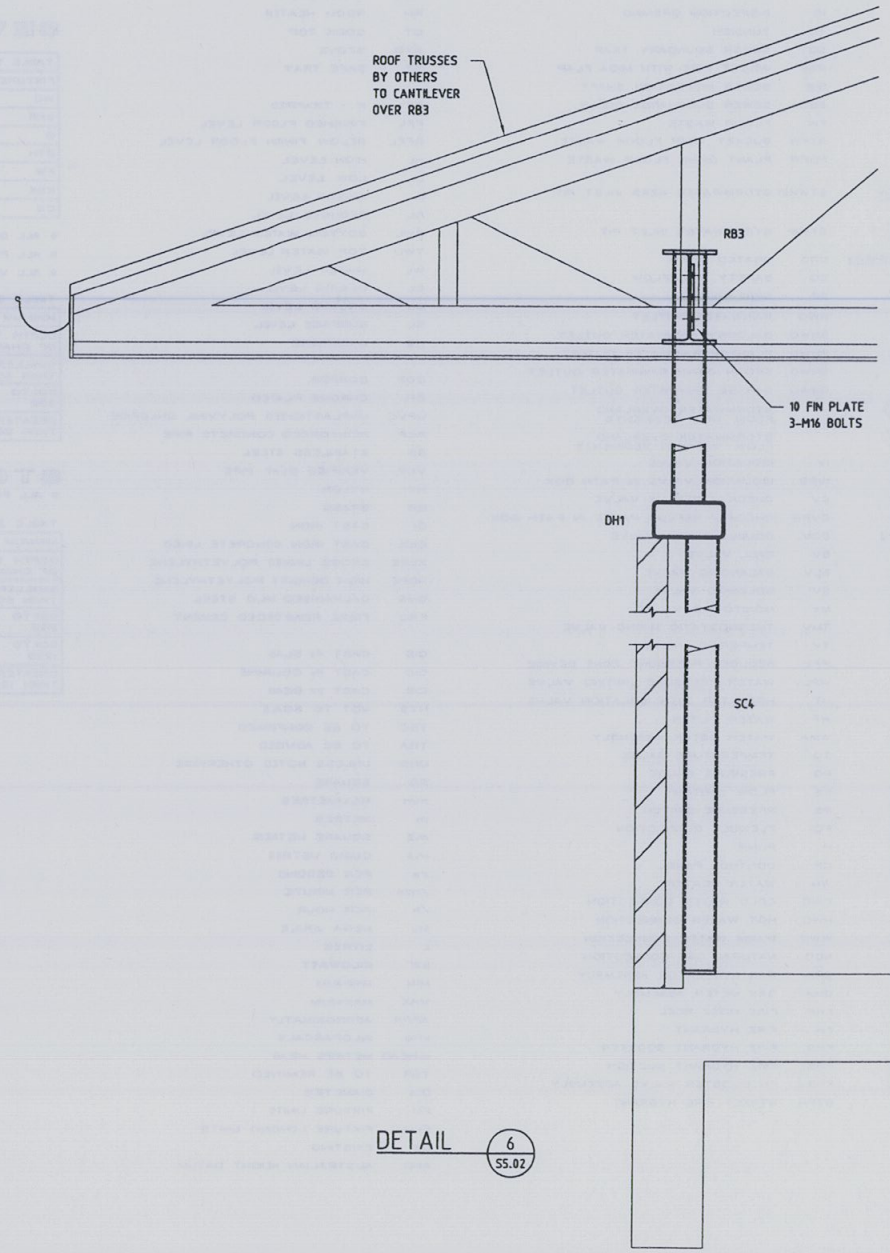




SECTION a



SECTION b



DETAIL 6 S5.02

SECTION c

ISSUED FOR TENDER

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
B	ISSUED FOR TENDER ADDENDUM	A.C.W.	L.M.	29-11-12
A	ISSUED FOR TENDER	A.C.W.	L.M.	17-10-12

Barrenjoey Consulting Engineers Pty Ltd
Stormwater Structural Civil
PO Box 672
Avalon nsw 2107
P : 9918 6264 F : 99[illegible]
M : 0418 620 330
E : lucasbce@bigpon
ABN : 13 124 694 917
ACN : 124 694 917

Project :

ALTERATIONS AND ADDITIONS
AVALON BEACH S.L.S.C.
558A BARRENJOEY ROAD
AVALON BEACH NSW

Drawing :

ROOF STEEL DETAILS
SHEET 2

Job No : 110208

Drawing No : S5.05 B

Document certification
Barrenjoey Consulting Engineers Pty Ltd

PER
Lucas Molloy MIEA CPEng NPER Director

HYDRAULIC SERVICES

AVALON BEACH SURF AND LIFESAVER CLUB

PIPEWORK

- SEWER DRAINAGE SIDE LINE
- SEWER DRAINAGE
- SEWER RISING MAIN
- SP — SANITARY PLUMBING
- SST — SANITARY STACK
- SW — SANITARY WASTE
- WST — WASTE STACK
- V — VENT
- RV — RELIEF VENT
- STW — STORMWATER
- SS — SUBSOIL
- GD — GARAGE DRAINAGE
- STWRM — STORMWATER RISING MAIN
- DP — DOWNPIPE (ROOD WATER ONLY)
- RD — ROOF DRAINAGE
- TWD — TRADE WASTE DRAINAGE
- TWST — TRADE WASTE STACK
- TWP — TRADE WASTE PLUMBING
- TWV — TRADE WASTE VENT
- CW — COLD WATER
- RW — RAIN WATER
- WW — WARM WATER
- HW — HOT WATER
- HWHC — HOT WATER WITH HEATING CABLE
- HWF — HOT WATER FLOW
- HWR — HOT WATER RETURN
- FLUE — FLUE
- NG — NATURAL GAS
- FHR — FIRE HOSE REEL
- FH — FIRE HYDRANT
- FS — FIRE SPRINKLER
- EXH — EXHAUST
- IRRIGATION
- EXISTING SERVICE
- EXISTING SERVICE TO BE DISCONNECTED AND REMOVED

GENERAL SYMBOLS

- DIRECTION OF FLOW
- TYPE OF SERVICE
- SIZE OF SERVICE
- DIRECTION OF FLOW

RISER INDICATOR

- RISER NUMBER
- RISER TYPE

REFER TO DETAIL No...

DRAWING CHANGE INDICATION

- INDICATES EXTENT / AREA OF CHANGE
- INDICATES DRAWING REVISION ASSOCIATED WITH CHANGE

CONTINUATION ARROW

- INDICATES DRAWING NUMBER FOR CONTINUATION

DETAIL INDICATOR

- INDICATES DETAIL AREA
- INDICATES DRAWING NUMBER
- INDICATES DETAIL NUMBER

SECTION INDICATOR

- INDICATES DRAWING NUMBER
- INDICATES SECTION NUMBER
- INDICATES SECTION ORIENTATION

BEAM / DUCT INDICATOR

- INDICATES RL @ U/S OF BEAM / DUCT
- INDICATES DISTANCE FROM U/S BEAM / DUCT TO FFL

PIPEWORK SYMBOLS

R	RISER
D	DROPPER
TDR	TEE DROPPER
COF	CAPPED OFF
FO	FLANGED OFF
U	UNION
HP	HORIZONTAL PENETRATION
DOF	DIRECTION OF FLOW
NC	NEW CONNECTION
C	CONTINUATION
FSC	FIRE STOP COLLAR
BO	BLOCK OUT
MH	MAN HOLE
IO	INSPECTION OPENING
TD	TUNDISH
SBT	SEWER BOUNDARY TRAP
IPMF	INDUCT PIPE WITH MICA FLAP
SIS	SEWER INSPECTION SHAFT
SSG	SEWER SURCHARGE GULLY
FW	FLOOR WASTE
BTFW	BUCKET TRAP FLOOR WASTE
PDFW	PLANT DRAIN FLOOR WASTE
STWKIP	STORMWATER KERB INLET PIT
STWIP	STORMWATER INLET PIT
GRD	GRATED DRAIN
SO	SAFETY OVERFLOW
SP	SPREADER
RWO	RAINWATER OUTLET
BRWO	BALCONY RAINWATER OUTLET
PRWO	PLANTER RAINWATER OUTLET
SRWO	SPOON DRAIN RAINWATER OUTLET
GRWO	GARAGE RAINWATER OUTLET
	STORMWATER OVERLAND FLOW WITH SEDIMENTS
	STORMWATER OVERLAND FLOW WITHOUT SEDIMENTS
IV	ISOLATION VALVE
IVPB	ISOLATION VALVE IN PATH BOX
CV	CHECK / REFLUX VALVE
CVPB	CHECK / REFLUX VALVE IN PATH BOX
DCV	DOUBLE CHECK VALVE
BV	BALL VALVE
BLV	BALANCING VALVE
SV	SOLENOID VALVE
MV	MONITORING VALVE
TMV	THERMOSTATIC MIXING VALVE
TV	TEMPERING VALVE
RPZ	REDUCED PRESSURE ZONE DEVICE
WPLV	WATER PRESSURE LIMITING VALVE
HT	HOSE TAP WITH ISOLATION VALVE
WF	WATER FILTER
WMA	WATER METER ASSEMBLY
TG	TEMPERATURE GAUGE
PG	PRESSURE GAUGE
FS	FLOW SWITCH
PS	PRESSURE SWITCH
FC	FLEXIBLE CONNECTION
P	PUMP
CP	CONTROL PANEL
WH	WATER HEATER
CWC	COLD WATER CONNECTION
HWC	HOT WATER CONNECTION
WWC	WARM WATER CONNECTION
NGC	NATURAL GAS CONNECTION
GRA	GAS REGULATOR ASSEMBLY
GMA	GAS METER ASSEMBLY
FHR	FIRE HOSE REEL
FH	FIRE HYDRANT
FHB	FIRE HYDRANT BOOSTER
FHS	FIRE HYDRANT SUCTION
FHBV	FH BOOSTER VALVE ASSEMBLY
STFH	STREET FIRE HYDRANT

ABBREVIATIONS

B	BASIN
KS	KITCHEN SINK
WC	WATER CLOSET
BTH	BATH
SHR	SHOWER
SHR BTH	BATH WITH SHOWER
T	LAUNDRY TUB
DW	DISHWASHER
CWM	CLOTH WASHING MACHINE
CS	CLEANER SINK
UR	URINAL
BI	BIDET
BWU	BOILING WATER UNIT
CWU	CHILLED WATER UNIT
BBQ	BARBEQUE
RH	ROOM HEATER
CT	COOK TOP
STO	STOVE
ST	SAFE TRAY
PT	P - TRAPPED
FFL	FINISHED FLOOR LEVEL
BFFL	BELOW FINISH FLOOR LEVEL
HL	HIGH LEVEL
LL	LOW LEVEL
IL	INVERT LEVEL
RL	REDUCED LEVEL
BWL	BOTTOM WATER LEVEL
TWL	TOP WATER LEVEL
WL	WATER LEVEL
CL	CEILING LEVEL
GL	GROUND LEVEL
SL	SURFACE LEVEL
US	UNDERSIDE
COP	COPPER
CP	CHROME PLATED
UPVC	UNPLASTICIZED POLYVINIL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
SS	STAINLESS STEEL
VCP	VERIFIED CLAY PIPE
NY	NYLON
BR	BRASS
CI	CAST IRON
CICL	CAST IRON CONCRETE LINED
XLPE	CROSS LINKED POLYETHYLENE
HDPE	HIGH DENSITY POLYETHYLENE
GMS	GALVANISED MILD STEEL
FRC	FIBRE REINFORCED CEMENT
CIS	CAST IN SLAB
CIC	CAST IN COLUMNE
CIB	CAST IN BEAM
NTS	NOT TO SCALE
TBC	TO BE CONFIRMED
TBA	TO BE ADVISED
UNO	UNLESS NOTED OTHERWISE
SQ	SQUARE
mm	MILLIMETRES
m	METRES
m2	SQUARE METRES
m3	CUBIC METRES
/s	PER SECOND
/min	PER MINUTE
/h	PER HOUR
MJ	MEGA JOULE
L	LITRES
kW	KILOWATT
MIN	MINIMUM
MAX	MAXIMUM
APPR	APPROXIMATLY
kPa	KILOPASCALS
mHEAD	METRES HEAD
TBR	TO BE REMOVED
DIA	DIAMETER
FU	FIXTURE UNITS
FLU	FIXTURE LOADING UNITS
EX	EXISTING
AHD	AUSTRALIAN HEIGHT DATUM

GENERAL NOTES

- CONFIRM LOCATION, SIZE, CONDITION AND LEVELS OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK
- ALL WORK TO BE IN ACCORDANCE WITH SPECIFICATION, AUTHORITIES REQUIREMTS, BCA AND RELEVANT AUSTRALIAN STANDARDS (IN PARTICULARLY AS 3500)
- DISCONNECT, CAPP OFF AND REMOVE ALL EXISTING, REDUNDANT SERVICES TO AUTHORITIES APPROVAL
- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DOCUMENTS. ALL DISCREPANCIES SHALL BE REFERRED TO THE PROJECT MANAGER BEFORE PROCEEDING WITH THE WORK
- LOCATION OF ALL PIPEWORK IS DIGRAMMATIC ONLY FINAL LOCATION TO BE CO-ORDINATED ON SITE AND APPROVED BY THE PROJECT MANAGER PRIOR TO COMMENCEMENT OF ANY WORK

SEWER

TABLE 1: FIXTURES PIPE SIZES

FIXTURE	SIZE
WC	100
SHR	100 RISER / 50 TRAP & WASTE
B	40 TRAP & WASTE
BTH	40 TRAP & WASTE
FW	100 RISER / 85 TRAP & WASTE
KSK	50 TRAP & WASTE
CS	50 TRAP & WASTE

- ALL DRAINAGE TO BE MINIMUM 65mm
- ALL PIPEWORK TO BE 100mm UNO
- ALL VENT PIPES TO BE 100mm UNO

TABLE 2: DRAINAGE INSPECTION CHAMBER SIZES

MINIMUM INTERNAL MEASUREMENTS:				
DEPTH TO BASE OF CHAMBER	RECTANGULAR WIDTH	RECTANGULAR LENGTH	CIRCULAR	LADDER / STEP IRON
SMALLER THAN 600	450	600	600	NO
601 TO 900	600	900	900	NO
GREATER THAN 900	750	1200	1050	YES

STORMWATER

- ALL PIPEWORK TO BE 100mm @ 1% FALL UNO

TABLE 3: STORMWATER PIT SIZES

MINIMUM INTERNAL MEASUREMENTS:				
DEPTH TO BASE OF CHAMBER	RECTANGULAR WIDTH	RECTANGULAR LENGTH	CIRCULAR	LADDER / STEP IRON
SMALLER THAN 600	450	450	600	NO
601 TO 900	600	600	900	NO
901 TO 1200	600	900	1050	NO
GREATER THAN 1200	900	900	1050	YES

PRIVATE CERTIFIERS AUSTRALIA
Construction Cert. No: Approved Date
130093 30 MAY 2013
Certifying Authority: Grant Harrington
Accreditation No: BPB 0170

TENDER

CC DRAWING

TENDER & CC

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION

CLIENT: AVALON BEACH S.L.S.C

PROJECT DIRECTOR: ROBERT HOPTON

ARCHITECT: RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1586 fax (02) 9997 3266
email: markus@itmdesign.com.au

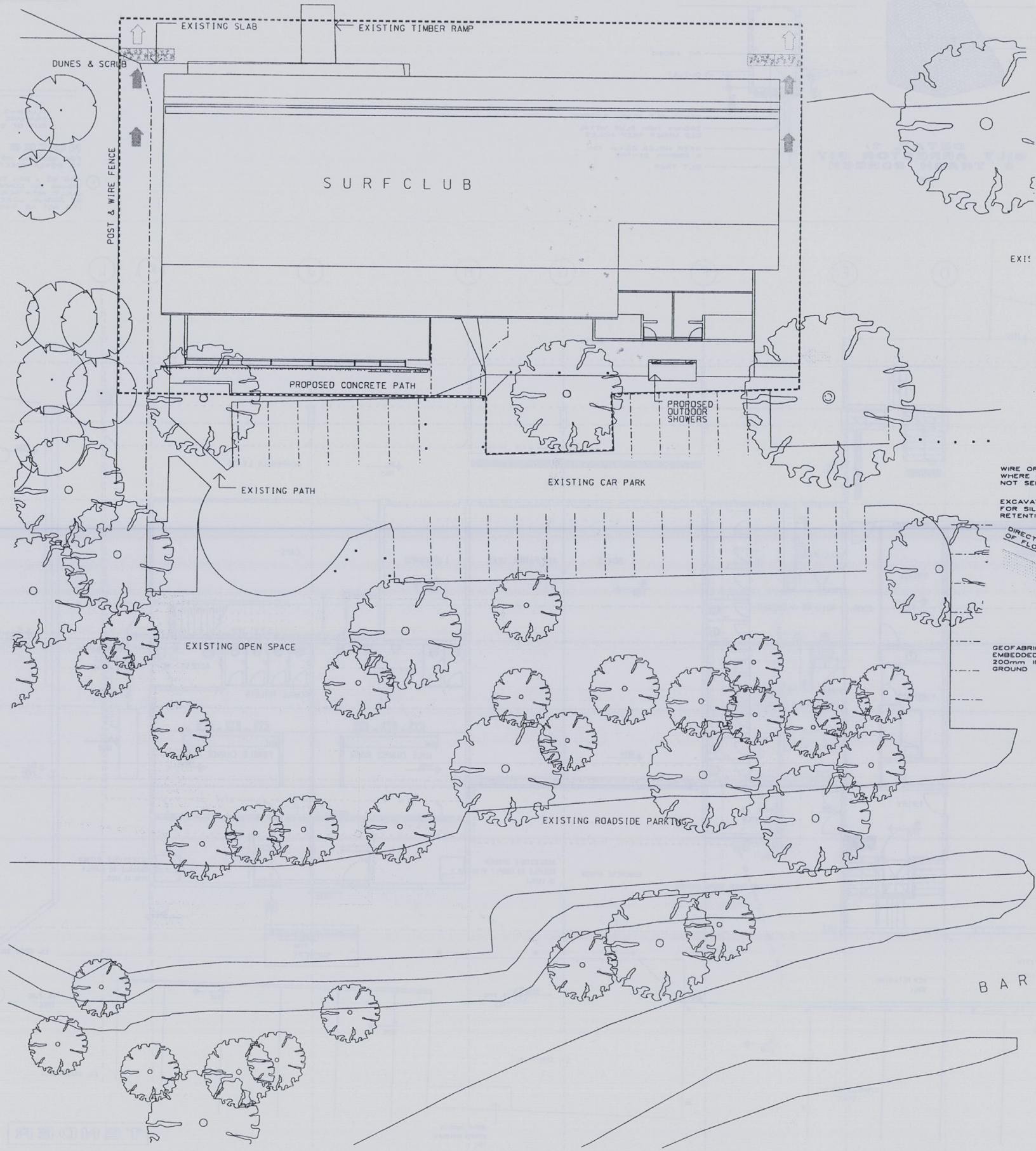
PROJECT: AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

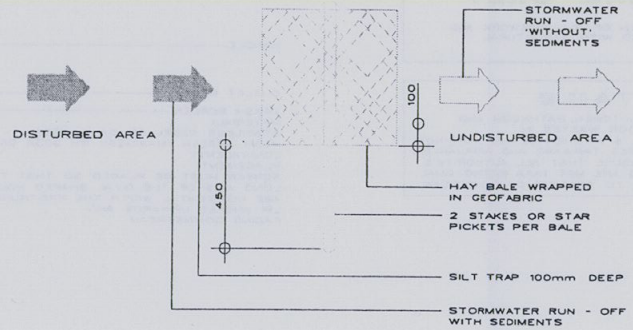
DRAWING TITLE: COVER SHEET AND LEGEND

SCALE: NTS
JOB No: 12 / 60
DISCIPLINE: HYD
DRAWING No: H - 00
REVISION: B

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

AVALON BEACH

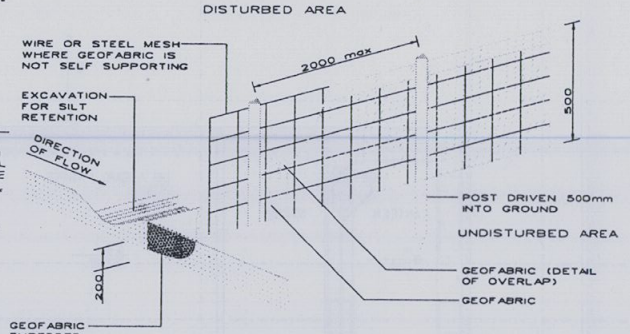




DETAIL 1:
HAY BALE BARRIER
NTS

EXI

INSTALL AS REQUIRED TO SUIT CONSTRUCTION PROGRESS



DETAIL 2:
SILT FENCE
NTS

NOTES
FOR GENERAL NOTES AND LEGEND REFER TO COVER SHEET

THERE IS CURRENTLY NO FIRE HYDRANT PROTECTION TO THE EXISTING BUILDING. NEW 100mm DIA SUPPLY PIPE REQUIRED. WATERMAIN IN AVALON PARADE IS THE NEAREST POINT OF CONNECTION ACCORDING TO SYDNEY WATER's SERVICES PRINT

AVALON PARADE

TENDER

TENDER & CC DRAWING

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	CC001
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION: A, B

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1555 fax (02) 9997 3255
email: markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

DRAWING TITLE
SITE HYDR. SERVICES AND SEDIMENTATION CONTROL

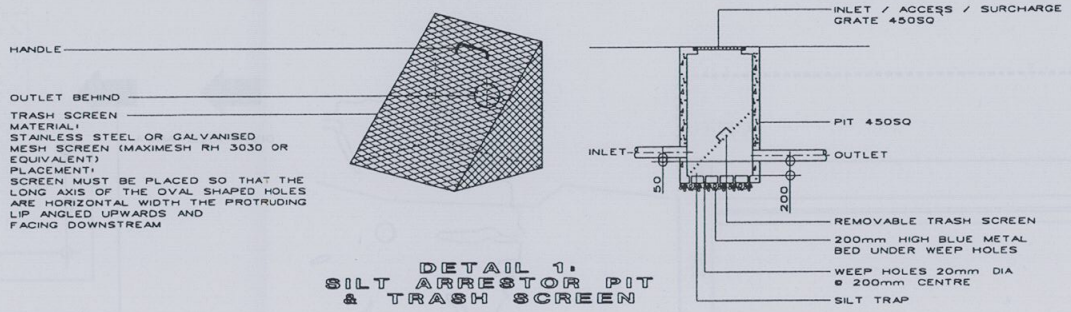
SCALE: 1:200 at A1
JOB No: 12/10
DISCIPLINE: HYD
DRAWING No: H - 01
REVISION: B

TENDER DRAWING ONLY

- NOT FOR CONSTRUCTION
- FINAL LOCATION AND CONFIGURATION OF ALL PIPEWORK AND EQUIPMENT TO BE CO - ORDINATED WITH STRUCTURAL LAYOUTS AND OTHER TRADES

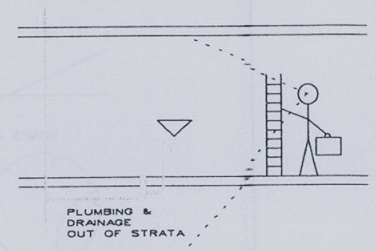
WET AREA DETAILS

- EXACT / FINAL LOCATION OF ALL KITCHEN, BATHROOM AND LAUNDRY FIXTURES, TAPS AND FLOOR WASTES IN ACCORDANCE WITH ARCHITECTURAL & KITCHEN DETAIL DRAWINGS
- OBTAIN EXACT LIST OF ALL FIXTURES, TAPWARE AND APPLIANCES FROM CONSTRUCTION MANAGER. ENSURE THAT ALL AUTHORITIES AND WATER SAVING REQUIREMENTS ARE MET (AAA RATING, DUAL FLUSH...). PAY SPECIAL ATTENTION TO SPECIFIC DA CONDITIONS



DETAIL 1
SILT ARRESTOR PIT & TRASH SCREEN
NTS

STRATA ZONE

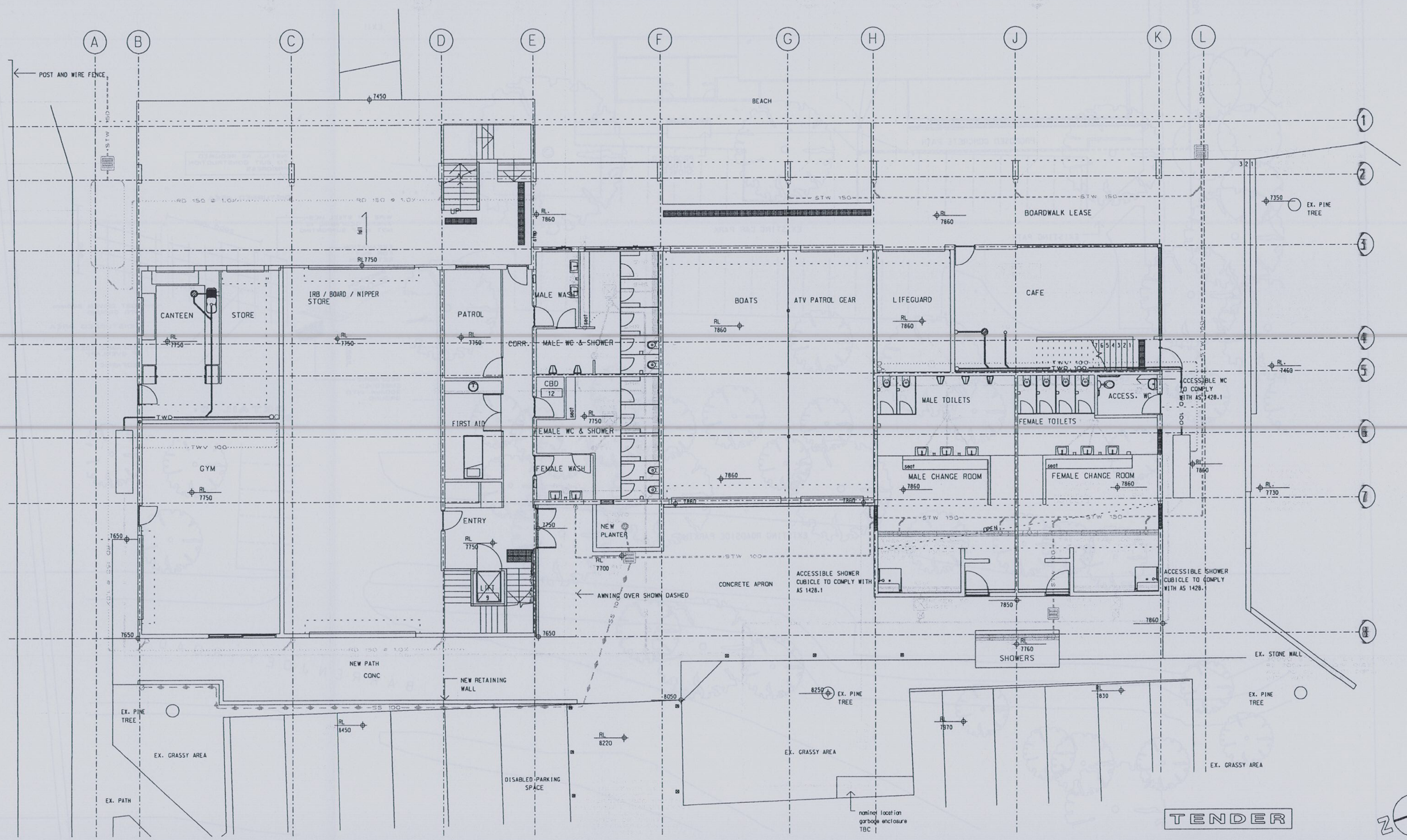


NOTES

FOR GENERAL NOTES AND LEGEND REFER TO COVER SHEET

(1) 450 SQ x 300 DEEP PIT WITH SLUD LID AND 100mm DIA CONNECTION PIPE. TOTRAPPED GULLY WITH SEALED LID. BASE OF PIT TO BE 300mm LOWER THAN OUTLETPIPE (TO ACT AS 'SAND TRAP')

APPLICATION WILL BE LODGED WITH SYDNEY WATER'S TRADE SECTION WITH THE AIM TO REMOVE THE REQUIREMENT FOR THE GREASE ARRESTOR.



TENDER

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND			DRAWING REVISION	
DISCIPLINE	COMPANY	DRAWING No	A	B
ARCH	R.COLE	CC004	D	I
ARCH	R.COLE			
SURVEY				
STRUCT				
MECH				
ELEC				
FIRE				

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1565 fax (02) 9997 3266
email markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

DRAWING TITLE
GROUND FLOOR SANITARY AND STORMWATER

SCALE 1:100 at A1

No 12 / 20

DISCIPLINE HYD

DRAWING No H - 02

REVISION B

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

TENDER & CC DRAWING

TENDER DRAWING ONLY

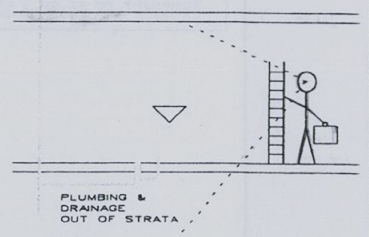
- NOT FOR CONSTRUCTION
- FINAL LOCATION AND CONFIGURATION OF ALL PIPEWORK AND EQUIPMENT TO BE CO - ORDINATED WITH STRUCTURAL LAYOUTS AND OTHER TRADES

WET AREA DETAILS

- EXACT / FINAL LOCATION OF ALL KITCHEN, BATHROOM AND LAUNDRY FIXTURES, TAPS AND FLOOR WASTES IN ACCORDANCE WITH ARCHITECTURAL & KITCHEN DETAIL DRAWINGS
- OBTAIN EXACT LIST OF ALL FIXTURES, TAPWARE AND APPLIANCES FROM CONSTRUCTION MANAGER. ENSURE THAT ALL AUTHORITIES AND WATER SAVING REQUIREMENTS ARE MET (AAA RATING, DUAL FLUSH...). PAY SPECIAL ATTENTION TO SPECIFIC DA CONDITIONS

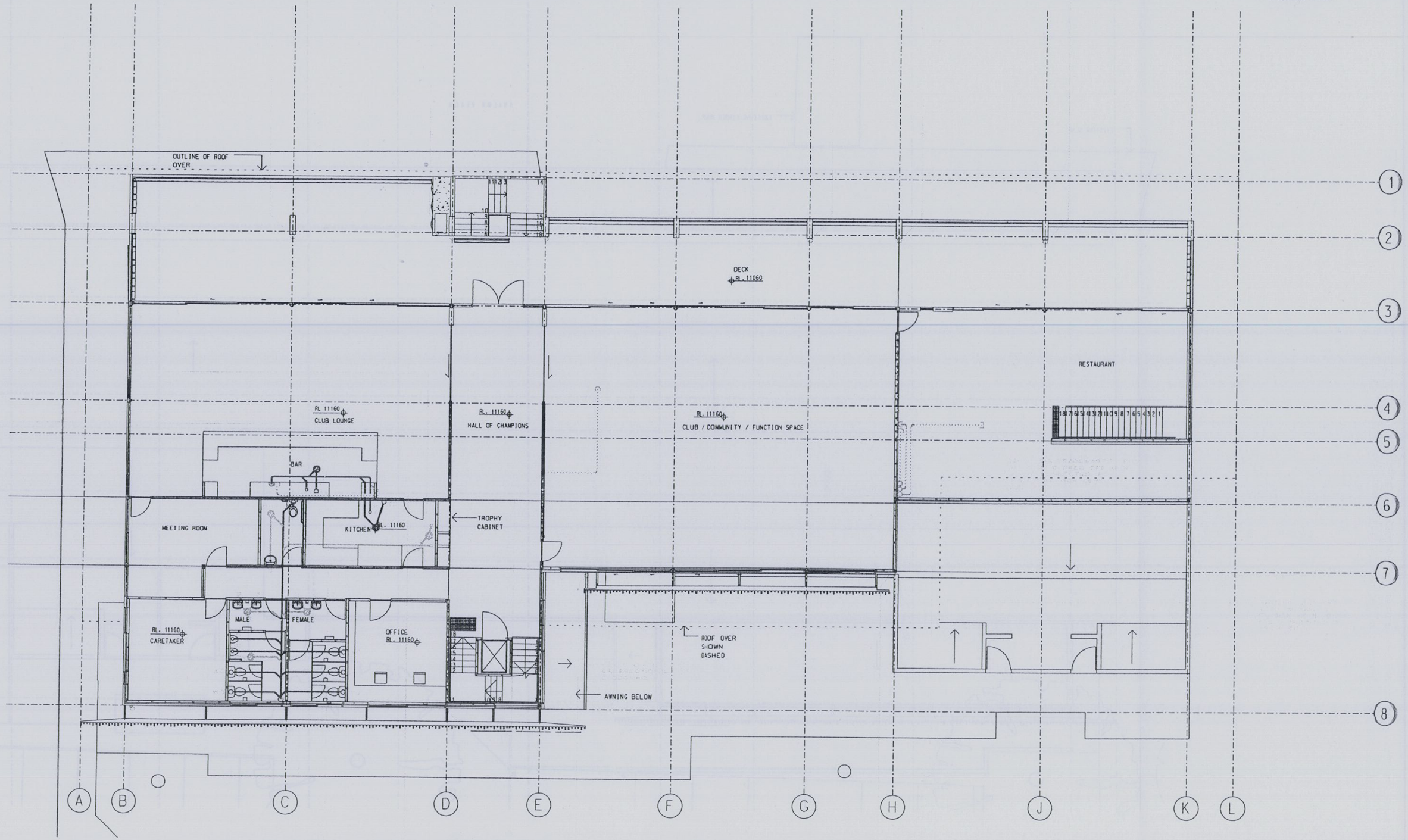
APPLICATION WILL BE LODGED WITH SYDNEY WATER's TRADE SECTION WITH THE AIM TO REMOVE THE REQUIREMENT FOR THE GREASE ARRESTOR.

STRATA ZONE



NOTES

FOR GENERAL NOTES AND LEGEND REFER TO COVER SHEET



TENDER

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	CC005
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION: A, B, D, I

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1555 fax (02) 9997 3255
email markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

DRAWING TITLE
FIRST FLOOR SANITARY AND STORMWATER

SCALE 1:100 at A1

JOB No 12 / 90

DISCIPLINE HYD

DRAWING No H - 03

REVISION B

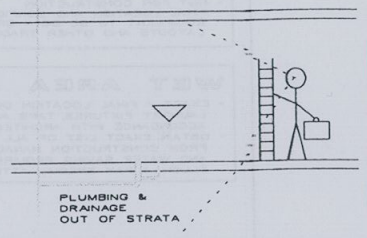
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

TENDER & CC DRAWING

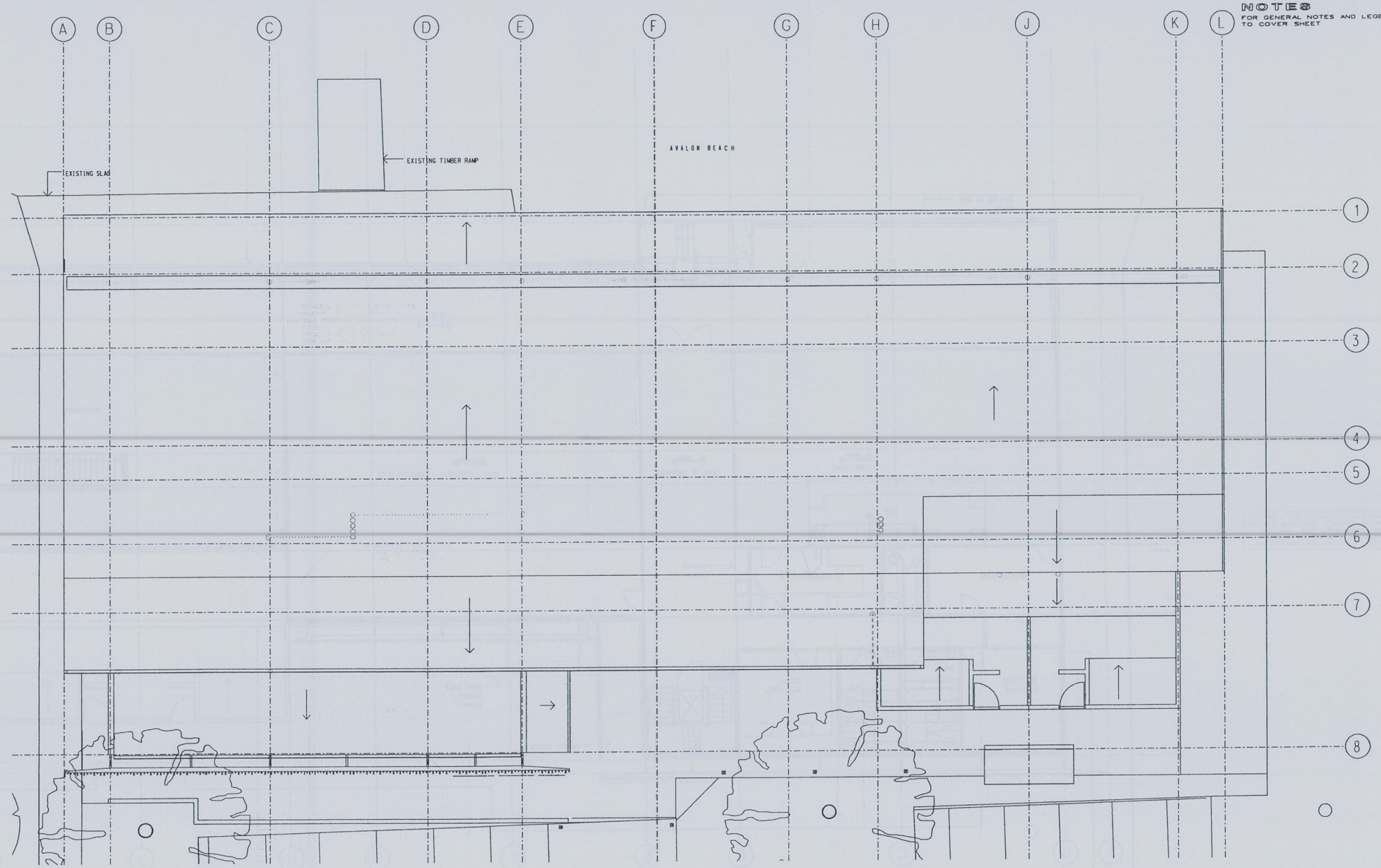
TENDER DRAWING ONLY

- NOT FOR CONSTRUCTION
- FINAL LOCATION AND CONFIGURATION OF ALL PIPEWORK AND EQUIPMENT TO BE CO - ORDINATED WITH STRUCTURAL LAYOUTS AND OTHER TRADES

STRATA ZONE



NOTES
FOR GENERAL NOTES AND LEGENDREFER TO COVER SHEET



TENDER

TENDER & CC DRAWING

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	09.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	CC005
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION: A D, B I

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1585 fax (02) 9997 3256
email marius@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
55&A BARRENJOEY ROAD

DRAWING TITLE
ROOF SANITARY AND STORMWATER

SCALE 1:100 at A1

JOB No 12/90

DISCIPLINE HYD

DRAWING No H - 04

REVISION B

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

TENDER DRAWING ONLY

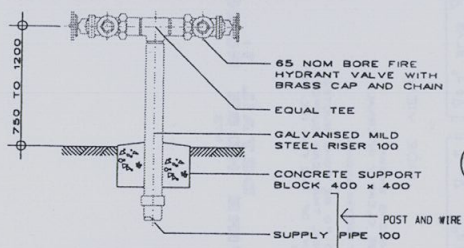
- NOT FOR CONSTRUCTION
- FINAL LOCATION AND CONFIGURATION OF ALL PIPEWORK AND EQUIPMENT TO BE CO - ORDINATED WITH STRUCTURAL LAYOUTS AND OTHER TRADES

WET AREA DETAILS

- EXACT / FINAL LOCATION OF ALL KITCHEN, BATHROOM AND LAUNDRY FIXTURES, TAPS AND FLOOR WASTES IN ACCORDANCE WITH ARCHITECTURAL & KITCHEN DETAIL DRAWINGS
- OBTAIN EXACT LIST OF ALL FIXTURES, TAPWARE AND APPLIANCES FROM CONSTRUCTION MANAGER. ENSURE THAT ALL AUTHORITIES AND WATER SAVING REQUIREMENTS ARE MET. (AAA RATING, DUAL FLUSH...). PAY SPECIAL ATTENTION TO SPECIFIC DA CONDITIONS

ALL HOSE COUPLINGS SHALL BE COMPATIBLE WITH THOSE USED BY THE FIRE BRIGADE SERVING THE AREA. STORZ HERMAPHRODITE COUPLINGS MUST BE FITTED TO ALL HYDRANTS.

BLANK CAPS MUST BE PROVIDED TO ALL HOSE COUPLINGS



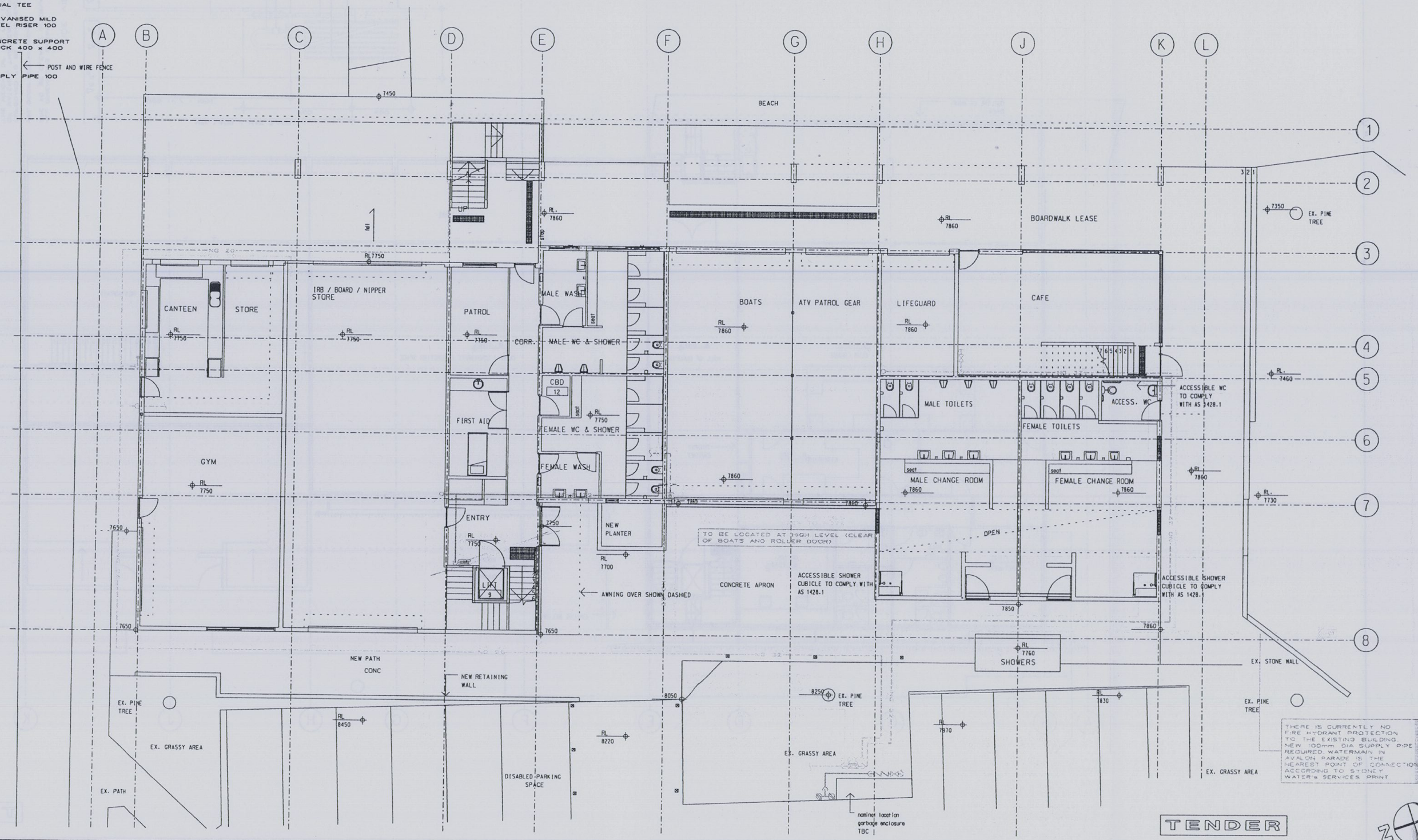
DETAIL 1.
FIRE HYDRANT
(DUAL PILLAR)
NTS

NOTES

FOR GENERAL NOTES AND LEGEND REFER TO COVER SHEET

(1) CONTINOUS FLOW GAS FIRED WATER HEATERS RHEEM MULTIPAK MODEL MPI02NK/50 (INTERNAL) COMPLETE WITH HORIZONTAL FLUE DISCHARGE PIPES THROUGH WALL, ISOLATION VALVES AND ASSOCIATED PIPEWORK TEMPERATURE SET AT 50 DEGREES
GAS SUPPLY: 410MJ/h
POWER SUPPLY: 240 VOLT GPO

FLUE TERMINATION IN ACCORDANCE WITH AS5601 (FIG.5.3)
- HORIZONTALLY - MIN 300mm FROM WINDOWS AND OPENINGS
- IN DIRECTION OF DISCHARGE- MIN 500mm CLEAR AREA
- VERTICALLY -1500mm BELOW WINDOWS AND OPENINGS
- ABOVE TRAFFICABLE AREAS - 2000mm
- BELOW EAVES OR BALCONIES OR OTHER PROJECTIONS - 300mm



TENDER

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND			DRAWING REVISION					
DISCIPLINE	COMPANY	DRAWING No	A	B				
ARCH	R.COLE	CC004	D	I				
ARCH	R.COLE							
SURVEY								
STRUCT								
MECH								
ELEC								
FIRE								

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1680
tel (02) 9997 1566 fax (02) 9997 3266
email: markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

DRAWING TITLE
GROUND FLOOR WATER AND GAS

SCALE 1:100 at A1
JOB No 12 / 00
DISCIPLINE HYD
DRAWING No H - 005
REVISION B

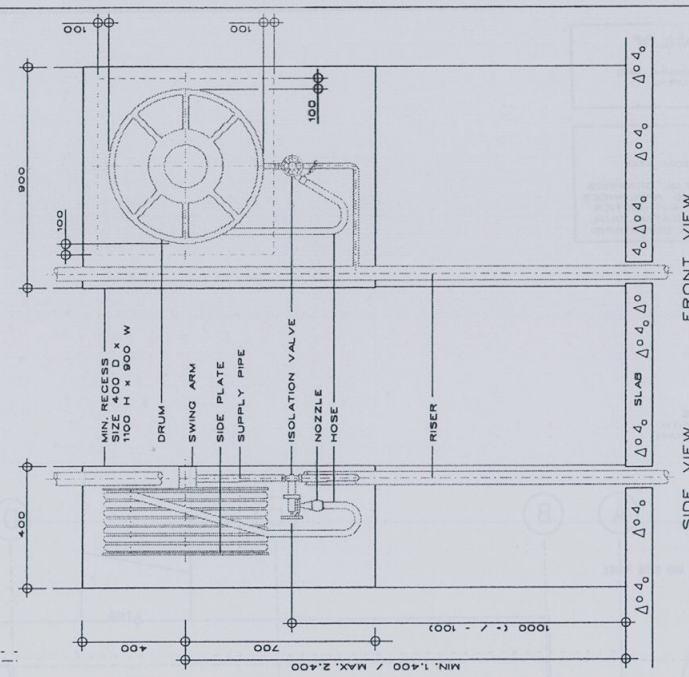
C DRAWING
TENDER & CC

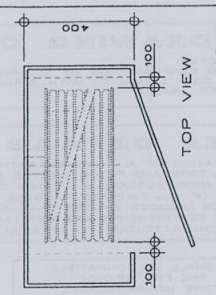
TENDER DRAWING ONLY

- NOT FOR CONSTRUCTION
- FINAL LOCATION AND CONFIGURATION OF ALL PIPEWORK AND EQUIPMENT TO BE CO - ORDINATED WITH STRUCTURAL LAYOUTS AND OTHER TRADES

WET AREA DETAILS

- EXACT / FINAL LOCATION OF ALL KITCHEN, BATHROOM AND LAUNDRY FIXTURES, TAPS AND FLOOR WASTES IN ACCORDANCE WITH ARCHITECTURAL & KITCHEN DETAIL DRAWINGS
- OBTAIN EXACT LIST OF ALL FIXTURES, TAPWARE AND APPLIANCES FROM CONSTRUCTION MANAGER. ENSURE THAT ALL AUTHORITIES AND WATER SAVING REQUIREMENTS ARE MET (AAA RATING, DUAL FLUSH...). PAY SPECIAL ATTENTION TO SPECIFIC DA CONDITIONS





NOTES

FOR GENERAL NOTES AND LEGEND REFER TO COVER SHEET

FIRE DETAIL 1

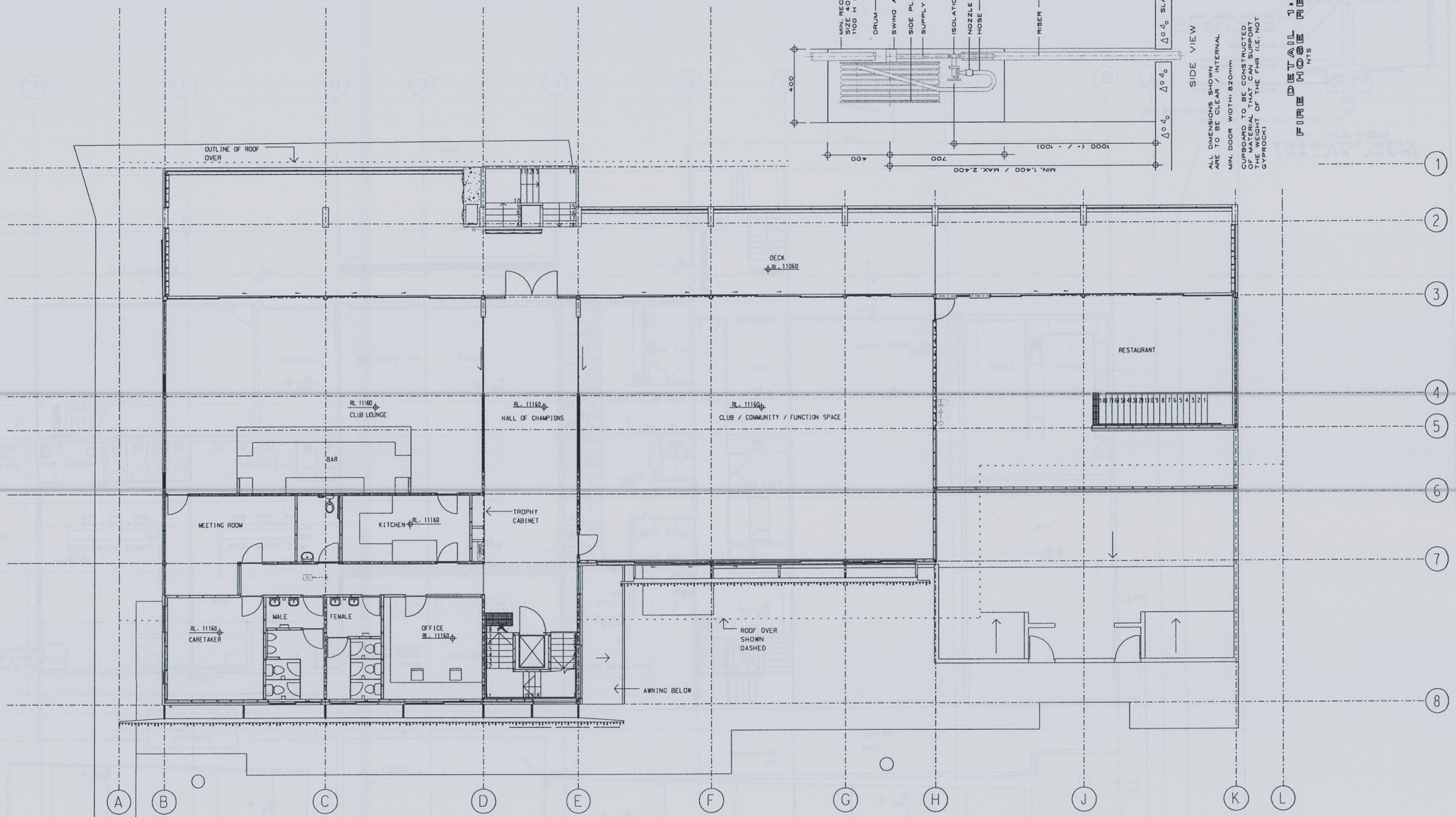
FIRE HOSE REEL

NTS

ALL DIMENSIONS SHOWN ARE TO BE CLEAR / INTERNAL

MIN. DOOR WIDTH 820mm

CUPBOARD TO BE CONSTRUCTED TO SUPPORT THE WEIGHT OF THE FHR (IE. NOT GYPROCK)



TENDER

TENDER & CC DRAWING

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	CC005
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION: A B D I

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1555 fax (02) 9997 3266
email: markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB

558A BARRENJOEY ROAD

DRAWING TITLE
FIRST FLOOR WATER AND GAS

SCALE 1:100 at A1

JOB No 12 / 50

DISCIPLINE HYD

DRAWING No H - 005

REVISION B

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SPECIFICATION

1. PREAMBLE

SCOPE OF WORKS

THE WORK UNDER THIS SECTION COVERS THE COMPLETE DESIGN, SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF THE FOLLOWING SYSTEMS:

- SANITARY DRAINAGE
- STORMWATER DRAINAGE
- SUBSOIL DRAINAGE
- TRADE WASTE DRAINAGE
- SANITARY PLUMBING
- STORMWATER PLUMBING
- FIXTURES AND FAUCETS
- COLD, HOT AND WARM WATER
- NATURAL GAS
- FIRE HOSE REELS
- FIRE HYDRANTS
- PLANT AND EQUIPMENT

EXISTING SERVICES

PAY ALL FEES AND CHARGES, LIAISE WITH RELEVANT AUTHORITIES FOR ALL NEW CONNECTIONS TO EXISTING SERVICES.

ALLOW TO DISCONNECT AND REMOVE ALL EXISTING, REDUNDANT SERVICES IN ACCORDANCE WITH AUTHORITIES REQUIREMENTS.

VERIFY AND CHECK THE EXTENT, SIZE AND LOCATION OF EXISTING SERVICES THAT NEED DISCONNECTION, REMOVAL, DIVERSION, ALTERATIONS PRIOR TO COMMENCEMENT OF ANY WORKS.

AUTHORITIES AND STANDARDS

ALL WORKS UNDERTAKEN OR PROVIDED AS PART OF THIS CONTRACT SHALL COMPLY, BUT NOT BE LIMITED, WITH THE MATERIAL, WORKMANSHIP, INSTALLATION AND COMMISSIONING REQUIREMENTS AS SPECIFIED BY AUTHORITIES HAVING JURISDICTION, RELEVANT STANDARDS AND CODES.

SUBMIT COMPLIANCE AND COMPLETION CERTIFICATES PRIOR OF APPLICATION FOR FINAL PAYMENT.

TENDER DRAWINGS

ALL DRAWINGS ARE DIAGRAMMATIC AND ISSUED AS A GUIDE ONLY. THEY SHALL BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTS PREPARED BY THE ARCHITECT AND OTHER CONSULTANTS.

AS INSTALLED DRAWINGS AND MAINTENANCE MANUALS

ON COMPLETION OF THE WORKS, SUPPLY TWO SETS OF 'AS INSTALLED' DRAWING(S) AND 'MAINTENANCE MANUALS':

THE DRAWING(S) SHALL INDICATE THE LOCATION OF ALL PIPEWORK, PITS, VALVES, PLANT AND EQUIPMENT.

THE MANUAL SHALL INCLUDE ALL WARRANTIES AND OUTLINE ALL MAINTENANCE, SERVICE AND INSPECTION REQUIREMENTS.

MATERIAL AND WORKMANSHIP

ALL MATERIALS SHALL BE NEW, OF FIRST QUALITY AND COMPLY WITH ALL RELAVANT STANDARDS, CODES AND AUTHORITIES REQUIREMENTS.

INSPECTION AND TESTING

ALL PIPEWORK AND PLANT SHALL BE TESTED IN ACCORDANCE WITH RELAVANT STANDARDS, MANUFACTURERS REQUIREMENTS AND AUTHORITIES HAVING JURISDICTION.

SUFFICIENT NOTICE SHALL BE GIVEN, SO THAT DESIGNATED TESTS CAN BE WITNESSED AND NECESSARY INSPECTION CAN BE CARRIED OUT.

ALTERNATIVES

GENERALLY ADHERE TO THE TYPES OF MATERIAL AND EQUIPMENT DETAILED IN THE DRAWINGS AND SPECIFICATION.

ALTERNATIVES MIGHT BE CONSIDERED AS LONG AS THEY ARE EQUAL AND CONFIRM WITH RELVANT STANDARDS AND REQUIREMENTS.

SUBMIT PROPOSED ALTERNATIVES FOR APPROVAL PRIOR TO INSTALLATION.

PROTECTION OF WORKS, EXISTING SERVICES AND STRUCTURES

BE RESPONSIBLE FOR THE PROTECTION OF ALL WORKS, EXISTING SERVICES AND STRUCTURES IN PARTICULAR:-

- SUPPLY COVERS FOR OPEN ENDS OF PIPEWORK, PLANT AND EQUIPMENT
- PROTECT PRIVATE AND PUBLIC PROPERTY (INCLUDING 'MAKE GOOD DAMAGE')

DEFECTS LIABILITY

BE RESPONSIBLE FOR THE RECTIFICATION AND / OR REPLACEMENT OF DEFECTS AND EQUIPMENT (DUE TO FAULTY MATERIALS AND / OR WORKMANSHIP) FOR A PERIOD AS SPECIFIED IN THE HEADCONTRACT (AFTER PRACTICAL COMPLETION).

CORE HOLES AND FIRE STOPPING

SET OUT ALL CORE HOLES AND SLEEVES IN SLABS AND BEAMS.

INSTALL APPROVED FIRE STOP COLLARS TO ACHIEVE / MAINTAIN THE REQUIRED FIRE RATING WHERE PLASTIC PIPES PASS THROUGH FIRE RATED WALLS AND STRUCTURES

ON COMPLETION

FLUSH AND REMOVE ALL DEBRIS WITHIN THE WHOLE SYSTEM AND ROD ALL INGROUND DRAINAGE LINES

NOISE AND VIBRATION

BE RESPONSIBLE FOR THE ELIMINATION OF SYSTEM NOISE AND WATER HAMMER. TAKE SPECIAL CARE TO AVOID TRANSMISSION OF VIBRATION USING FLEXIBLE CONNECTIONS AND SUPPORT BRACKETS WITH RUBBER INSERTS.

FIXING AND SUPPORT

ALL PIPES SHALL BE ADEQUATELY SUPPORTED AND SECURED TO ADJACENT WALLS AND SLABS AND MUST NOT COME IN CONTACT WITH OTHER SERVICES AND / OR BUILDING STRUCTURE.

THEY HAVE TO BE FIXED IN A MANNER THAT ALLOWS FREE MOVEMENT AND EXPANSION WITHOUT CAUSING STRESS IN THE PIPEWORK AND / OR ITS JOINTS.

SUPPLY AND INSTALL ALL BRACKETS AND HANGERS IN APPROPRIATE SPACING DISTANCES IN ACCORDANCE WITH RELEVANT STANDARDS AND MANUFACTURERS REQUIREMENTS.

PIPE IDENTIFICATION AND PAINTING

ALL PIPES SHALL BE ADEQUATELY IDENTIFIED AND LABELLED IN ACCORDANCE WITH AS 1345

WORK BY OTHERS

THE FOLLOWING WORK ASSOCIATED WITH THE HYDRAULIC SERVICES HAS TO BE PROVIDED BY OTHER TRADES:

BUILDER:

- ACCESS AND INSPECTION PANELS
- CUTTING HOLES IN FINISHED SURFACES (SUCH AS KITCHEN AND VANITY CUPBOARDS)
- SHOWER BASES AND NOBS INCLUDING SEALING OF ALL WET AREAS FLOORS
- FORMING OF SPOON AND CHANNEL DRAINS COMPLETE WITH FALL TO OUTLETS
- CONCRETE PLINTHS FOR PLANT AND EQUIPMENT
- BOXING AND CONCEALING OF ALL PIPEWORK
- BALCONY AND ROOF STORMWATER SAFETY OVERFLOWS
- SIGNAGE

ROOF CONTRACTOR:

- GUTTERS AND SUMPS
- ROOF PENETRATIONS AND FLASHING

ELECTRICAL CONTRACTOR:

- POWER SUPPLY TO ALL PLANT AND EQUIPMENT AS SPECIFIED

ALLOW TO CO-ORDINATE ALL REQUIREMENTS WITH THE PROJECT MANAGER AND OTHER TRADES

2. DRAINAGE

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 3500.2.
- NSW CODE OF PRACTICE PLUMBING AND DRAINAGE
- AS 3500.3.
- COUNCIL STORMWATER POLICY

EXCAVATION AND TRENCHES

ALLOW FOR ALL EXCAVATION WORK REQUIRED FOR INSTALLATION OF THE DRAINAGE SYSTEMS.

TRENCHES SHALL BE PARALLEL WITH THE DESIGN INVERT OF THE PIPE AND EXTEND MIN. 100mm FROM EITHER OUTSIDE EDGE OF THE PIPE(S) TO THE INNERMOST FACE OF THE TRENCH.

BACKFILLING

THE DRAINAGE PIPEWORK SHALL BE INSPECTED BY THE PROJECT MANAGER AND / OR THE RELEVANT AUTHORITIES PRIOR TO ANY BACKFILLING

ALL PIPES SHALL HAVE A MIN. COVER OF 300mm, EXCEPT WHERE A COVER OF STRUCTURALLY REINFORCED CONCRETE IS PROVIDED, ALL IN ACCORDANCE WITH AS 3500.2.2 CLAUSE 3.7
BEDDING MATERIAL SHALL BE ADEQUATE TO CONTINUOUSLY SUPPORT THE INSTALLED PIPE AND TO ACCOMMODATE EXPECTED LOADS FROM THE PIPE AND SURROUNDING GROUND AND STRUCTURES.
ALL BEDDING MATERIALS IN ACCORDANCE WITH AS 3500.2.2 CLASUE 5.4
DO NOT LAY DRAINAGE PIPEWORK ON FILLED GROUND
EXCAVATED MATERIAL FROM THE TRENCH CAN BE USED FOR BACKFILLING AS LONG AS IT IS FREE FROM ROCK AND / OR HARD MATTER LARGER THAN 25mm. ALLOW TO CAREFULLY BACKFILL AND COMPACT ALL TRENCHES (IN INCREMENTS OF MAX. 300mm)

LAY ALL SUBSOIL DRAINAGE PIPES ON 50mm BED OF BLUE METAL, BACKFILL TO TOP OF BULK EXCAVATION LEVEL WITH BLUE METAL AND WRAPP IN GEOFABRIC.

PAY SPECIAL ATTENTION TO UNSTABLE AND / OR WATERCHARGED GROUND CONDITIONS (CAST IRON AND / OR PIER BEAM CONSTRUCTION MIGHT BE REQUIRED

CLEAROUTS AND INSPECTION OPENINGS

INSTALL 100mm DIA BRASS CLEAROUTS AND INSPECTION OPENINGS AS REQUIRED EXTENDING TO FINISHED SURFACE LEVEL USING A 60 DEGREE JUNCTION AND A 30 DEGREE BEND.

STORMWATER OUTLETS

ALL STORMWATER OUTLETS SHALL BE EQUAL TO 'SPS TRUFLO' COMPLETE WITH GRATE AS SPECIFIED BY ARCHITECT

3. SANITARY PLUMBING

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 3500.2
- NSW CODE OF PRACTICE PLUMBING AND DRAINAGE

EXPANSION JOINTS

EXPANSION JOINTS SHALL BE INSTALLED IN SUCH MANNER THAT AXIAL MOVEMENT WITH ADJACENT SECTIONS OF THE PIPE TO THE EXTENT OF 8mm IN EITHER DIRECTION IS POSSIBLE.

HORIZONTAL PIPES:
INSTALL EXPANSION JOINTS ON HORIZONTAL PIPES IN EXCESS OF 6m LENGTH, WHERE FIXED AT CLOSER INTERVALS: BETWEEN EVERY TWO FIXED SUPPORTS THAT ARE MORE THAN 2m APART.

VERTICAL PIPES:
INSTALL EXPANSION JOINTS AT THE BASE AND AT EVERY ALTERNATE FLOOR LEVEL

INSPECTION OPENINGS AND GATES

INSTALL INSPECTION OPENINGS IN PIPES SO THAT EACH SECTION IS ACCESSBLE IN AT LEAST ONE DIRECTION AND TEST GATE AT BASE OF EACH STACK.

FIXTURE TRAPS

FIXTURE TRAPS SHALL BE OF THE SAME SIZE AS THE FIXTURE OUTLET

- CONCEALD TRAPS SHALL BE UPVC / HDPE
- EXPOSED TRAPS SHALL BE CHROME PLATED COPPER

FLOOR WASTES

FLOOR WASTES SHALL CONSIST OF A 100mm WATERTIGHT RISER COMPLETE WITH GRATE (AS SPECIFIED BY ARCHITECT) SET AT A LEVEL TO ENSURE CORRECT DRAINAGE OF THE FLOOR AREA

VENT TERMINATIONS

INSTALL UPTURNED FLASHING TO ALL VENT PIPES PASSING THROUGH ROOFS COMPLETE WITH COWL AT EACH TERMINATION

4. RAINWATER PLUMBING

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 3500.3
- COUNCIL STORMWATER POLICY

INSPECTION OPENINGS AND GATES

INSTALL INSPECTION OPENINGS IN PIPES SO THAT EACH SECTION IS ACCESSBLE IN AT LEAST ONE DIRECTION AND TEST GATE AT BASE OF EACH DOWNPIPE

5. FIXTURES AND FAUCETS

ALLOW TO SUPPLY AND INSTALL ALL FIXTURES AND FAUCETS AS SPECIFIED BY THE ARCHITECT AND SHOWN ON THE DRAWING(S) COMPLETE WITH CONNECTION TO THE WATER SYSTEM

6. COLD, HOT AND WARM WATER

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 3500.1
- AS 3500.4.
- NSW CODE OF PRACTICE WATER AND HOT WATER SUPPLY
- AS 3501

DESIGN CRITERIAS

- PIPE VELOCITY: 1.5 - 1.8 m/s
- OPERATING PRESSURE: 250 to 500 kPa
  (PRESSURE LIMITING VALVES REQUIRED FOR PRESSURES GREATER THAN 500kPa)
- WARM WATER TEMPERATURE: 50 DEGREE TO ALL FIXTURES

CONNECTION POINTS

PROVIDE AND INSTALL BSP BRASS MALE THREAD AT THE WALL COMPLETE WITH CHROME PLATED COVER PLATES

ISOLATION VALVES

SUPPLY AND INSTALL EASY ACCESSIBLE ISOLATION VALVES ('JOHNS' OR APPROVED EQUAL) FOR EACH GROUP OF FIXTURES (CHROME PLATED RECCESS COCKS WHERE LOCATED IN WALLS IN EXPOSED LOCATIONS)

VALVES GENERALLY

- SUPPLY AND INSTALL CAST IRON PATH BOX WITH HINGED LID WHERE VALVES ARE LOCATED BELOW GROUND
- VALVES 50mm AND ABOVE SHALL BE FLANGED
- VALVES UNDER 50mm SHALL BE SCREWED BSP

EXPANSION

ALLOW FOR SUFFICIENT OFFSETTING AND LOOPS OF HOT WATER PIPEWORK TO COMPENSATE FOR LENGTH INCREASES FROM THERMAL PIPE EXPANSION

INSULATION

ALL HOT AND WARM WATER LINES SHALL BE INSULATED AS FOLLOWS:
IN ACCORDANCE WITH AS 3500.4 (SECTION 8)

COLD WATER:
INSULATE ALL COLD WATER PIPEWORK LICATED IN WALL CHASES WITH 'KEMLAG' / 'THERMOTEC' (OR APPROVED EQUAL)

TESTING AND COMMISSIONING

ALLOW FOR SUFFICIENT TESTING IN ACCORDANCE WITH AS/NZS 3500.1.2 SECTION 13

- WATER SERVICES SHALL NOT SHOW ANY SIGN OF LEAKAGE WHEN SUBJECT TO HYDROSTATIC PRESSURE OF 1500kPa FOR A PERIOD OF NOT LESS THAN 30 min.

ALLOW TO COMMISSION THE WHOLE SYSTEM INCLUDING PIPEWORK, PLANT, BALANCING, FLOW, PRESSURE AND TEMPERATURE ON COMPLETION

7. NATURAL GAS

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 5601
- SUPPLY AUTHORITY REQUIREMENTS

REGULATOR AND METER ASSEMBLY

PAY ALL FEES AND CHARGES. LIAISE WITH THE SUPPLY AUTHORITY TO ORGANIZE THE INCOMING GAS SUPPLY AND TO OBTAIN THE MASTER GAS METER / REGULATOR ASSEMBLY

INSTALLATION OF APPLIANCES

ENSURE THAT ALL APPLIANCES ARE APPROVED BY THE SUPPLY AUTHORITY PRIOR TO CONNECTING TO THE GAS SYSTEM.

INSTALL APPROVED ISOLATION VALVE AT INLET TO EACH APPLIANCE.

INCOMING SUPPLY PIPE

THE INCOMING SUPPLY PIPE SHALL TERMINATE 225mm BEYOND THE BOUNDARY WITH AN APPROVED VALVE IN A PATH BOX AS INDICATED ON THE DRAWING(S)

VENTILATION

PROVIDE ADEQUATE VENTILATION TO ALL APPLIANCES, METERS AND REGULATORS IN ACCORDANCE WITH AUTHORITIES REQUIREMENTS

TESTING AND COMMISSIONING

ALLOW FOR SUFFICIENT TESTING IN ACCORDANCE WITH AG 601 SECTION 2.6.

ALLOW TO COMMISSION THE WHOLE SYSTEM INCLUDING PIPEWORK, PLANT, FLOW AND PRESSURE ON COMPLETION

8. FIRE HYDRANT & HOSE REEL

STANDARDS, REGULATIONS AND REQUIREMENTS

THIS SECTION SHALL COMPLY (BUT NOT BE LIMITED) TO:

- AS 2419.1
- AS 2441
- BCA
- NSW FIRE BRIGADES & COUNCIL REGULATIONS

ISOLATION VALVES

SUPPLY AND INSTALL EASY ACCESSIBLE ISOLATION VALVES AS INDICATED AND REQUIRED (USE MONITORED VALVES WHERE INDICATED)

VALVES GENERALLY

- SUPPLY AND INSTALL CAST IRON PATH BOX WITH HINGED LID WHERE VALVES ARE LOCATED BELOW GROUND
- VALVES 50mm AND ABOVE SHALL BE FLANGED
- VALVES UNDER 50mm SHALL BE SCREWED BSP

HYDRANT LANDING VALVES

LANDING VALVES SHALL COMPRISE 65mm DIAMETER STANDARD ALL BRONZE LANDING VALVES SUITABLE FOR CONNECTION BY THE FIRE BRIGADE. POSITION VALVE CENTRE LINE 750m ABOVE FINISH FLOOR LEVEL AND ALLOW OUTLETS AND TO MEET WITH THE APPROVAL OF THE AUTHORITIES.
THE HANDWHEEL OF THE VALVE TO BE 100mm CLEAR OF ANY OBSTRUCTION.

BLOCKPLAN

ALLOW TO SUPPLY AND INSTALL HYDRANT BLOCKPLAN (ON PHOTO SENSITISED ALUMINIUM) ADJACENT TO BOOSTER VALVE ASSEMBLY

HOSE REEL

EACH FIRE HOSE REEL SHALL BE WALL MOUNTED WITH SWIVEL HOSE GUIDE COMPLETE WITH ALL FITTINGS INCLUDING GLOBE VALVE AND CONTAINING 36m LENGTH OF 20mm INTERNAL DIAMETER FABRIC REINFORCED RUBBER HOSE

EXPANSION

ALLOW FOR SUFFICIENT OFFSETTING AND LOOPS OF HOT WATER PIPEWORK TO COMPENSATE FOR LENGTH INCREASES FROM THERMAL PIPE EXPANSION

TESTING AND COMMISSIONING

ALLOW FOR SUFFICIENT TESTING IN ACCORDANCE WITH AS/NZS 3500.1.2 SECTION 13

- WATER SERVICES SHALL NOT SHOW ANY SIGN OF LEAKAGE WHEN SUBJECT TO HYDROSTATIC PRESSURE OF 1500kPa FOR A PERIOD OF NOT LESS THAN 30 min.

ALLOW TO COMMISSION THE WHOLE SYSTEM INCLUDING PIPEWORK, PLANT, BALANCING, FLOW AND PRESSURE ON COMPLETION

SERVICE	MATERIAL			
	ABBREVIATION	DESCRIPTION	STANDARD	NOTES
STORMWATER DRAINAGE	UPVC	UNPLASTICIZED POLYVINIL CHLORIDE	- AS 1254 - AS 1260 - AS 2032	- BELOW GROUND - ABOVE GROUND - INSTALLATION
	RCP	REINFORCED CONCRETE	- AS 4058 - AS 3725	CLASS 4 UNO LAYING
	HDPE	HIGH DENSITY POLYETHYLENE	INSTALLED IN ACCORDANCE WITH MANUFACTURERS (VINIDEX / GEBERIT) REQUIREMENTS	
	FRC	FIBRE REINFORCED CEMENT	- AS 4139 - AS 3725	- CLASS 4 UNO - LAYING & INST.
SEWER DRAINAGE	UPVC (DWV)	UNPLASTICIZED POLYVINIL CHLORIDE	- AS 1254 - AS 1260 - AS 2032	- BELOW GROUND - ABOVE GROUND - INSTALLATION
	HDPE	HIGH DENSITY POLYETHYLENE	INSTALLED IN ACCORDANCE WITH MANUFACTURERS (VINIDEX / GEBERIT) REQUIREMENTS	
	FRC	FIBRE REINFORCED CEMENT	- AS 4139 - AS 3725	- CLASS 4 UNO - LAYING & INST.
SUBSOIL	PERFORATED UPVC	UNPLASTICIZED POLYVINIL CHLORIDE	- AS 1254 - AS 2032	- BELOW GROUND - INSTALLATION
	DRAINAGE CELL	'ATLANTIS' (OR APPROVED EQUAL) INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND REQUIREMENTS		
TRADE WASTE DRAINAGE	HDPE	HIGH DENSITY POLYETHYLENE	INSTALLED IN ACCORDANCE WITH MANUFACTURERS (VINIDEX / GEBERIT) REQUIREMENTS (max. 82°)	
SANITARY & STORMWATER PLUMBING	CO	COPPER	AS 1432 TABLE 2 (TYPE 'A' & 'B')	
	UPVC	UNPLASTICIZED POLYVINIL CHLORIDE	- AS 1260 - AS 2032	
	HDPE	HIGH DENSITY POLYETHYLENE	INSTALLED IN ACCORDANCE WITH MANUFACTURERS (VINIDEX / GEBERIT) REQUIREMENTS (max. 82°)	
POTABLE WATER SERVICES	CO	COPPER	AS 1432 TABLE 2 (TYPE 'B')	
	XLPE	CROSS LINKED POLYETHYLENE (REHAU)	INSTALLED IN ACCORDANCE WITH MANUFACTURERS (REHAU) REQUIRMENTS / DIN 16892	
GAS SERVICES	CO	COPPER	AS 1432 TABLE 2 (TYPE 'B')	
FIRE HOSE REEL SERVICES	CO	COPPER	AS 1432 TABLE 2 (TYPE 'B')	
FIRE HYDRANT SERVICES	CO	COPPER	AS 1432 TABLE 2 (TYPE 'B')	BELOW GROUND INSTALLATION ONLY
	GMS	GALVANISED MILD STEEL	AS1074	DOWNSTREAM OF DOUBLE CHECK VALVE

TENDER

REV	DESCRIPTION	DATE
B	RE - ISSUED FOR TENDER AND CC	14.11.12
A	ISSUED FOR TENDER AND CC	12.10.12

LIST OF REFERENCE DRAWINGS USED AS BACKGROUND

DISCIPLINE	COMPANY	DRAWING No
ARCH	R.COLE	
ARCH	R.COLE	
SURVEY		
STRUCT		
MECH		
ELEC		
FIRE		

DRAWING REVISION

CLIENT
AVALON BEACH S.L.S.C

PROJECT DIRECTOR
ROBERT HOPTON

ARCHITECT
RICHARD COLE ARCHITECTURE

itmdesign pty ltd
consulting hydraulic engineers
unit 5 / 3 apollo st, warriewood nsw 2102
po box 1438 mona vale nsw 1660
tel (02) 9997 1566 fax (02) 9997 3265
email: markus@itmdesign.com.au

PROJECT
AVALON BEACH SURF AND LIFESAVER CLUB
558A BARRENJOEY ROAD

DRAWING TITLE
SPECIFICATION

SCALE: NTS
JOB No: 12 / 20
DISCIPLINE: HYD
DRAWING No: H - 07
REVISION: B

TENDER & CC DRAWING

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

AVALON BEACH SURF LIFE SAVING CLUB

558A BARRENJOEY ROAD, AVALON

DEVELOPMENT APPLICATION LOT 202 DP 1107408

DRAWING LIST	
DRAWING NUMBER	DRAWING NAME
DA2000	SITE PLAN
DA2001	GROUND FLOOR PLAN
DA2002	LEVEL 1 PLAN
DA2003	ROOF PLAN
DA3001	DEMOLITION PLAN - GROUND FLOOR
DA3002	DEMOLITION PLAN - LEVEL 1
DA4001	ELEVATIONS 1
DA4002	ELEVATIONS 2
DA5001	SECTIONS
DA6001	PERSPECTIVES

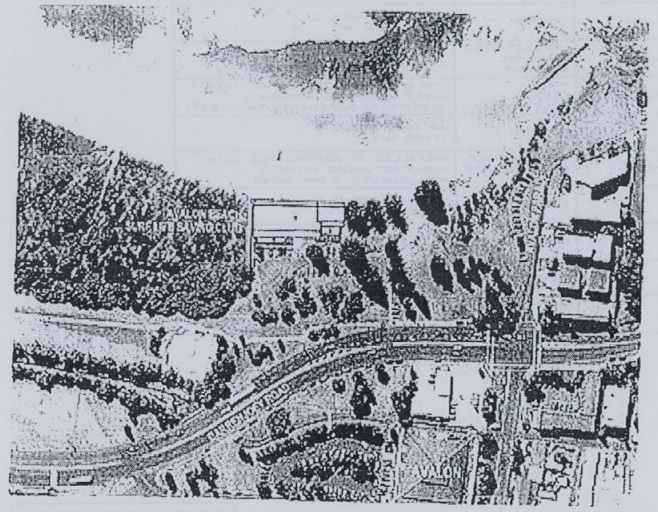
SYDNEY WATER
APPROVED

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/drainer.
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, Building, Verandah, Floor or other cover unless otherwise approved by Sydney Water.
6. Property No. 5382295

Reece, Mona Vale
Quick Check Agent on behalf of
SYDNEY WATER

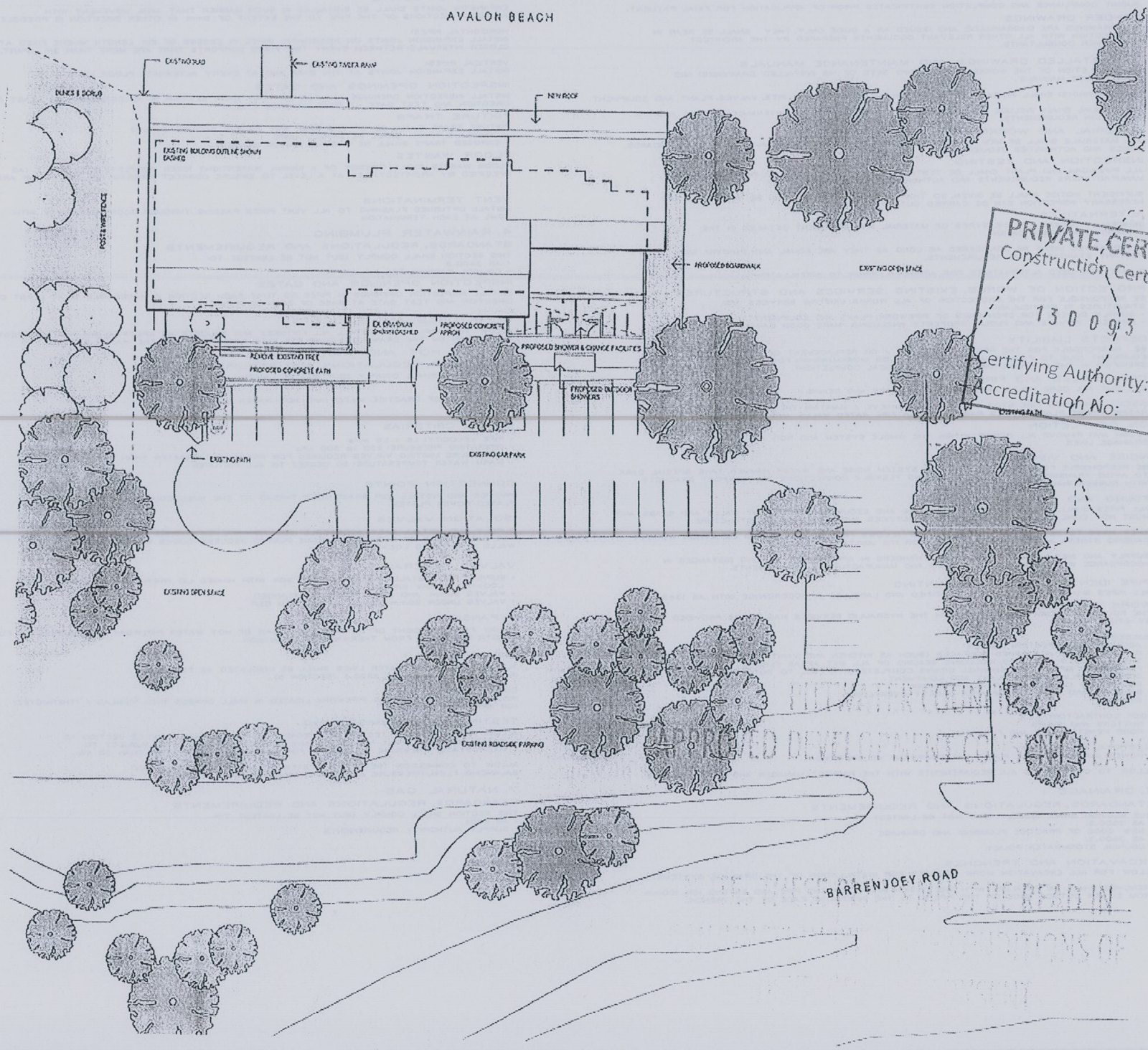
Per: 10/4/2013

PRIVATE CERTIFIERS AUSTRALIA
Construction Cert. No: 130093 Approved Date 30 MAY 2013
Certifying Authority: Grant Harrington
Accreditation No: BPB 0170



1 LOCATION PLAN
1 : 2000

0 20m 40m 60m 80m 100m
1:2000 @ A1, 1:4000 @ A3



2 SITE PLAN
1 : 250

0 2.5m 5.0m 7.5m 10.0m 12.5m
1:250 @ A1, 1:500 @ A3

APPROVED DEVELOPMENT CONSENT PLANS
THESE PLANS SHALL BE READ IN CONJUNCTION WITH ALL CONDITIONS OF CONSENT

woodhead

AH-01 Nom. 600x600mm trimless access hatch to be Rondo Panther or equal. Provide all required hardware and accessories. Panel door to finish flush with adjacent ceiling. Paint finish to match ceiling.

AN-01 Roof mounted galvanised steel combined digital & FM antennae. Provide all required support, fixings and flashing.

AP-01 Acoustica Quietspace 50 fabric faced acoustic panel adhesive fixed to wall. Provide 50 x 50 x 3mm clear anodised aluminium angle to exposed edges. Colour to be "Wasabi".

BBQ-01 Proprietary BBQ to be selected.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 48hx 30 Class 1 dressed all round klin dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BL-02 Steel balustrade comprising 30 x 10mm MS Flat stanchions at max 1258mm centres welded to 30 x10mm MS flat top and bottom rail. Provide countersunk stainless steel masonry anchors to structure. Finish to be Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

BO-01 Existing Bollard

BO-02 New bollard to match existing

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on MR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.

BT-03 Reuse existing 30mm thick stainless steel benchtop reconfigured to suit new kitchen. Check and confirm onsite.

CD-01 Nom. 150 x 20mm dressed all round klin dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Caminteil Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminteil Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CD-03 Nom. 100mm thick random ashlar rock faced sandstone cladding with dry joints. Sandstone equal to Gosford Quarries "Pit White" in whites and browns (no pink).

CD-04 Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Loft". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflective foil insulation and R2 bulk insulation.

CD-05 Temporary CD face A-Bond plywood cladding screw fixed to substrate. Wall to be replaced in leasehold fitout.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Keylock suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomatt Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

CL-03 9mm thick Caminteil Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminteil Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HN-9009-C available from Harvey Norman Commercial. Provide white grout joints.

DG-01 Drip groove to concrete slab.

DK-01 Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Sidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear sheen gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LM5 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-05 Steel framed security gate comprising 50 x 50 EA ash frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class 1 H-V vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MDZ FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-07 External Doors – Solid core external grade flush panel door with Dulux Weathershield semi gloss paint finish in Elevate Aluminium 400 Series Commercial aluminium frames. Provide Madinoz LM5 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide magnetic door stops to all doors. Colour to be Dulux "Handmade Linen Quarter".

EV-01 9mm thick Caminteil Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminteil Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

EX-01 Existing to comply with AS2293.1-2005

FF-02

FHR-01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS1221.1-1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL-02 Folded sheet steel capping with Colorbond Ultra finish to match roof. Stramit "Three Break Ridge" profile.

FL-03 Continuous Alcor Flashing.

FL-04 Folded Colorbond flashing with Colourbond Ultra finish to match roof.

FT-01 Sand sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Merc Ash HNTGN Code HN6704 available from Harvey Norman Commercial.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/ B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

FT-08 Water resistant carpet on approved underlay installed to manufacturer's instructions. Carpet to be Autex Decord "Tussock" polypropylene fibre carpet. Provide clear anodised aluminium threshhold strips to joints with other flooring.

FT-09 Vinyl flooring installed to manufacturer's instructions. Flooring to be Polyflor XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GP-01 Gas Bayonet nominally 250 to CL AFFL unless noted otherwise.

GR-01 Stormtech or equal 650ARG900 stainless steel strip drain connected to sewer system.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to stormwater system.

GR-03 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to sewer system.

GT-01 508bc 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietary corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.

GT-02 228mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

HR-01 Internal Timber handrail comprising 90 x 30 dressed all round klin dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD H4V rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 klin dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No.stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

HR-03 40mm Diameter stainless steel tubular handrail to AS 1428.1-2009. Concealed fixings to ground.

HT-01 Infrared Radiant Heater - Calmer IR-HG 114 Auto Gas heater with electrical ignition installed to manufacturers instructions. Provide heat shield if required. Conceal gas and electrical connection.

JF-01 Fabric covered pinboard equal to Designer Pinboards Australis Standard Range Colour Terracotta Red.

JH-01 Joinery door pull - Edge of joinery panel to be routed out to provide door pull nom. 150mm wide x 20mm deep with round end.

JH-02 Cable entry hole 60 dia Hafele Chrome Plated Matt 631.32.413.

JH-03 Conical Desk Leg Hafele 635.49.971

JH-04 Hafele Joinery Lock

JS-01 16mm MR particleboard with white melamine to both sides and 2mm edge strips.

Existing kitchen joinery to be salvaged and reused. Check & confirm onsite dimensions for installation. Modify and rectify as required.

JP-01 17mm Black Formply plywood with sealed edges and no trade markings. Provide concealed fixings. Handles to doors to be 150 x 20mm routed round end slot as shown on drawings.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS Interior Mat Plus 003 finish. Provide Anglesnoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

JP-04 35mm flush panel solid core pivot door with Dulux Wash n' Wear semi gloss paint finish. Provide Anglesnoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005.

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium strutted angle brackets as detailed at maximum 900mm centres with stainless steel screws.

JT-01 18mm A bond plywood with nom 6mm thick x 120 wide butt jointed lining boards to match CD-01 adhesive fixed to substrate. No edge strips - stain raw edges black. Boards to run vertically and be aligned across cupboards. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide Madinoz MDZ 144/150 PSS cabinet handle and keyed alike cabinet locks.

KI-01 Oven - reuse existing.

KI-03 Kitchen Sink - reuse existing integrated kitchen sink.

KI-05 Fridge - reuse existing.

KI-06 Integrated garbage sorter - to be selected.

KI-07 Kitchen mixer - reuse existing.

KI-08 Kitchen mixer - Caroma Titan Sink Mixer 99033SSA.

KI-09 Dishwasher - to be selected.

KI-10 Cooktop - reused existing.

KI-11 Microwave - reuse existing.

KI-13 Chest Freezer - reuse existing.

KI-14 Integrated stainless steel kitchen sink with designer wastes.

KI-15 Coffee Machine - reuse existing.

KI-16 Underbench fridge - to be selected.

KI-17 Ice Cream Fridge - reuse existing.

KI-18 Grinder - reuse existing.

LF-01 Restricted usage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietary lift system to be Easy Living Domus.lift XL Model DL-1C/XL configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft 1500mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 720mm wide x 360deep x 1500mm high. Power - single phase. Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturers instructions.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LN-02 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with no visible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens.

LN-03 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (interior) with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 003 clear.

LT-01 10W LED recessed dimmable panel ceiling light from LED Shopper 6500K colour temperature.

LT-02 160W LED flood light ZM-FL-160-WW-NAN-120D from ZAMTAS Led Lights. 6500K colour temperature

LT-03 LED track lighting - Round from Environmental LED Lighting Solutions. 6500K colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-05 9W Uplight from LED Shopper. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

LT-07 Pendant light. Replica Paul Henningsen Snowball Light – Exact from Matt Blatt with E27 LED bulb. 6500K colour temperature.

LT-08 Isis fan from Big Ass Fans installed to manufacturer's instructions. Confirm clearance requirements prior to installation.

LT-09 Exhaust Fan - Inline exhaust fan with ceiling mounted clear anodised aluminium grille Universal Fans 2 slot Linear vent, run on timer and humidity sensor. Provide Universal Fans Anodised Aluminium Vent EVLINAL1 to exterior and all required ducting and adaptors. Size fan to suit room volume.

LT-10 Ceiling Fan - Reuse existing fan.

LT-11 External 15W LED spotlight - Superlight SL6465- 15. 6500K colour temperature

LT-12 Wall mounted external grade light sensor with timer

LT-13 Wall mounted external up / down light - Superlight 6W LED SL6192-15 silver finish. 6500K colour temperature.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

MR-01 Adhesive fixed mirror with polished edges.

PJ-01 Existing Projector to be reused.

PJ-02 Ceiling mounted automatic retractable projection screen equal to Grandview 150" 3320 x 1865 GR SB150H with Hideaway Ceiling Mount HERSOHD375 available from Harvey Norman Commercial.

QJ-01

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG. Align joints and plug spacer holes with matching material.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-04 Reinforced concrete pier to structural engineer's details.

RC-05 Reinforced concrete turndown to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Cronmelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

RF-03 Ampelite Wonderglas GC gel coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD H4V timber framing to structural engineers details. Finish with Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

RV-01 25mm Thick timber reveal with Dulux Wash n Wear Acrylic gloss finish. Colour to be Dulux "Natural White".

SA-01 Wall mounted waterless urinal - Caroma H2Zero Cube 678610W.

SA-02 Wall mounted handbasin - Caroma Carboni II 865715W with Plug & and Vandal flush fixing Chrome waste 687141C and Gerberit Disena Bottle Trap ABS CP 170.130.21.1-C.

SA-03 Reuse existing boys & adult size wall mounted urinals. Check and confirm onsite.

SA-04 Basin Mixer to be 'Alpha' self closing tap from RBA code RBA1043-600.

SA-05 Shower Mixer - Caroma Slim Shower Mixer 90333C CP.

SA-06 Shower Rose to be Vandal Resistant Conical Rose from RBA code RBA8519-102.

SA-07 Back to Wall toilet suite - Stylus Banksia BTW Bsm1 Uni trap Suite w/SC Seat WH-K1000W--C.

SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 18mm panels with Hardicolor Polyurethane System. Front panels installed with overhead channels and fixed to floor with 6mm brass dowels. cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour to be Dulux "Olive Reserve A221" with Satin finish.

SA-09 San Marco Stone Amenity Terrazzo partition system with "Baltic Black" terrazzo and partition to ground layout. Provide Miriam stainless steel hardware with Series 300 concealed fixing surface mounted turnbolts and gravity hinges. Provide painted solid core waterproof doors, colour to be Dulux "Night Sky"

SA-10 Floor Waste - Reece Mitzu stainless steel waste or equal.

SA-11 Shower Mixer to be Self Closing Tap Valve with cold water from RBA with 30 second run time code RBA 1055-530.

SA-12 Reuse existing hand dryer. Check & confirm on site.

SA-13 Reuse existing soap dispenser. Check & confirm on site.

SA-14 Automatic Hand Dryer - Bradley Hand Dryer - Automatic (Heavy) 2202-50A--C S/S.

SA-15 Surface Mounted liquid soap dispenser - Bradley Sgl S/Mtd (1.2ltr) SSS.

SA-16 Surface Mounted toilet roll dispenser - Bradley Tpl S/Mtd 5443-SSS.

SA-17 Proprietary Sharps Container to be selected.

SA-18 Reuse existing three roll toilet paper holder. Check & confirm onsite.

SA-19 Wall faced accessible toilet suite - Caroma Care 800 BTW C/C Suite w/ Colani Sgle Flap Seat WH-K1818BPMWHT.

SA-20 Wall mounted hand basin - Caroma Cube Extension Care Wall Basin (RHS 864115W) (LHS 864215W) with single tap hole and Gerberit Disena Bottle Trap ABS CP 170.130.21.1-C. RHS or LHS as shown on drawings.

SA-21 Wall mounted self closing foot tap - RBA "Rio" Wall Mounted Self Closing Tap RBA1053-600 PC

SA-22 Reuse existing wall faced toilet suite. Check & confirm on site.

SA-23 Integrated Sink - Nom 450mm diameter x 180mm deep round 304 Grade stainless steel integrated sink.

SA-24

SA-24 Shower Set - Virtu Plus stainsafe II on Rail Ecoject Neu - 900mm 782732--C CP.

SA-25 Basin Mixer - Caroma Slim Basin mixer 90330SCA.

SA-26 Basin Mixer - Reuse existing from first floor bathrooms.

SA-27 Baby Change Table - to be Koala Bear horizontal recessed standard with stainless steel frame Code KB100-01ST in grey from RBA installed to comply with AS 1428.1-2009.

SA-28 Robe Hook with bumper - Bradley Regent Robe Hook R039 PSS.

SA-29 Reuse existing towel hook brackets where viable. New Robe Hooks to be Bradley Regent Robe Hook R083 PSS.

SA-30 Shower Rose - Mina Shower rose 10179 CP.

SA-31 Basin mixer - Raymor Acadeny Basin Pillar Mixer (70mm) 035207 with Raymor Academy Disabled Lever Handle 035487 CP.

SA-32 Folding Shower Seat - RBA 8819687

SA-33 Grab Rails - RBA grad rit to AS/4281.1 2009.

SA-34 Surface Mounted toilet roll dispenser - Bradley Tpl S/Mtd 5402 SSS.

SA-35 Paper towel dispenser - Bradley Model 252 with Satin Finish Stainless Steel

SA-36 Accessible WC Backrest - Bradley 9573

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 H-V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SF-04 Steel services beam with corrosion protection to AS2312. Provide 300 x 200 RHS with 50 CHS suspension brackets conceal fixed to roof structure. Provide openings to conceal electrical and gas services within CHS members. Taper ends to profile as shown on drawings. Finish to be Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SH-02 Rondo PTSP-610 tear away shadow bead 6mm.

SJ-01 Sikaflex Joint - black.

SK-01 100 x 3mm fish aluminium skirting with clear anodised finish.

SK-02 Capral Modline 150 x 35mm ducted skirting with clear anodised finish.

SK-03 Ceramic skirting tile to match floor tile. Provide grout to match tile colour.

SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

SN-01 350mm high laser cut copper signage nom 3mm thick. Fix each letter individually to timber rails with 2 no. 12mm copper tubes welded to back of each letter. Epoxy fix tubes to timber rails. Lettering to be Helvetica Light.

SN-02 Satin natural anodised aluminium door signs to be S2K Identity systems AM Series D2-1 with 6mm Square Cut Sidelocks and Satin Natural Anodised aluminium finish. Provide black vinyl cut Arial Lettering.

SN-03 S2K Identity systems Braille 3d Tactile Sign. Provide silver Background with Black Graphics.

SN-04 Provide black vinyl cut Arial Lettering nom. 50mm high to comply with AS2441-2005.

SP-01 Ceiling mounted speakers. Reuse existing where possible. New speakers to be Nilles CM-750. Colour white.

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Cronmelin Cromshield Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-01 Switch nominally 1000 AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-02 Fan Speed Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-03 Infra-Red Heater Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-04 Speaker system controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-06 Double external GPO nominally 300 to CL AFFL. GPO's to be Clipsal WSC2272 or equal.

SW-07 External switch nominally 1000 AFFL to centreline. Switch to be Clipsal WS226.

SW-08 Shark Alarm Switch connected to existing shark alarm. Confirm location of alarm siren prior to installation.

SW-09 Audio Input plate connected to PA system. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-10 Data switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-11 Telephone switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-12 Cable TV switch plate nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-13 Aerial switch plate nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour. Connect to roof Mounted aerial.

SW-14 Switchboard in wall mounted galvanised steel cabinet.

TM-01 Tactile marker to comply with AS 1428.4. Individual black PVC Dots drilled and glued by Tactile Indicators pty ltd or equal.

TP-01 External tap and stump connected to the sewer system.

TR-01 Timber framed ramp to structural engineers detail. Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated structure at 450 centres. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

TR-02 Existing timber ramp. Make good if required.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Fermiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

TV-01 Wall mounted LCD TV to be selected.

VB-01 Double sided heavy duty perforated reflective foil insulation Fletcher Insulmist 800 Antiglare.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative sheet steel duct with Colorbond Ultra finish to match roof. Provide profile is shown and framing and fixing as required.

WN-01 Elevate Aluminium Series 620 Cantreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised pillery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WP-01 Weephole.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity inner blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or HSP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally..

WT-06 Acoustic wall comprising 90mm blockwork with cement render finish to inside face, 28mm furring channels at 600mm centres on CSR resilient mounts with 50mm glasswool partition batts 11kg/m and 2 x layers of 13mm CSR Soundchek acoustic plasterboard. Provide Dulux Wash N' Wear low sheen paint finish, colour "Natural White".

WT-07 Nom. 70mm thick H3 treated timber stud wall. Provide vertical stiffening as required to comply with structural requirements for balustrades.

WT-09 PVC coated black 3.15 diameter chainlink wire full height dividing fence. Provide nom 50 x 50 HDG EA frame fixed to floor and ceiling and intermediate supports as required. Provide tensioning and fixings as required.

WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear low sheen acrylic, colour to be "Natural White".

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

PRIVATE CERTIFIERS AUSTRALIA
Construction Cert. No: Approved Date
130093 30 MAY 2013
Certifying Authority: Grant Harrington
Accreditation No: BPB 0170

DRAWING NUMBER	DRAWING NAME
CC00	TITLE
CC001	SITE PLAN
CC002	DEMOLITION PLAN - GROUND FLOOR
CC003	DEMOLITION PLAN - LEVEL 1
CC004	GROUND FLOOR PLAN
CC005	LEVEL 1 PLAN
CC006	ROOF PLAN
CC007	WEST & EAST ELEVATIONS
CC008	NORTH & SOUTH ELEVATIONS
CC009	SECTIONS
CC010	SECTIONS
CC011	SECTIONS
CC012	GROUND FLOOR RCP
CC013	LEVEL 1 RCP
CC014	GROUND FLOOR PLAN - ROOM G.01-G.02 & G.05&E.06
CC015	GROUND FLOOR WET AREAS - ROOM G.09-G.10,E.12-G.13 & OUTDOOR SHOWERS
CC016	GROUND FLOOR WET AREAS - ROOM G.21 & G.22
CC017	GROUND FLOOR WET AREAS ROOM G.18-G.20
CC018	LEVEL 1 PLAN - ROOM 1.01 & 1.09
CC019	LEVEL 1 WET AREAS ROOM 1.02-1.03, 1.06 & 1.08
CC020	WALL SECTIONS
CC021	WALL SECTIONS
CC022	WALL SECTIONS
CC023	PLAN & GARBAGE STORE DETAILS
CC024	DETAIL SECTIONS
CC025	STAIR DETAILS
CC026	WINDOW SCHEDULE
CC027	WINDOW SCHEDULE
CC028	DOOR SCHEDULE
CC029	JOINERY DETAILS
CC030	FOOTING SETOUT

AVALON BEACH S.L.S.C.

CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

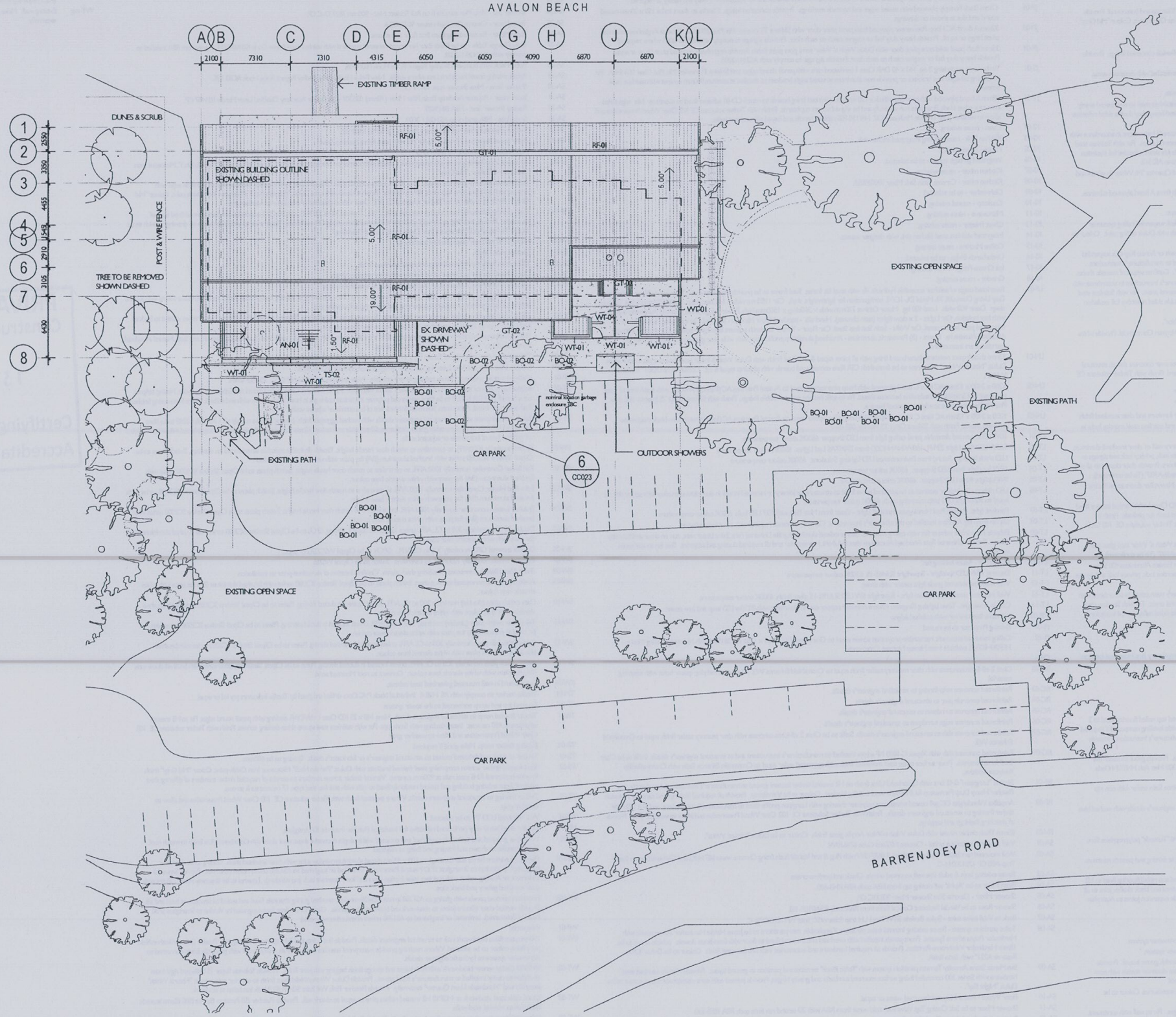
30-04-13

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887



139 PALM GROVE ROAD
AVALON BEACH NSW 2107
t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolemanarchitecture.com.au
www.richardcolemanarchitecture.com.au
nominated architect: Richard Cole B.Sc(Hons)Arch Dip.Arch(Hons) reg. No. 4330

AVALON BEACH



1 CC067 PLAN - SITE
1 : 250

0 2.5m 5.0m 7.5m 10.0m 12.5m
1:250 @ A1, 1:500 @ A3

AN-01 Roof mounted galvanised steel combi-ridge & RM antennae. Provide all required support, fixings and flashing.

BO-01 Existing Bollard

BO-02 New bollard to match existing.

GT-01 500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood organ-ik gutter board. Provide proprietary corrosion resistant gutter-gard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Paint over flow to lower side of gutter. Colorbond colour to match roof.

GT-02 200mm diameter Colorbond Ultra half-round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

RF-01 Seamit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer instructions. Lay directly over Fletcher Heavy Duty Permastop R1.3 thermal wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Flemiko No.57 Misaooxa Iron Oxide" Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 50mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineers details.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" intermixed "Handmade Linen Quarter" externally.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Arch(UNSW) Dip.T.P. Arch(Hons) F.R.A.I.A. Reg. No. 4328

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE EXECUTION AND CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS OR THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DRAWINGS ARE NOT TO SCALE UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.

CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

to:
AVALON BEACH S.L.S.C.

SITE PLAN

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 250

CC001

A B C 1 CC009 D 3 CC009 E F 4 CC009 G H 2 CC009 J K L

2800 7310 7310 4315 6050 6050 4090 6870 6870 2100

BEACH

POST AND WIRE FENCE

RETAIN EXISTING TIMBER RAMP

EXTENT OF PROPOSED LEVEL 1 DECK SHOWN WITH LIGHT SHADING

DEMOLISH EXISTING COLUMNS TO FACADE

DEMOLISH EXISTING WINDOWS

SALVAGE EXISTING ROLLER SHUTTERS. ASSESS POTENTIAL FOR REUSE

INTERNAL WALLS TO BE DEMOLISHED SHOWN DASHED

RL 7750

SALVAGE AV / AUDIO GEAR

EXISTING SLAB TO BE DEMOLISHED

RL 7750

EXISTING COLUMNS TO BE DEMOLISHED

SALVAGE EXISTING ROLLER SHUTTERS. ASSESS POTENTIAL FOR REUSE

DEMOLISH EXISTING WALL AND DOORS

EXISTING SLAB TO BE DEMOLISHED

RL 7890

RL 7890

DEMOLISH EXISTING WALL AND DOORS

SALVAGE EXISTING TOWEL HOOK RACKS AND SEAT BRACKETS FOR REUSE IN NEW CHANGE ROOMS

EXISTING SLAB TO BE DEMOLISHED

RL 7860

SALVAGE EXISTING TOWEL HOOK RACKS AND SEAT BRACKETS FOR REUSE IN NEW CHANGE ROOMS

100

100

EX. PINE TREE

RETAIN EXISTING LANDSCAPED WALLS AND STEPS

RETAIN PART EXTERNAL WALL

DEMOLISH EXISTING WALLS TO TOILET BLOCK

2550 3350 4655 1345 2910 3315 6490

1 2 3 4 5 6 7 8

DEMOLISH EXISTING STAIR & MASONRY WALL

DEMOLISH EXISTING STAIR & BALCONY

SALVAGE EXISTING ROLLER SHUTTERS. ASSESS POTENTIAL FOR REUSE

REMOVE EXISTING PAVERS

REMOVE EXISTING LANDSCAPING

EXTENT OF PROPOSED GROUND FLOOR SHOWN WITH DARK SHADING

DEMOLISH EXISTING SHOWERS

EXTENT OF PROPOSED GROUND FLOOR SHOWN WITH DARK SHADING

REMOVE EXISTING TREE

CUT & FILL BACK TO LINE OF NEW RETAINING WALL

EX. PINE TREE

RL 8525

RL 8290

EX. PINE TREE

RL 7900

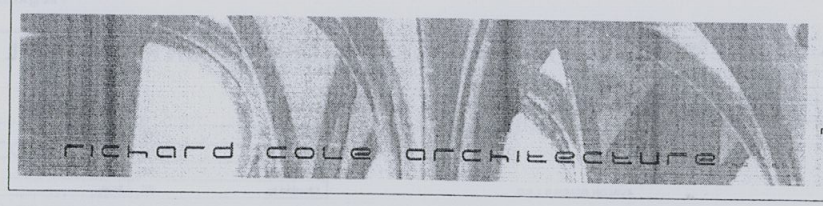
EX. PINE TREE

1 CC007 PLAN - GROUND FLOOR DEMOLITION
1 : 100

NOTE: The existing vegetated foredune immediately to the north of the surf club building as well as the Norfolk Island Pines to the south of the building must be protected and maintained both during construction of the works and for the life of the development.

Demolition of this structure shall be undertaken in accordance with AS2601

0 1.0m 2.0m 3.0m 4.0m 5.0m
1:100 @ A1, 1:200 @ A3



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 6329

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE REUSED OR REPRODUCED FOR THE PURPOSES OTHER THAN THOSE AUTHORISED BY RICHARD COLE ARCHITECTURE PTY LTD. WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS ARE TO BE READ IN PREFERENCE TO SCALED DETAILS. TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION AND MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND ALL BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

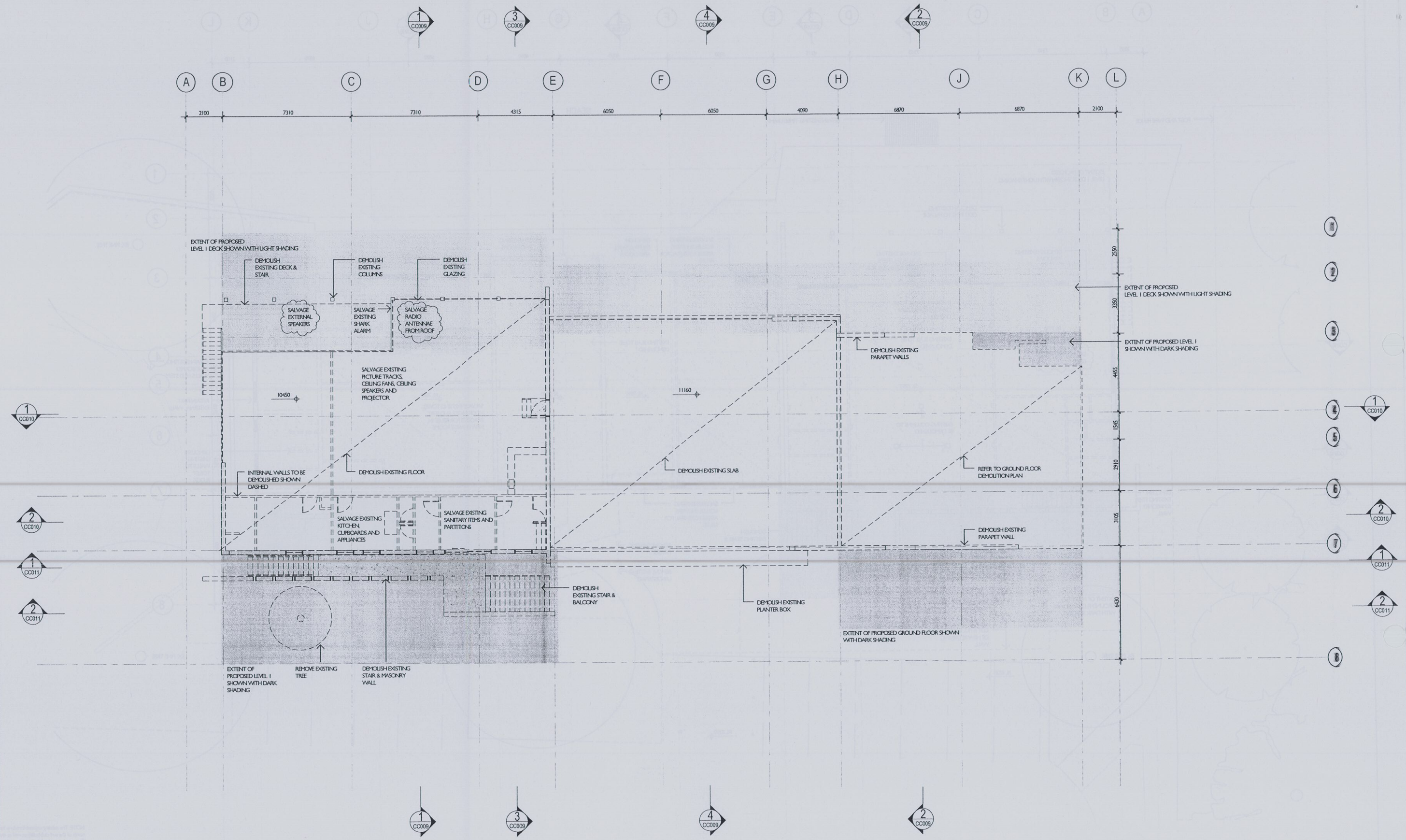
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

DEMOLITION PLAN-GROUND FLOOR

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC002



1 CC029 PLAN - LEVEL 1 DEMOLITION

1 : 100

Demolition of this structure shall be undertaken in accordance with AS2601

0 1.0m 2.0m 3.0m 4.0m 5.0m

1:100 @ A1, 1:200 @ A3

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nsw:(02) 9918 4135 abn:38 092 598 415
nominated architects: Richard Cole B.Sc(Arch) (Hons I) B.Arch(Hons I) Reg. No. 6328

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE WRITTEN CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS AND LARGE SCALE DRAWINGS (DETAILS) TAKE PRECEDENCE OVER SCALED, AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT THE WORKS AND ALL BUILDING ELEMENTS COMPLY WITH BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.

CONSTRUCTION

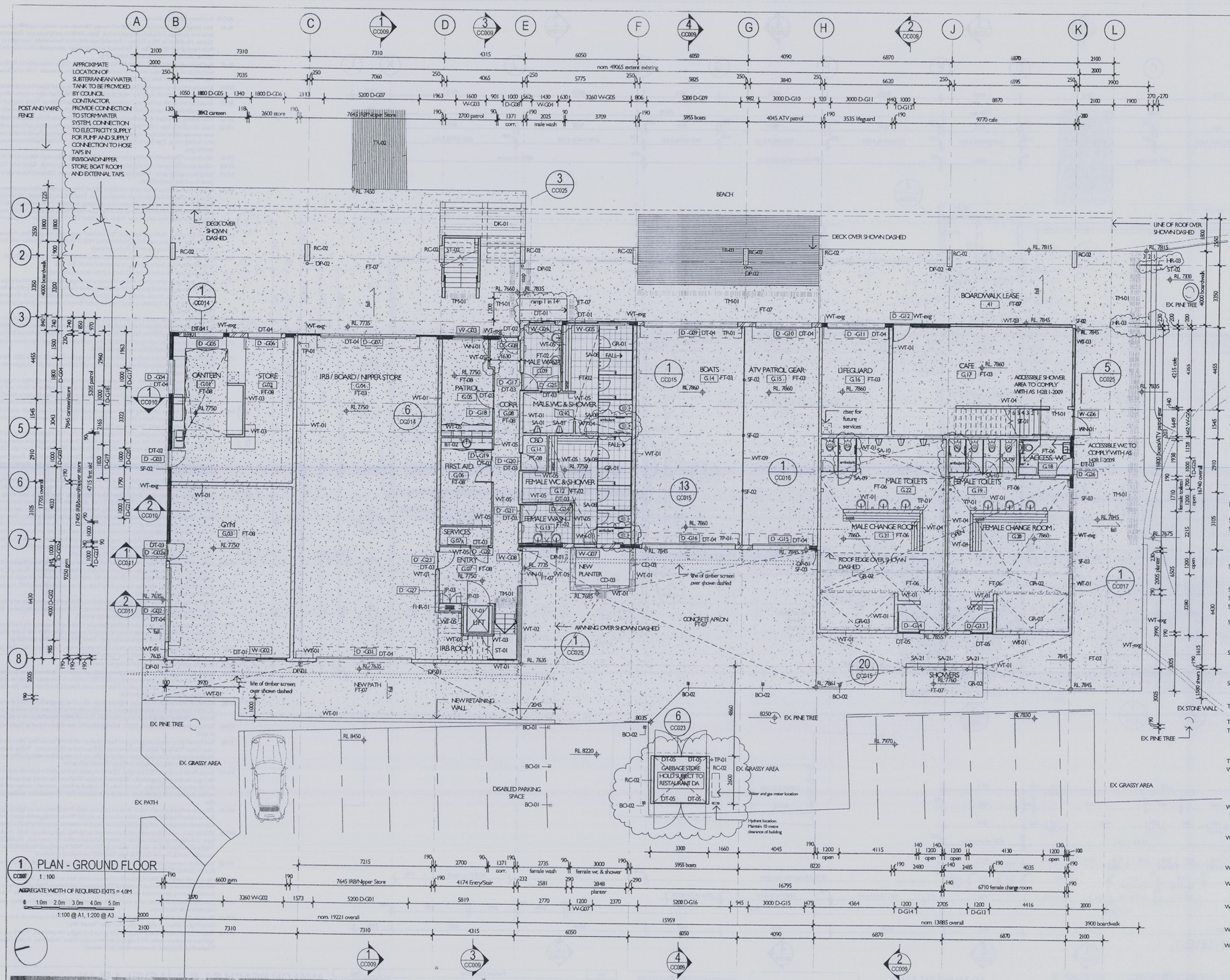
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

DEMOLITION PLAN- LEVEL 1

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC003



BO-01 Existing Bollard

BO-02 New bollard to match existing

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on HMR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.

CD-03 Nom. 100mm thick random ashlar rock faced sandstone cladding with dry joints. Sandstone equal to Gosford Quarries "Pink Whites" in whites and browns (no pink).

DK-01 Nom 140 x 25 KD Class 1 H4 DAR decking with pencil round edges. Fix to H3 treated batters at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Sliding door 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash 'n' Wear semi gloss paint finish in street frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Radiance Lifft Handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide doorstoppers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeside A100". (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-05 Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 T5 flat frame rail and 40 x 20 DAR. KD Class 1 H4 V vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Permeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

FH-R-01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS 1221-1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HN6704 available from Harvey Norman Commercial.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finished Crommelin Cromsheild Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

FT-08 Water resistant carpet on approved underlay installed to manufacturer's instructions. Carpet to be Autex Decord "Tussock" polypropylene fibre carpet. Provide clear anodised aluminium threshold strips to joins with other flooring.

GR-01 Stormtech or equal 65ARG40 stainless steel strip drain connected to sewer system.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard tiled-slip stainless steel grate connected to stormwater system.

GR-03 150mm wide grated drain equal to ACO Klassicdrain with heelguard tiled-slip stainless steel grate connected to sewer system.

HR-03 40mm Diameter stainless steel tubular handrail to AS 1428.1-2009. Conceal fixings to ground.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sklikrea T5 Interior Mat Plus 003 finish. Provide Anglehose concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

LF-01 Restricted usage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietary lift system to be Easy Living Domuslift XL Model DL-1CAL configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft 1500mm wide x 1550mm deep. Door 900mm clear. Load 400 kg. Motor Cabinet 720mm wide x 360 deep x 1500mm high. Power - single phase Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - stainless steel. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls -Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturer's instructions.

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Gamshield Enhance WS. Align joints and plug spacer holes with matching material.

SA-01 Wall mounted waterless urinal - Caroma H2Zero Cube 67861 0W.

SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 18mm panels with Hardicolor Polyurethane System. Frame panels installed with overhead channels and fixed to floor with 6mm brass dowels. cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour to be Dulux "Olive Reserve A221" with Satin finish.

SA-09 San Marco Stone Amenity Terrazo partition system with "Baltic Black" terrazzo and partition to ground layout. Provide Metlam stainless steel hardware with Series 300 concealed fixing surface mounted turnbolts and gravity hinges. Provide painted solid core waterproof doors, colour to be Dulux "Night Sky".

SA-10 Floor Waste - Reece Mizu stainless steel waste or equal.

SA-21 Wall mounted self closing foot tap - RIBA "Rio" Wall Mounted Self Closing Tap RIBA1053-600 PC.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Permeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 H4 V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Permeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Crommelin Cromsheild Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

TP-01 Tactile marker to comply with AS 1428.4. Individual black PVC Dotsdrilled and glued by Tactile Indicators pty ltd or equal.

TP-01 External tap and sump connected to the sewer system.

TR-01 Timber framed ramp to structural engineers detail. Nom 140 x 25 H3 Class 1 H4 WDAR decking with pencil round edges. Fix to H3 treated structure at 450 centres. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

TR-02 Existing timber ramp. Make good if required.

WM-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Alta H150mm with clear anodised gallery and black clips.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-09 PVC coated black 3.15 diameter chainlink wire full height dividing fence. Provide nom. 50 x 50 HDG EA frame fixed to floor and ceiling and intermediate supports as required. Provide tensioning and fixings as required.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect : Richard Cole B.Sc.(Arch) (Hons.1) B.Arch.(Hons1) Reg. No. 6208

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE REPRODUCED IN ANY FORM OR USED FOR THE PURPOSE OF CONSTRUCTION OF THIS SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND / OR COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGER SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. THIS DRAWING IS COPYRIGHT UNLESS OTHERWISE NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE APPROPRIATE COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDER OF RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

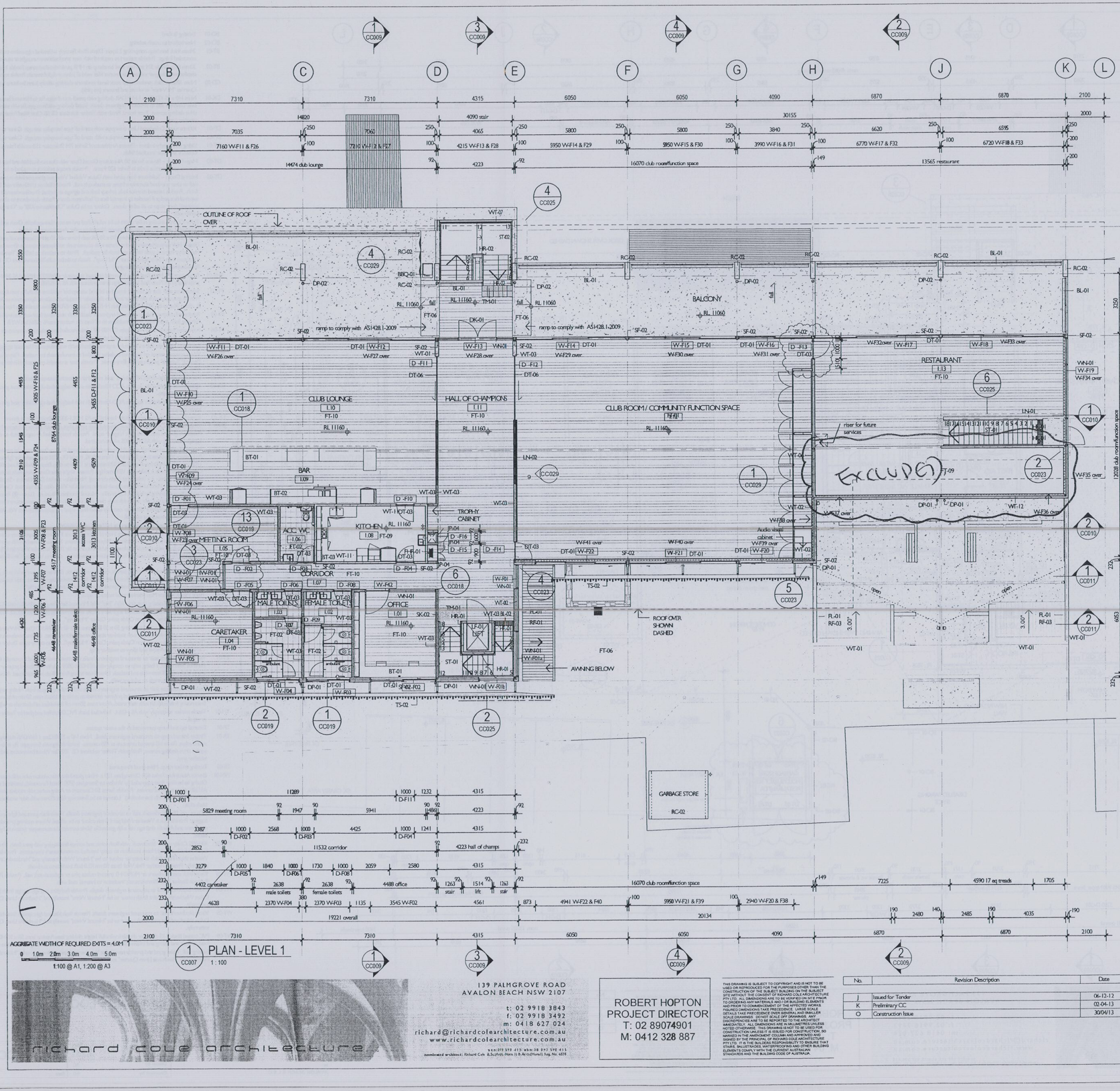
AVALON BEACH S.L.S.C.

GROUND FLOORPLAN

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC

CC004

Scale 1 : 100



BBQ-01 Proprietary BBQ to be selected.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size: 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 10mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BL-02 Steel balustrade comprising 30 x 10mm MS Flat stanchions at max 125mm centres welded to 30 x10mm MS flat top and bottom rail. Provide countersunk stainless steel masonry anchors to structure. Finish to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on H-MR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.

BT-03 Reuse existing 30mm thick stainless steel benchtop reconfigured to suit new kitchen. Check and confirm onsite.

DK-01 Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated timber battens spaced to maximum 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty strap. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty strap. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LINS handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MDZ FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

FH-R-01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS1221-1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FT-01 Semi sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Mist Ash HANTON Code HNA704 available from Havey Norman Commercial.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-09 Vinyl flooring installed to manufacturer's instructions. Flooring to be Polyflor 3XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and groove top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over conc. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

HR-01 Internal Timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD H4V rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

JH-04 35mm flush panel solid core pivot door with Dulux Wash n' Wear semi gloss paint finish. Provide Anglehoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005.

LF-01 Restricted usage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietory lift system to be Easy Living Domuslift XL Model DL-1C7XL configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft 1500mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 720mm wide x 360deep x 1500mm high. Power - single phase. Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (8) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturers instructions.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joins taped & set. Colour to be Dulux "White on White".

LN-02 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with no visible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens.

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromsheild Enhance WSI. Align joints and plug spacer holes with matching material.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

RF-03 Ampelite Wonderglas GC gell coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR H4V timber framing to structural engineers details. Finish with Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SK-02 Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Crommelin Cromsheild Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

TM-01 Tactile marker to comply with AS 1428.4. Individual black PVC Dots drilled and glued by Tactile Indicators pty ltd or equal.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

WN-01 Elevate Aluminium Series 620 Centregla ze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 (Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/90 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-06 Acoustic wall comprising 90mm blockwork with cement render finish to inside face, 28mm furring channels at 600mm centres on CSR resilient mounts with 50mm glasswool partition batts 11kg/m and 2 x layers of 13mm CSR Soundchek acoustic plasterboard. Provide Dulux Wash N' Wear low sheen paint finish, colour "Natural White".

WT-07 Nom. 70mm thick H3 treated timber stud wall. Provide vertical stiffening as required to comply with structural requirements for balustrades.

WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear low sheen acrylic, colour to be "Natural White".

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc.(Arch), Hons 1) B.Arch(Hons1) Reg. No. 6578

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. THE BUILDER SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ANY DISCREPANCIES FOUND IN THE DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED AS "FOR CONSTRUCTION. SO THAT IT CAN BE STAMPED BY COUNCIL AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT ALL WORKS AND BUILDING ELEMENTS COMPLY WITH ALL BUILDING ELEMENTS TO COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

LEVEL 1 PLAN

Project number	1008
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC005

PROVIDE COMPLETE ROOF ACCESS AND HEIGHT SAFETY SYSTEM TO PROVIDE SAFE ACCESS FOR MAINTENANCE TO ROOF AND GUTTERS EQUAL TO SAFEMASTER HEIGHT SAFETY SOLUTIONS QUOTE No. 22566

COORDINATE WITH COUNCIL APPOINTED CONTRACTOR FOR PROVISION OF ROOF MOUNTED PHOTOVOLTAIC SOLAR PANEL SYSTEM. LOCATION OF SOLAR PANELS AND INVERTER TO BE ADVISED.

A B C D E F G H J K L

1 CC009 3 CC009 4 CC009 2 CC009

2100 7310 7310 4315 6050 6050 4090 6870 6870 2100

nom. 53065 roof

EXISTING TIMBER RAMP

AVALON BEACH

EXISTING SLAB

250

2 CC022

5.00°

DP-02 DP-02 GT-01 DP-02 DP-02 GT-01

FL-01 RF-01 FL-01

5.00° 5.00°

VP-01 VP-01 FL-01

FL-02 FL-02 FL-01

19.00°

RF-01 APPROXIMATE LOCATION OF RESTAURANT EXHAUST SUBJECT TO FUTURE APPROVAL

GT-02

LOUVER ROOF

EXISTING BUILDING OUTLINE SHOWN DASHED

OPEN

FL-01 DP-01 DP-01 GT-02 RF-01 GT-02 DP-01

RF-03 FL-01 3.00° 3.00° RF-03 FL-01

AN-01

1.50° RF-01 7.60°

DP-01 DP-01 GT-02 DP-01

TS-02

OUTDOOR SHOWERS

GARBAGE STORE

EXISTING CAR PARK

EXISTING PATH

nom. 18330 roof 200 nom. 2095 roof 18284

nom. 39325 roof nom. 13740 roof

2100 7310 7310 4315 6050 6050 4090 6870 6870 2100

1 CC009 3 CC009 4 CC009 2 CC009

1 2 3 4 5 6 7 8

2550 3350 4465 1545 2910 3105 6430

nom. 25750 roof nom. 3895 roof

nom. 16577 roof nom. 13101 roof nom. 13748 roof nom. 8019 roof

1 CC010 2 CC010 1 CC011 2 CC011

1 CC007 PLAN - ROOF 1:100

AN-01 Roof mounted galvanised steel combined digital & TV antennae. Provide all required support, fixings and flashing.

DP-01 100mm round Colorbond Ultra downpipe with stand-off type heavy duty astragals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand-off type heavy duty astragals. Colour to be "Windspray"

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL-02 Folded sheet steel capping with Colorbond Ultra finish to match roof. Stramit "Three Break Ridge" profile.

GT-01 500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietary corrosion resistant gutter gasket to all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation strips. Provide overflow to lower side of gutter. Colorbond colour to match roof.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permaseal R1.8 mineral wool ceiling blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

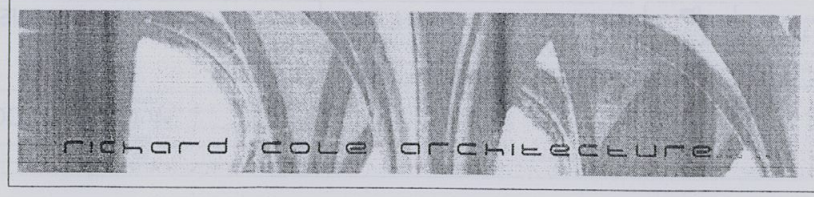
RF-03 Ampelite Wonderglas GC gell coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD HW timber framing to structural engineers details. Fallowich Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

TS-02 Steel framed timber screen comprising steel frame brackets with Dulux "Fermoko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative sheet steel duct with Colorbond Ultra finish to match roof. Provide profile as shown and framing and fixing as required.

0 1.0m 2.0m 3.0m 4.0m 5.0m

1:100 @ A1, 1:200 @ A3



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole (ExSc(Arch) (Hons I) BArch(Hons I) Reg. No. 6528

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE REPRODUCED IN ANY FORM OR USED FOR THE PURPOSE OF CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS. DO NOT SCALE DRAWINGS. FIGURED DIMENSIONS OR WHERE FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES AND / OR OMISSIONS ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL BUILDING WORKS ARE TO COMPLY UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION. NO RESPONSIBILITY IS ACCEPTED FOR DOCUMENTS NOT SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STABILISING STRAPPING, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30-04-13

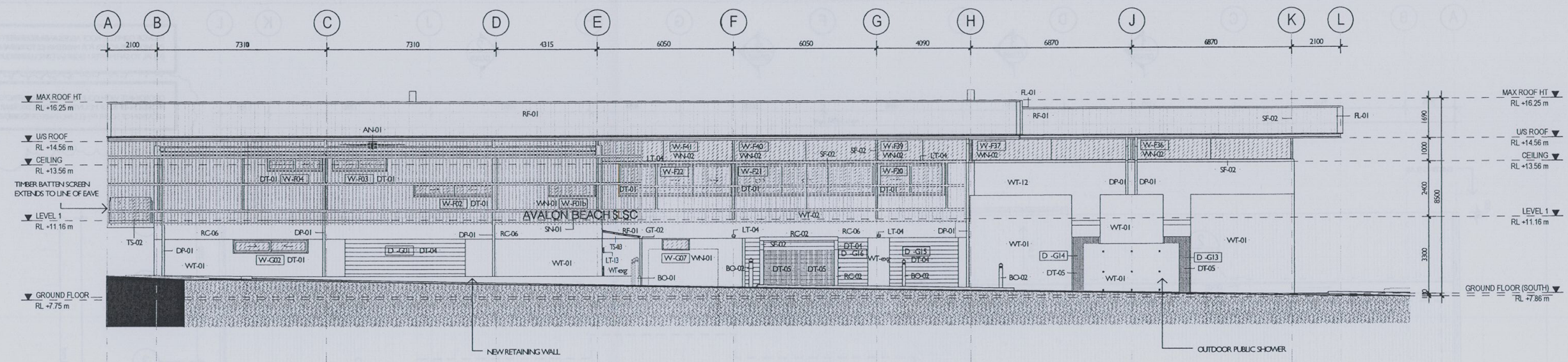
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

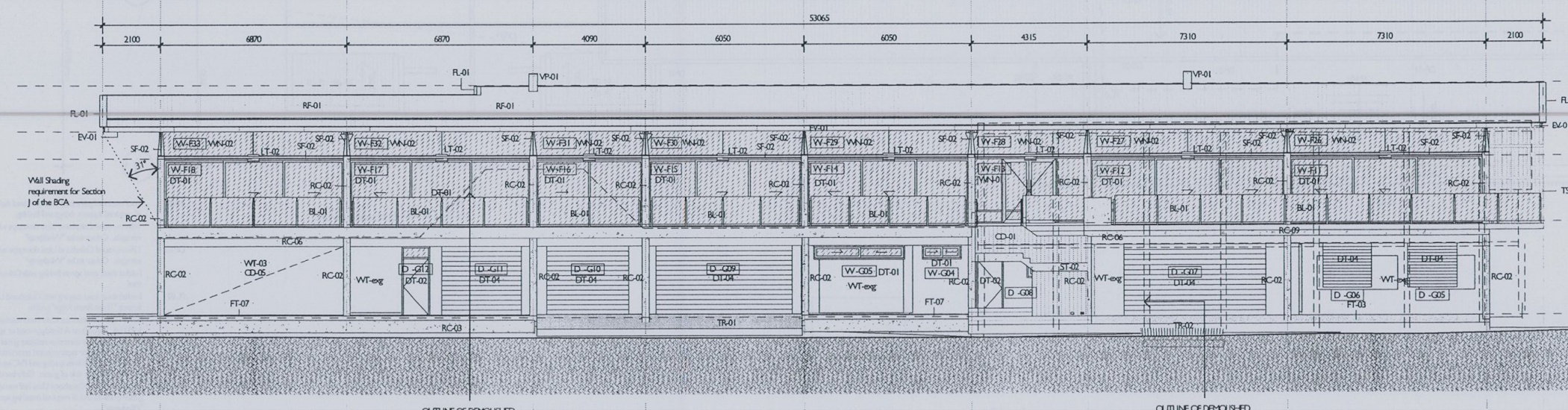
ROOF PLAN

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC006



1 Western Elevation
1 : 100



2 Eastern Elevation
DA2001 1 : 100

AN-01 Roof mounted galvanised steel aerial mast with digital & FM antennae. Provide all required support, fixings and flashing.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 15mm diameter circular core drilled clear anodised aluminium stanchions and base mounted handrail. Space stanchions evenly across runs. Maximum opening to 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with DArounded to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back bolt fixings.

BO-01 Existing Bollard

BO-02 New bollard to match existing

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-05 Temporary CD face A-Bond plywood cladding screwfixed to substrate. Wall to be replaced in lessehold fitout.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 38 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. Newroller doors to be Rusmil Parsoon Aluminium roller shutters to match existing.

DT-05 Steel framed security gate comprising 50 x 50 EA sub frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class 1 HW vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux Termite No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timbersolutions CE 102 Clear Wood Preservative and allow to weather grey.

EV-01 9mm thick Cemintel Cemrock Limestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints cemintel Expresswall to external areas. Fix with Stainless steel washer head Expresswall expand head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

FL-01 Folded sheet steel apron flashing with Colorbond Ultra finish to match roof.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/B.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

LT-02 160W LED flood light ZMFL-160W-NAN1-120D from ZMITAS Led Lights. 65 colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-13 Wall mounted external up / down light - Superlight DAVID SL6192-15 silver finish. 6500K colour temperature.

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WS. Align joints and plug spacer holes with matching mortar.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Scribe to Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Termeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey"

SN-01 350mm high lasercut copper signage norm 3mm thick. Finish letter individually to timber rails with 2 no. 12mm copper tubes welded to behind each letter. Epoxy fix tubes to timber rails. Lettering to be Helvetica Light.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

TR-01 Timber framed ramp to structural engineers detail. Nom 190 x 35 KD Class 1 HW DAR decking with pencil round edges. Fix to H3 treated structure at 450 centres. Install decking with 3mm gaps. Fix with stainless steel square drive decking screws. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

TR-02 Existing timber ramp. Make good if required.

TS-02 Steel framed timber screen comprising steel framed battens with Dulux "Termeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing buildings spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative steel duct with Colorbond Ultra finish to match roof. Provide profile as shown on framing and fixing as required.

WN-01 Elevate Aluminium Series 620 Casmentglaze 150 x 44mm jointed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Alu 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nominal 25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/90 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to stadwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher 158 Partition Blanket ISBS 85mm acoustic insulation to internal stud walls.

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

0 1.0m 2.0m 3.0m 4.0m 5.0m
1:100 @ A1, 1:200 @ A3

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect : Richard Colin Bulloch (Hons I) B.Arch(Hons I) Reg. No. 4878

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT LAND. ALL RIGHTS ARE RESERVED BY RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND / OR COMMENCING ANY WORK. FIGURED DIMENSIONS UNLESS NOTED OTHERWISE TAKE PRECEDENCE OVER SCALED DIMENSIONS. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. THE BUILDING DESIGN INCLUDING ALL ASSOCIATED WORKS (STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS) COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

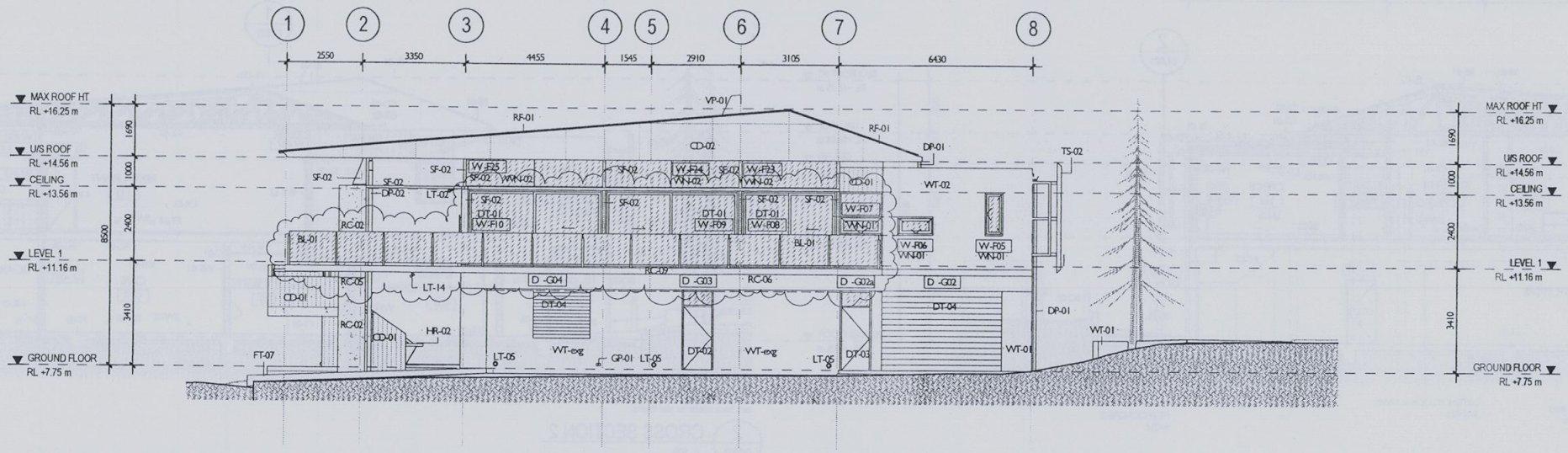
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

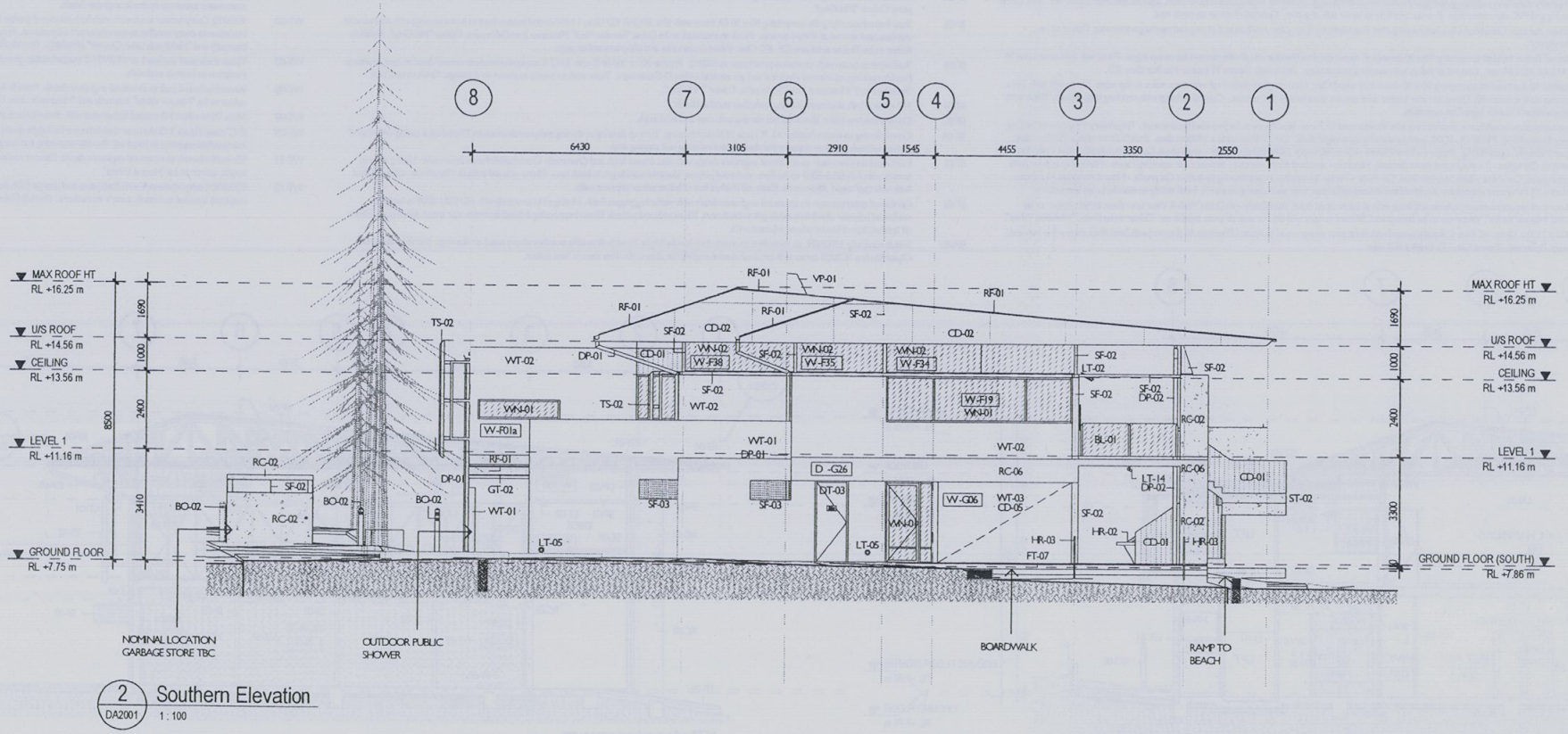
WEST & EAST ELEVATIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC007



1 DA2001 **Northern Elevation**
1 : 100



2 DA2001 **Southern Elevation**
1 : 100

BL-01 Semi frameless glass balustrade to AS1288 with nominal 10mm diameter circular core drilled clear anodised aluminium stanchions and laminated handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Stanchions to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius top edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with concealed stainless steel tube brackets, stainless steel screws and back to back handrailings.

BO-02 New bollard to match existing

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood shiplapped profile vertical weatherboards fixed with stainless steel screws positionally. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation as Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Cemintel Clearsteel Barestone cladding to all fresh joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints in Cemintel Expressvall to external areas. Fix with Stainless steel wafer head Expressvall capped head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CD-05 Temporary CD face A-Bond plywood cladding screwfixed to substrate. Wall to be replaced in leasehold fitout.

DP-01 100mm round Colorbond Ultra downpipe with standard bigge heavy duty astragals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with standard bigge heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 204 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Doors with clear anodised finish and Icon Door furniture and stainless steel mortice locks to suit 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash&Wear semi gloss paint finish in steel frame to masonry wall or clear anodised sliding system to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish Passide related mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A1.07" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Manor Aluminium roller shutters to match existing.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

GP-01 Gas Bayonet nominally 250 to CL AFFL unless noted otherwise.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour light Silk externally.

HR-03 40mm Diameter stainless steel tubular handrail to AS 1657-2009. Conceal fixings to ground.

LT-02 160W LED flood light ZMFL-160W-NAN-120D from ZMTAS Led Lights. 6500K colour temperature

LT-05 9W Uplight from LED Shopper. 6500K colour temperature

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromsheild Enhance WSI. Align joints and plug spacer holes with matching material.

RC-05 Reinforced concrete turndown to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admixture added to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA flanged with 40 x 20 DAR KD Class 1 H-V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timbersolutions CE 102 Clear Wood Preservative and allow to weather grey.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit. In black nom. 50mm wide and setback 15mm. Nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade to adjacent walls.

TS-02 Steel framed timber screen comprising steel frame to details with Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative sheet steel duct with Colorbond Ultra finish to match roof. Provide profile as shown and framing and fixing as required.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm sized aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Alle 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Ados drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/90 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to all walls.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher 15B Partition Blanket 15B5 85mm acoustic insulation to internal stud walls.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

0 1.0m 2.0m 3.0m 4.0m 5.0m
1:100 @ A1, 1:200 @ A3

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nsw 6973 nominated architect: Richard Cole B.Arch(Hons) I) B.Arch(Hons) Reg. No. 6624

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED OR ON ANY OTHER SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DETAILS. DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE ARCHITECT. THE ARCHITECT IS NOT A STRATA SCHEME PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

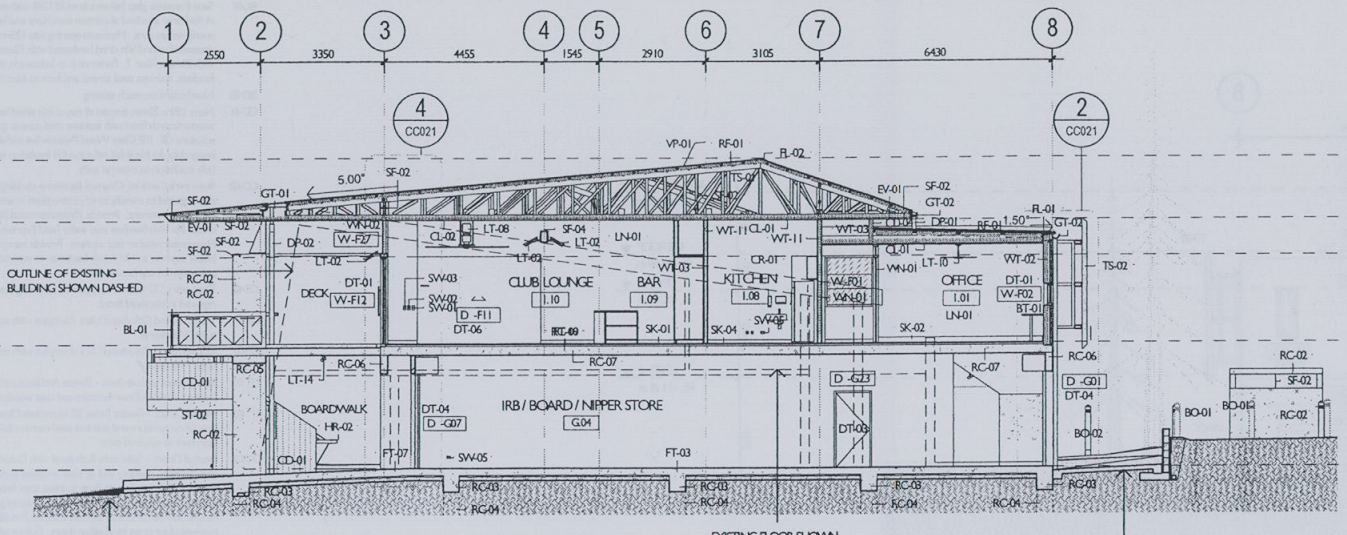
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

NORTH & SOUTH ELEVATIONS

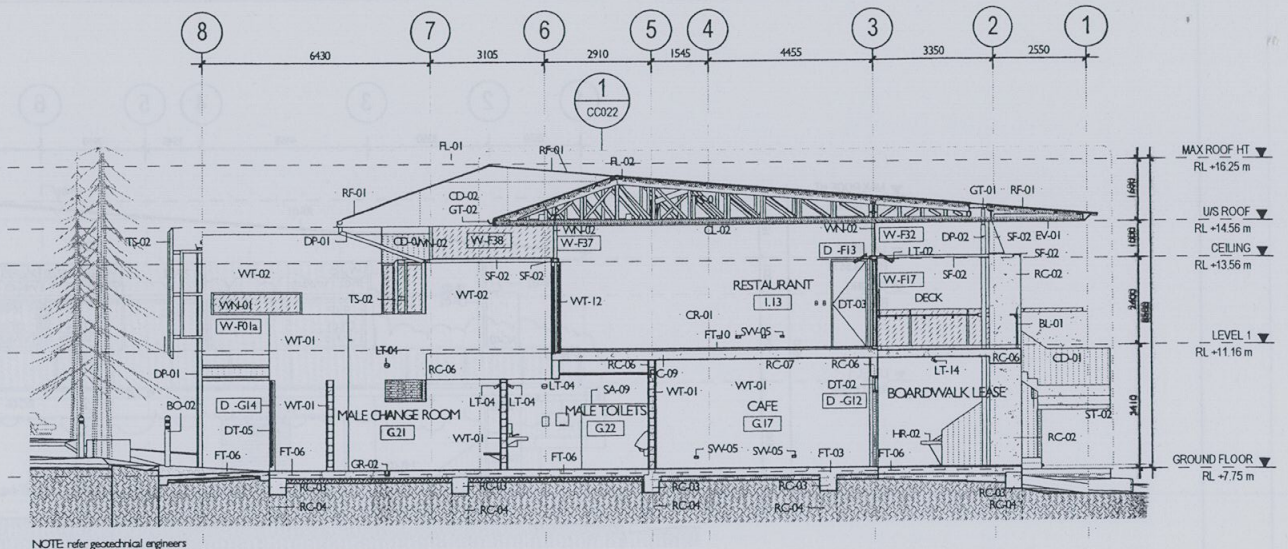
Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC008

to
AVALON BEACH S.L.S.C.



1 CC002 **CROSS SECTION 1** 1 : 100



2 CC002 **CROSS SECTION 2** 1 : 100

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 10mm radius to upper edges. Finish Handrail with Sikkens Rilser 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BO-01 Existing Bollard

BO-02 New bollard to match existing

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on HMR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Caminel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminel Epresswall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CD-04 Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Loft". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflective foil insulation and R2 bulk insulation.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomat Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

DK-01 Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frames. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Mulinor LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-05 Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 M.S flat centre rail and 40 x 20 DAR.KD Class 1 H4V vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MDZ FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

EV-01 9mm thick Caminel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminel Epressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

EX-01 Exit sign to comply with AS2293.1-2005

FL-01 Folded sheet steel apron flashing with Colorbond Ultra finish to match roof.

FL-02 Folded sheet steel capping with Colorbond Ultra finish to match roof. Stramit "Three Break Ridge" profile.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to stormwater system.

GT-01 500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietory corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

HR-01 Internal Timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD H4V rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

LF-01 Restricted usage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietory lift system to be Easy Living Domuslift XL Model DL-1CXL, configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft1500mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 720mm wide x 360deep x 1500mm high. Power - single phase. Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturers instructions.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LN-03 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior)with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 003 clear.

LT-02 160W LED flood light ZM-FL-160WNAN-1200 from ZAMTAS Led Lights. 6500K colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-07 Pendant light. Replica Poul Henningsen Snowball Light – Exact from Matt Blatt with E27 LED bulb, 6500K colour temperature.

LT-08 Isis fan from Big Ass Fans installed to manufacturer's instructions. Confirm clearance requirements prior to installation.

LT-10 Ceiling Fan - Reuse existing fan.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

Q31

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSi. Align joints and plug spacer holes with matching material.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-04 Reinforced concrete pier to structural engineer's details.

RC-05 Reinforced concrete turndown to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSi.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

SA-09 San Marco Stone Amenity Terrazzo partition system with "Baltic Black" terrazzo and partition to ground layout. Provide Medam stainless steel hardware with Series 300 concealed fixing surface mounted turnbolts and gravity hinges. Provide painted solid core waterproof doors, colour to be Dulux "Night Sky".

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 H4V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SF-04 Steel services beam with corrosion protection to AS2312. Provide 300 x 200 RHS with 50 CHS suspension brackets conceal fixed to roof structure. Provide openings to conceal electrical and gas services within CHS members. Taper ends to profile as shown on drawings. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.

SK-02 Capral Mouldline 150 x 35mm ducted skirting with clear anodised finish.

SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-02 Fan Speed Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-03 Infra-Red Heater Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000series with brushed aluminium (BA) flat plate with white electric base colour.

SW-14 Switchboard in wall mounted galvanised steel cabinet.

TR-01 Timber framed ramp to structural engineers detail. Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated structure at 450 centres. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative sheet steel duct with Colorbond Ultra finish to match roof. Provide profile as shown and framing and fixing as required.

WN-01 Elevate Aluminium Series 620 Centregate 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezeway Elite 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solarzone Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher 55BS Insulation Blanket 55BS 65mm acoustic insulation to internal stud walls.

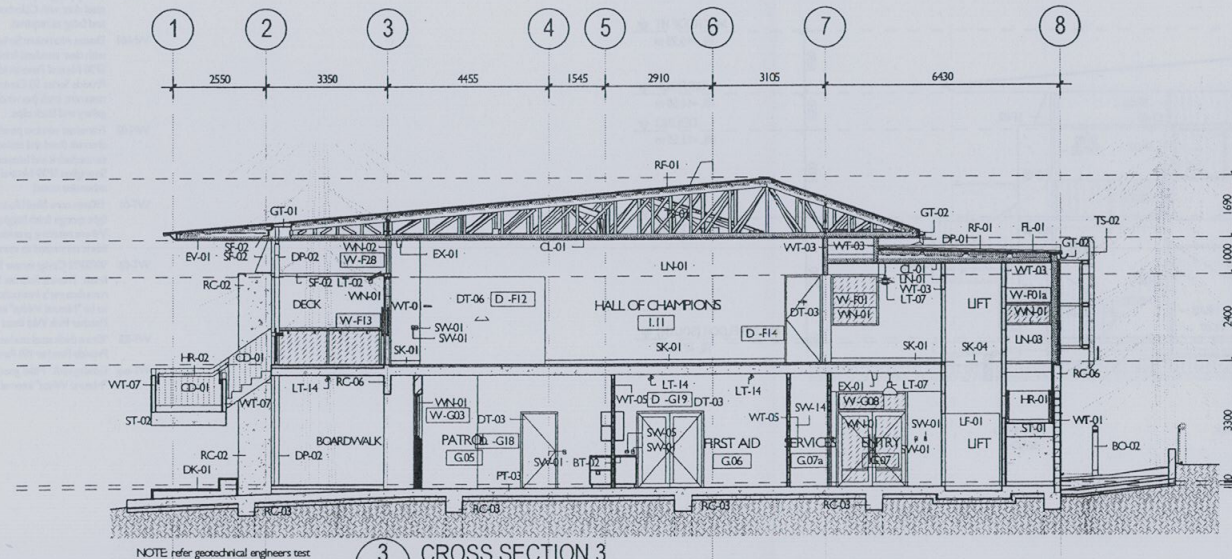
WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally..

WT-07 Nom. 70mm thick H3 treated timber stud wall. Provide vertical stiffening as required to comply with structural requirements for balustrades.

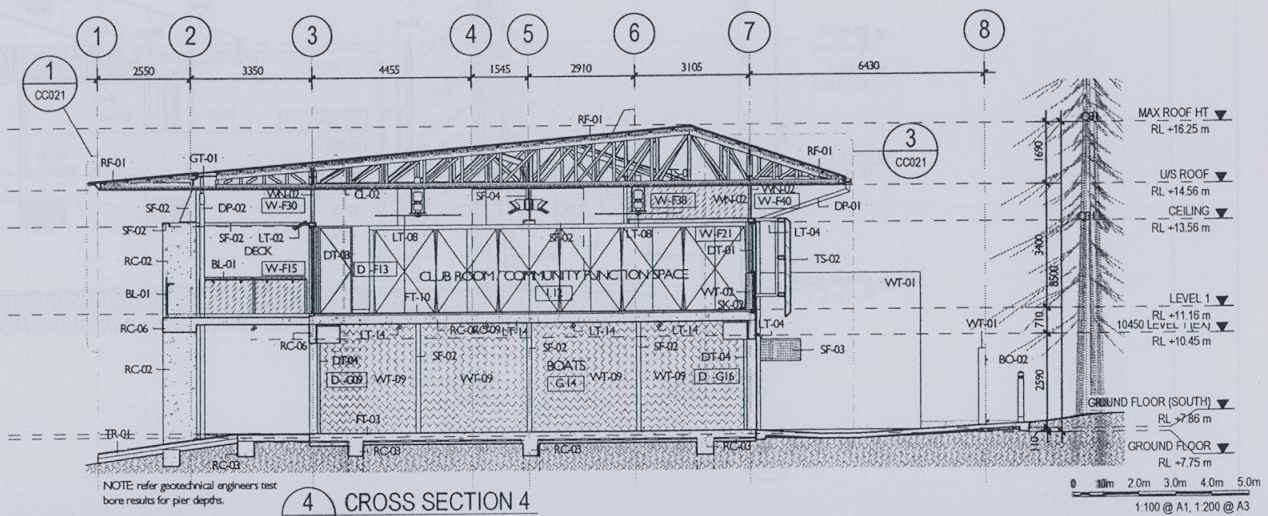
WT-09 PVC coated black 3.15 diameter chainlink wire full height dividing fence. Provide nom. 50 x 50 HDG EA framed to floor and ceiling and intermediate supports as required. Provide tensioning and fixing as required.

WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear low sheen acrylic, colour to be "Natural White".

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colours be selected.



3 CC002 **CROSS SECTION 3** 1 : 100



4 CC002 **CROSS SECTION 4** 1 : 100

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nsw reg 5795 413 · act reg 20 092 578 415
nominated architect : Richard Cole B.Sc.(Arch) (Hons I) B.Arch(Hons II) Reg. No: 6028

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. THE BUILDER SHALL VERIFY THE DIMENSIONS ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS INDICATED ON THE PLANS. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. LARGE SCALE DETAIL DRAWINGS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THE CONSTRUCTION OF THE BUILDING AND ALL BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

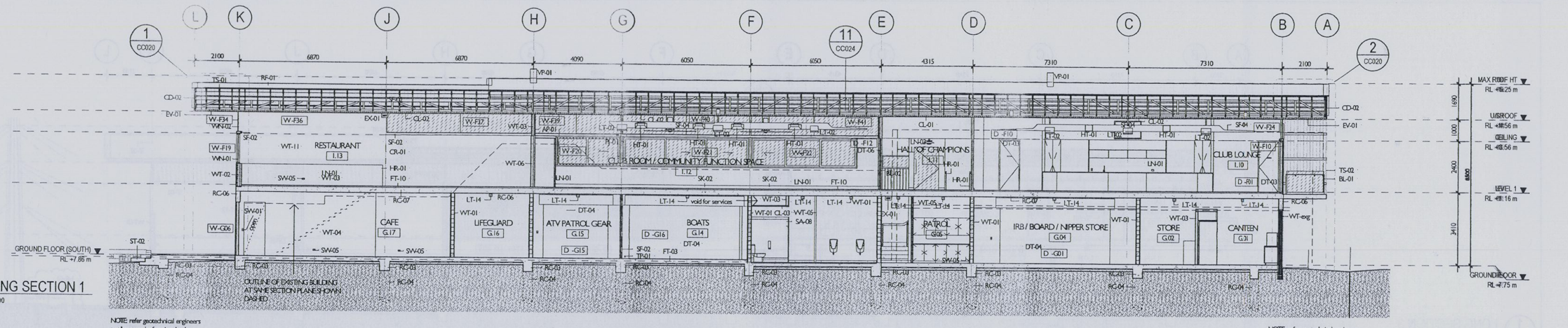
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

SECTIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC009



1 CC002 **LONG SECTION 1** 1 : 100

NOTE: refer geotechnical engineers test bore results for pier depths.

NOTE: refer geotechnical engineers test bore results for pier depths.

AP-01 Acoustica Quietspace 50 fabric faced acoustic panel adhesive fixed to wall. Provide 50 x 50 x 3mm clear anodised aluminium angle to exposed edges. Colour to be "Wessbi".

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be H0 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BL-02 Steel balustrade comprising 30 x 10mm MS Flat stanchions at max 125mm centres welded to 30 x10mm MS flat top and bottom rail. Provide countersunk stainless steel masonry anchors to structure. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

CD-02 9mm thick Caminet Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminet Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CD-04 Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Loft". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflective foil insulation and R2 bulk insulation.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Soncrmet Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

CL-03 9mm thick Caminet Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminet Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360010PW Code H-R009-C available from Harvey Norman Commercial. Provide white grout joints.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MDZ FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

EV-01 9mm thick Caminet Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminet Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

EX-01 Exit sign to comply with AS2293.1-2005

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

HR-01 Internal Timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD HW rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.

HR-03 40mm Diameter stainless steel tubular handrail to AS 1428.1-2009 Conceal fixings to ground.

HT-01 Infrared Radiant Heater - Celmec IRH-G 114 Auto Gas heater with electrical ignition installed to manufacturers instructions. Provide heat shield if required. Conceal gas and electrical connection.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS Interior Mat Plus 003 finish. Provide Angleshoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LN-02 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with no visible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens.

LN-03 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (Interior)with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 003 clear.

LT-02 160W LED flood light ZM-RL-160W-NAN-120D from ZAMTAS Led Lights. 6500K colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

LT-08 Isis fan from Big Ass Fans installed to manufacturer's instructions. Confirm clearance requirements prior to installation.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

PJ-01 Existing Projector to be reused.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-04 Reinforced concrete pier to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 18mm panels with Hardicolor Polyurethane System. Front panels installed with overhead channels and fixed to floor with 6mm brass dowels. cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour to be Dulux "Olive Reserve A221" with Satin finish.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-04 Steel services beam with corrosion protection to AS2312. Provide 300 x 200 RHS with 50 CHS expansion brackets conceal fixed to roof structure. Provide openings to conceal electrical and gas services within CHS members. Taper ends to profile as shown on drawings. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.

SK-02 Capral Modalline 150 x 35mm ducted skirting with clear anodised finish.

SK-03 Ceramic skirting tile to match floor tile. Provide grout to match tile colour.

SK-04 Coved skirting to match Polyflor XL PU Jade 3880 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

TP-01 External tap and sump connected to the sewer system.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

VP-01 Vent pipes grouped and flashed through roof and enclosed within single decorative sheet steel duct with Colorbond Ultra finish to match roof. Provide profile as shown and framing and fixing as required.

WN-01 Elevate Aluminium Series 620 Centregaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Alstair 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Adants drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

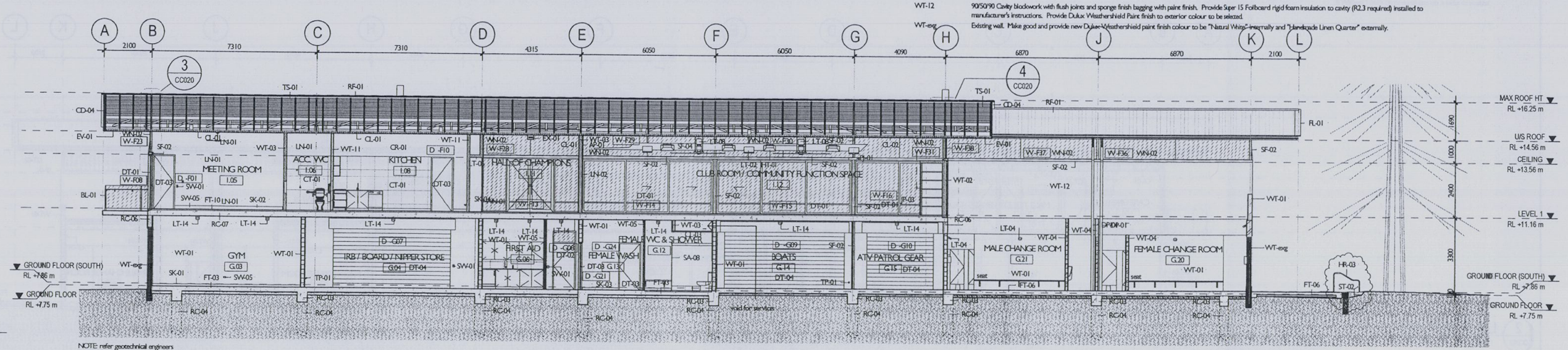
WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally..

WT-06 Acoustic wall comprising 90mm blockwork with cement render finish to inside face, 28mm furring channels at 600mm centres on CSR resilient mounts with 50mm glasswool partition batts 1 Rg/m and 2 x layers of 13mm CSR Soundchek acoustic plasterboard. Provide Dulux Wash N' Wear low sheen paint finish, colour "Natural White".

WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear' low sheen acrylic, colour to be "Natural White".

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.



2 CC002 **LONG SECTION 2** 1 : 100

NOTE: refer geotechnical engineers test bore results for pier depths.

NOTE: refer geotechnical engineers test bore results for pier depths.

0 1.0m 2.0m 3.0m 4.0m 5.0m

1:100 @ A1, 1:200 @ A3

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 6320

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. THE BUILDER SHALL CHECK ALL DIMENSIONS PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ALL DISCREPANCIES IN THE DRAWINGS OR DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES. THIS DRAWING MAY NOT BE ALTERED OR SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT ALL WORKS AND BUILDING ELEMENTS COMPLY WITH THE BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN BUILDING STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

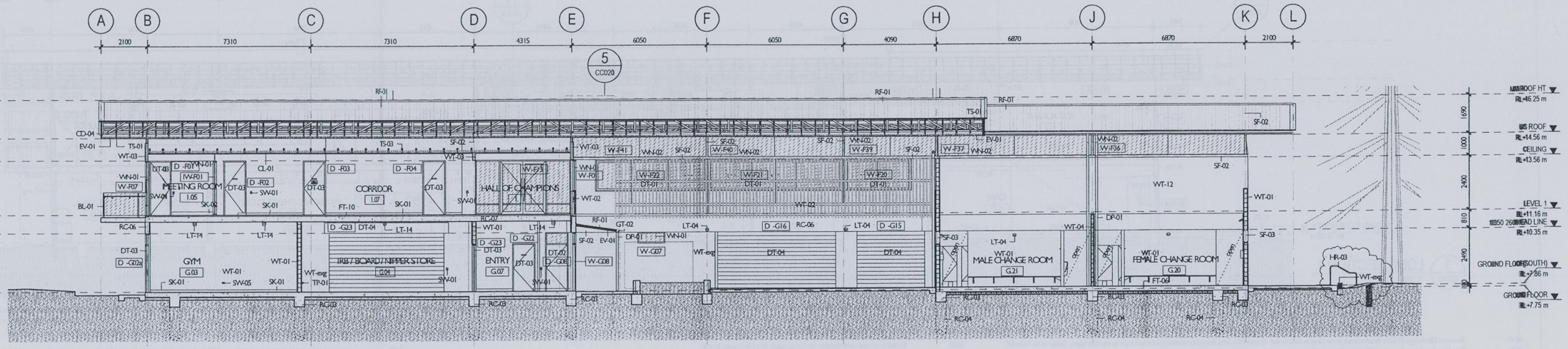
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

SECTIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 100

CC010



1 CC002 LONG SECTION 3
1 : 100

NOTE: refer geotechnical engineers test bore results for pier depths.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round Idin dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BL-02 Steel balustrade comprising 30 x 10mm M/S Flat stanchions at max 125mm centres welded to 30 x 10mm M/S flat top and bottom rail. Provide countersunk stainless steel masonry anchors to structure. Finish to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

CD-04 Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Lotl". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflective foil insulation and R2 bulk insulation.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Clive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

EV-01 9mm thick Cemintel Cleanesi Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

EX-01 Exit sign to comply with AS2293.1-2005

FHR-01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS1221:1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL-02 Folded sheet steel capping with Colorbond Ultra finish to match roof. Stramit "Three Break Ridge" profile.

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Mist Ash HNTGN Code HN-6704 available from Harvey Norman Commercial.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/ B.

FT-06 Reinforced concrete slab with Xypex G-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

HR-03 40mm Diameter stainless steel tubular handrail to AS 1428.1-2009. Conceal fixings to ground.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS interior Mat Plus 003 finish. Provide Anglesheve concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

LF-01 Restricted usage wheelchair accessible hydraulic lift, with steel lift frame. Steel frame to be provided by contractor. Proprietary lift system to be Easy Living Domuslift XL Model DL-1C7L configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft1500mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 720mm wide x 360deep x 1500mm high. Power - single phase. Control Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium - Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturers instructions.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LN-03 1200 x 2400 x 12mm AC Face 'C' Bord plywood with hoop pine veneer equal to Austral Premium AC (Interior) with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS interior 003 clear.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-05 9W Uplight from LED Shopper. 6500K colour temperature

LT-10 Ceiling Fan - Reuse existing fan.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-04 Reinforced concrete pier to structural engineer's details.

RC-06 Reinforced concrete edge turndown tc structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSI.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 miniveral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

RF-03 Ampelite Wonderglas GC gaill coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD HW timber framing to structural engineers details. Finish with Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 19mm panels with Hardicolor Polyurethane System. Front panels installed with overhead channels and fixed to floor with 6mm brass dowels, cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour to be Dulux "Clive Reserve A221" with Satin finish.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 H/V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.

SK-02 Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-02 Fan Speed Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-10 Data switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-11 Telephone switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-13 Aerial switch plate nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour. Connect to roof Mounted aerial.

TP-01 External tap and sump connected to the sewer system.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RH-S steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 38 casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm window anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure allied and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

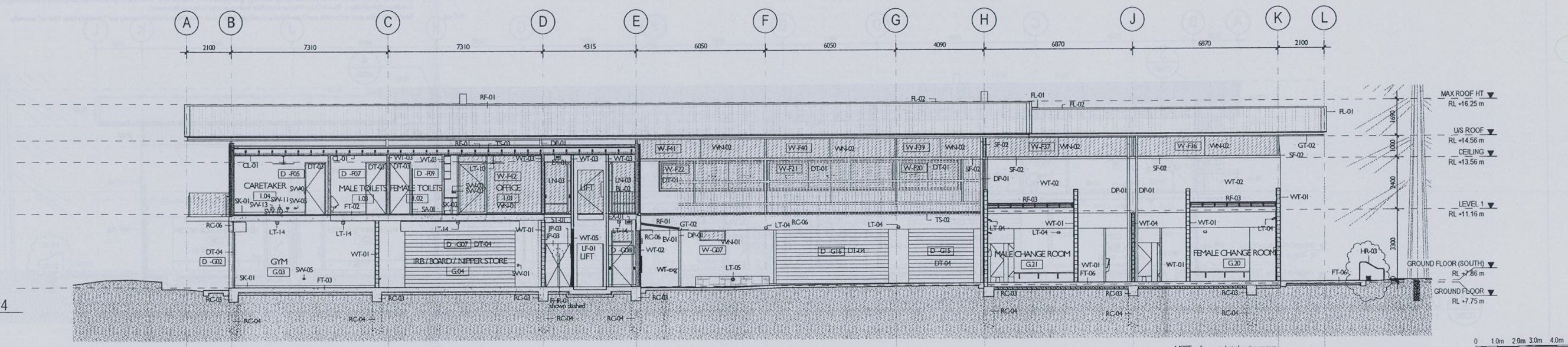
WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket R2.5 55mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.



2 CC002 LONG SECTION 4
1 : 100

NOTE: refer geotechnical engineers test bore results for pier depths.

0 1.0m 2.0m 3.0m 4.0m 5.0m
1:100 @ A1, 1:200 @ A3

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

abn 39 598 415 abn 39 592 598 415
nominated architect: Richard Cole. B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 4626

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED, WITHOUT THE WRITTEN CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE ARRANGEMENT COLUMN AND APPROVED AND SIGNED BY RICHARD COLE ARCHITECTURE PTY LTD. RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

SECTIONS

Project number	1001		CC011
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	1 : 100

ROBERT HOPTON
PROJECT DIRECTOR
M: 0412 328 887

139 PALMGROVE ROAD
AVALON BEACH NSW 2107
t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
www.richardcolearchitecture.com.au
richard@richardcolearchitecture.com.au
ABN 79 145 448 238 Nominated Architect Richard Cole Reg No 4103

richard cole architecture

No.	Revision Description	Date
J	Issued for Tender	06-12-13
K	Tendering CC	02-06-13
O	Construction Issue	30/04/13

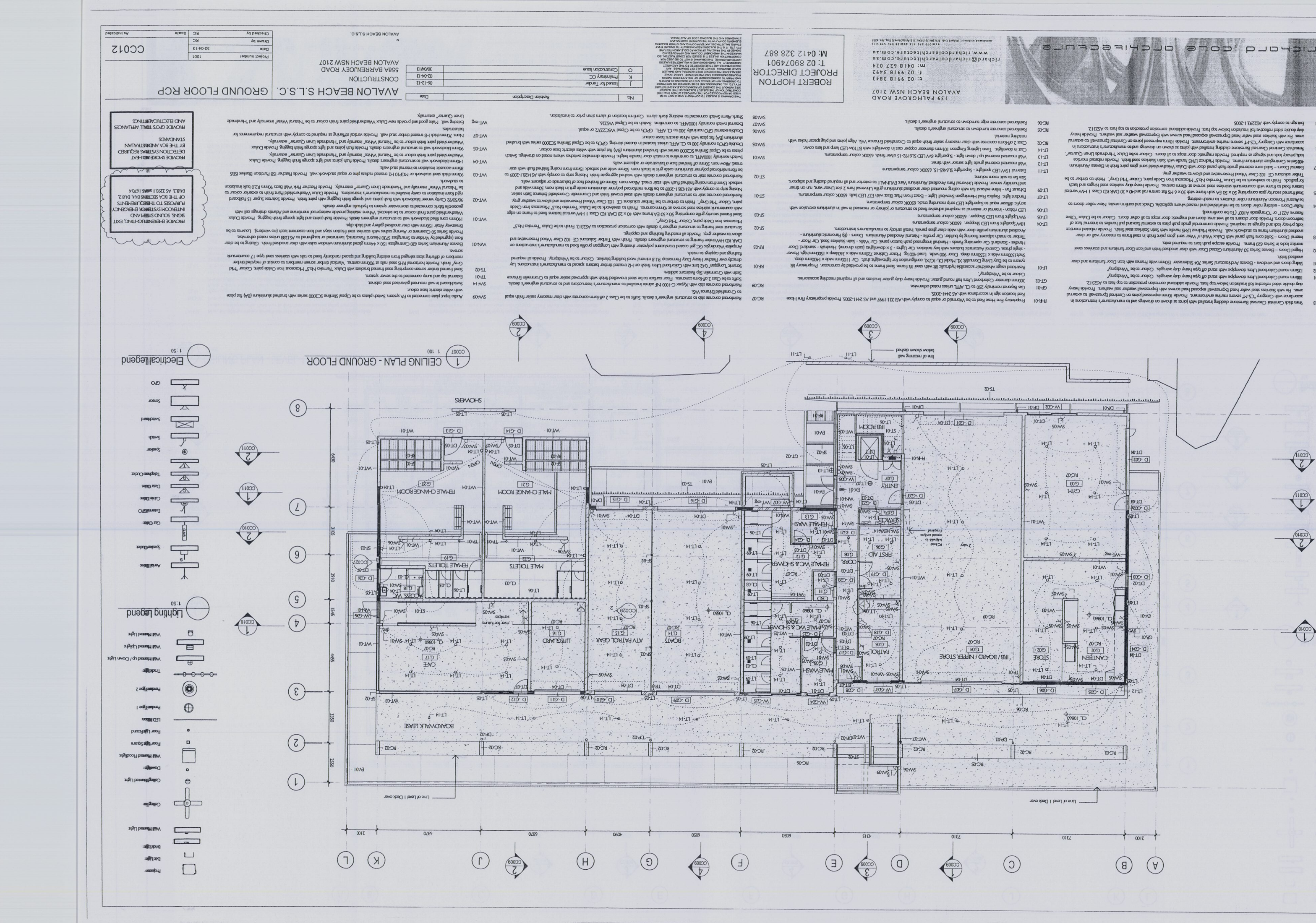
AVALON BEACH S.L.S.C. GROUND FLOOR RCP

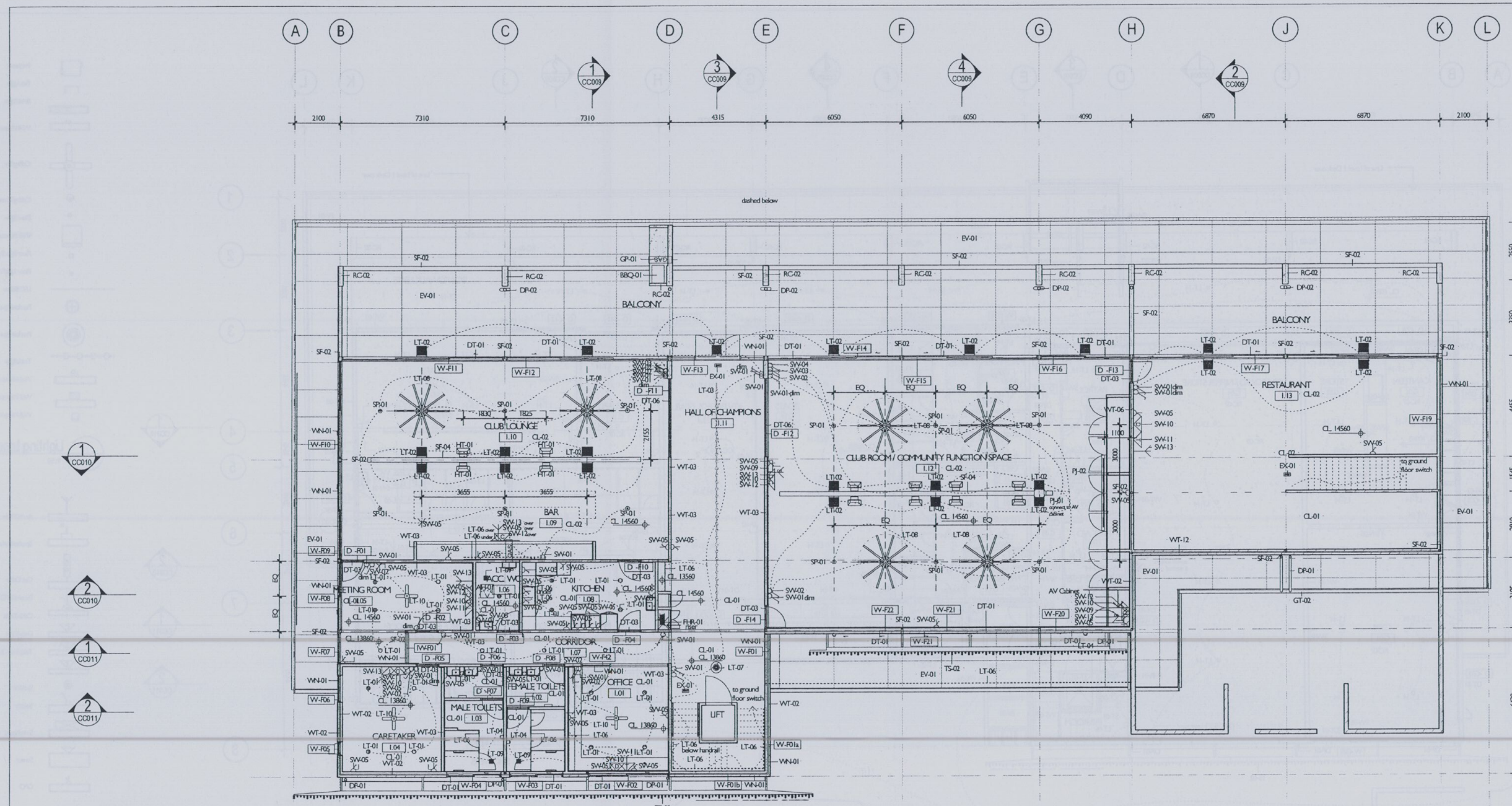
CONSTRUCTION
588A BARRENJOEY ROAD
AVALON BEACH NSW 2107

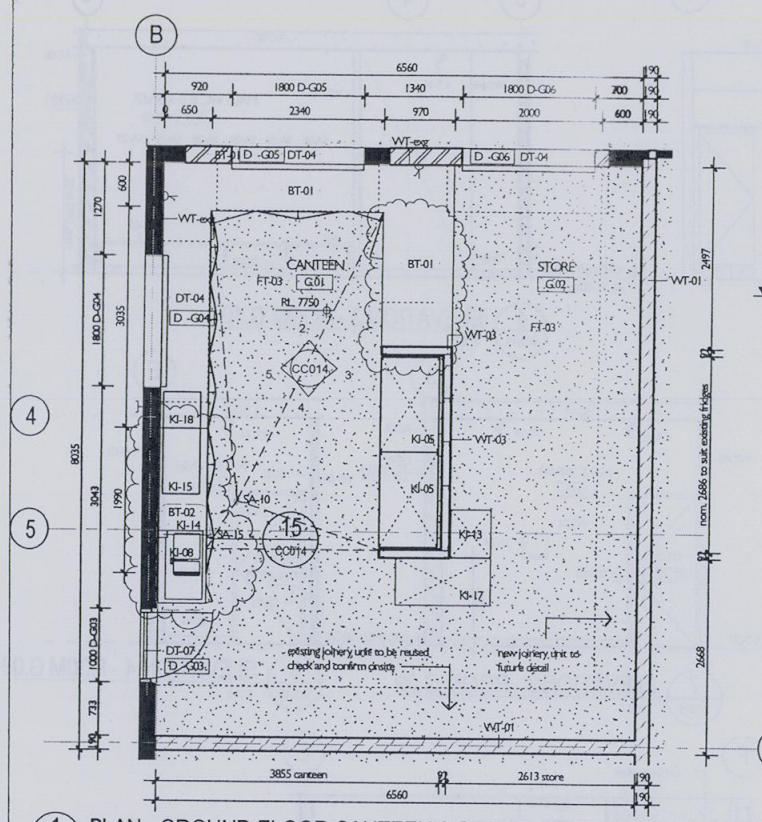
Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	As indicated

CC012

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE COPIED OR REPRODUCED BY ANY MEANS OR IN ANY MANNER WHATSOEVER NOR ISSUED TO ANY THIRD PARTY WITHOUT THE CONSENT OF THE ARCHITECT. ALL RIGHTS ARE RESERVED. THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT. NO RESPONSIBILITY IS ACCEPTED FOR SCALING OF THIS DRAWING. ALL WORKMANSHIP AND MATERIALS ARE TO COMPLY WITH RELEVANT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

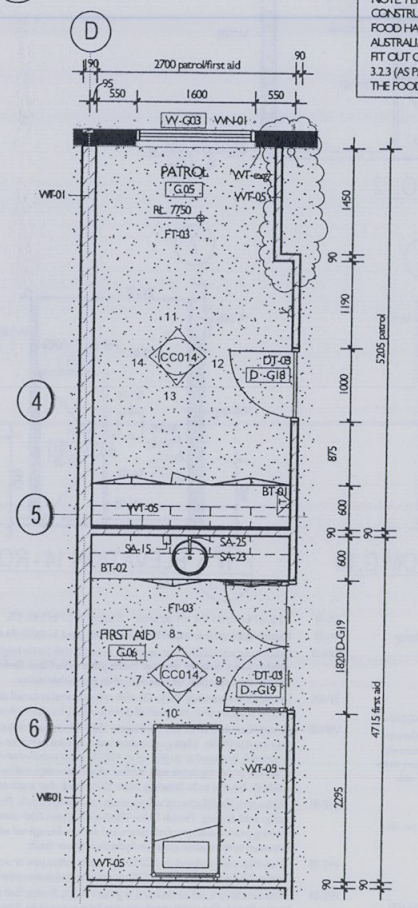

Line of cladding wall below shown dotted
Line of Level | Deck over
Line of Level | Deck over
SHOWERS
BOARDWALK LEASE
CAFE
LIFEGUARD
ATV PATROL GEAR
BOATS
MALE CHANGE ROOM
FEMALE CHANGE ROOM
MALE TOILETS
FEMALE TOILETS
CROSS WK
FEMALE WC & SHOWER
MALE WC & SHOWER
FEMALE WASH
MALE WASH
FIRST AID
CORR
ENTRY
PATROL
IRB / BOARD / NIPPER STORE
CANTEEN
STORE
GYM
IRB ROOM
LIFT
Ramp 1:14
Level change
Level change
Ramp 1:14
Ramp 1:14
Ramp 1:14


A
B
C
D
E
F
G
H
J
K
L
2100
7310
7310
4315
6050
6050
4090
6870
6870
2100
dashed below
BALCONY
CLUB LOUNGE
1.10
CL-02
HALL OF CHAMPIONS
1.11
CLUB ROOM / COMMUNITY FUNCTION SPACE
1.12
CL-02
BALCONY
RESTAURANT
1.13
CL-02
BAR
1.09
CL-02
MEETING ROOM
CL-01
1.05
ACC. WC
1.06
KITCHEN
1.08
CL-01
CORRIDOR
CL-01
CARETAKER
1.04
CL-01
FEMALE TOILETS
1.02
CL-01
MALE TOILETS
1.03
CL-01
OFFICE
1.01
CL-01
LIFT
AV Cabinet
CL-01
CL-02
CL-01
1
2
3
4
5
6
7
8
2550
3350
4455
2910
3105
6400
1100
3000
3000
1945
1800
1825
3655
3655
1830
1830
515
1830
1830
1830

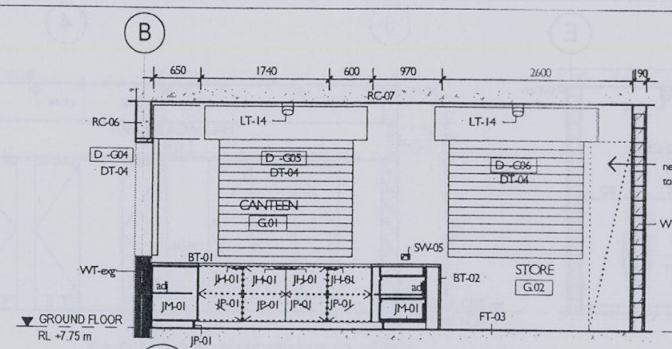


1 PLAN - GROUND FLOOR CANTEEN & STORE - ROOM G.01 & G.02
CC004 1 : 50

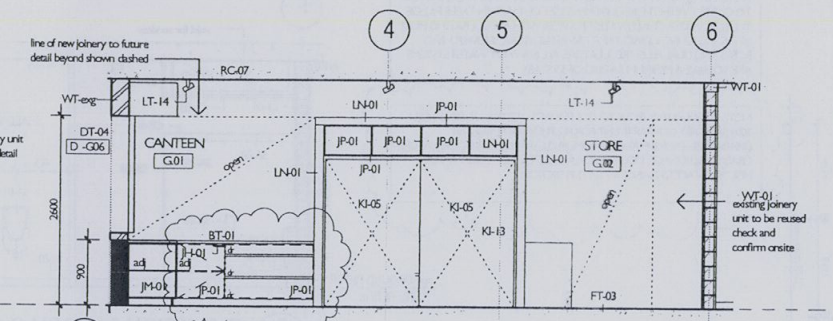
NOTE: PER DEVELOPMENT CONSENT ND893/10 THE CONSTRUCTION, FIT OUT AND FINISHING OF THE KITCHEN, FOOD HANDLING AND STORAGE AREAS MUST COMPLY WITH AUSTRALIAN STANDARDS 4674-2004 DESIGN, CONSTRUCTION & FIT OUT OF FOOD PREMISES AND THE FOOD SAFETY STANDARD 3.2.3 (AS PART OF THE FOOD STANDARDS CODE) REQUIRED BY THE FOOD REGULATION 2004.



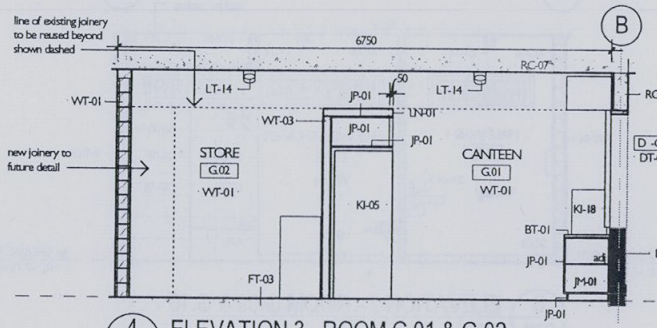
6 PLAN - GROUND FLOOR PATROL & FIRST AID
CC004 1 : 50



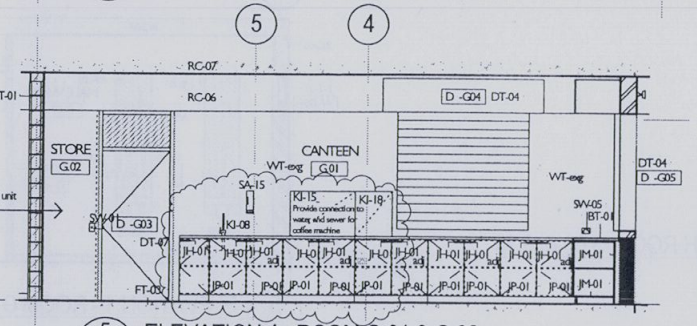
2 ELEVATION 1 - ROOM G.01 & G.02
CC014 1 : 50



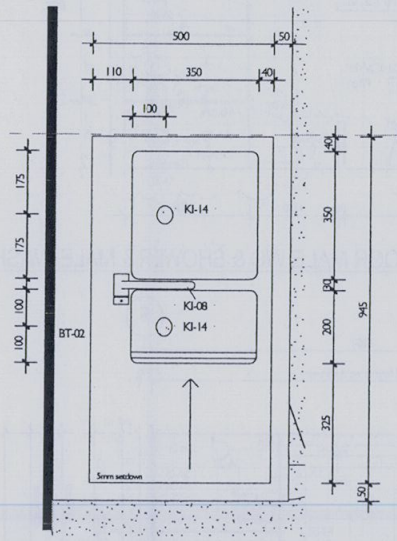
6 3 ELEVATION 2 - ROOM G.01 & G.02
CC014 1 : 50



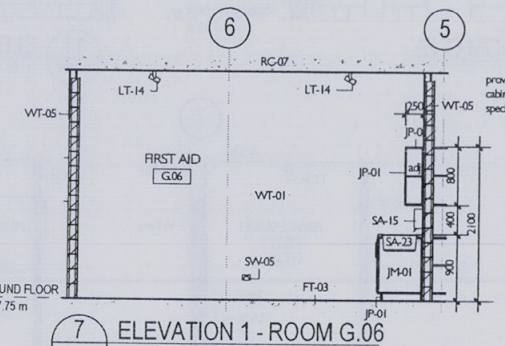
4 ELEVATION 3 - ROOM G.01 & G.02
CC014 1 : 50



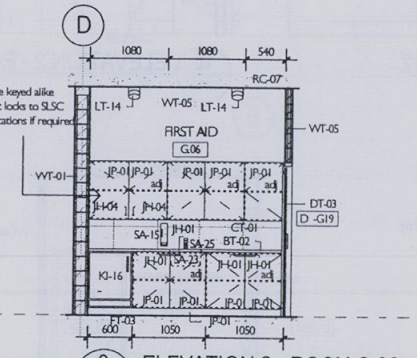
5 ELEVATION 4 - ROOM G.01 & G.02
CC014 1 : 50



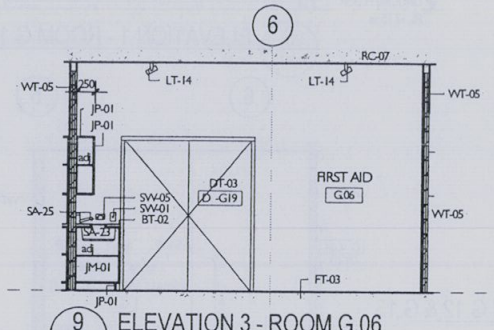
15 PLAN - CANTEEN SINK
CC014 1 : 10



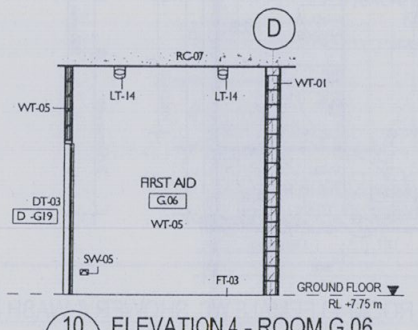
7 ELEVATION 1 - ROOM G.06
CC014 1 : 50



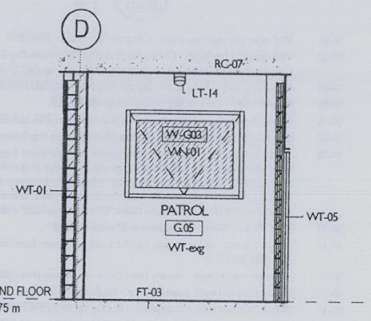
8 ELEVATION 2 - ROOM G.06
CC014 1 : 50



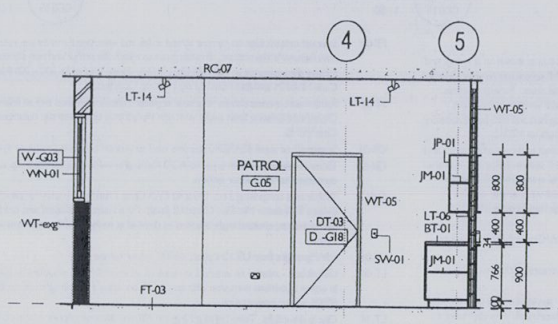
9 ELEVATION 3 - ROOM G.06
CC014 1 : 50



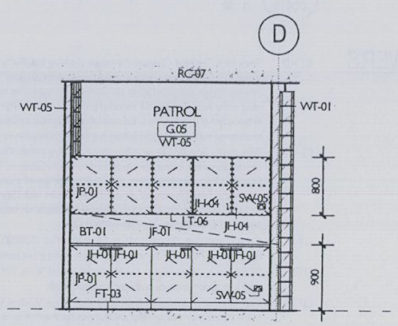
10 ELEVATION 4 - ROOM G.06
CC014 1 : 50



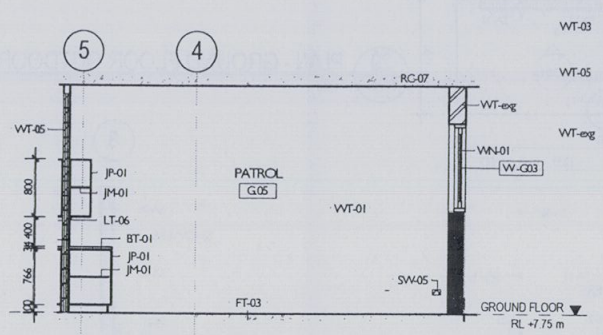
11 ELEVATION 1 - ROOM G.05
CC014 1 : 50



12 ELEVATION 2 - ROOM G.05
CC014 1 : 50



13 ELEVATION 3 - ROOM G.05
CC014 1 : 50



14 ELEVATION 4 - ROOM G.05
CC014 1 : 50

AP-01 Acoustica Quietspace 50 fabric faced acoustic panel adhesive fixed to wall. Provide 50 x 50 x 3mm clear anodised aluminium angle to exposed edges. Colour to be "Matt".

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with 6mm anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on H4R particleboard substrate. Provide integral splash as detailed with designer wastes. Continuous fillet weld all joins and grind smooth. Provide square edge detail.

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G 36000 GPW Code HNK009-C available from Harvey Norman Commercial. Provide white grout joints.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Clear furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to stud/steel wall. Provide Madinoc LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Cliveller reserve A721" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-07 External Doors – Solid core external grade flush panel door with Dulux Weathershield semi gloss paint finish in Elevate Aluminium 400 Series Centreglaze aluminium frame. Provide Madinoc LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide magnetic door stops to all doors. Colour to be Dulux "Handmade Linen Quarter".

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Cromsheild Cromfield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

JF-01 Fabric covered pinboard equal to Designer Pinboards Australia Standard Range Colour Terracotta Felt.

JH-01 Joinery door pull - Edge of joinery panel to be routed out to provide door pull norm. 150mm wide x 20mm deep with round end.

JH-04 Häfele Joinery Lock

JM-01 16mm HMR particleboard with white melamine to both sides and 2mm edge strips.

JP-01 17mm Black Formply plywood with sealed edges and no trade markings. Provide concealed fixings. Handles to doors to be 150 x 20mm routed round and slot as shown on drawings.

KI-05 Fridge - reuse existing.

KI-08 Kitchen mixer - Caroma Time Sink Mixer 99003SSSA.

KI-13 Chest Freezer - reuse existing.

KI-14 Integrated stainless steel kitchen sink with designer wastes.

KI-15 Coffee Machine - reuse existing.

KI-16 Underbench fridge - to be silenced.

KI-17 Ice Cream Fridge - reuse existing.

KI-18 Grinder - reuse existing.

LN-01 13mm thick impact resistant plasterboard lining with all joins taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joins taped & set. Colour to be Dulux "White on White".

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in walls aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

RC-06 Reinforced concrete edge to down to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromsheild Enhance WS.

SA-10 Floor Waste - Reece Mitu stainless steel waste or equal.

SA-15 Surface Mounted liquid soap dispenser - Bradley Sf. SMtd (1.2ltr) SSS.

SA-23 Integrated Sink - Nomi 450 mm diameter x 180mm deep round 304 Grade stainless steel integrated sink.

SA-25 Basin Mixer - Caroma Slim Line mixer 903305CA

SW-01 Switch nominally 1000 AFFL unless noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Imagine 5P30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-03 92mm thick steel stud work as MRGF1015 treated radiata pine or equal stud work wall. Provide Flexible ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

a.b.n. 093 592 415 a.c.n. 138 097 592 415
nominated architect: Richard Cole B.Sc.(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 5519

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED IN ANY MANNER FOR THE PURPOSE OF CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND / OR THE COMMENCEMENT OF ANY WORKSHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED BY THE PRINCIPAL CONSULTANT AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

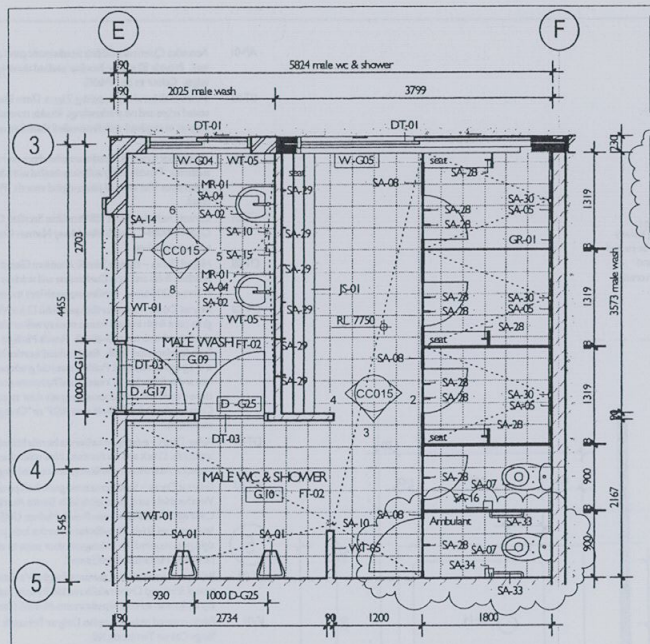
AVALON BEACH S.L.S.C.

GROUND FLOOR PLAN - ROOM G.01-G.02 & G.05-G.06

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC

CC014

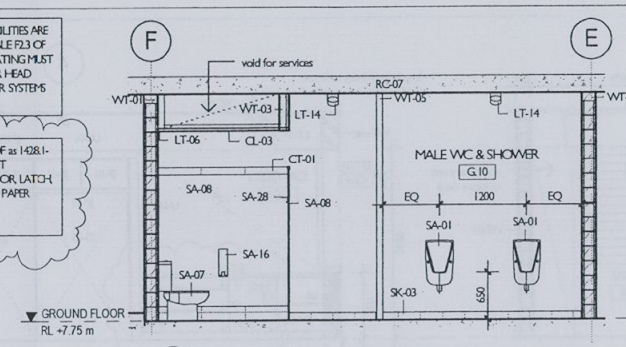
Scale As indicated



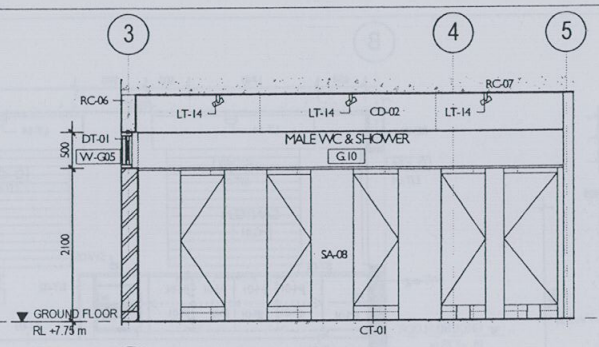
1 CC004 PLAN - GROUND FLOOR MALE WC & SHOWER & MALE WASH ROOM G.09 & G.10
1 : 50

NOTE: PER DEVELOPMENT CONSENT ND693/10 SANITARY FACILITIES ARE TO COMPLY WITH THE REQUIREMENTS SET OUT WITHIN TABLE F3.3 OF THE BCA. WATER CONSERVATION DEVICES WITH AN AAA RATING MUST BE INSTALLED INCLUDING TAP FLOW REGULATORS, SHOWER HEAD ROSES AND DUAL FLUSH REGULATORS. ALL NEW HOT WATER SYSTEMS ARE TO HAVE A MINIMUM RATING OF 3.5 STARS.

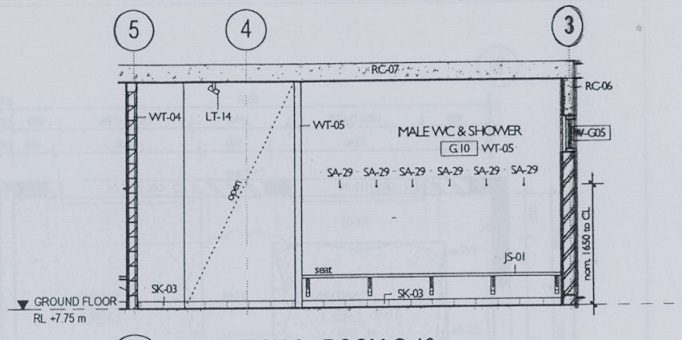
NOTE: AMBULANT CUBICLE TO COMPLY WITH SECTION 16 OF as 1428.1-2009 SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES. PROVIDE 700MM MINIMUM CLEARANCE FOR DOOR, LATCH, GRABRAILS, SIGNAGE, DOOR HOOK AND SETOUT OF TOILET PAPER HOLDER IN ACCORDANCE WITH THIS SECTION.



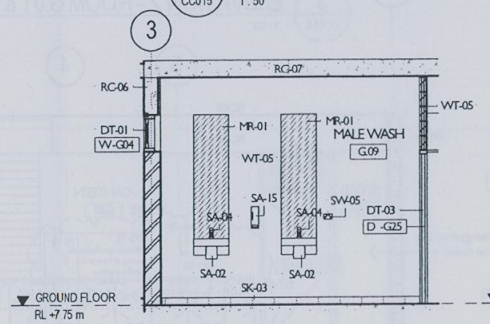
3 CC015 ELEVATION 2 - ROOM G.10
1 : 50



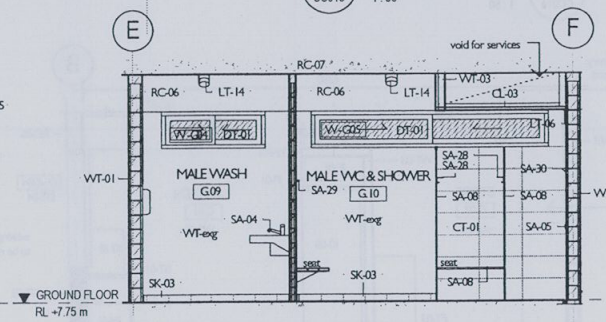
2 CC015 ELEVATION 1 - ROOM G.10
1 : 50



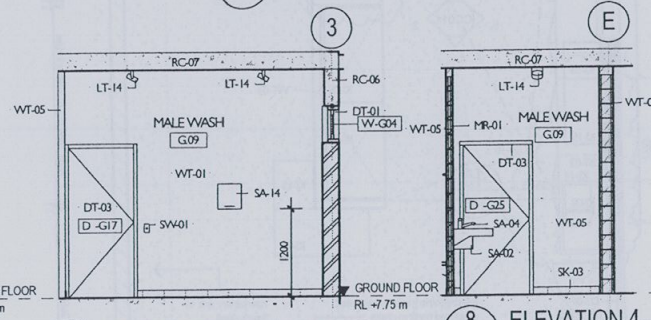
4 CC015 ELEVATION 3 - ROOM G.10
1 : 50



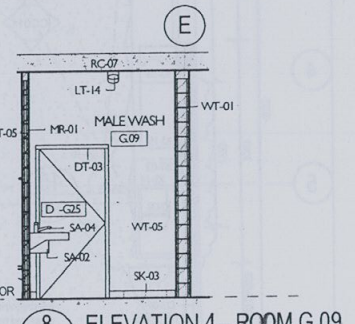
5 CC015 ELEVATION 1 - ROOM G.09
1 : 50



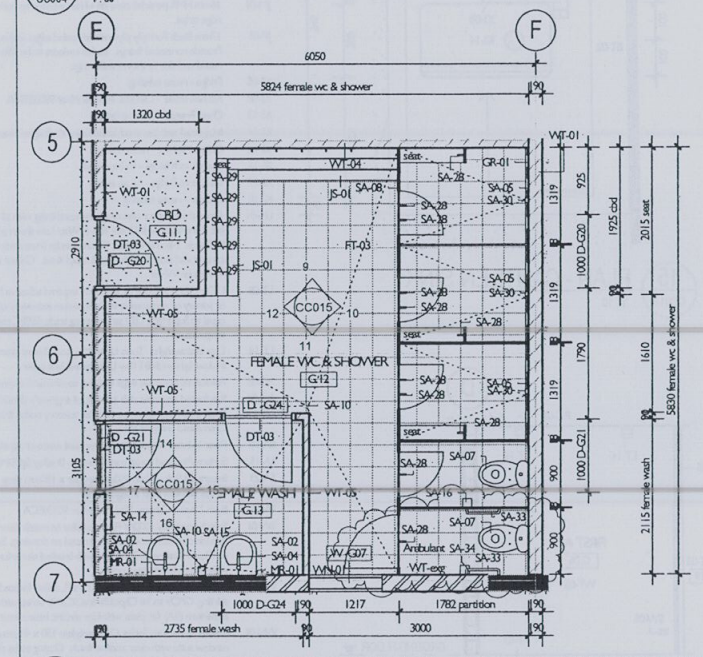
6 CC015 ELEVATION 2 - ROOM G.09 & G.10
1 : 50



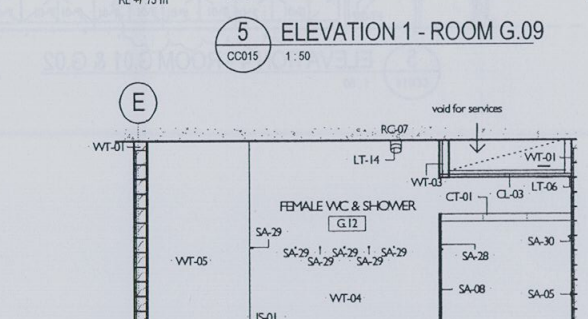
7 CC015 ELEVATION 3 - ROOM G.09
1 : 50



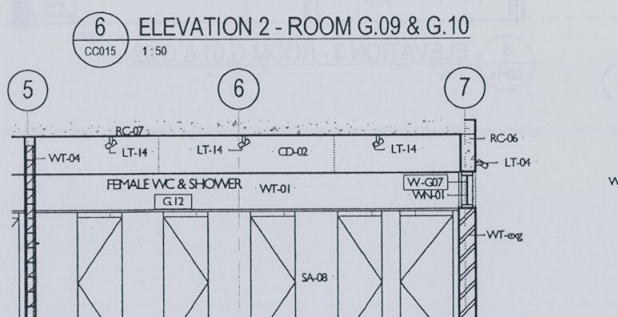
8 CC015 ELEVATION 4 - ROOM G.09
1 : 50



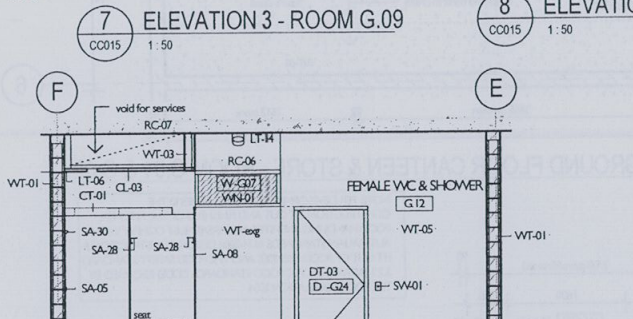
13 CC004 PLAN - GROUND FLOOR ROOM 13 FEMALE WC, SHOWER & WASH ROOM G.12 & G.13
1 : 50



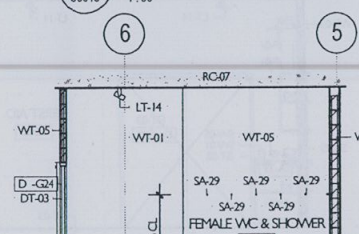
9 CC015 ELEVATION 1 - ROOM G.12
1 : 50



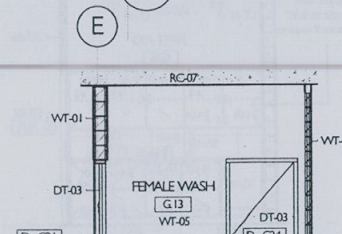
10 CC015 ELEVATION 2 - ROOM G.12
1 : 50



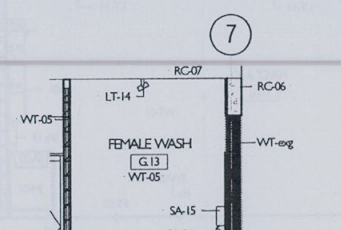
11 CC015 ELEVATION 3 - ROOM G.12
1 : 50



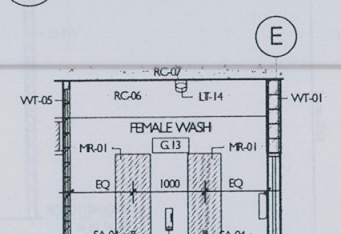
12 CC015 ELEVATION 4 - ROOM G.12
1 : 50



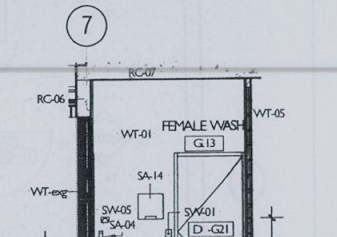
14 CC015 ELEVATION 1 - ROOM G.13
1 : 50



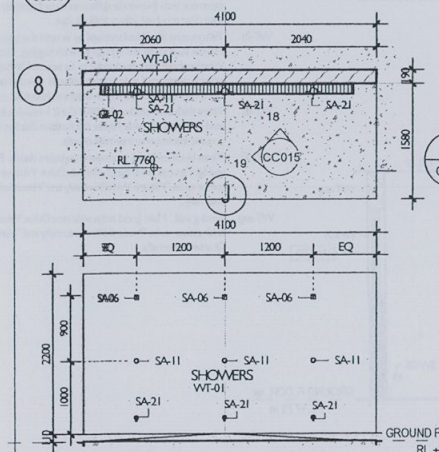
15 CC015 ELEVATION 2 - ROOM G.13
1 : 50



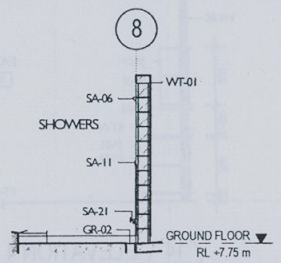
16 CC015 ELEVATION 3 - ROOM G.13
1 : 50



17 CC015 ELEVATION 14 - ROOM G.13
1 : 50



20 CC004 PLAN - GROUND FLOOR OUTDOOR SHOWERS
1 : 50



18 CC015 ELEVATION 1 - OUTDOOR SHOWERS
1 : 50

19 CC015 ELEVATION 2 - OUTDOOR SHOWERS
1 : 50

CD-02 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Espresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CL-03 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Espresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HNR009-C available from Harvey Norman Commercial. Provide white grout joints.

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Sidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-03 Internal Doors – Solid core flush panel with Dulux 'Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HNA704 available from Harvey Norman Commercial.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/ B.

GR-01 Stormtech or equal 65ARG40 stainless steel strip drain connected to sewer system.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to stormwater system

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium strutted angle brackets as detailed at minimum 900mm centres with stainless steel screws.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

MR-01 Adhesive fixed mirror with polished edges.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSI.

FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HNA704 available from Harvey Norman Commercial.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W/ B.

GR-01 Stormtech or equal 65ARG40 stainless steel strip drain connected to sewer system.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to stormwater system

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium strutted angle brackets as detailed at minimum 900mm centres with stainless steel screws.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

LT-14 Cast in downlight. Tovo Lighting Kingston 101mm diameter copper cast in downlight with BT10w LED lamp and lens cover.

MR-01 Adhesive fixed mirror with polished edges.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSI.

SA-01 Wall mounted waterless urinal - Caroma H2Zero Cube 678610W.

SA-02 Wall mounted handbasin - Caroma Carboni II 865715W with Plug & anti Vandal flush fitting Chrome waste 68714 C and Gerberit Disens Bottle Trap ABS CP 190130211-C.

SA-04 Basin Mixer to be 'Alpha' self closing tap from RBA code RBA1043-480.

SA-05 Shower Mixer - Caroma Slim Shower Mixer 90333C CP.

SA-06 Shower Rose to be Vandal Resistant Conical Rose from RBA code RBA8519-102.

SA-07 Back to Wall toilet suite - Stylus Banksia BTW Bsmd Uni trap Suite w5C Seat VH-K1000W-C.

SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 18mm panels with Hardicolor Polyurethane System. Front panels installed with overhead channels and fixed to floor with 6mm brass dowels. cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour to be Dulux "Olive Reserve A221" with Satin finish.

SA-10 Floor Waste - Reece Mizu stainless steel waste or equal.

SA-11 Shower Mixer to be Self Closing Tap Valve with cold water from RBA with 30 second run time code RBA 1055-530.

SA-14 Automatic Hand Dryer - Bradley Hand Dryer - Automatic (Heavy)2202SOA–C S/S.

SA-15 Surface Mounted liquid soap dispenser - Bradley Sgl S/Mtd (1.2ltr) SSS.

SA-16 Surface Mounted toilet roll dispenser - Bradley Tpl S/Mtd 5443 SSS.

SA-21 Wall mounted self closing foot tap - RBA "Rio" Wall Mounted Self Closing Tap RBA1053-600 PC.

SA-28 Robe Hook with bumper - Bradley Regent Robe Hook R039 PSS.

SA-29 Reuse existing towel hook brackets where viable. New Robe Hooks to be Bradley Regent Robe Hook R033 PSS.

SA-30 Shower Rose - Mira Shower rose 10179 CP.

SA-33 Grab Rails - RBA grad ril to AS1428.1 2009.

SA-34 Surface Mounted toilet roll dispenser - Bradley Tpl S/Mtd 5402 SSS.

SK-03 Ceramic skirting tile to match floor tile. Provide grout to match tile colour.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

WN-01 Elevate Aluminium Series 620 Cairnsglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISBS 85mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally as: "Handmade Linen Quarter" externally.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally as: "Handmade Linen Quarter" externally.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 6028

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN CONSTRUCTION OF THE WORKS SHOWN HEREON WITHOUT THE WRITTEN CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS OR WORKSHOP DRAWINGS BEING PREPARED. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE HEADSHEET COLUMN AND FURTHERMORE SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

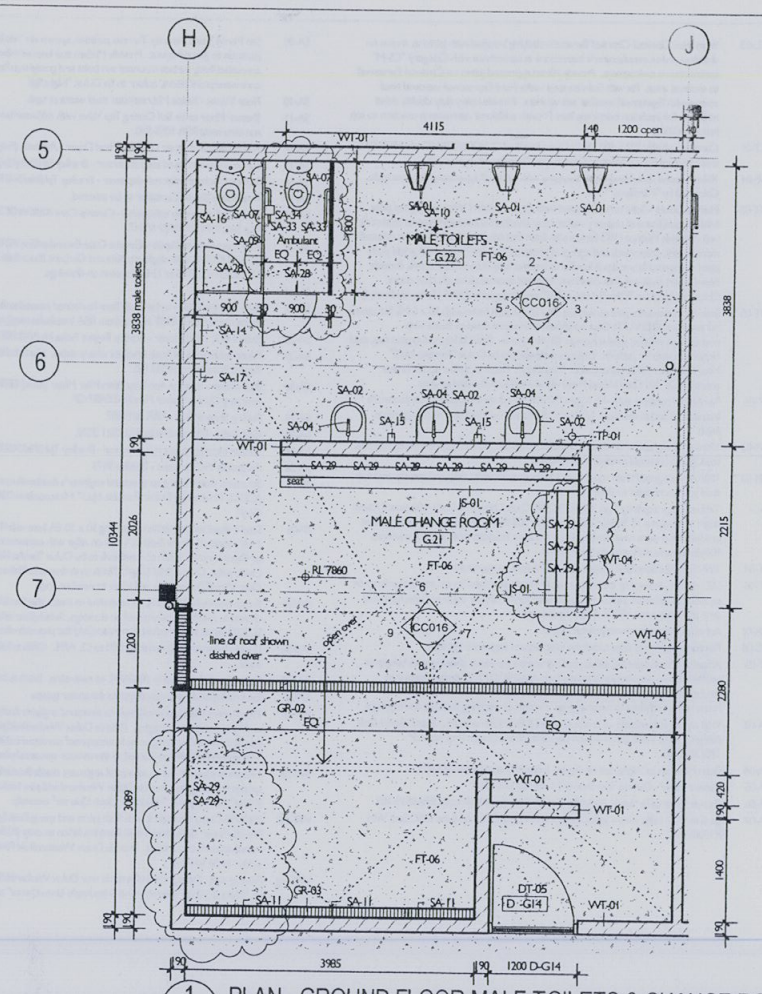
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

for
AVALON BEACH S.L.S.C.

GROUND FLOOR WET AREAS – ROOM G.09-G10, G.12-G.13 & OUTDOOR SHOWERS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 50

CC015



1 CC004 PLAN - GROUND FLOOR MALE TOILETS & CHANGE ROOM ROOM G.21 & G.22
1 : 50

NOTE AMBULANT CUBICLE TO COMPLY WITH SECTION 16 OF as 1428.1-2009 SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES. PROVIDE 700MM MINIMUM CLEARANCE FOR DOOR, LATCH, GRABRAILS, SIGNAGE, DOOR HOOK AND SETOUT OF TOILET PAPER HOLDER IN ACCORDANCE WITH THIS SECTION.

NOTE: PER DEVELOPMENT CONSENT ND693/10 SANITARY FACILITIES ARE TO COMPLY WITH THE REQUIREMENTS SET OUT WITHIN TABLE F3.1 OF THE BCA. WATER CONSERVATION DEVICES WITH AN AAA RATING MUST BE INSTALLED INCLUDING TAP FLOW REGULATORS, SHOWER HEAD ROSES AND DUAL FLUSH REGULATORS. ALL NEW HOT WATER SYSTEMS ARE TO HAVE A MINIMUM RATING OF 3.5 STARS.

CL-03 9mm thick Caminet Clearseal Barestone cladding installed with joints as shown on drawing; and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joint on Caminet Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HM009-C available from Harvey Norman Commercial. Provide white grout joints.

DT-05 Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class II HW vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to stormwater system.

GR-03 150mm wide grated drain equal to ACO Klassicdrain with heelguard anti-slip stainless steel grate connected to sewer system.

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikaflex TS Interior Mastic Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium stratted angle brackets as detailed at minimum 900mm centres with stainless steel screws.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSL

RF-03 Ampelite Wonderglas GC gel coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD HW timber framing to structural engineers details. Finish with Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

SA-01 Wall mounted waterless urinal - Caroma H2Zero Cube 67861 0W.

SA-02 Wall mounted handbasin - Caroma Carboni II 865715W with Plug & anti Vandal flush fitting Chrome waste 687141C and Geberit Diseno Bottle Trap ABS CP 170130211-C.

SA-04 Basin Mixer to be 'Alpha' self closing tap from RBA code RBA1043-600.

SA-06 Shower Rose to be Vandal Resistant Conical Rose from RBA code RBA851902.

SA-07 Back to Wall toilet suite - Stylus Banksia BTW Bsm1 Uni trap Suite w/SC Seat WHK1000W-C.

SA-09 San Marco Stone Amenity Terrazzo partition system with "Baltic Black" terrazzo and partition to ground layout. Provide Pilkam stainless steel hardware with Series 300 concealed fixing surface mounted turnbolts and gravity hinges. Provide painted stile core waterproof doors, colour to be Dulux "Night Sky".

SA-10 Floor Waste - Reece Mitu stainless steel waste or equal.

SA-11 Shower Mixer to be Self Closing Tap Valve with cold water from RBA with 30 second run time code RBA 1055-530.

SA-14 Automatic Hand Dryer - Bradley Hand Dryer - Automatic (Heavy) 2202504-C SS.

SA-15 Surface Mounted liquid soap dispenser - Bradley Sgl SMtd (1.2ltr) SSS.

SA-16 Surface Mounted toilet roll dispenser - Bradley Tpl SMtd 5443 SSS.

SA-17 Proprietary Sharps Container to be selected.

SA-28 Robe Hook with bumper - Bradley Regent Robe Hook R039 PSS.

SA-29 Reuse existing towel hook brackets where viable. New Robe Hooks to be Bradley Regent Robe Hook RC83 PSS.

SA-33 Grab Rails - RBA grad ril to AS1428.1 2009.

SA-34 Surface Mounted toilet roll dispenser - Bradley Tpl SMtd 5402 SSS.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 HW vertical battens fixed to transom edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Fernleko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SW-06 Double external GPO nominally 300 to CL AFFL. GPO's to be Clipsal WSC2072 or equal.

SW-07 External switch nominally 1000 AFFL to centreline. Switch to be Clipsal WS26.

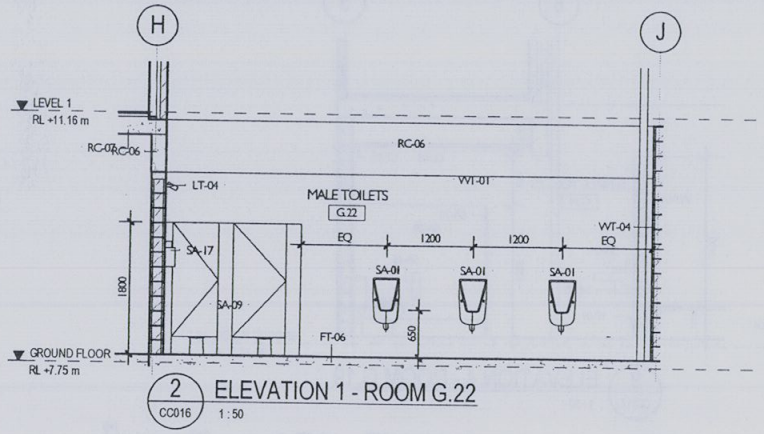
TP-01 External tap and sump connected to the sewer system.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

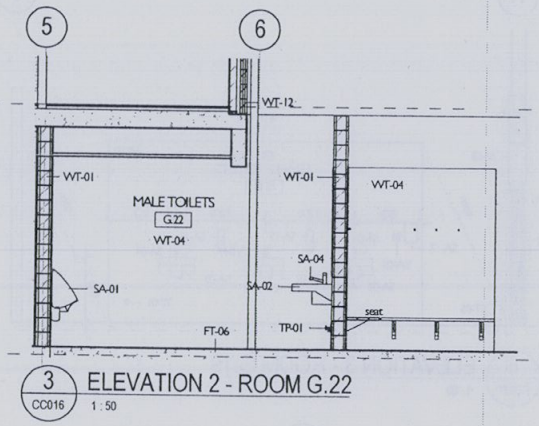
WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solarex Super 15 foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

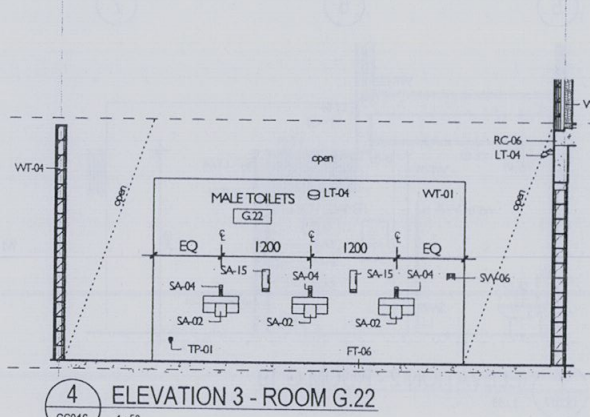
WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.



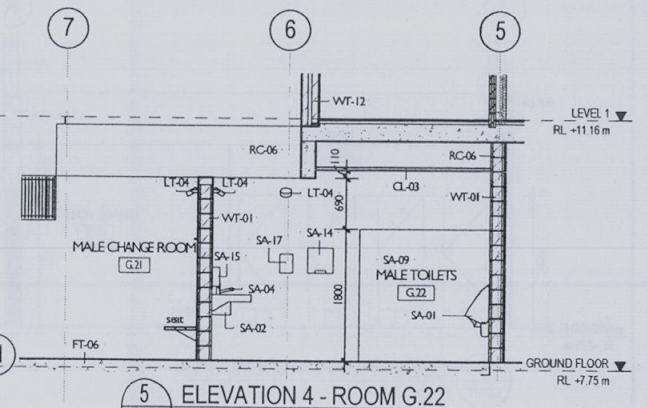
2 CC016 ELEVATION 1 - ROOM G.22
1 : 50



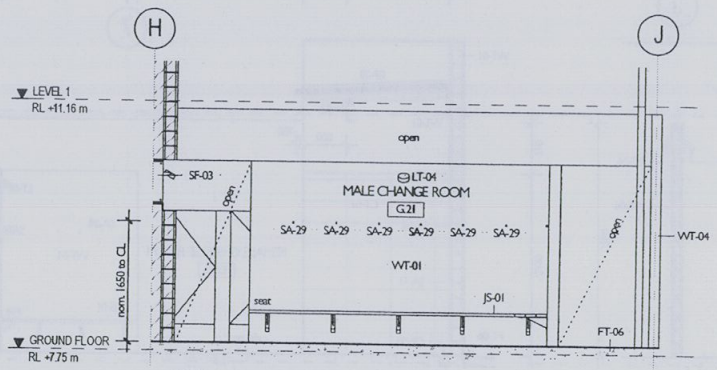
3 CC016 ELEVATION 2 - ROOM G.22
1 : 50



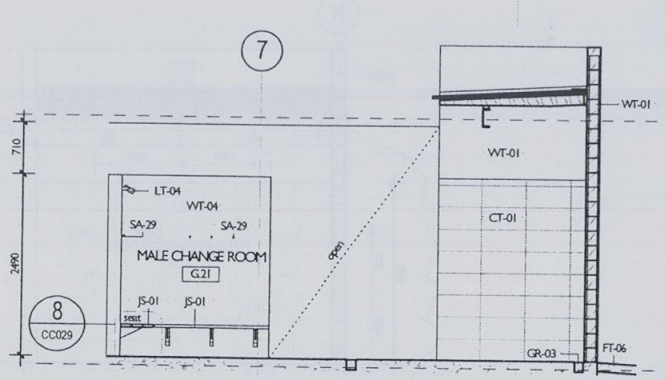
4 CC016 ELEVATION 3 - ROOM G.22
1 : 50



5 CC016 ELEVATION 4 - ROOM G.22
1 : 50

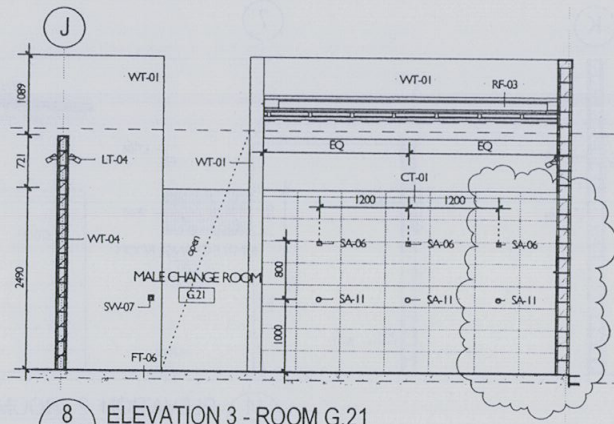


6 CC016 ELEVATION 1 - ROOM G.21
1 : 50

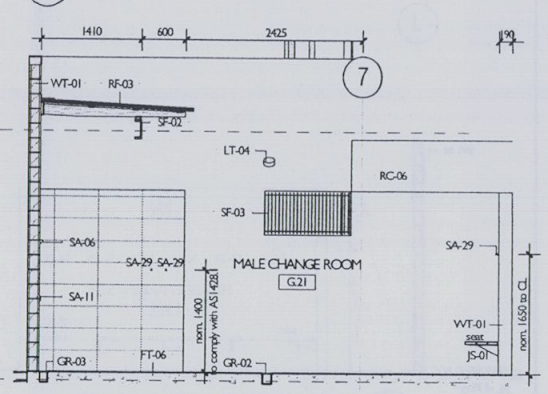


7 CC016 ELEVATION 2 - ROOM G.21
1 : 50

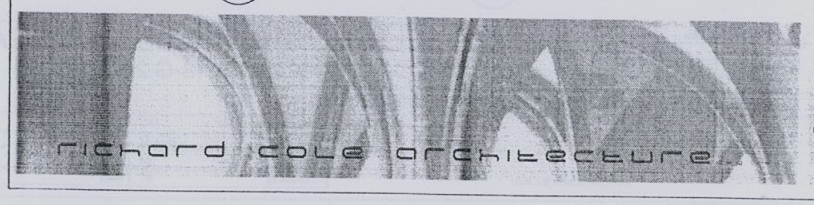
8 CC029



8 CC016 ELEVATION 3 - ROOM G.21
1 : 50



9 CC016 ELEVATION 4 - ROOM G.21
1 : 50



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg No. 4201

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED OR ON ANY OTHER SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS ON SITE. FIGURED DIMENSIONS ARE TO BE ADHERED TO IN DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THESE DRAWINGS ARE NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE ARCHITECT. IT IS THE RESPONSIBILITY OF RICHARD COLE ARCHITECTURE PTY LTD, IF IN THE BUILDING REDRAWINGS, TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND ALL OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
M	Restaurant Development Application	17/04/13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

GROUND FLOOR WET AREAS - ROOM G.21 & G.22

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 50

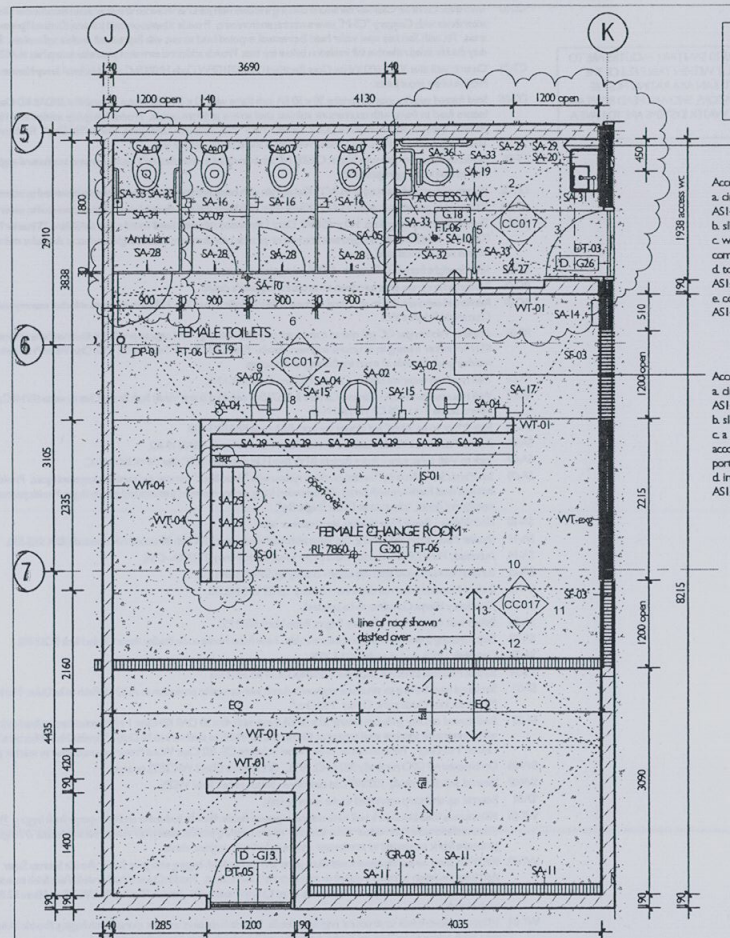
CC016

NOTE: AMBULANT CUBICLE TO COMPLY WITH SECTION 16 OF as 1428.1-2009 SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES. PROVIDE 700MM MINIMUM CLEARANCE FOR DOOR, LATCH, GRABRAILS, SIGNAGE, DOOR HOOK AND SET OUT OF TOILET PAPER HOLDER IN ACCORDANCE WITH THIS SECTION

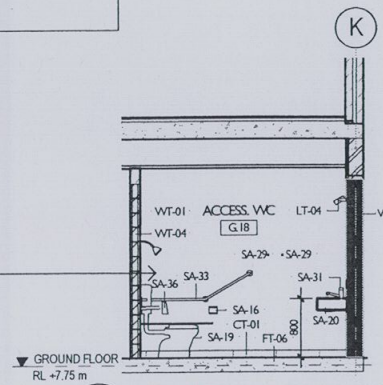
NOTE: PER DEVELOPMENT CONSENT ND693/10 SANITARY FACILITIES ARE TO COMPLY WITH THE REQUIREMENTS SET OUT WITHIN TABLE F2.3 OF THE BCA. WATER CONSERVATION DEVICES WITH AN AAA RATING MUST BE INSTALLED INCLUDING TAP FLOW REGULATORS, SHOWER HEAD ROSES AND DUAL FLUSH REGULATORS. ALL NEW HOT WATER SYSTEMS ARE TO HAVE A MINIMUM RATING OF 3.5 STARS.

Accessible WC to comprise:
a. circulation space in accordance with AS1428.1
b. slip resistant floor surface
c. washbasin that will allow clearances that comply with AS1428.1
d. toilet and grab rail that complies with AS1428.1
e. coat hooks installed in accordance with AS1428.1

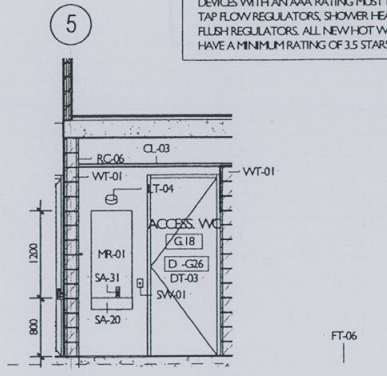
Accessible shower cubicle to comprise:
a. circulation space in accordance with AS1428.1
b. slip resistant floor surface
c. a shower that complies with AS1428.1 accomodating the following: a grab rail, portable shower head and folding seat
d. install towel hooks in accordance with AS1428.1



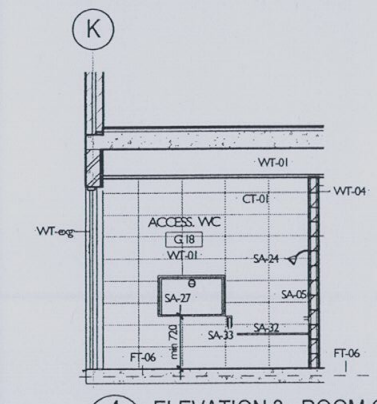
1 CC004 PLAN - GROUND FLOOR FEMALE TOILETS, CHANGE ROOM & ACCESS WC ROOM G.18-G.20 1 : 50



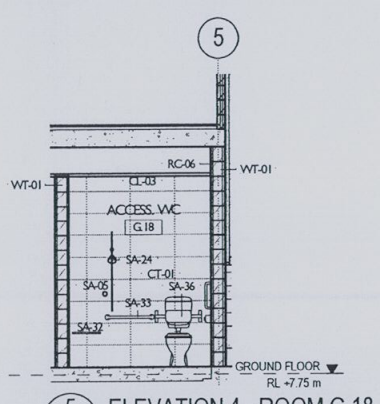
2 CC017 ELEVATION 1 - ROOM G.18 1 : 50



3 CC017 ELEVATION 2 - ROOM G.18 1 : 50



4 CC017 ELEVATION 3 - ROOM G.18 1 : 50



5 CC017 ELEVATION 4 - ROOM G.18 1 : 50

CL-03 9mm thick Caminel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Caminel Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HN-8009-C available from Harvey Norman Commercial. Provide white grout joints.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoc LR45 handle set in Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-05 Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class 1 H-V vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Terrneko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

FT-06 Reinforced concrete slab with Xypex G-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

GR-02 150mm wide grated drain equal to ACO Klassicdrain with heelguard and anti-slip stainless steel grate connected to stormwater system.

GR-03 150mm wide grated drain equal to ACO Klassicdrain with heelguard and anti-slip stainless steel grate connected to sewer system.

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium grated angle brackets as detailed at minimum 900mm centres with stainless steel screws.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

MR-01 Adhesive fixed mirror with polished edges.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RF-03 Ampelite Wonderglas GC gel coated translucent polyester sheeting with Longspan profile fixed to manufacturer's instructions on DAR KD H-V timber framing to structural engineers details. Finish with Timber Solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide all matching flashings and cappings.

SA-02 Wall mounted handbasin - Caroma Carboni II 865715W with Plug & anti Vandal flush fitting Chrome waste 687141C and Gerberit Diseno Bottle Trap ABS CP 170130211-C.

SA-04 Basin Mixer to be "Alpha" self closing tap from RBA code RBA1043-600.

SA-05 Shower Mixer - Caroma Slim Shower Mixer 903330C CP.

SA-06 Shower Rose to be Vandal Resistant Conical Rose from RBA code RBABS19-102.

SA-07 Back to Wall toilet suite - Stylus Banksia BTW Bern1 Uni trap Suite w5C Seat WH K1003W-C.

SA-09 San Marco Stone Amenity Terrazo partition system with "Nero Black" terrazzo and partition to ground layout. Provide Medam stainless steel hardware w/ 1 Series 300 concealed fixing surface mounted turnbouts and grasshopper. Provide painted solid core waterproof doors, colour to be Dulux "Night Sky".

SA-10 Floor Waste - Reece Mitzi stainless steel waste or equal.

SA-11 Shower Mixer to be Self Closing Tap Valve with coldwater from RBA with 30 second run time code RBA 1055-530.

SA-14 Automatic Hand Dryer - Bradley Hand Dryer - Automatic Filmyn 1200250A--C SS.

SA-15 Surface Mounted liquid soap dispenser - Bradley Spl Sfmd (1.2lt) SSS.

SA-16 Surface Mounted toilet roll dispenser - Bradley Tpl Sfmd 5481SSS.

SA-17 Proprietary Sharps Container to be selected.

SA-19 Wall faced accessible toilet suite - Caroma Care 800SFWC Suite w/ Colani Sgle Flap Seat WH 900180108P-WH-T.

SA-20 Wall mounted hand basin - Caroma Cube Extension Care Wall Basin (W-S 864115W) (L-S 864215W) with single tap hole and Gerberit Diseno Bottle Trap ABS CP 170130211-C. RH-S or L-HS as shown on drawings.

SA-24 Basin Waste

SA-27 Baby Changes Table - to be Koala Bear horizontal recessed stanford with stainless steel frame Code KB100-01ST in grey from RBA. Installed to comply with AS 1428.1-2009.

SA-28 Robe Hook with bumper - Bradley Regent Robe Hook RO39 PTS.

SA-29 Reuse existing towel hook brackets where viable. New Robe Hooks to be Bradley Regent Robe Hook RC03 PSS.

SA-31 Basin mixer - Raymor Academy Basin Pillar Mixer (Warm) 035187 with Raymor Academy Disabled Lever Handle 035487 CP.

SA-32 Folding Shower Seat - RBA BB19687

SA-33 Grab Rails - RBA grad ril to AS1428.1 2009.

SA-34 Surface Mounted toilet roll dispenser - Bradley Tpl Sfmd 5482SSS.

SA-36 Accessible WC Backrest - Bradley 9573

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Terrneko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 H-V vertical battens fixed to frame on edge with countersunk stainless steel screws at 40mm centres. Finish to steelwork to be Dulux "Terrneko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switches to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-06 Double external GPO nominally 300 to CL AFFL. GPO's to be Clipsal W5C2272 or equal.

SW-07 External switch nominally 1000AFFL to centreline. Switch to be Clipsal W5226.

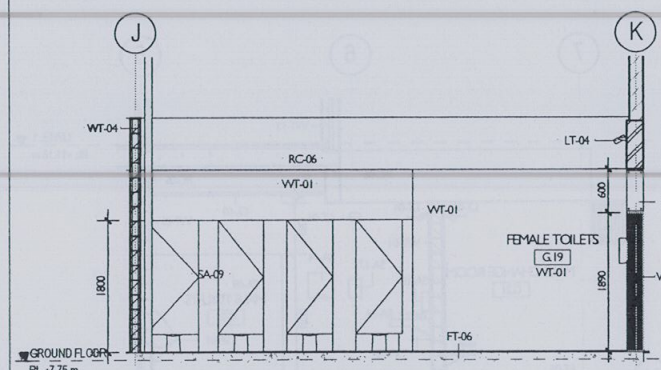
TP-01 External tap and sump connected to the sewer system.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Hydrotech drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer detail.

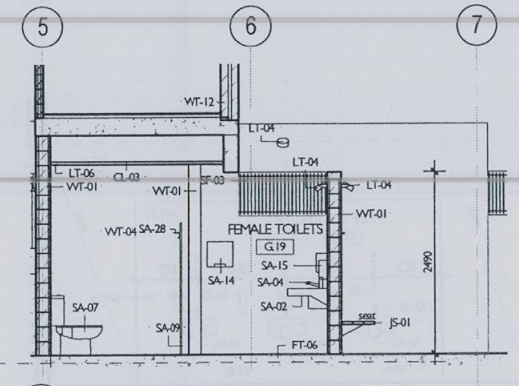
WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

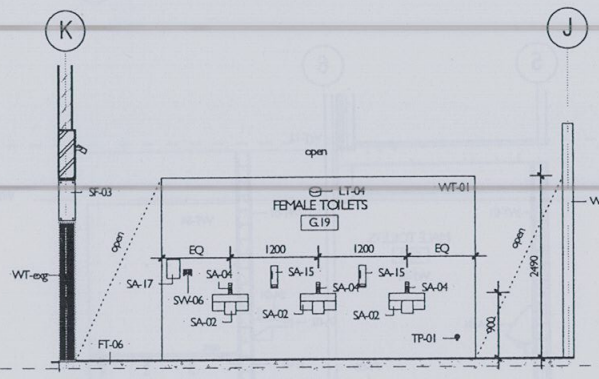
WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.



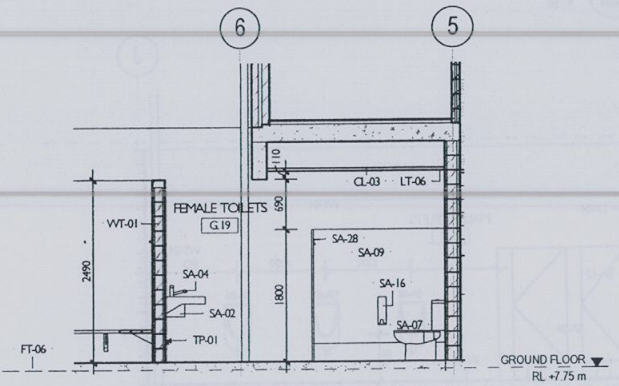
6 CC017 ELEVATION 1 - ROOM G.19 1 : 50



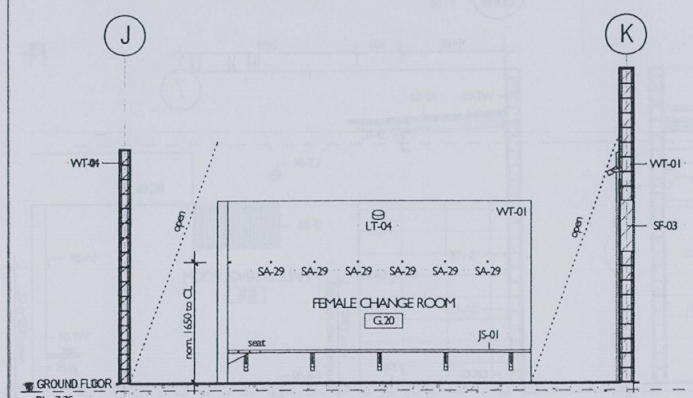
7 CC017 ELEVATION 2 - ROOM G.19 1 : 50



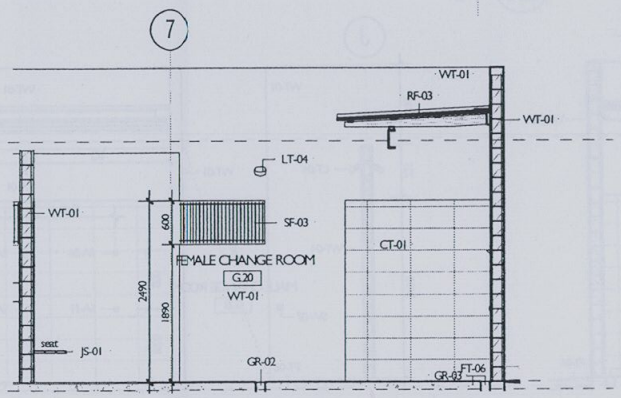
8 CC017 ELEVATION 3 - ROOM G.19 1 : 50



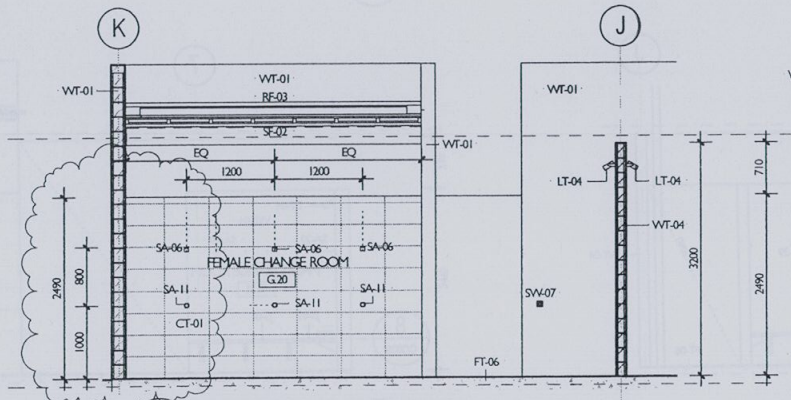
9 CC017 ELEVATION 4 - ROOM G.19 1 : 50



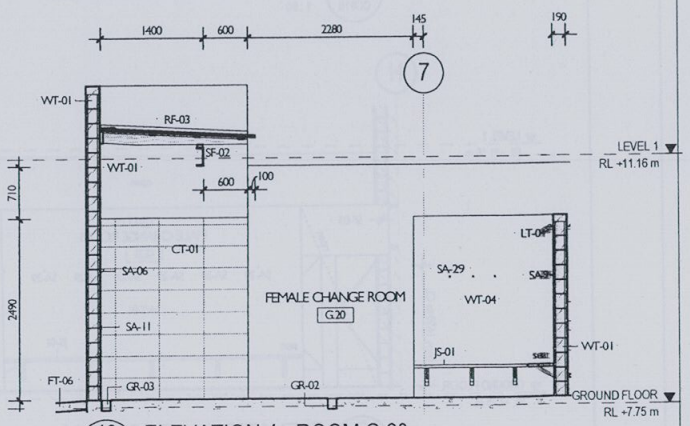
10 CC017 ELEVATION 1 - ROOM G.20 1 : 50



11 CC017 ELEVATION 2 - ROOM G.20 1 : 50



12 CC017 ELEVATION 3 - ROOM G.20 1 : 50



13 CC017 ELEVATION 4 - ROOM G.20 1 : 50



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.S.(Hab) (Hons 1) B.Arch(Hons1) Reg. No. 6509

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR BUYING QUOTE FOR THIS PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. THE COPYRIGHT ALSO APPLIES TO THE USE OF IDEAS AND TO ORIGINAL ANY MATERIALS AND FOR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ALL DISCREPANCIES IN DIMENSIONS OR DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, NO RESPONSIBILITY IS ACCEPTED FOR ANY DRAWINGS NOT SIGNED OR SEALED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT ALL SETOUTS, SKILLIONS, WATERPROOFING AND OTHER BUILDING WORKS COMPLY WITH THE GUNGAHLIN AUSTRALIAN STANDARD AND THE BUILDING CODE OF AUSTRALIA.

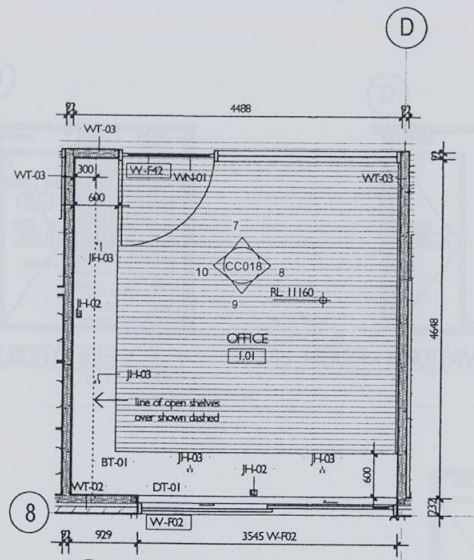
No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

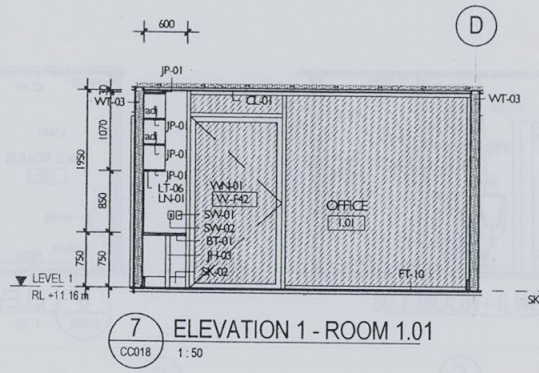
AVALON BEACH S.L.S.C.

GROUND FLOOR WETAREAS ROOM G.18-G.20

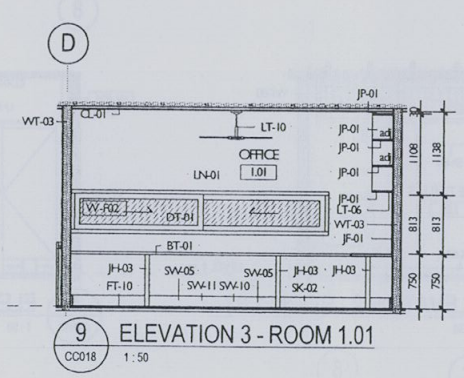
Project number	1001	CC017	
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	1 : 50



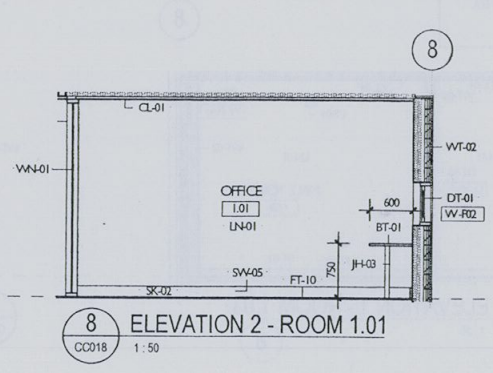
6 CC005 PLAN - LEVEL 1 OFFICE ROOM 1.01
1 : 50



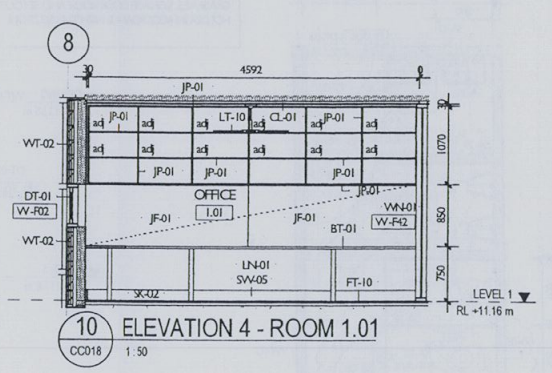
7 CC018 ELEVATION 1 - ROOM 1.01
1 : 50



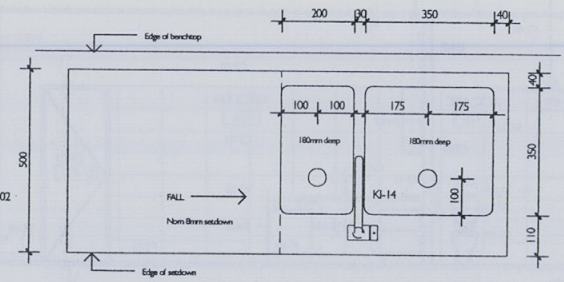
9 CC018 ELEVATION 3 - ROOM 1.01
1 : 50



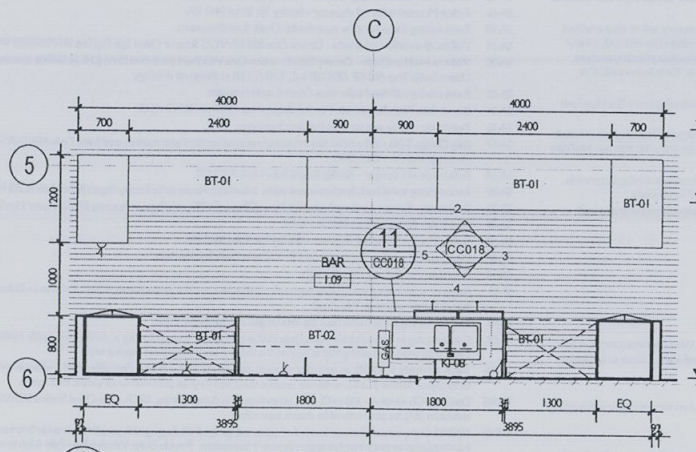
8 CC018 ELEVATION 2 - ROOM 1.01
1 : 50



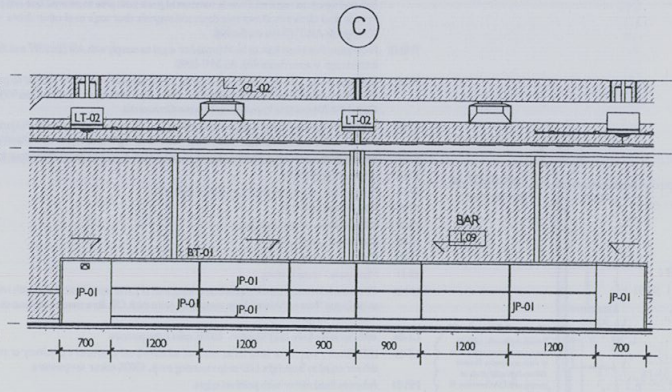
10 CC018 ELEVATION 4 - ROOM 1.01
1 : 50



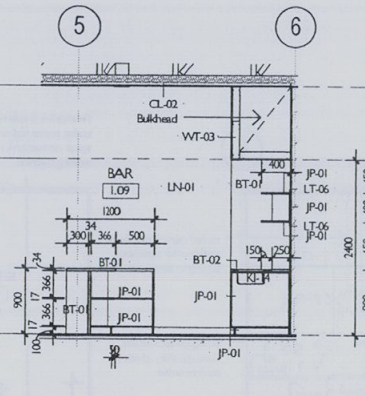
11 CC018 PLAN - LEVEL 1 BAR ROOM SINK
1 : 10



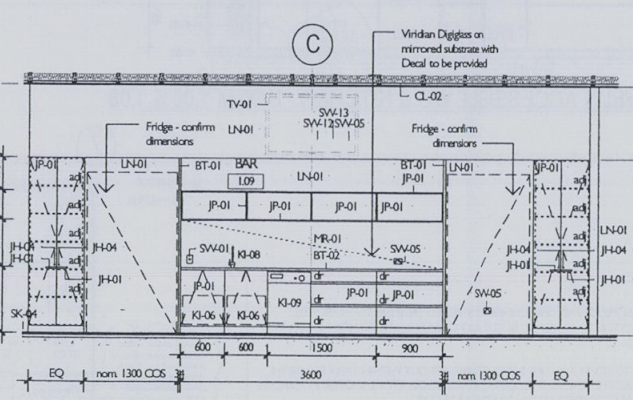
1 CC005 PLAN - LEVEL 1 BAR ROOM 1.09
1 : 50



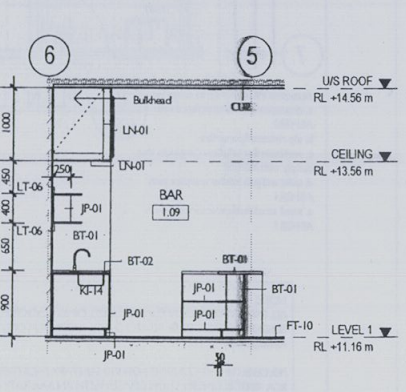
2 CC018 ELEVATION 1 - ROOM 1.09
1 : 50



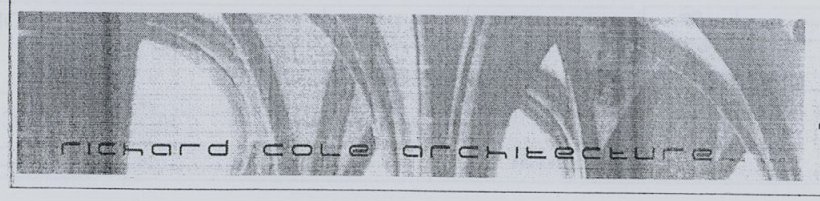
3 CC018 ELEVATION 2 - ROOM 1.09
1 : 50



4 CC018 ELEVATION 3 - ROOM 1.09
1 : 50



5 CC018 ELEVATION 4 - ROOM 1.09
1 : 50



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole (Reg No 6365 (NSW))

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SIGNATURED IN THE AMENDMENT COLUMN AND APPROVED (NO) BY THE BUILDING SURVEYOR. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30-04-13

BT-01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

BT-02 30mm thick Grade 304 stainless steel benchtop on HMR particleboard substrate. Provide integrated sink as detailed with designer wastes. Continuous fillet weld all joints and grind smooth. Provide square edge detail.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonoroll Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide frames with Icon Door furniture and clear anodised finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end joined tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black silaflex joint to all sil junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

JF-01 Fabric covered pinboard equal to Designer Pinboards Australia Standard Range Colour Terracotta Red.

JH-01 Joinery door pull - Edge of joinery panel to be routed out to provide door pull nom. 150mm wide x 20mm deep with round end.

JH-02 Cable entry hole 60 dia Hafele Chrome Plated Matt 631.32.413.

JH-03 Conical Desk Leg Hafele 635.49.971

JH-04 Hafele Joinery Lock

JP-01 17mm Black Formply plywood with sealed edges and no trade markings. Provide concealed fixings. Handles to doors to be 150 x 20mm routed round end and slot as shown on drawings.

KI-06 Integrated garbage sorter - to be selected.

KI-08 Kitchen mixer - Caroma Titan Sink Mixer 9900.3SSSA.

KI-09 Dishwasher - to be selected.

KI-14 Integrated stainless steel kitchen sink with designer wastes.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LT-02 160W LED flood light ZM-FL-160WANAN-120D from ZAMTAS Led Lights. 6500K colour temperature

LT-06 LED ribbon - Internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED Ltd mounting track. 6500K colour temperature.

LT-10 Ceiling Fan - Reuse existing fan.

MR-01 Adhesive fixed mirror with polished edges.

SK-02 Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.

SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet as support the sheeting and matching wall capping strip.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-02 Fan Speed Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-05 Double GPO's nominally 300 to CL AFFL, unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-10 Data switch plate (double) nominally 300 to CL AFFL, unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-11 Telephone switch plate (double) nominally 300 to CL AFFL, unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-12 Cable TV switch plate nominally 300 to CL AFFL, unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-13 Aerial switch plate nominally 300 to CL AFFL, unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour. Connect to roof Mounted aerial.

TV-01 Wall mounted LCD TV to be selected.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Tempdex SP70 Natural Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezeway Altair 150mm with clear anodised gallery and black clips.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish. Lagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batt 90mm R2.0 bulk insulation to studwork.

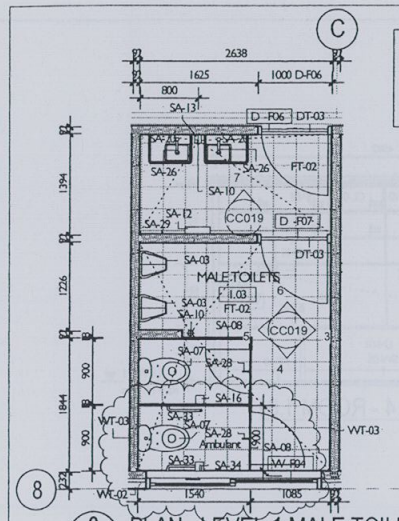
WT-03 92mm thick steel studwork or M3P10 H2 treated radiata pine or equivalent studwork wall. Provide Fletcher ISB Partition Blanket ISBS 85mm acoustic insulation to internal stud walls.

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

LEVEL 1 PLAN - ROOM 1.01 & 1.09

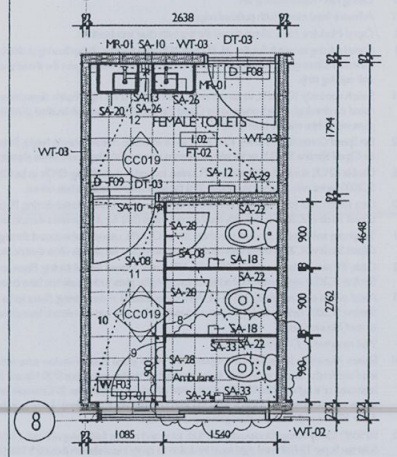
Project number	1001	CC018	
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	As indicated



8

2 CC005 PLAN - LEVEL 1 MALE TOILETS ROOM 1.03 1 : 50

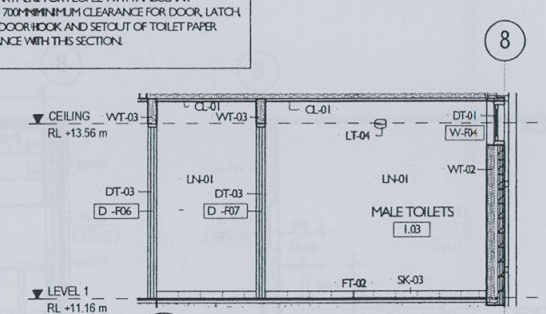
C



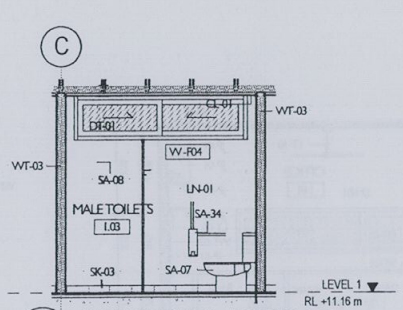
8

1 CC005 PLAN - LEVEL 1 FEMALE TOILETS ROOM 1.02 1 : 50

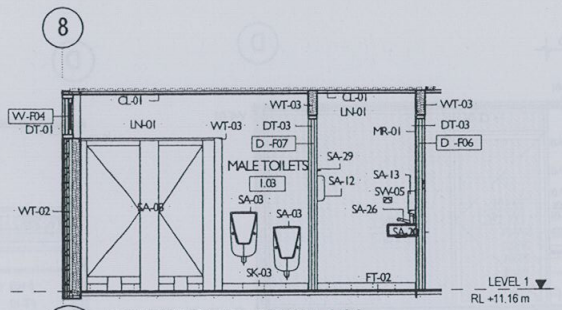
NOTE: AMBULANT CUBICLE TO COMPLY WITH SECTION 16 OF as 1428.1-2009 SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES. PROVIDE 700MM MINIMUM CLEARANCE FOR DOOR, LATCH, GRABRAILS, SIGNAGE, DOOR HOOK AND SETOUT OF TOILET PAPER HOLDER IN ACCORDANCE WITH THIS SECTION.



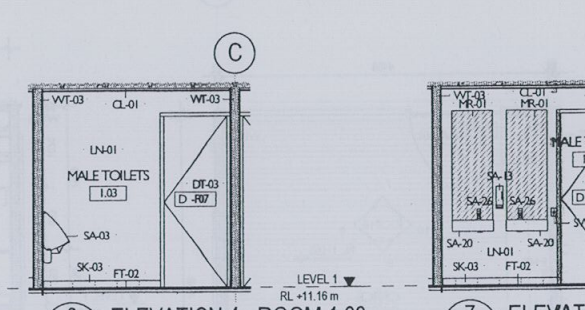
3 CC019 ELEVATION 1 - ROOM 1.03 1 : 50



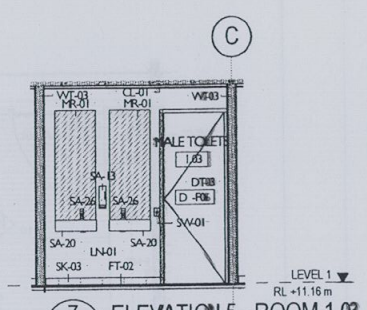
4 CC019 ELEVATION 2 - ROOM 1.03 1 : 50



5 CC019 ELEVATION 3 - ROOM 1.03 1 : 50

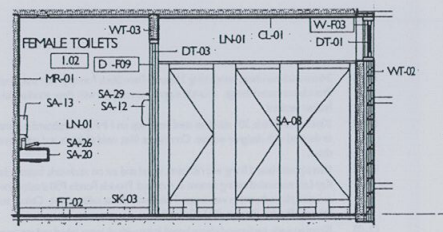


6 CC019 ELEVATION 4 - ROOM 1.03 1 : 50



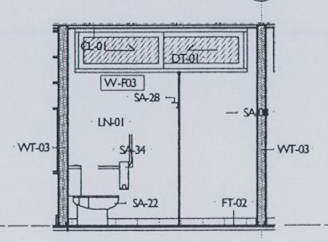
7 CC019 ELEVATION 5 - ROOM 1.03 1 : 50

8



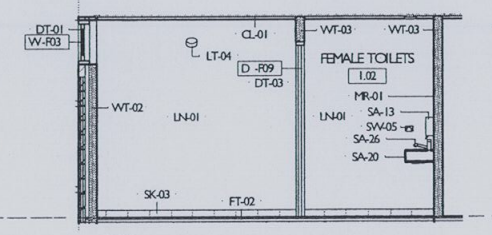
8 CC019 ELEVATION 1 - ROOM 1.02 1 : 50

C



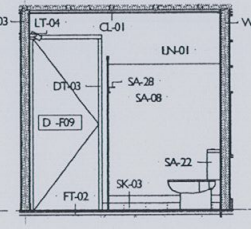
9 CC018 ELEVATION 2 - ROOM 1.02 1 : 50

8



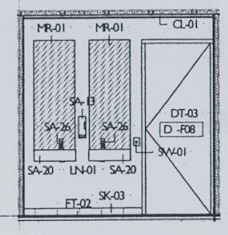
10 CC019 ELEVATION 3 - ROOM 1.02 1 : 50

C



11 CC018 ELEVATION 4 - ROOM 1.02 1 : 50

C

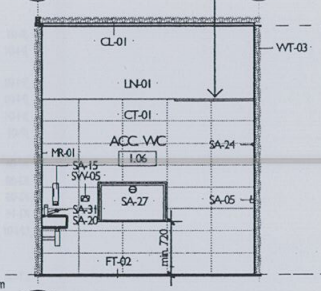


12 CC018 ELEVATION 5 - ROOM 1.02 1 : 50

7

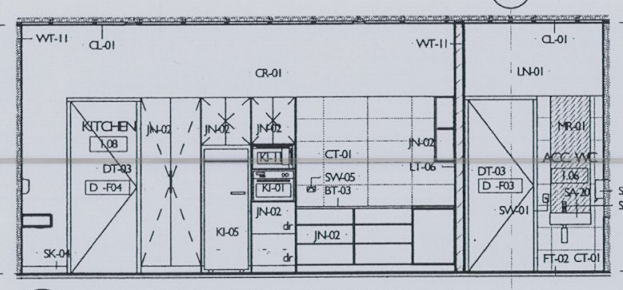
provide suspended clear anodised aluminium shower curtain rail with proprietary shower curtain.

6



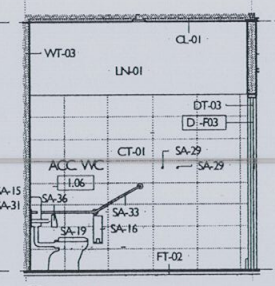
14 CC018 ELEVATION 1 - ROOM 1.06 1 : 50

C



15 CC019 ELEVATION 1 - ROOM 1.06 & 1.08 1 : 50

6



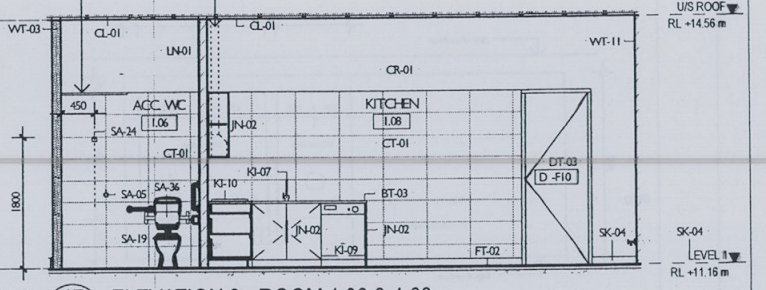
16 CC018 ELEVATION 2 - ROOM 1.06 1 : 50

7

provide suspended clear anodised aluminium shower curtain rail with proprietary shower curtain.

reuse existing rangehood allow for associated ducting to eaves vent

C



17 CC019 ELEVATION 3 - ROOM 1.06 & 1.08 1 : 50

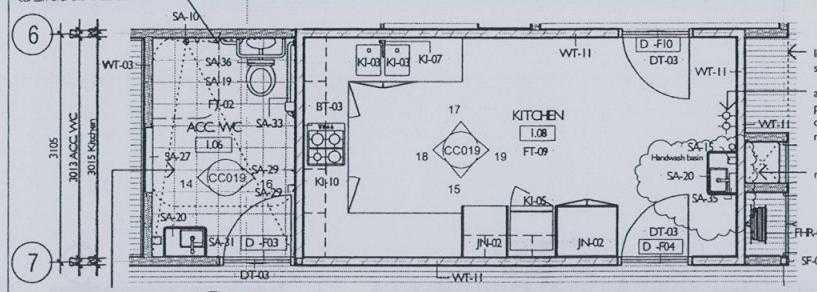
C

suspended clear anodised aluminium shower curtain rail with proprietary shower curtain over shown dashed

1947 ACC WC

5941 Kitchen

532

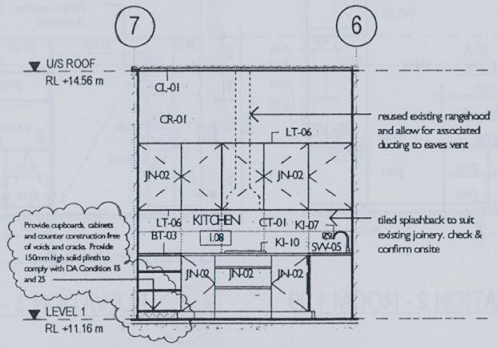


Accessible WC & Shower to comprise:
a. circulation space in accordance with AS1428.1
b. slip resistant floor surface
c. washbasin that will allow clearances that comply with AS1428.1
d. toilet and grab rails that complies with AS1428.1
e. install towel holder in accordance with AS1428.1

13 CC005 PLAN - LEVEL 1 ACCESSIBLE WC & KITCHEN - ROOM 1.06 & 1.08 1 : 50

7

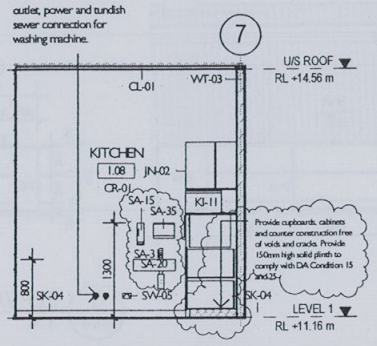
6



18 CC018 ELEVATION 3 - ROOM 1.08 1 : 50

Provide hot & cold water outlet, power and tundish sewer connection for washing machine.

7



19 CC018 ELEVATION 4 - ROOM 1.08 1 : 50

NOTES
ALL EXISTING KITCHEN APPLIANCES INCLUDING COOKTOP, OVEN, FRIDGE AND DISHWASHER TO BE REUSED. EXISTING STAINLESS STEEL BENCHTOPS IN KIS TO BE REUSED. CHECK & CONFIRM ONSITE. EXISTING BENCHTOP TO BE CUT ALONG EXISTING WELDED JOINTS TO RESIZE AS REQUIRED.

PER DEVELOPMENT CONSENT ND693/10 SANITARY FACILITIES ARE TO COMPLY WITH THE REQUIREMENTS SET OUT WITHIN TABLE F2.3 OF THE BCA. WATER CONSERVATION DEVICES WITH AN AAA RATING MUST BE INSTALLED INCLUDING TAP FLOW REGULATORS, SHOWER HEAD ROSES AND DUAL FLUSH TOILET CISTERNS. ALL NEW HOT WATER SYSTEMS ARE TO HAVE A MINIMUM RATING OF 3.5 STARS.

THE CONSTRUCTION, FIT OUT AND FINISHING OF THE KITCHEN AND FOOD HANDLING AND STORAGE AREAS MUST COMPLY WITH: Australian Standard 4674:2004 Design, construction & fit-out of food premises, and The Food Safety Standard 3.2.3 (as part of the Food Standards Code) required by the Food Regulation 2004.

BT-03 Reuse existing 30mm thick stainless steel benchtop reconfigured to suit new kitchen. Check and confirm onsite.
CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo F50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.
CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".
CT-01 Ceramic wall tiles 300 x 600 White Gloss Rectified G-360001GPW Code HN-89009-C available from Harvey Norman Commercial. Provide white grout joints.
DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.
DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Mediinot LM45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).
FH-R01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS1221:1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.
FT-02 Selected ceramic tiles on cement screed to fall and waterproof membrane installed to manufacturer's instructions. Provide grout to match tile colour and non-slip sealer if required to achieve slip resistance to AS 4586 Class W/ B. Floor Tiles to be 300 x 300 Matt Ash HNTGN Code HN-6704 available from Harvey Norman Commercial.
FT-09 Vinyl flooring installed to manufacturer's instructions. Flooring to be Polyflor XL PU Jade 3830. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.
JN-02 Existing kitchen joinery to be salvaged and reused. Check & confirm onsite dimensions for installation. Modify and rectify as required.
KI-01 Oven - reuse existing.
KI-03 Kitchen Sink - reuse existing integrated kitchen sink.
KI-05 Fridge - reuse existing.
KI-07 Kitchen mixer - reuse existing.
KI-09 Dishwasher - to be selected.
KI-10 Cooktop - reused existing.
KI-11 Microwave - reuse existing.
LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".
LT-04 18W Spotlight from LED Shopper. 6500K colour temperature
LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.
MR-01 Adhesive fixed mirror with polished edges.
RF-01 Sararmit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.
SA-03 Reuse existing boys & adult size wall mounted urinals. Check and confirm onsite.
SA-05 Shower Mixer - Caroma Slim Shower Mixer 90333C CP.
SA-07 Back to Wall toilet suite - Stylus Banksia BTW Bimil Uni trap Suite w/SC Seat WH K1000W–C.
SA-08 Toilet partition system - Reuse existing internal toilet partitions if applicable, new partitions to be James Hardie Hardicolor 18mm panels with Hardicolor Polyurethane System. Front panels installed with overhead channels and fixed to floor with 6mm brass dowels. cubicle doors to be 18mm Hardicolor Washroom Partition. Provide all required hardware and accessories with stainless steel finish. Colour: as Dulux "Olive Reserve A221" with Satin finish.
SA-10 Floor Waste - Reece Mizu stainless steel waste or equal.
SA-12 Reuse existing hand dryer. Check & confirm on site.
SA-13 Reuse existing soap dispenser. Check & confirm on site.
SA-15 Surface Mounted liquid soap dispenser - Bradley Sgl 5/Mtd (1.2ltr) SSS.
SA-16 Surface Mounted toilet roll dispenser - Bradley Tpl 5/Mtd 5143 SSS.
SA-18 Reuse existing three roll toilet paper holder. Check & confirm onsite.
SA-19 Wall faced accessible toilet suite - Caroma Cure 800 BTW CIC Suite w/ Colani Style Flap Seat WH 990 1810BMWH-T.
SA-20 Wall mounted hand basin - Caroma Cube Extension Care Wall Basin (RH-S 864115W) (LH-S 864215W) with single tap hole and Gerbait Diseno Bottle Trap ABS CP 170130211-C. RH-S or LH-S as shown on drawings.
SA-22 Reuse existing wall faced toilet suite. Check & confirm on site.
SA-24 Shower Set - Virtu Plus starsafe II on Rail Ecoject Neu - 900mm 782732--C CP.
SA-26 Basin Mixer - Reuse existing from first floor bathrooms.
SA-27 Baby Change Table - to be Koala Bear horizontal recessed standard with stainless steel frame Code KB100-01ST in grey from RBA installed to comply with AS 1428.1-2009.
SA-28 Robe Hook with bumper - Bradley Regent Robe Hook R039 PSS.
SA-29 Reuse existing towel hook brackets where viable. New Robe Hooks to be Bradley Regent Robe Hook RC83 PSS.
SA-31 Basin mixer - Raymor Academy Basin Pillar Mixer (70mm) 035207 with Raymor Academy Disabled Lever Handle 035487 CP.
SA-33 Grab Rails - RBA grad rail to AS1428.1 2009.
SA-34 Surface Mounted toilet roll dispenser - Bradley Tpl 5/Mtd 5402 SSS.
SA-35 Paper towel dispenser - Bradley Model 252 with Satin Finish Stainless Steel
SA-36 Accessible WC Backrest - Bradley 9573
SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fermeko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".
SK-03 Ceramic skirting tile to match floor tile. Provide grout to match tile colour.
SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.
SW-01 Switch nominally 1000AFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.
SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.
WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 115 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.
WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 65mm acoustic insulation to internal stud walls.
WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear low sheen acrylic, colour to be "Natural White".

139 PALMGROVE ROAD
AVALON BEACH NSW 2107
t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au
nsw ARB 5991 nt ARB 3997 qld REG 4115
nominated architect: Richard Cole B.Arch(Hons) Dip.Arch(Hons) Reg. No. 4078

richard cole architecture

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN FOR THE CONSTRUCTION OF THIS SUBJECT BUILDING IN THIS SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND/ OR BUILDING ELEMENTS OR THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ANY DISCREPANCIES IN THE DOCUMENTATION OR DISCREPANCIES AND TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

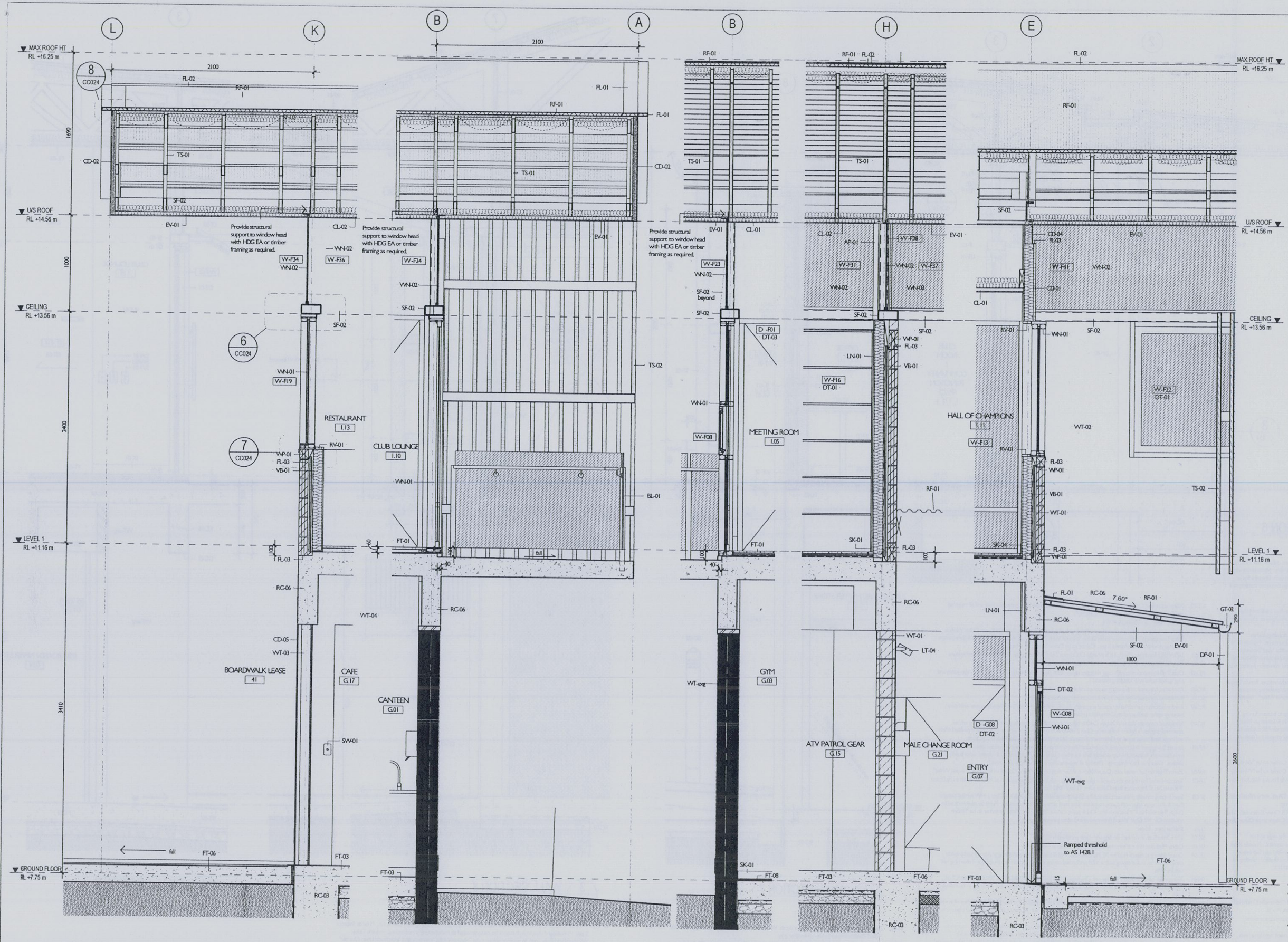
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

for
AVALON BEACH S.L.S.C.

LEVEL 1 WET AREAS ROOM 1.02-1.03, 1.06 & 1.08

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1:50

CC019



1 CC010 WALL SECTION 1 1:20

2 CC010 WALL SECTION 2 1:20

3 CC010 WALL SECTION 3 1:20

4 CC010 WALL SECTION 4 1:20

5 CC011 WALL SECTION 5 1:20

AP-01 Acoustics Quietspace 50 fabric faced acoustic panel adhesive fixed to wall. Provide 50 x 50 x 2.5mm clear anodised aluminium angle to exposed edges. Colour to be "Vivida".

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed, rounded kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fit handrail to balustrade with electropolished stainless steel tube brackets, stainless steel screws and back to back button fixings.

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood cleanline profile vertical weatherboard fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Cemintel Clearsteel Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CD-04 Flat sheet steel cladding with Colorbond Ultra finish fixed with stainless steel screws. Colour "Lafe". Provide 6mm A bond plywood substrate. Provide heavy duty double sided reflective foil insulation and R2 bulk insulation.

CD-05 Temporary CD face A-Bond plywood cladding screw fixed to substrate. Wall to be replaced in leasehold fitout.

CL-01 10mm plasterboard lining with all joints taped and set on stud walls, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo 858 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on stud work, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Soundmaster Batts or 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo 750 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray".

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slimmaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to stud work wall. Provide Madinoc LVL5 hardwood with Satin Stainless steel finish. Provide rebated mortice lock, privacy locked signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

EV-01 9mm thick Cemintel Clearsteel Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

FL-01 Folded sheet steel apron flashing with Colorbond Ultra finish to match roof.

FL-02 Folded sheet steel capping with Colorbond Ultra finish to match roof. Stramit "Three Break Ridge" profile.

FL-03 Continuous Alcor Flashing.

FT-01 Semi sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Cronmellin Cranshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-08 Water resistant carpet on approved underlay installed to manufacturer's instructions. Carpet to be Autex Decord "Tussock" polypropylene fibre carpet. Provide clear anodised aluminium threshold strip set to joins with other flooring.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black sikaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashing and cappings to match.

RV-01 25mm Thick timber reveal with Dulux Wash n Wear Acrylic gloss finish. Colour to be Dulux "Natural White".

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Fermoko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.

SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and installing wall capping strip.

SW-01 Switch nominally 1000 AFFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (Bilfflat plate with white electric base colour.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 900mm

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Fermoko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

VB-01 Double sided heavy duty perforated reflective foil insulation Fletcher Insulation 800 Antiglare.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smarglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channel fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smarglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WP-01 Weathpole.

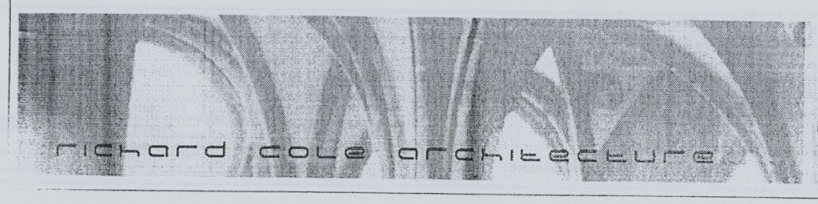
WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlands drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/90/90 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons 1) B.Arch(Hons1) Reg. No. 6024

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT LAND. ALL RIGHTS ARE RESERVED BY RICHARD COLE ARCHITECTURE PTY. LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS ISSUED FOR CONSTRUCTION AND SO MARKED IN THE HARDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY. LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND ALL BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.

CONSTRUCTION

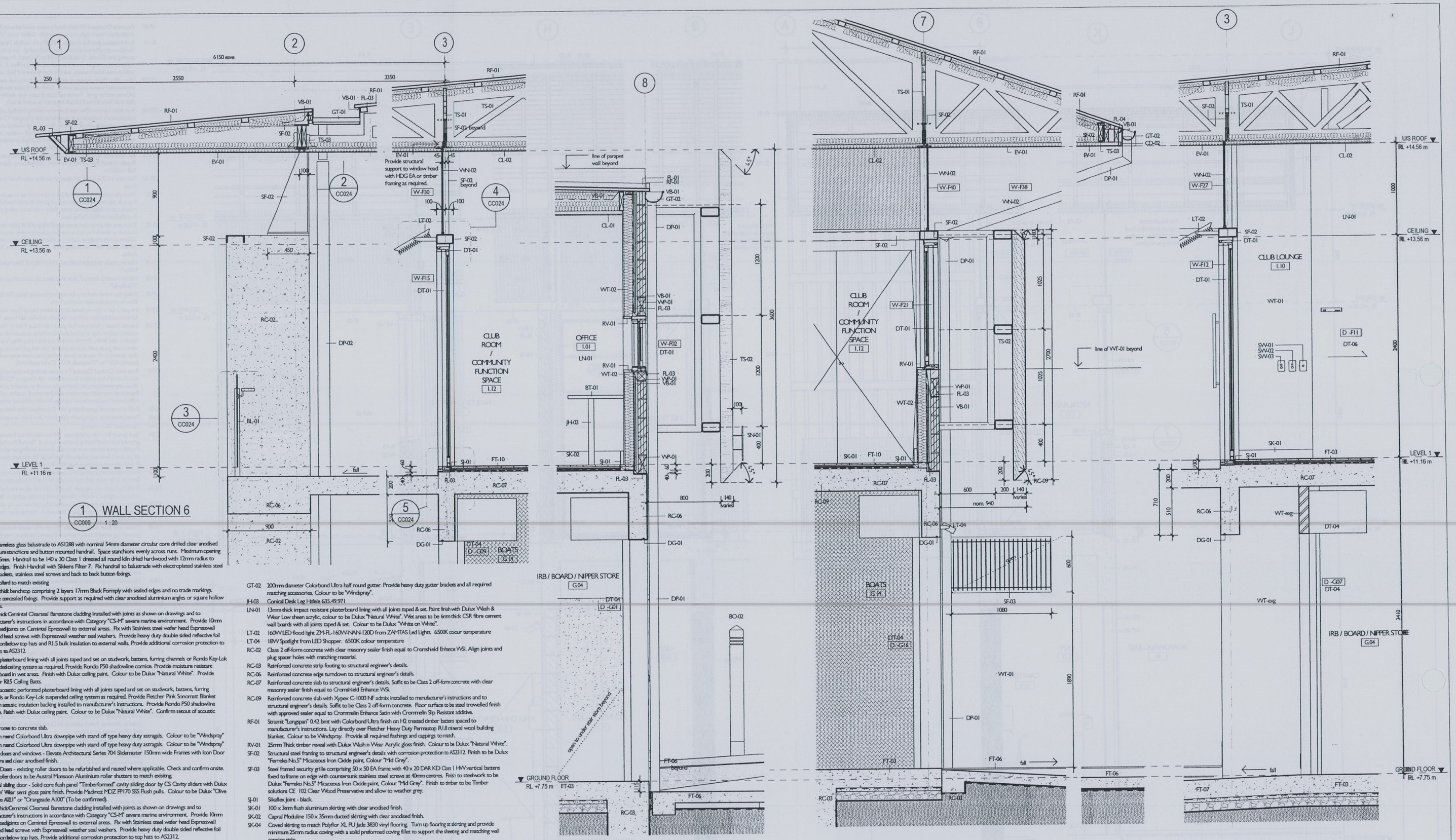
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

WALL SECTIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1:20

CC020



1 CC009 WALL SECTION 6 1 : 20

BL01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter-7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BR02 New bollard to match existing

BT01 34mm thick benchtop comprising 2 layers 17mm Black Formply with sealed edges and no trade markings. Provide concealed fixings. Provide support as required with clear anodised aluminium angles or square hollow sections.

CB-02 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CL01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R3.5 Ceiling Batts.

CL02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Soncrest Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

DG01 Drip groove to concrete slab.

DP01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DP02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DR01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DR04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DR06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Mudmaz MDZ PR170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A821" or "Orangeade A100" (To be confirmed).

EW01 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expresswall to external areas. Fix with Stainless steel wafer head Expresswall exposed head screws with Expresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

FL01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL03 Continuous Alcor Flashing.

FL04 Folded Colorbond flashing with Colourbond Ultra finish to match roof.

FR01 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

FT-08 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved tapered flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black silaflex joint to all sill junctions. Sand and polish with Peerless Jet Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GT-01 300 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietory corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

JH-03 Conical Desk Lag Hafele 635.49.971

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall board with all joints taped & set. Colour to be Dulux "White on White".

LT-02 160W LED flood light. ZY-FL-160W-NAN-1200 from ZAMTAS Led Lights. 6500K colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSi. Align joints and plug spacer holes with matching material.

RC-03 Reinforced concrete strip footing to structural engineer's details.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WSi.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permisatop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

RV-01 25mm Thick timber reveal with Dulux Wash n Wear Acrylic gloss finish. Colour to be Dulux "Natural White".

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-03 Steel framed security grille comprising 50 x 50 EA frame with 40 x 20 DAR KD Class 1 HV vertical battens fixed to frame on edge with countersunk stainless steel screws at 90mm centres. Finish to steelwork to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

SI-01 Silaflex joint - black.

SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.

SK-02 Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.

SK-04 Coved skirting to match Polyflor XL PU Jade 3830 vinyl flooring. Turn up flooring at skirting and provide minimum 25mm radius coving with a solid preformed coving fillet to support the sheeting and matching wall capping strip.

SN-01 350mm high laser cut copper signage nom 3mm thick. Fix each letter individually to timber rails with 2 no. 12mm copper tubes welded to back of each letter. Epoxy fix tubes to timber rails. Lettering to be Helvetica Light.

SW-01 Switch nominally 1000AFFL to centreline to match door handle height. Provide dimmale switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-02 Fan Speed Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-03 Infra-Red Heater Controller nominally 1000 AFFL to centreline to match door handle height. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-02 Steel framed timber screen comprising steel framed brackets with Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey" finish. Provide horizontal RHS steel rails at 900mm centres. Vertical timber screen members to consist of recycled timber members of differing sizes salvaged from existing building and spaced randomly fixed to rails with stainless steel type 17 countersunk screws.

2 CC009 WALL SECTION 7 1 : 20

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

VB-01 Double sided heavy duty perforated reflective foil insulation Fletcher Insulmist 800 Antiglare.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WP-01 Weephole.

WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

3 CC009 WALL SECTION 8 1 : 20

WT-02 90S092 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-exg Existing wall. Make good and provide new Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

4 CC009 WALL SECTION 9 1 : 20

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

richard cole architecture

ACN 073 598 413 ABN 38 092 598 413
nominated architect: Richard Cole B.Arch(Hons) FRAIA Architect No. 6818

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR CONSTRUCTION OR ANY PURPOSE OTHER THAN CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS OR THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ANY DISCREPANCIES IN THE DOCUMENTATION OR SITE CONDITIONS ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION. SO FAR AS IS REASONABLY PRACTICABLE, THIS DESIGN HAS BEEN WORKED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

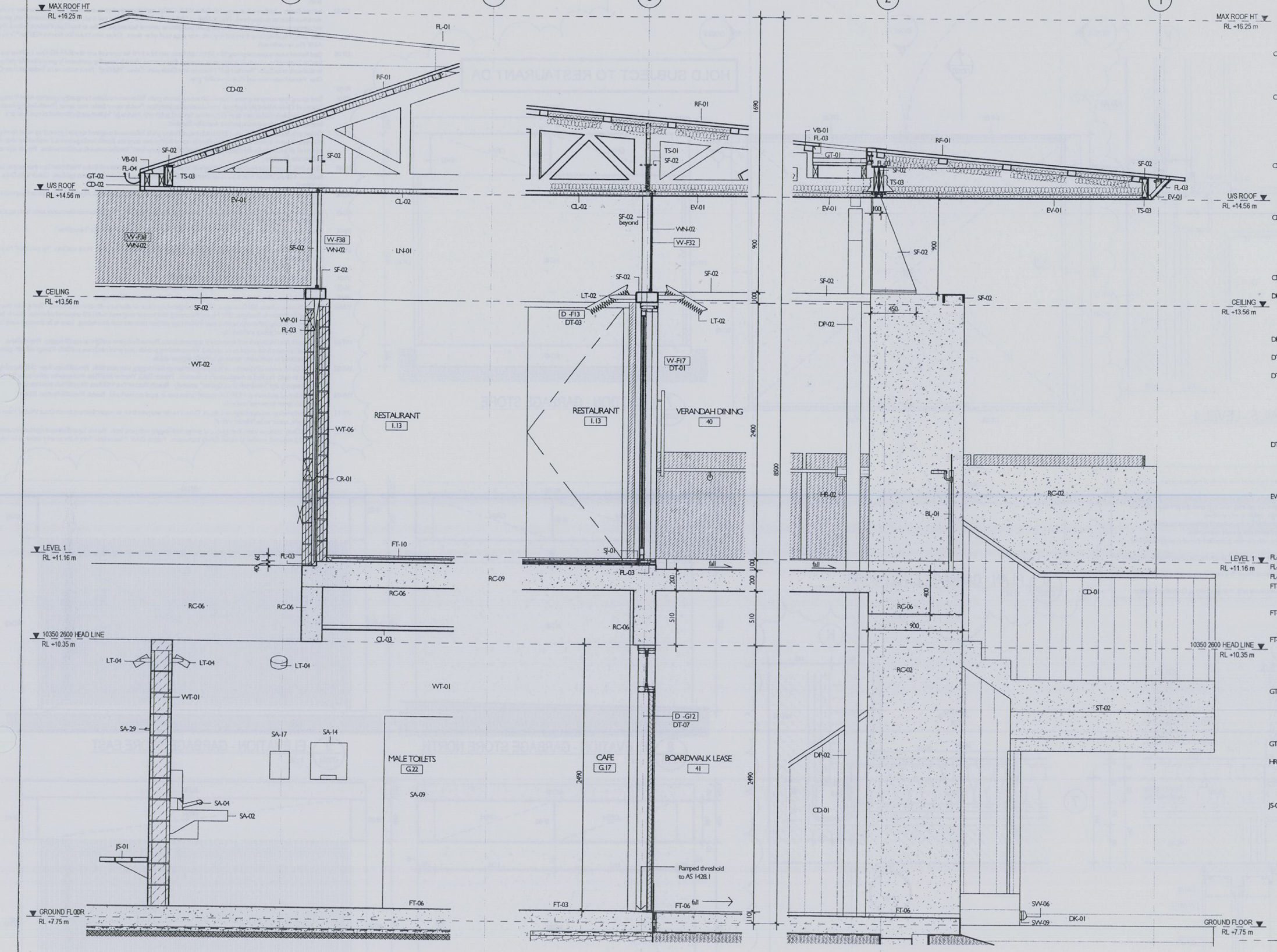
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

for
AVALON BEACH S.L.S.C.

WALL SECTIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 20

CC021



1 WALL SECTION 10
CC009 1 : 20

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and buxton mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back buxton fixings.

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Espresswall to external areas. Fix with Stainless steel wafer head Espresswall exposed head screws with Espresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomatt Blanket 100mm acousic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm extent of acoustic sheets.

CL-03 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Espresswall to external areas. Fix with Stainless steel wafer head Espresswall exposed head screws with Espresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

DK-01 Nom 140 x 25 KD Class 1 HW DAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astragals. Colour to be "Windspray"

DT-01 Sliding doors and windows - Elevata Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221F" or "Orangeside A100" (To be confirmed).

DT-07 External Doors – Solid core external grade flush panel door with Dulux Weathershield semi gloss paint finish in Elevate Aluminium 400 Series Centregate aluminium frame. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide magnetic door stops to all doors. Colour to be Dulux "Handmade Linen Quarter".

EV-01 9mm thick Cemintel Clearseal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Espresswall to external areas. Fix with Stainless steel wafer head Espresswall exposed head screws with Espresswall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL-03 Continuous Alcor Flashing.

FL-04 Folded Colorbond flashing with Colourbond Ultra finish to match roof.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT-06 Reinforced concrete slab with Xypex G-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood and joined tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black silaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joins to Australian Standards.

GT-01 500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A/s Bond plywood or spandek gutter board. Provide proprietary corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.

GT-02 200mm diameter Colorbond Ultra half round gutter. Provide heavy duty gutter brackets and all required matching accessories. Colour to be "Windspray".

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium strutted angle brackets as detailed at minimum 900mm centres with stainless steel screws.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic colour to be Dulux "Natural White". Wet areas to be 6mm thick Villaboard to manufacturer's details. Villaboard boards with all joints taped & set. Colour to be Dulux "White on White".

LT-02 160W LED flood light ZM-FL-160 MINI-LED from ZANITAS Led Lights. 6500K colour temperature

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

RC-02 Class 2 off-form concrete with clearview ivory roller finish equal to Cromshield Enhance WA. Align joints and plug taper holes without fixing material.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Cromsolin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay liberally over Fletcher Heavy Duty Permastop R1.8 mineral wool bulking blanket. Colour to be Windspray. Provide all required flashings and copings to match.

SA-02 Wall mounted handbasin - Caroma Cube 1 865781W with Plug & and Vandal flush fixting Chrome waste 687141 Caad Gerberit Dino Bottle Trap ABS CP 170130211-C.

SA-04 Basin Mixer to be 'Alpha' self closing type from RBA code RBA1043-600.

SA-09 San Marco Stone Amenity Terrazzo partition system with "Baltic Black" terrazzo and partition to ground layout. Provide Matrix matrix steel hardware with Series 300 concealed fixing surface mounted turnbuts and gravity hinges. Provide painted solid core waterproof doors, colour to be Dulux "Night Sky".

SA-14 Automatic Hand Dryer - Bradley HandDryer - Automic (Heavy) 2202504A–C SS.

SA-17 Proprietary Sharps Container to be selected.

SA-29 Reuse existing towel hook brackets where visible. Titus Robe Hooks to be Bradley Regent Robe Hook RC033 PSS.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux Terrocillia 5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SJ-01 Sikaflex Joint - black.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS4081.1-2009 table fibre reinforced polymer aluminium oxide grit in black nom. 50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-06 Double external GPO nominally 300 to CL AFL, GPO's to be Clipsal WSC2272 or equal.

SW-09 Audio Input plate connected to PA system. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

VB-01 Double sided heavy duty perforated reflective foil isolation Fletcher Insulmist 800 Anticglare.

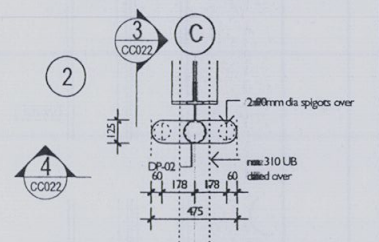
WN-02 Frameless window panels with glazing to AS1288 inmm. 25x25mm clear anodised glazing channels fixed and sealed to structureat head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SPAN Natural Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WP-01 Weephole.

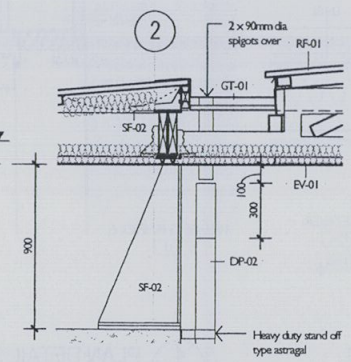
WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Folbase rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" externally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

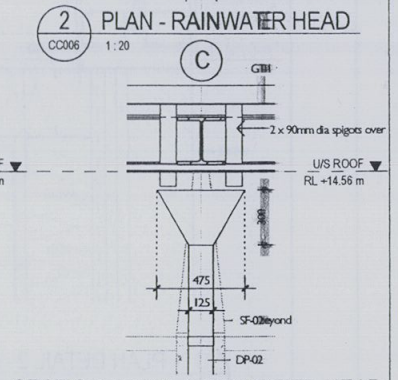
WT-06 Acoustic wall comprising 90mm blockwork with coarse render finish to inside face, 28mm furring channels at 600mm centres on Cemresilient mounts with 50mm glasswool partition batts 1 layer and 2 x layers of 13mm CSR Soundchek acoustic plasterboard. Provide Dulux Wash N' Wallow sheen paint finish, colour "Natural White".



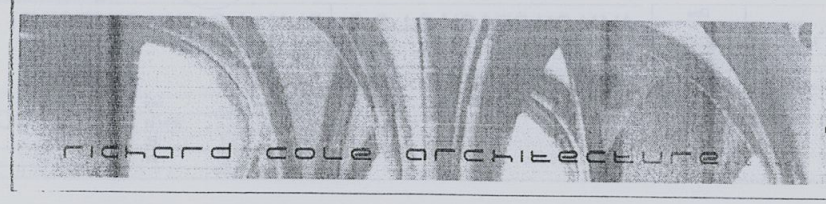
2 PLAN - RAINWATER HEAD
CC006 1 : 20



3 SECTION DETAIL 1 RAINWATER HEAD
CC022 1 : 20



4 SECTION DETAIL 2 RAINWATER HEAD
CC022 1 : 20



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nsw reg 3773 | act 6619 | qld 19174
nominated architect: Richard Cole B.Sc.Arch(Hons 1) B.Arch(Hons1) Reg. No. 6328

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE PERMISSION OF RICHARD COLE ARCHITECTURE PTY. LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS ISSUED AS SUCH AND HAS BEEN SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY. LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

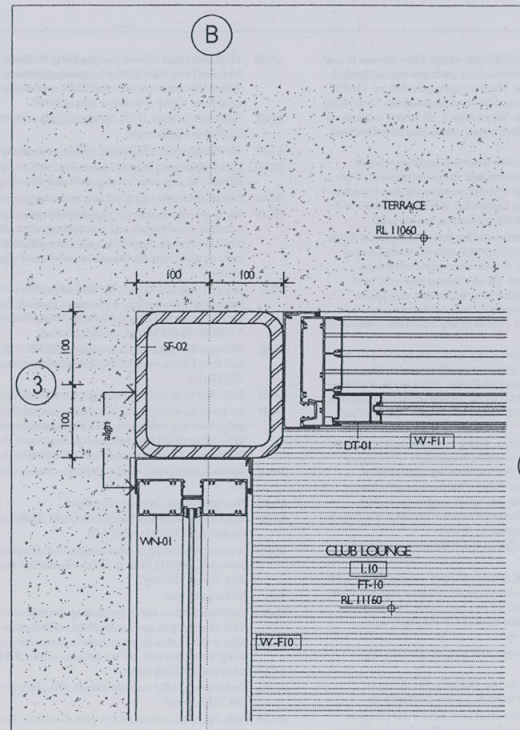
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

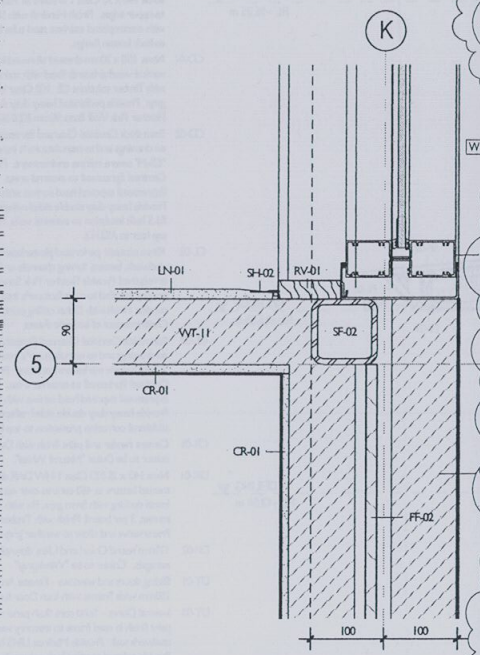
WALL SECTIONS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 20

CC022

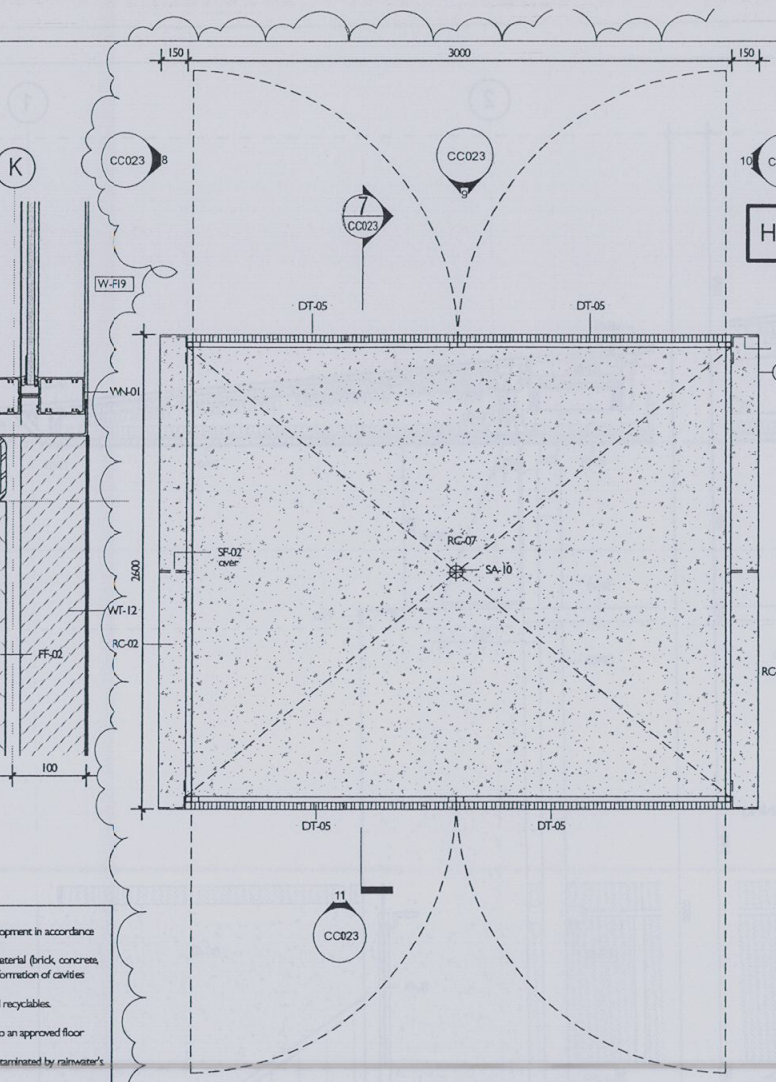


1 PLAN DETAIL 1 - LEVEL 1
CC005 1 : 5



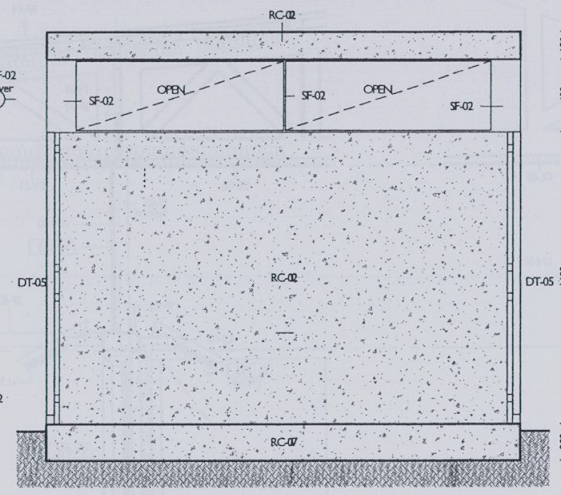
2 PLAN DETAIL 5 - LEVEL 1
CC005 1 : 5

NOTE per Development Consent N06393/10:
All garbage enclosures/stores shall be constructed and fitted out and maintained over the life of the development in accordance with the following:
1. The area used for the storage and washing down of garbage receptacles shall be constructed of solid material (brick, concrete, concrete blocks, structural fibrous cement or other similar homogeneous material) so as to prevent the formation of cavities which become possible harbourages for insects and vermin. Framing in timber is not permitted.
2. A separate room or an appropriately constructed area is to be provided for the storage of garbage and recyclables.
3. The walls of the enclosure shall be cement rendered and steel trowelled to a smooth, even surface.
4. The floor shall be of impervious material coved at the intersection with the walls, graded and drained to an approved floor waste within the room/enclosure.
5. Stormwaters shall not enter the floor of the garbage enclosure such that the sewer system may be contaminated by rainwater's.
6. The garbage enclosure shall be made vermin proof.
7. Garbage rooms shall be vented to the external air by natural or artificial means. The installation and operation of the mechanical ventilation system shall comply with AS 1668, Parts 1 & 2.
8. Hot and cold water hose cocks shall be located within a garbage enclosure or in close proximity to Council's satisfaction.



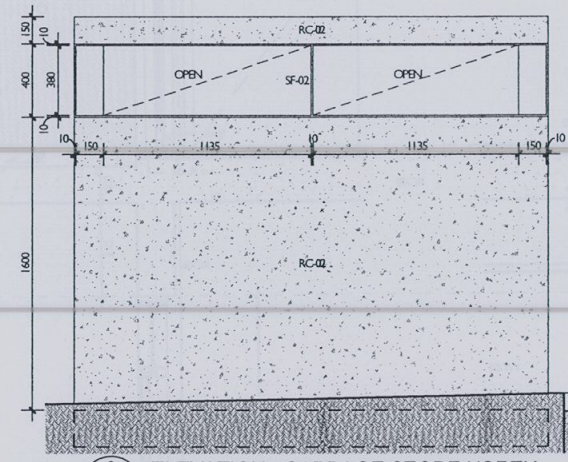
6 PLAN - GARBAGE ENCLOSURE
CC001 1 : 20

HOLD SUBJECT TO RESTAURANT DA

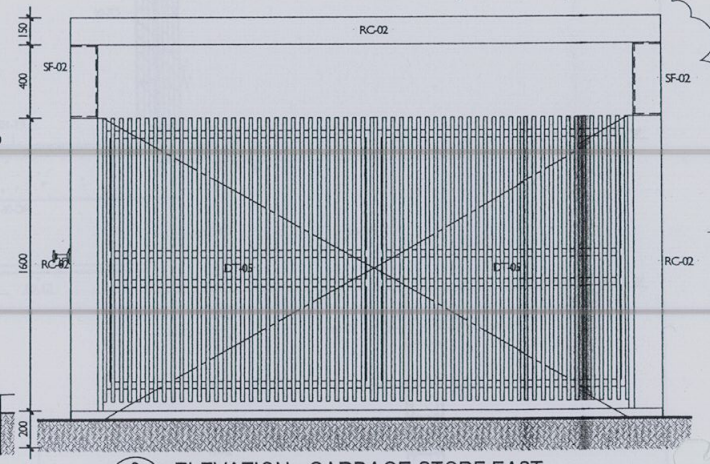


7 SECTION - GARGARGE STORE
CC023 1 : 20

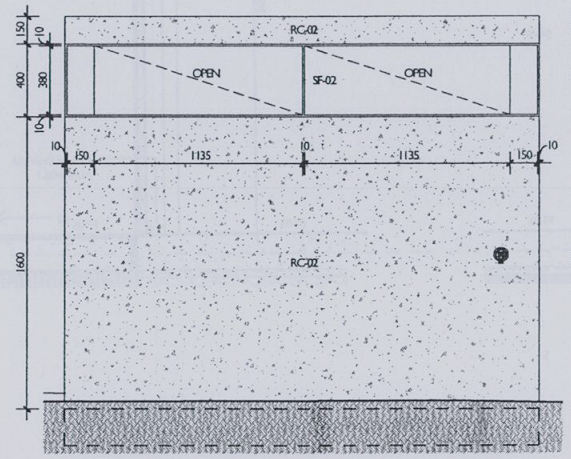
CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".
DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astrugals. Colour to be "Windspray"
DT-01 Sliding doors and windows - Elevate Architectural Series 704 Sidemaster 150mm wide frames with Duo Door furniture and clear anodised finish.
DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish to steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux Tile Reserve A221" or "Orangeade A100" (To be confirmed).
DT-05 Steel framed security gate comprising 50 x 50 EA sash frame with 50 x 6 MS flat centre rail and 40 x 20 RAR KD Class 1 HW vertical battens fixed to frame with countersunk stainless steel screws at 40mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Terreko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish timber to be Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.
FF-02
FT-01 Semi sprung floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongued grooved top nailed flooring fixed to 2 layers of 12mm A Bond plywood over 5mm closed cell polyethylene. Provide vapour barrier over concrete. Provide levelling compound if required and black skaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.
FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongued grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black skaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.
LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash n' Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".
RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG. Align joints and plug spacer holes with matching material.
RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG.
RV-01 25mm Thick timber reveal with Dulux Wash n Wear Acrylic gloss finish. Colour to be Dulux "Natural White".
SA-10 Floor Waste - Reece Mitu stainless steel waste or equal.
SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Terreko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".
SH-02 Rondo PTSH630 tear away shadow head 6mm.
SK-01 100 x 3mm flush aluminium skirting with clear anodised finish.
SK-02 Capral Moduline 150 x 35mm ducted skirting with clear anodised finish.
VB-01 Double sided heavy duty perforated reflective foil insulation Fletcher Insulmer 800 Anticlime.
WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezeway Altair 150mm with clear anodised gallery and black clips.
WT-01 190mm core filled blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Ausdrain drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.
WT-02 90/5090 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Fibertex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.5 bulk insulation to external
WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher 88 Partition Blanket 75mm acoustic insulation to internal stud walls.
WT-11 90mm blockwork to structural engineers details. Cement render and paint finish to internal (kitchen) face with Dulux Wash n' Wear low sheen acrylic, colour to be "Natural White".
WT-12 90/5090 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish exterior colour to be selected



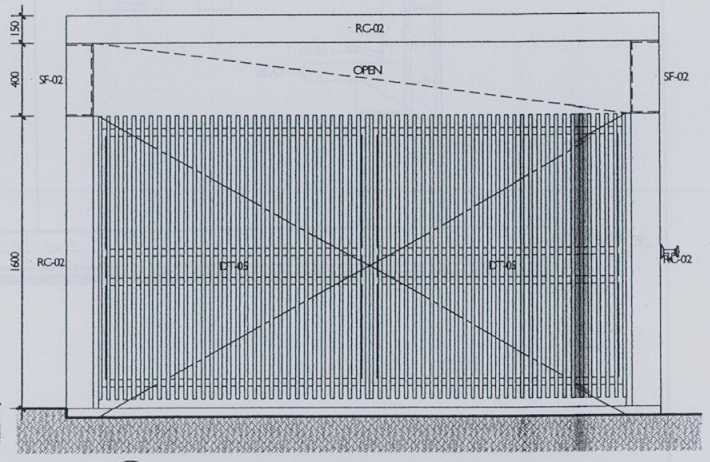
8 ELEVATION - GARBAGE STORE NORTH
CC023 1 : 20



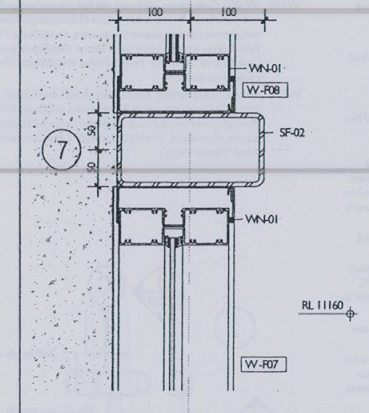
9 ELEVATION - GARBAGE STORE EAST
CC023 1 : 20



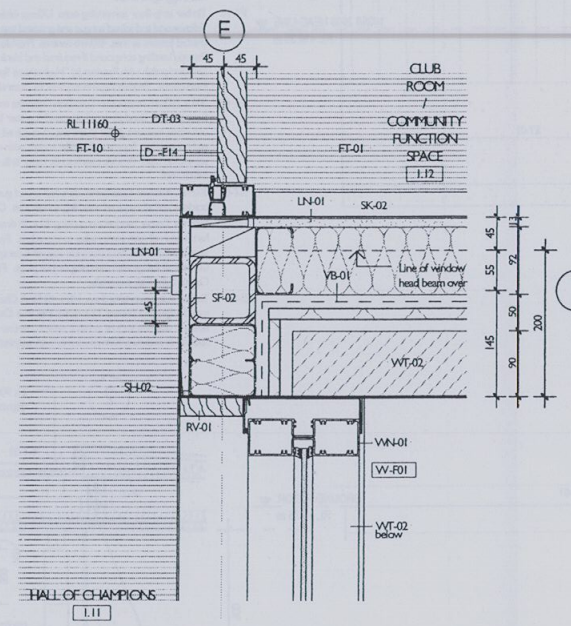
10 ELEVATION - GARBAGE STORE SOUTH
CC023 1 : 20



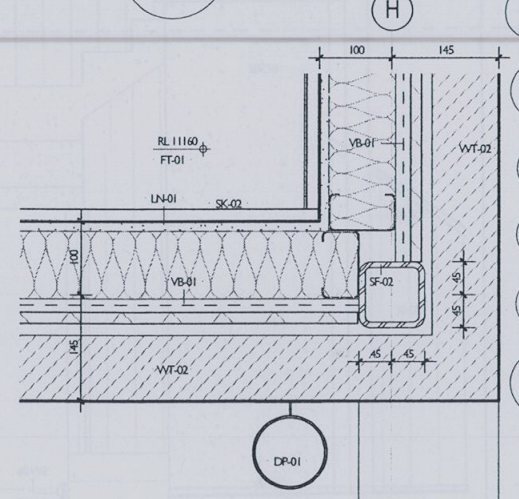
11 ELEVATION - GARBAGE STORE WEST
CC023 1 : 20



3 PLAN DETAIL 2 - LEVEL 1
CC005 1 : 5



4 PLAN DETAIL 3 - LEVEL 1
CC005 1 : 5



5 PLAN DETAIL 4 - LEVEL 1
CC005 1 : 5



139 PALMGROVE ROAD
AVALON BEACH NSW 2107
t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au
nsw 5393 abn 58 595 598 415
nominated architect: Richard Cole B.Sc.(Arch) Hons 1) B.Arch.(Hons1) Reg. No. 4026

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED OR ISSUED ON THE SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS BEING PREPARED FOR THE SUPPLY OF WORK. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE ARCHITECT. THE ARCHITECT IS NOT THE BUILDER PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

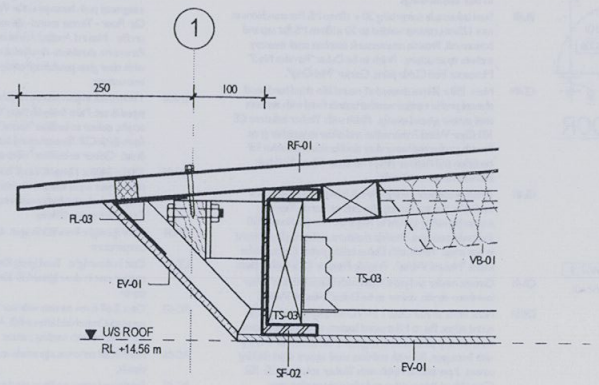
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

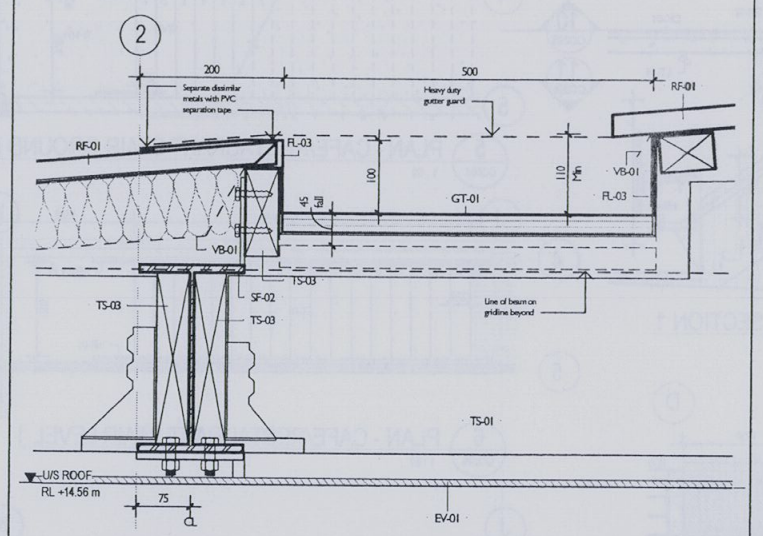
PLAN & GARBAGE STORE DETAILS

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	As indicated

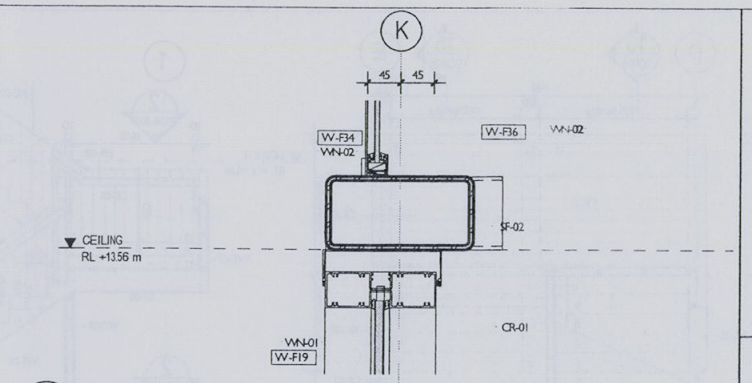
CC023



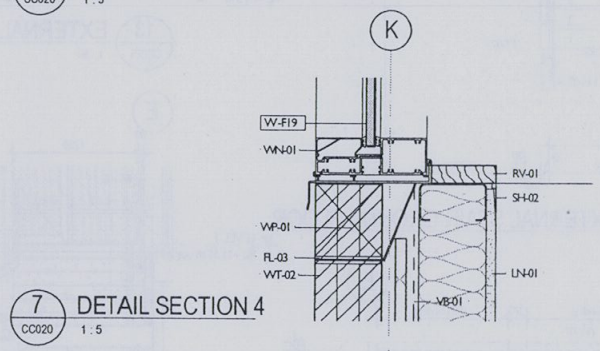
1 CC021 DETAIL SECTION 1 1 : 5



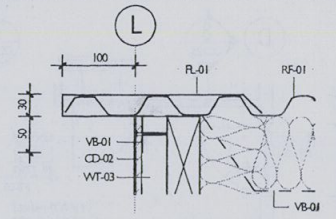
2 CC021 DETAIL SECTION 2 1 : 5



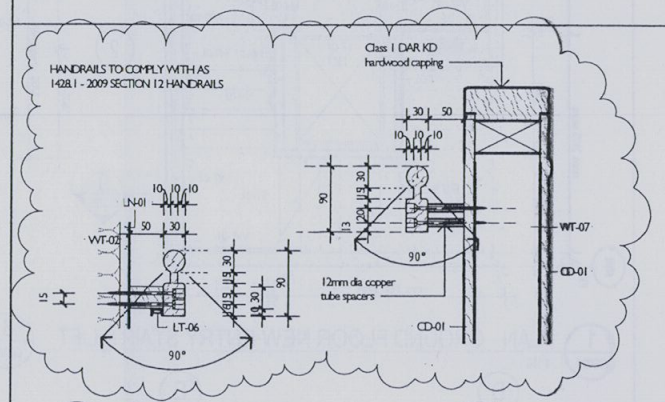
6 CC020 DETAIL SECTION 3 1 : 5



7 CC020 DETAIL SECTION 4 1 : 5

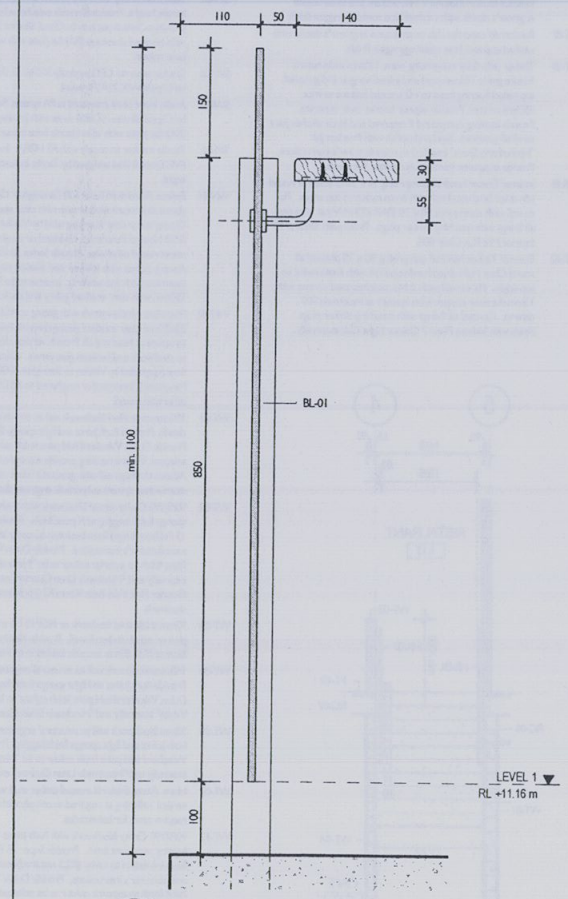


8 CC020 DETAIL SECTION 5 1 : 5

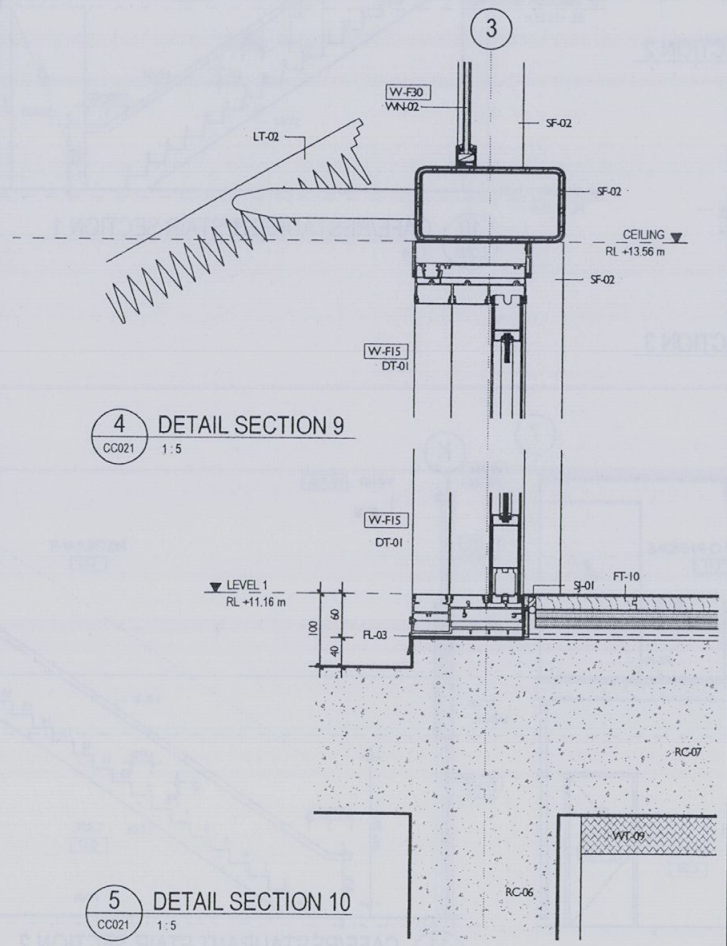


9 CC025 DETAIL SECTION 6 1 : 5 INTERNAL HANDRAIL

10 CC025 DETAIL SECTION 7 1 : 5 EXTERNAL HANDRAIL

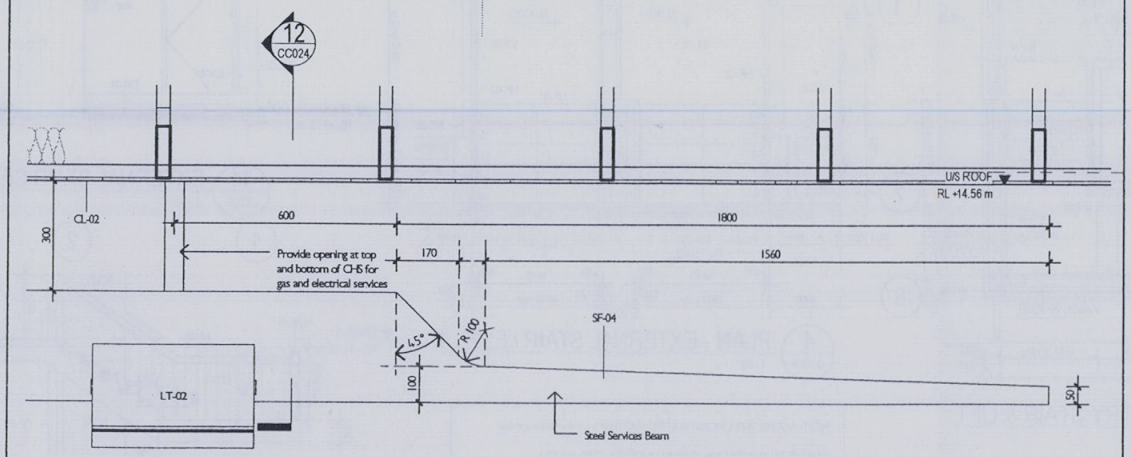


3 CC021 DETAIL SECTION 8 1 : 5

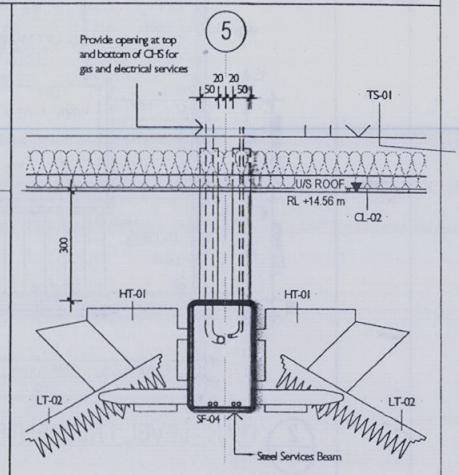


4 CC021 DETAIL SECTION 9 1 : 5

5 CC021 DETAIL SECTION 10 1 : 5



11 CC010 DETAIL SECTION 11 1 : 10



12 CC024 DETAIL SECTION 12 1 : 10

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium stanchions and button mounted handrail. Space stanchions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CD-02 9mm thick Cemintel Cleansteal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats and R1.5 bulk insulation to external walls. Provide additional corrosion protection to top hats to AS2312.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomatt Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

EV-01 9mm thick Cemintel Cleansteal Barestone cladding installed with joints as shown on drawings and to manufacturer's instructions in accordance with Category "CS-M" severe marine environment. Provide 10mm expressed joints on Cemintel Expressvall to external areas. Fix with Stainless steel wafer head Expressvall exposed head screws with Expressvall weather seal washers. Provide heavy duty double sided reflective foil insulation below top hats. Provide additional corrosion protection to top hats to AS2312.

FL-01 Folded sheet steel apron flashing with Colourbond Ultra finish to match roof.

FL-03 Continuous Alcor Flashing.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood and joined tongue and grooved top nailed floorting fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black skirtex joint to all sill junctions. Sand and polish with Feeless Jet "Hydrothane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

GT-01 500 x 100mm continuous Colorbond stainless steel box gutter with 1:200 fall. Support on A Bond plywood or spandek gutter board. Provide proprietary corrosion resistant gutter guard and all required flashings. Allow for expansion and contraction. Separate dissimilar metals with nom 10mm spacing and PVC separation tape. Provide overflow to lower side of gutter. Colorbond colour to match roof.

HT-01 Infrared Radiant Heater - Celmec IRH-G 114 Auto Gas heater with electrical ignition installed to manufacturers instructions. Provide heat shield if required. Conceal gas and electrical connection.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear Low sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "White on White".

LT-02 160W LED flood light ZM-FL-160W-NAN-120D from ZAMTAS Led Lights. 6500K colour temperature

LT-06 LED ribbon - internal or external as required adhesive fixed to structure or joinery or recessed in wall in aluminium extrusion with acrylic diffuser equal to Superlight LED strip mounting track. 6500K colour temperature.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromsheild Enhance WG.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacture's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

RF-01 Stramit "Longspan" 0.42 bmt with Colorbond Ultra finish on H2 treated timber battens spaced to manufacturer's instructions. Lay directly over Fletcher Heavy Duty Permiastop R1.8 mineral wool building blanket. Colour to be Windspray. Provide all required flashings and cappings to match.

RV-01 25mm Thick timber reveal with Dulux Wash n Wear Acrylic gloss finish. Colour to be Dulux "Natural White".

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Termiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SF-04 Steel services beam with corrosion protection to AS2312. Provide 300 x 200 RHS with 50 CHS suspension brackets conceal fixed to roof structure. Provide openings to conceal electrical and gas services within CHS members. Taper ends to profile as shown on drawings. Finish to be Dulux "Termiko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SH-02 Rondo PTSH 1630 rear away shadow bead 6mm.

SJ-01 Skirtex joint - black

TS-01 Timber or steel prefabricated trusses to structural engineer's or fabricator's details. Spacing to be 600mm.

TS-03 Timber framing to structural engineers details. Where exposed finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

VB-01 Double sided heavy duty perforated reflective foil insulation Fletcher Insulmax 800 Antiglare.

WN-01 Elevate Aluminium Series 620 Cantrefgate 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and lockable casement latch (no winders). Louvres to be Breezeway Altair 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 2525mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to streetwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WP-01 Weephole.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish bagging with paint finish. Provide Solartex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Partition Blanket ISB5 85mm acoustic insulation to internal stud walls.

WT-07 Nom. 70mm thick H3 treated timber stud wall. Provide vertical stiffening as required to comply with structural requirements for balustrades.

WT-09 PVC coated black 3.15 diameter chainlink wire full height sliding fence. Provide nom. 50 x 50 HDG EA frame fixed to floor and ceiling and intermediate supportas required. Provide tensioning and fixings as required.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

ABN 39 598 413 836 ACN 090 598 415
nominated architect: Richard Cole B.Sc.Arch (Hons 1) B.Arch(Penn) Reg. No. 6320

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED OR ON ANY OTHER SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND/OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DETAILS. TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE ARRANGEMENT COLUMN AND APPROVED AND SIGNED BY AN AUTHORISED PERSON OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND ALL OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

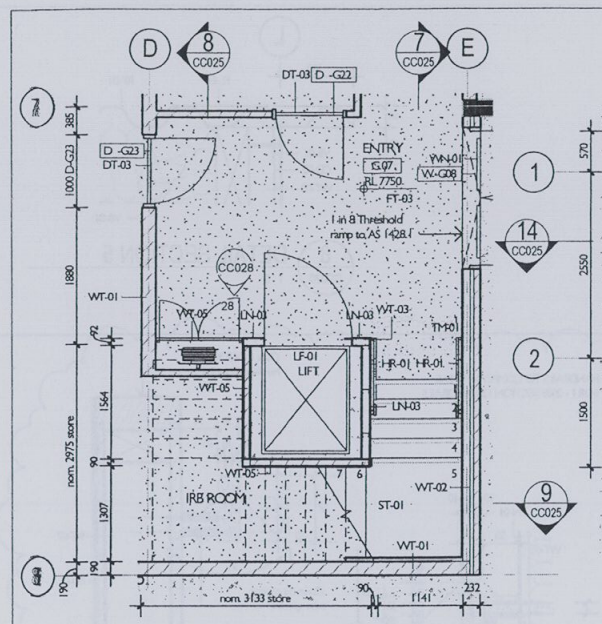
for
AVALON BEACH S.L.S.C.

DETAIL SECTIONS

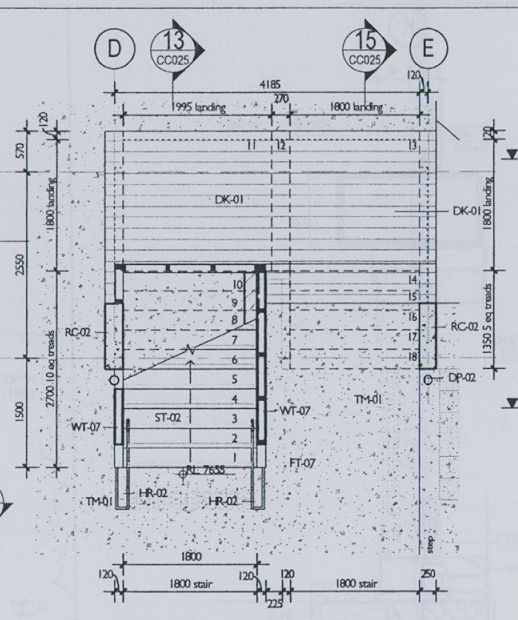
Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC

CC024

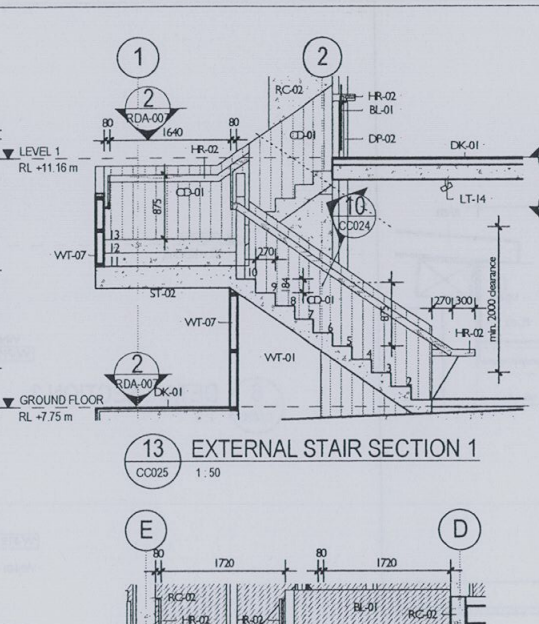
Scale As indicated



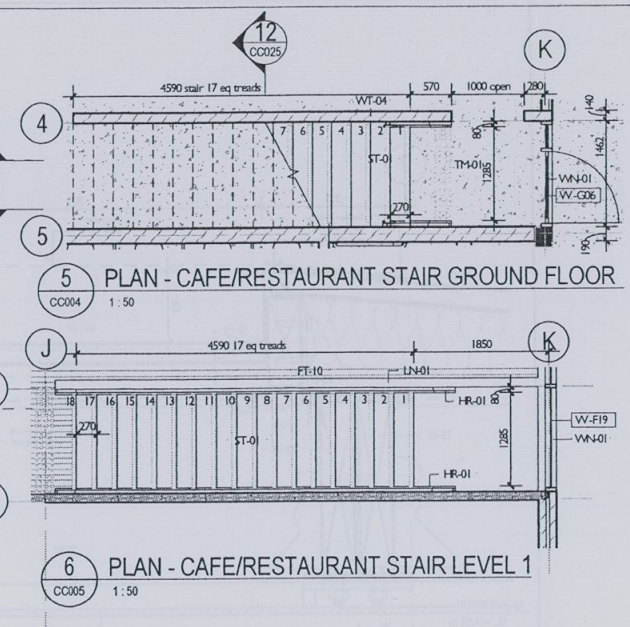
1 PLAN - GROUND FLOOR NEW ENTRY STAIR & LIFT
CC004 1:50



3 PLAN - EXTERNAL STAIR GROUND FLOOR
CC004 1:50

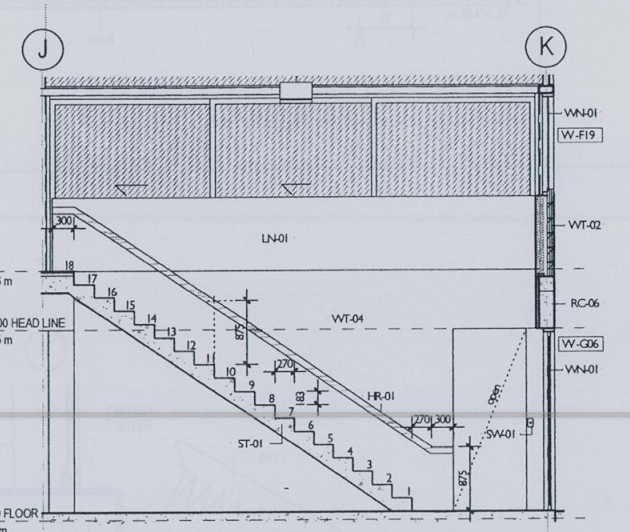


13 EXTERNAL STAIR SECTION 1
CC025 1:50

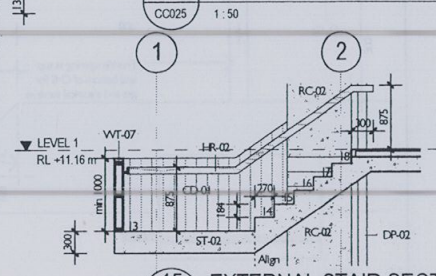


5 PLAN - CAFE/RESTAURANT STAIR GROUND FLOOR
CC004 1:50

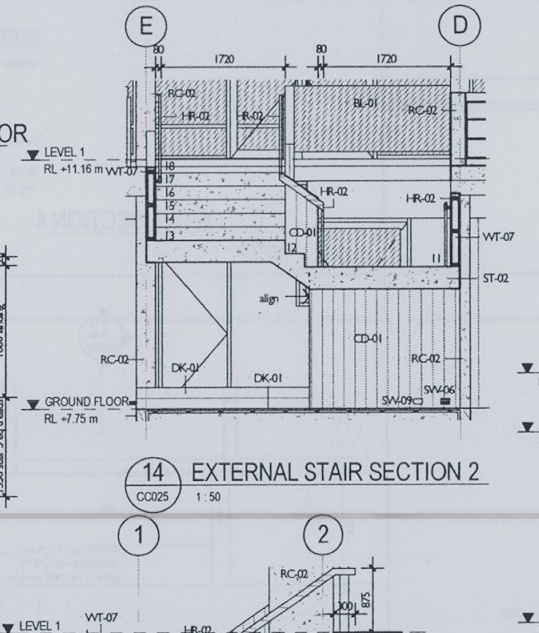
6 PLAN - CAFE/RESTAURANT STAIR LEVEL 1
CC005 1:50



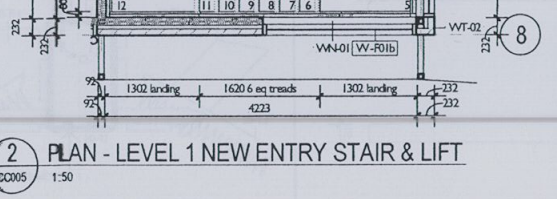
10 CAFE/RESTAURANT STAIR SECTION 1
CC025 1:50



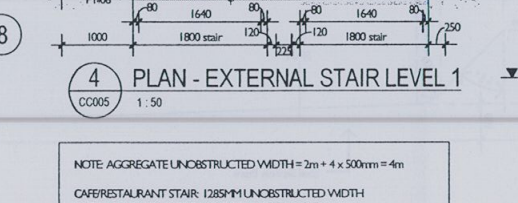
15 EXTERNAL STAIR SECTION 3
CC025 1:50



14 EXTERNAL STAIR SECTION 2
CC025 1:50



2 PLAN - LEVEL 1 NEW ENTRY STAIR & LIFT
CC005 1:50

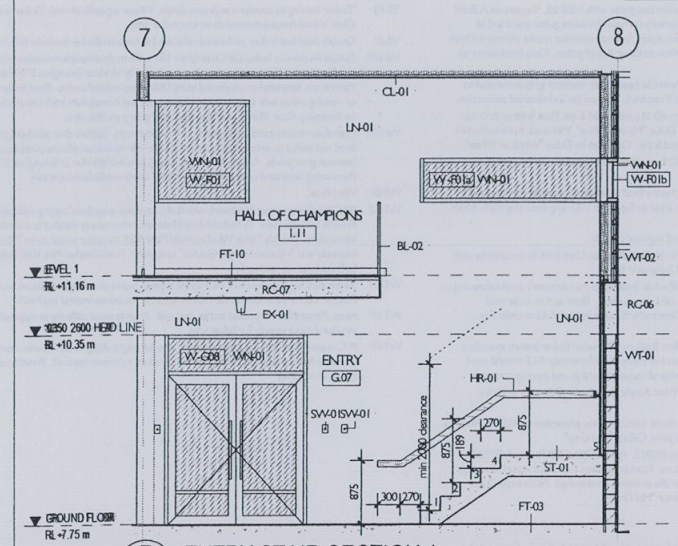


4 PLAN - EXTERNAL STAIR LEVEL 1
CC005 1:50

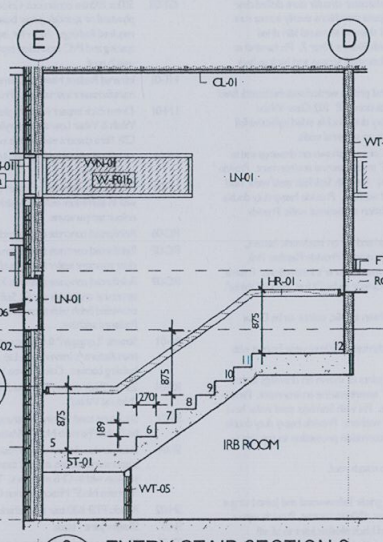
NOTE: AGGREGATE UNOBSTRUCTED WIDTH = 2m + 4 x 500mm = 4m

CAFE/RESTAURANT STAIR: 1285MM UNOBSTRUCTED WIDTH
ENTRY/LIFT STAIR: 1078MM UNOBSTRUCTED WIDTH
EXTERNAL STAIR: 1640MM UNOBSTRUCTED WIDTH

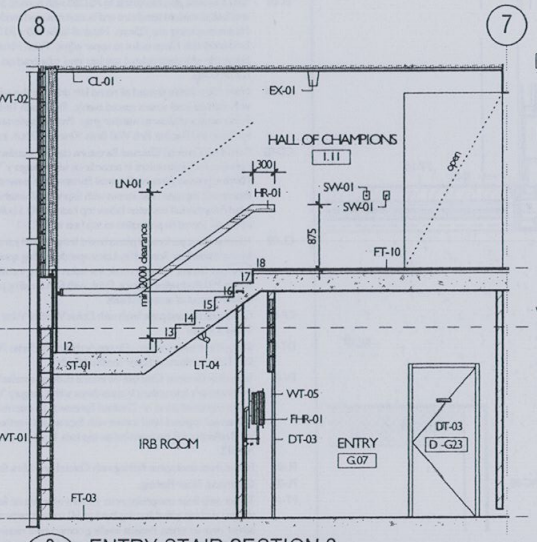
TOTAL: 1285 + 1078 + 1640 = 4003MM AGGREGATE UNOBSTRUCTED WIDTH



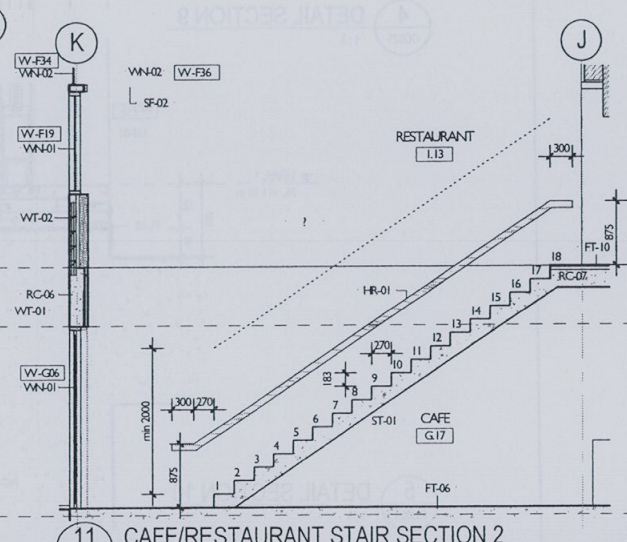
7 ENTRY STAIR SECTION 1
CC025 1:50



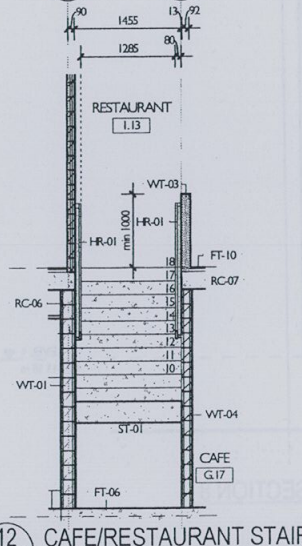
9 ENTRY STAIR SECTION 2
CC025 1:50



8 ENTRY STAIR SECTION 3
CC025 1:50



11 CAFE/RESTAURANT STAIR SECTION 2
CC025 1:50



12 CAFE/RESTAURANT STAIR SECTION 3
CC025 1:50

BBQ-01 Proprietary BBQ to be selected.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular core drilled clear anodised aluminium standkions and button mounted handrail. Space standkions evenly across runs. Maximum opening size 125mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edges. Finish Handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

BL-02 Steel balustrade comprising 30 x 10mm MS Flat standkions at max 125mm centres welded to 30 x10mm MS flat top and bottom rail. Provide countersunk stainless steel masonry anchors to structure. Finish to be Dulux "Permoko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

CD-01 Nom. 150 x 20mm dressed all round kiln dried hardwood channel profile vertical weatherboards fixed with stainless steel screws spaced evenly. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide perforated heavy duty double sided reflective foil insulation and Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to external walls.

CL-01 10mm plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Rondo P50 shadowline cornice. Provide moisture resistant plasterboard in wet areas. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Provide Fletcher R2.5 Ceiling Batts.

CR-01 Cement render and paint finish with Dulux Wash n' Wear low sheen acrylic, colour to be Dulux "Natural White".

DK-01 Nom 140 x 25 KD Class 1 HWDAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DP-01 100mm round Colorbond Ultra downpipe with stand off type heavy duty astrapals. Colour to be "Windspray"

DP-02 125mm round Colorbond Ultra downpipe with stand off type heavy duty astrapals. Colour to be "Windspray"

DT-03 Internal Doors – Solid core flush panel with Dulux 'Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoc LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

EX-01 Exit sign to comply with AS2293.1-2005

FH-N-01 Proprietary Fire Hose Reel to be Wormald or equal to comply with AS1221:1997 and AS 2441-2005. Provide proprietary Fire Hose Reel location sign in accordance with AS 2441-2005.

FT-03 Reinforced concrete slab to structural engineer's details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer with non slip additive to achieve slip resistance to AS 4586 Class W / B.

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-07 Reinforced concrete slab to structural engineer's details with washed exposed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood and joined tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black silaflex joint to all sill junctions. Sand and polish with Peerless Jal "Hydrathane Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

HR-01 Internal Timber handrail comprising 90 x 30 dressed all round kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with continuous 50 x 30 DAR KD HW rail. Conceal all fixings with matching timber plugs. Finish with Sikkens TS Interior Mat Plus Clear 003.

HR-02 External Timber handrail comprising 90 x 30 dressed all round Class 1 kiln dried hardwood rail with 6mm radius to top edges. Fix to wall with 2 No. stainless steel screws with 12mm diameter copper tube spacers at maximum 900 centres. Conceal all fixings with matching timber plugs. Finish with Sikkens Filter 7 Colour Light Oak externally.

LF-01 Restricted useage wheelchair accessible hydraulic lift with steel lift frame. Steel frame to be provided by contractor. Proprietary lift systems to be Easy Living Domus lift XL, Model DL-HC01, configuration for lightweight shaft. Car 1100mm wide x 1400mm deep. Shaft 1580mm wide x 1550mm deep. Door 900 wide. Load 400 kg. Motor Cabinet 728mm wide x 360deep x 1500mm high. Power - single phase. Control - Automatic buttons with key isolation. Car Lights - 3 x downlights (satin chrome). Handrails - standard. Door Handles - Standard. Car operating Panels - Handrail integrated push button panel. Car Walls - Satin Stainless Steel. Car Floor - Timber to match adjacent flooring by builder. Car profile - Natural Anodised Aluminium. Doors - (B) Panoramic aluminium-Anodised aluminium profile door with wide clear glass panels. Install strictly to manufacturers instructions.

LN-01 13mm thick Impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear low sheen acrylic, colour to be Dulux "Natural White". Where areas to be 6mm thick CSR fibre cement wall boards with all joints taped & set. Colour to be Dulux "Villa on White".

LN-03 1200 x 3400 x 12mm AC FaceTC Bond plywood with hoop pine veneer equal to Natral Premium AC (interior) with 5mm black shadowline between sheets. Finish with Sikkens Cetol TS Interior 008 clear.

LT-04 18W Spotlight from LED Shopper. 6500K colour temperature

LT-14 Cast in downlight. Tow Lighting Kingston 101 medium etter copper cast in downlight with 8W 10w LED lamp and lens cover.

RC-02 Class 2 off-form concrete with silver masonry sealer finish equal to Cromshield Enhance WG. Align joints and plug spacer holes with matching material.

RC-06 Reinforced concrete edge turndown to structural engineer's details.

RC-07 Reinforced concrete slab to structural engineer's details. Soffit to be Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Crommelin Enhance Satin with Crommelin Slip Resistant additive.

SF-02 Structural steel framing to structural engineer's details with corrosion protection to AS2312. Finish to be Dulux "Permoko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

ST-01 Reinforced concrete stair to structural engineers details with steel trowel finish and Crommelin Cromshield Enhance Satin sealer. Nosing strip to comply with AS1428.1-2009 to be 8mm reinforced polymer aluminium oxide grit in black nom.50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom.50mm off finished face of balustrade or adjacent walls.

ST-02 Reinforced concrete stair to structural engineers details with washed aggregate finish. Nosing strip to comply with AS1428.1-2009 to be 8mm reinforced polymer aluminium oxide grit in black nom.50mm wide and setback 15mm from nosing finished flush with stair tread. Allow nom. 50mm off finished face of balustrade or adjacent walls.

SW-01 Switch nominally 1020AFL to centreline to match door handle height. Provide dimmable switches where noted on drawings. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-06 Double external GPO nominally 300 to CL AFFL. GPO's to be Clipsal WSC2272 or equal.

SW-09 Audio Input plate connected to PA system. Switchplates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

TM-01 Tactile marker to comply with AS 1428.4. Individual black PVC Dots drilled and glued by Tactile Indicators pty/ltd or equal.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 45mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and 80cm casement batch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

WT-01 190mm core filled blockwork wall to structural details. Provide flush joints and light sponge finish. Provide Dulux Weathershield paint finish colour to be selected. Where retaining provide waterproof membrane and Atlantis drainage cell with geotextile fabric connected to stormwater system to hydraulic engineer details.

WT-02 90/50/90 Cavity veneer blockwork with flush joint and sponge finish bagging with paint finish. Provide Solatex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 92mm thick steel studwork or MGP10 H2 treated radiata pine or equal studwork wall. Provide Fletcher ISB Friction Blanket ISB5 85mm acoustic insulation to internalised walls.

WT-04 140mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-05 90mm blockwork wall to structural engineers details. Provide flush joints and light sponge finish bagging. Provide Dulux Weathershield paint finish colour to be "Natural White" internally and "Handmade Linen Quarter" externally.

WT-07 Nom. 70mm thick H3 treated timber stud wall. Provide vertical stiffening as required to comply with structural requirements for balustrades.

WT-12 90/50/90 Cavity blockwork with flush joints and sponge finish bagging with paint finish. Provide Super 15 Foilboard rigid foam insulation to cavity (R2.3 required) installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be selected.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect - Richard Cole, B.Arch(Hons) D.B.Arch(Hons1), Reg. No. 4859

THIS DRAWING IS SUBJECT TO COPYRIGHT AND SHALL NOT BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE ISSUED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE MARGIN. ALL DRAWINGS REMAIN THE PROPERTY AND COPYRIGHT OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

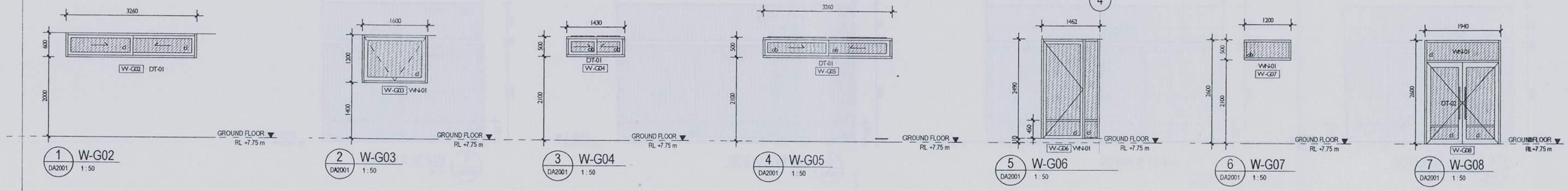
No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

STAIR DETAILS

Project number	1001		CC025
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	1 : 50



1 DA2001 W-G02 1 : 50

2 DA2001 W-G03 1 : 50

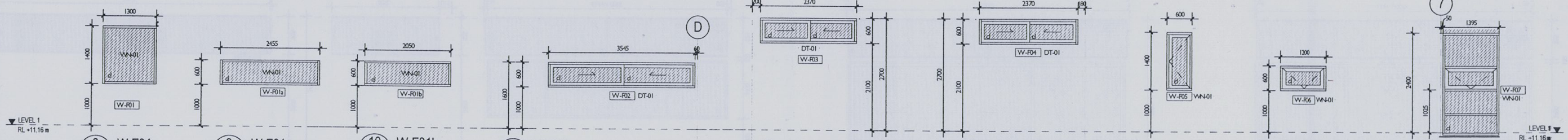
3 DA2001 W-G04 1 : 50

4 DA2001 W-G05 1 : 50

5 DA2001 W-G06 1 : 50

6 DA2001 W-G07 1 : 50

7 DA2001 W-G08 1 : 50



8 DA2002 W-F01 1 : 50

9 DA2002 W-F01a 1 : 50

10 DA2002 W-F01b 1 : 50

11 DA2002 W-F02 1 : 50

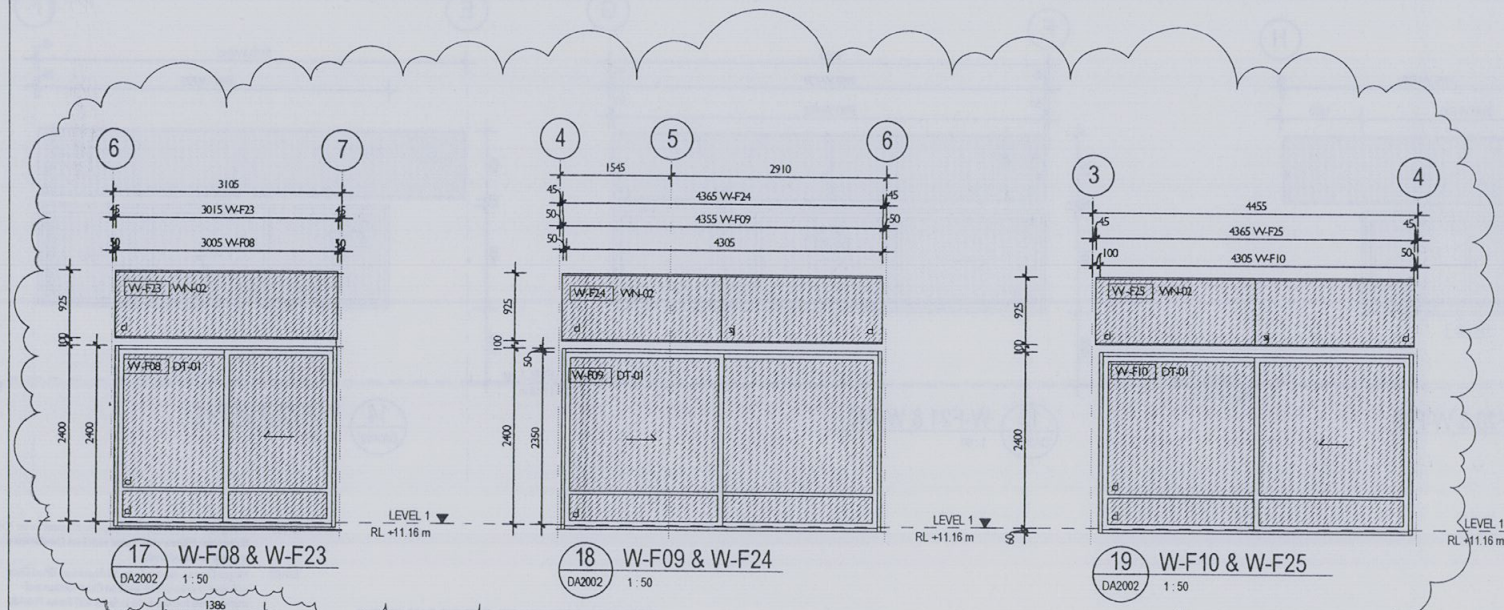
12 DA2002 W-F03 1 : 50

13 DA2002 W-F04 1 : 50

14 DA2002 W-F05 1 : 50

15 DA2002 W-F06 1 : 50

16 DA2002 W-F07 1 : 50



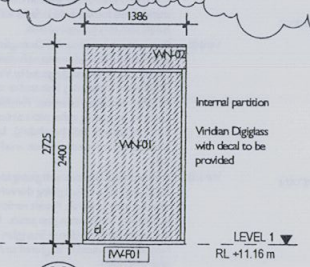
17 DA2002 W-F08 & W-F23 1 : 50

18 DA2002 W-F09 & W-F24 1 : 50

19 DA2002 W-F10 & W-F25 1 : 50

20 DA2002 W-F11 & F26 1 : 50

21 DA2002 W-F12 & W-F27 1 : 50



22 DA2002 IW-F01 1 : 50

CHECK ALL DIMENSIONS ON SITE. DIMENSIONS ARE OPENING SIZES AND ARE FOR TENDERING PURPOSES ONLY.

LEGEND
cl : clear glass - all glass to be clear uno
tv-ct: clear glass louvres
sc : solid core
sj : silicon joint

Refer SECTION J CERTIFICATE for further requirements

ALL CLEAR GLASS TO BE UPGRADED BY VIRIDIAN TO VIRIDIAN SMARTGLASS SP30 NEUTRAL PANORAMIC

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Door furniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

WN-01 Elevate Aluminium Series 620 Centreglaze 150 x 44mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised gallery and black clips.

WN-02 Frameless window panels with glazing to AS1288 in nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

ACN 073 398 413 ABN 29 893 398 413
nominated architect: Richard Cole B.Sc.(Arch) (Hons.) B.Arch(Hons1), Reg. No. 6078

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE PURPOSE FOR WHICH IT WAS PREPARED, NOR ON ANY SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DETAILS. DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED IN THE AMENDMENT COLUMN AND APPROVED. WG PROJECTS © 2013 RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND ALL BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

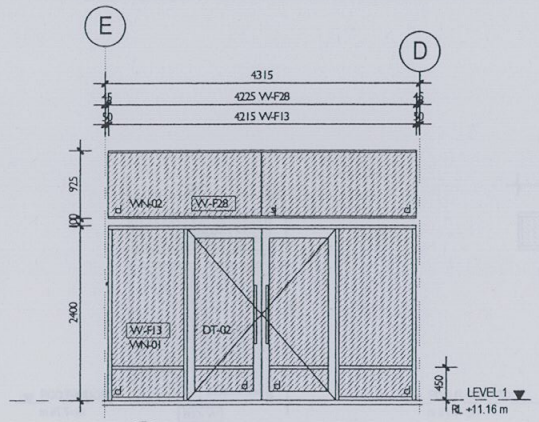
No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

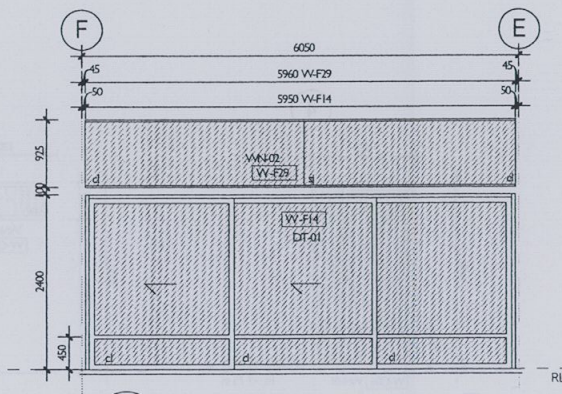
AVALON BEACH S.L.S.C.

WINDOW SCHEDULE

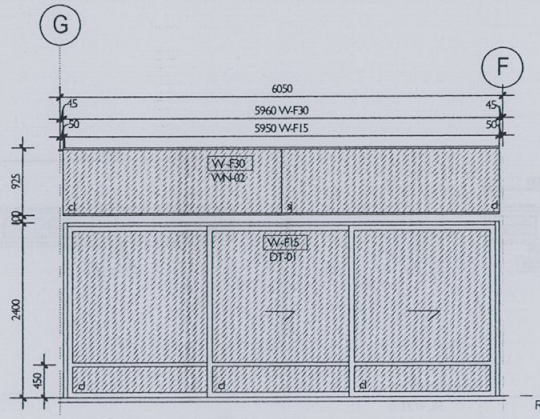
Project number	1001		CC026
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	1 : 50



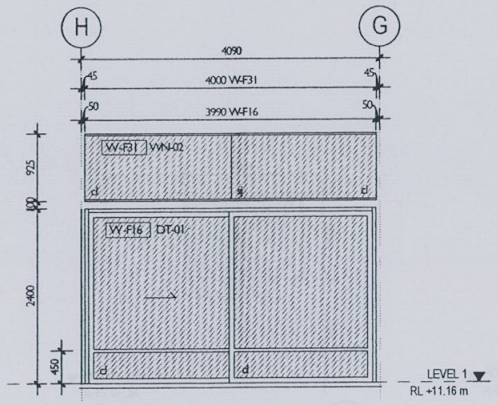
1 DA2002 W-F13 & W-F28 1 : 50



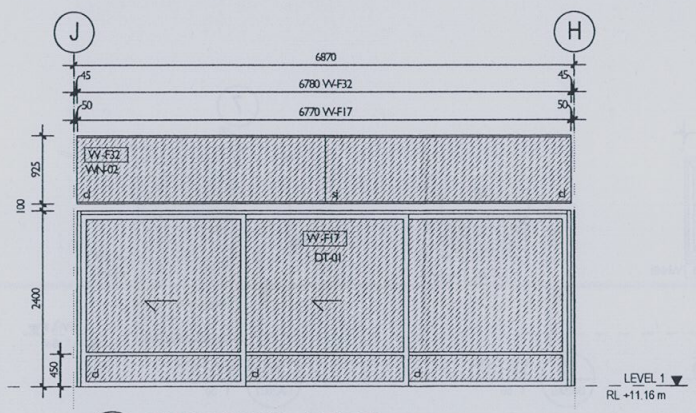
2 DA2002 W-F14 & W-F29 1 : 50



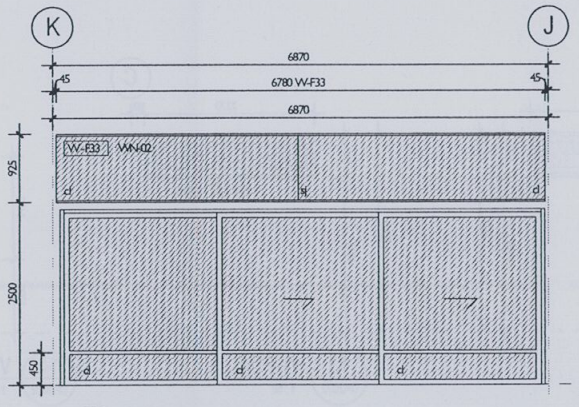
3 DA2002 W-F15 & W-F30 1 : 50



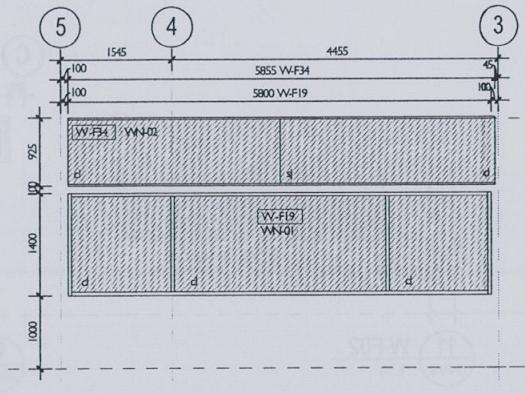
4 DA2002 W-F16 & W-F31 1 : 50



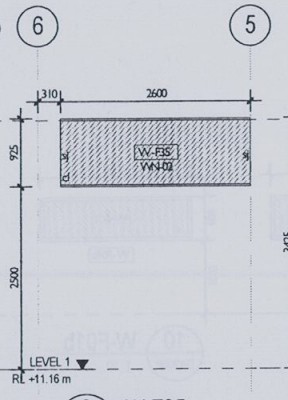
5 DA2002 W-F17, W-F17a & W-F32 1 : 50



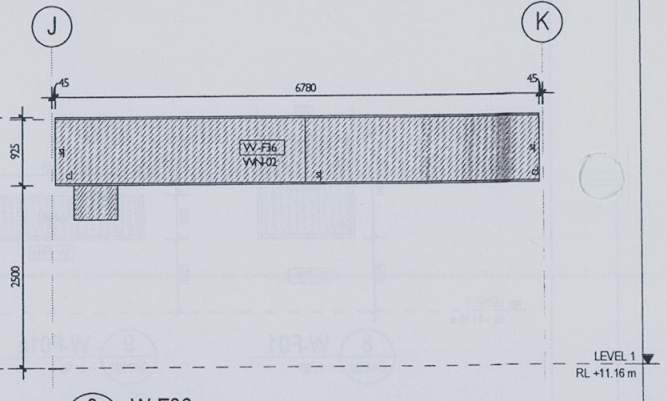
6 DA2002 W-F18 & W-F33 1 : 50



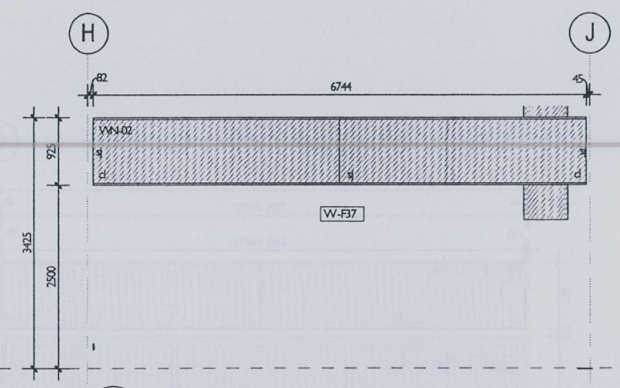
7 DA2002 W-F19 & W-F34 1 : 50



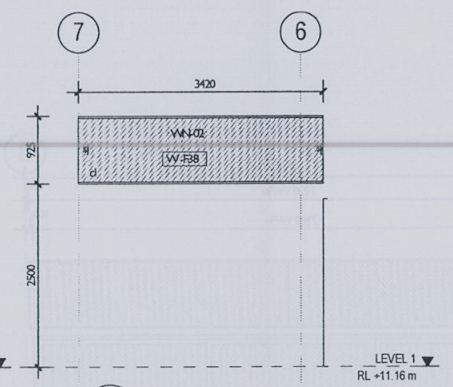
8 CC012 W-F35 1 : 50



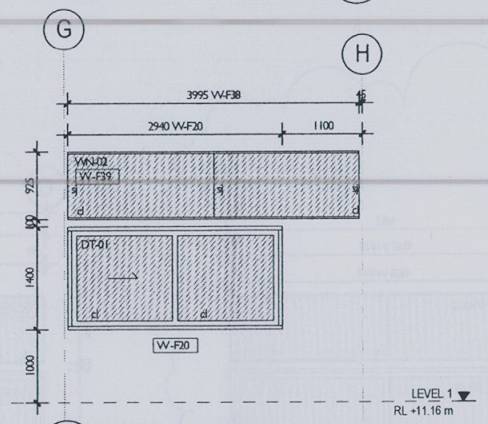
9 DA2002 W-F36 1 : 50



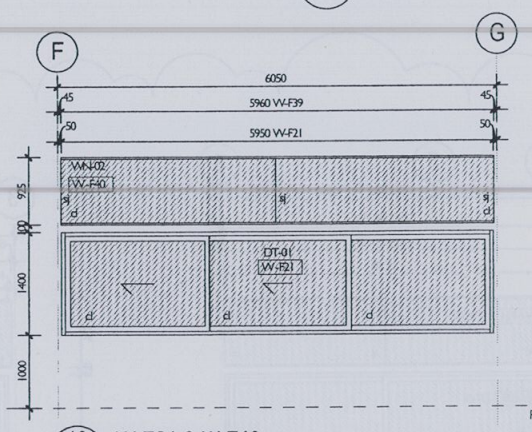
10 DA2002 W-F37 1 : 50



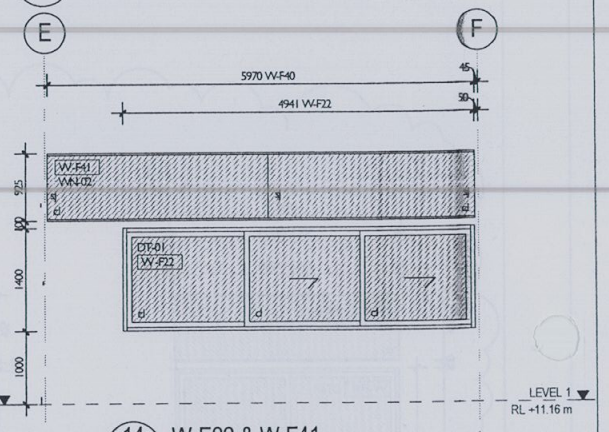
11 DA2002 W-F38 1 : 50



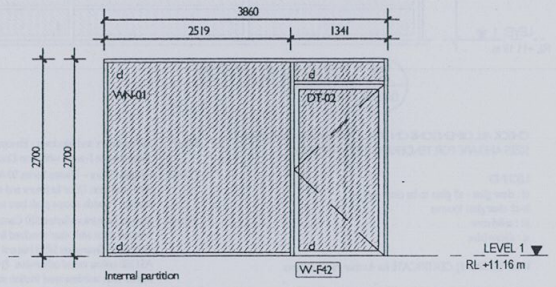
12 DA2002 W-F20 & W-F39 1 : 50



13 DA2002 W-F21 & W-F40 1 : 50



14 DA2002 W-F22 & W-F41 1 : 50



15 DA2002 W-F42 1 : 50

DT-01 Sliding doors and windows - Elevate Architectural Series 704 Slidemaster 150mm wide Frames with Icon Doorfurniture and clear anodised finish.

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

WN-01 Elevate Aluminium Series 620 Casmentglaze 150x14mm glazed aluminium window suite with clear anodised finish. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise. Provide Series 50 Casement or Awning sashes with stainless steel friction stays and Icon casement latch (no winders). Louvres to be Breezway Altair 150mm with clear anodised glass and black clips.

WN-02 Frameless window panels with glazing to AS1288 min nom. 25x25mm clear anodised glazing channels fixed and sealed to structure at head and sill. Provide vertical clear silicone joints to steelwork and between glass panels. Glazing to be clear float (upgraded by Viridian to Smartglass SP30 Neutral Panoramic), laminated or toughened to AS1288 unless noted otherwise noted.

CHECK ALL DIMENSIONS ON SITE. DIMENSIONS ARE OPENING SIZES AND ARE FOR TENDERING PURPOSES ONLY.

LEGEND
cl : clear glass - all glass to be clear uno
lv-cl: clear glass louvres
sc : solid core
sj : silicon joint

Refer SECTION J CERTIFICATE for further requirements

ALL CLEAR GLASS TO BE UPGRADED BY VIRIDIAN TO VIRIDIAN SMARTGLASS SP30 NEUTRAL PANORAMIC



139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc(Arch) (Hons I) B.Arch(Hons I) Reg No. 6038

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT LAND BY OR ON BEHALF OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DRAWINGS TAKE PRECEDENCE OVER SMALL SCALE AND LARGER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL WORKS ARE TO COMPLY WITH THE BCA UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO MARKED ON THE ANNOTATION COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. ALL BUILDING ELEMENTS, INCLUDING BUT NOT LIMITED TO STEEL, INSULATION, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.

CONSTRUCTION

558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

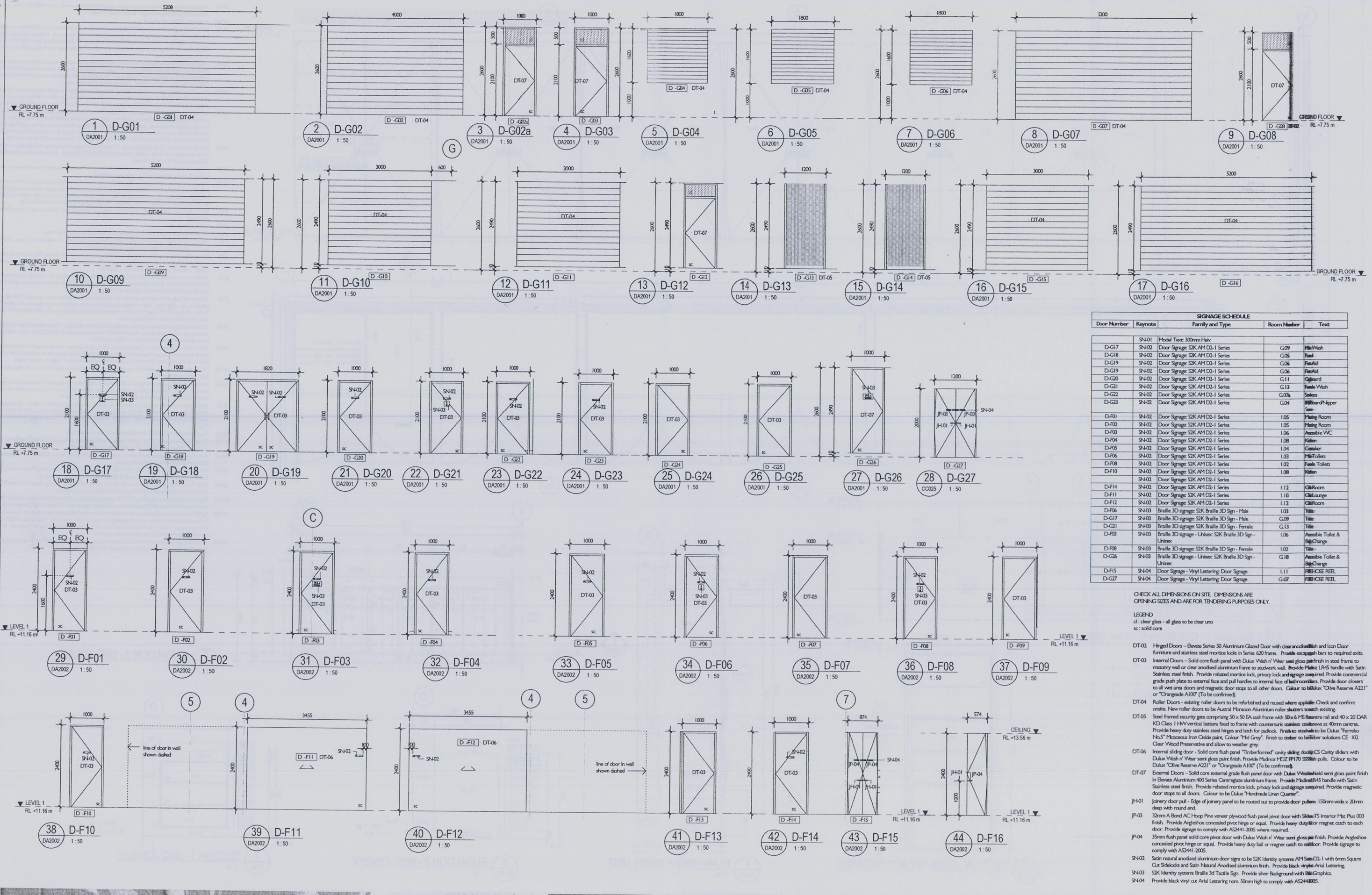
AVALON BEACH S.L.S.C.

WINDOW SCHEDULE

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC

CC027

Scale 1 : 50



SIGNAGE SCHEDULE

Door Number	Keynote	Family and Type	Room Number	Text
	SN-01	Model Text: 300mm Helv		
D-G17	SN-02	Door Signage: 52K AM D2-1 Series	G.09	Male Wash
D-G18	SN-02	Door Signage: 52K AM D2-1 Series	G.05	Pantry
D-G19	SN-02	Door Signage: 52K AM D2-1 Series	G.06	First Aid
D-G19	SN-02	Door Signage: 52K AM D2-1 Series	G.06	First Aid
D-G20	SN-02	Door Signage: 52K AM D2-1 Series	G.11	Cupboard
D-G21	SN-02	Door Signage: 52K AM D2-1 Series	G.13	Female Wash
D-G22	SN-02	Door Signage: 52K AM D2-1 Series	G.07a	Seniors
D-G23	SN-02	Door Signage: 52K AM D2-1 Series	G.04	BBBoard/Napper Store
D-F01	SN-02	Door Signage: 52K AM D2-1 Series	1.05	Meeting Room
D-F02	SN-02	Door Signage: 52K AM D2-1 Series	1.05	Meeting Room
D-F03	SN-02	Door Signage: 52K AM D2-1 Series	1.06	Accessible WC
D-F04	SN-02	Door Signage: 52K AM D2-1 Series	1.08	Kitchen
D-F05	SN-02	Door Signage: 52K AM D2-1 Series	1.04	Counselor
D-F06	SN-02	Door Signage: 52K AM D2-1 Series	1.03	Male Toilets
D-F08	SN-02	Door Signage: 52K AM D2-1 Series	1.02	Female Toilets
D-F10	SN-02	Door Signage: 52K AM D2-1 Series	1.08	Kitchen
	SN-02	Door Signage: 52K AM D2-1 Series		
D-F14	SN-02	Door Signage: 52K AM D2-1 Series	1.12	Club Room
D-F11	SN-02	Door Signage: 52K AM D2-1 Series	1.10	Club Lounge
D-F12	SN-02	Door Signage: 52K AM D2-1 Series	1.12	Club Room
D-F06	SN-03	Braille 3D signage: 52K Braille 3D Sign - Male	1.03	Toilet
D-G17	SN-03	Braille 3D signage: 52K Braille 3D Sign - Male	G.09	Toilet
D-G21	SN-03	Braille 3D signage: 52K Braille 3D Sign - Female	G.13	Toilet
D-F03	SN-03	Braille 3D signage - Unisex: 52K Braille 3D Sign - Unisex	1.06	Accessible Toilet & Baby Change
D-F08	SN-03	Braille 3D signage: 52K Braille 3D Sign - Female	1.02	Toilet
D-G26	SN-03	Braille 3D signage - Unisex: 52K Braille 3D Sign - Unisex	G.18	Accessible Toilet & Baby Change
D-F15	SN-04	Door Signage - Vinyl Lettering: Door Signage	1.11	FIRE HOSE REEL
D-G27	SN-04	Door Signage - Vinyl Lettering: Door Signage	G-07	FIRE HOSE REEL

CHECK ALL DIMENSIONS ON SITE. DIMENSIONS ARE OPENING SIZES AND ARE FOR TENDERING PURPOSES ONLY.

LEGEND
cl : clear glass - all glass to be clear uno
sc : solid core

DT-02 Hinged Doors – Elevate Series 50 Aluminium Glazed Door with clear anodised finish and Icon Door furniture and stainless steel mortice locks in Series 620 frame. Provide escape push bars to required exits.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Mulec LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-04 Roller Doors - existing roller doors to be refurbished and reused where applicable. Check and confirm onsite. New roller doors to be Austral Monsoon Aluminium roller shutters to match existing.

DT-05 Steel framed security gate comprising 50 x 50 EA steel frame with 50 x 6 MS flat centre rail and 40 x 20 DAR KD Class 1 H/W vertical battens fixed to frame with countersunk stainless steel screws at 90mm centres. Provide heavy duty stainless steel hinges and latch for padlock. Finish to steelwork to be Dulux "Ferrieko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey". Finish to timber to be libeller solutions CE 102. Clear Wood Preservative and allow to weather grey.

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door in CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Mudmet MDZ.RM70.SSS finish pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-07 External Doors – Solid core external grade flush panel door with Dulux Weathershield semi gloss paint finish in Elevate Aluminium 400 Series Centreglaze aluminium frame. Provide Mudmet LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide magnetic door stops to all doors. Colour to be Dulux "Handmade Linen Quarter".

JH-01 Joinery door pull - Edge of joinery panel to be routed out to provide door pull arm. 150mm wide x 20mm deep with round end.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS interior Mat Plus 003 finish. Provide Angleshoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

JP-04 35mm flush panel solid core pivot door with Dulux Wash n' Wear semi gloss paint finish. Provide Angleshoe concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005.

SN-02 Satin natural anodised aluminium door signs to be 52K Identity systems AM Series D2-1 with 6mm Square Cut Sidelocks and Satin Natural Anodised aluminium finish. Provide black vinyl cut Arial Lettering.

SN-03 52K Identity systems Braille 3d Tactile Sign. Provide silver Background with Blue Graphics.

SN-04 Provide black vinyl cut Arial Lettering nom. 50mm high to comply with AS2441-2005.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107
t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au
ABN 073 598 415 nbn:38 890 598 415
nominated architect: Richard Cole B.Arch(Hons I) R.Arch(Hons I) Reg. No. 4268

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE PERMISSION OF RICHARD COLE ARCHITECTURE PTY. LTD. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO ORDERING ANY MATERIALS AND/OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS ARE TO BE ADHERED TO WHERE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALL SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, AND MARKED IN THE AMENDMENT COLUMN AND APPROVED AND SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY. LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT ALL WORKS, MATERIALS, METHODS AND ASSEMBLY OF BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA

No.	Revision Description	Date
G	Issued to Style Finish - Door Hardware Review	18-09-12
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

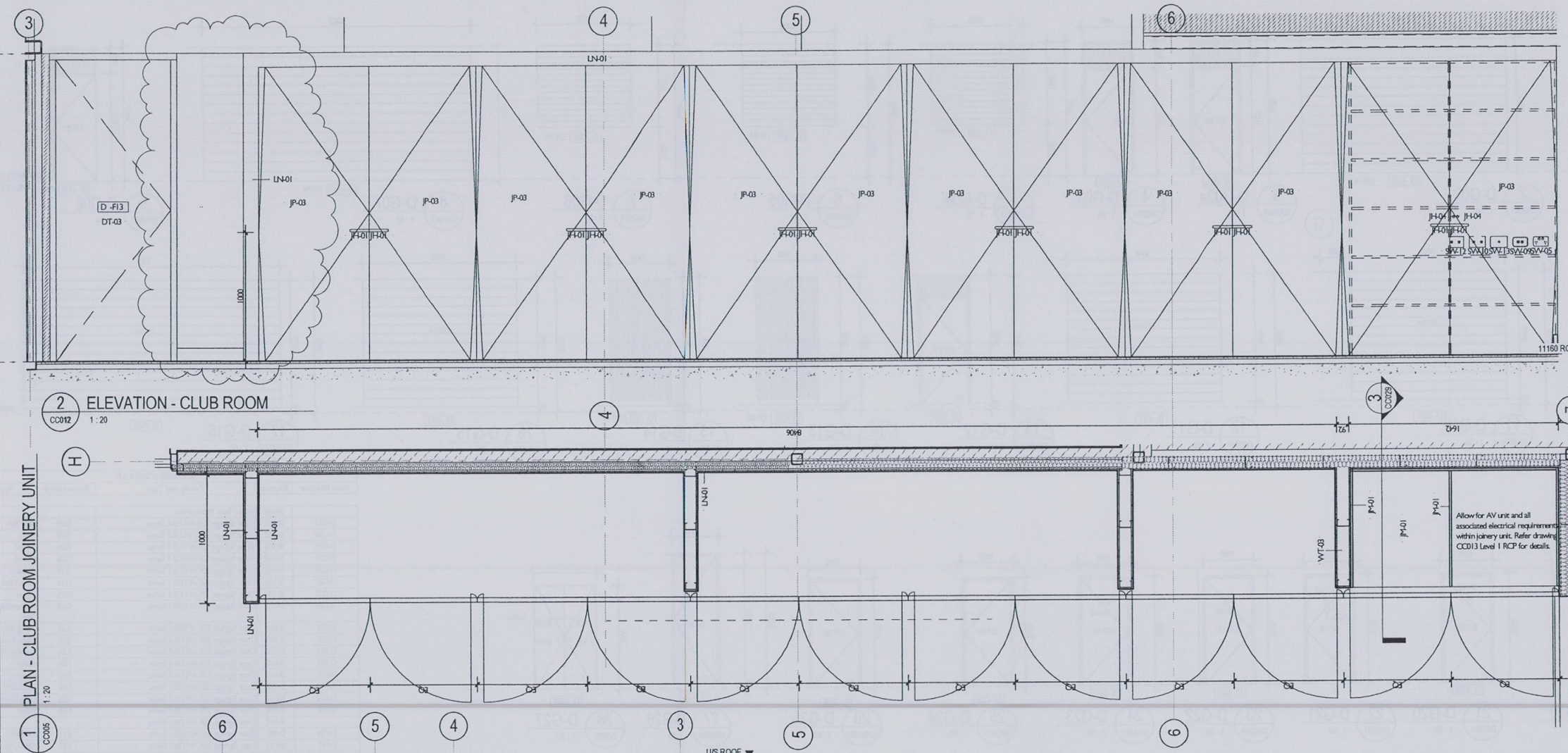
AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

to:
AVALON BEACH S.L.S.C.

DOOR SCHEDULE

Project number	1001
Date	30-04-13
Drawn by	RC
Checked by	RC
Scale	1 : 50

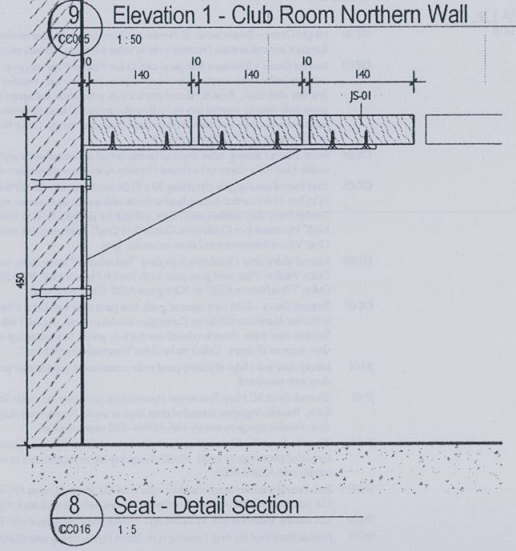
CC028



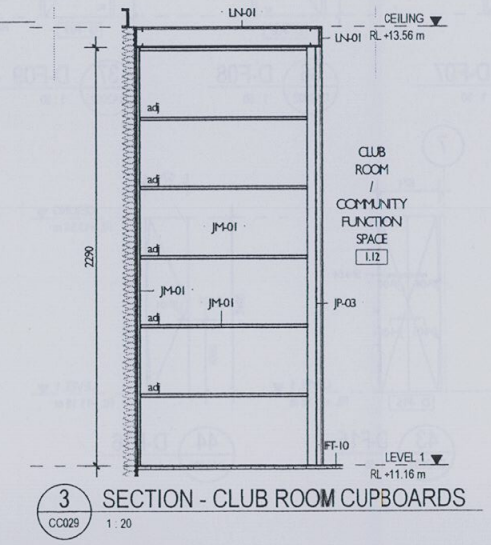
2 CC012 **ELEVATION - CLUB ROOM** 1 : 20

1 CC005 **PLAN - CLUB ROOM JOINERY UNIT** 1 : 20

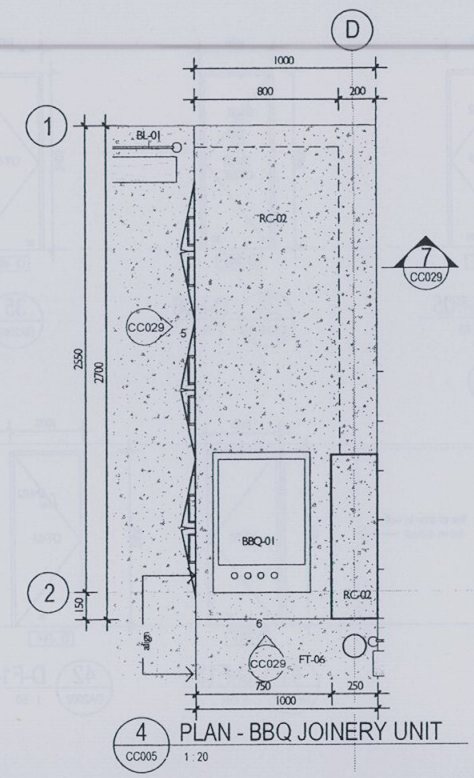
9 CC005 **Elevation 1 - Club Room Northern Wall** 1 : 50



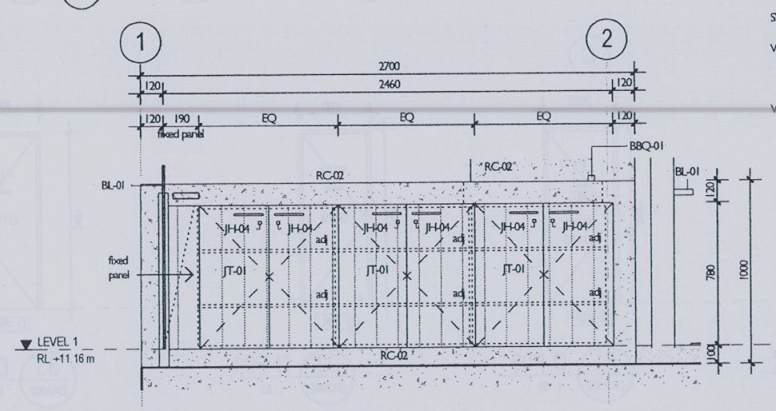
8 CC016 **Seat - Detail Section** 1 : 5



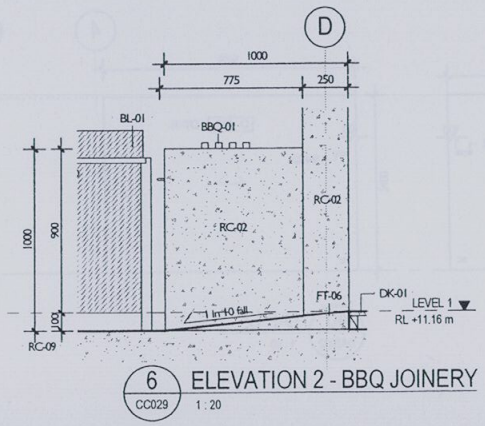
3 CC029 **SECTION - CLUB ROOM CUPBOARDS** 1 : 20



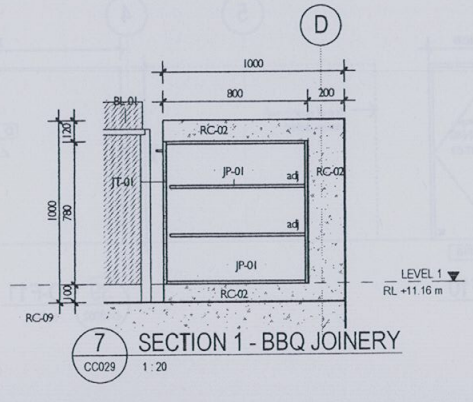
4 CC005 **PLAN - BBQ JOINERY UNIT** 1 : 20



5 CC029 **ELEVATION 1 - BBQ JOINERY** 1 : 20



6 CC029 **ELEVATION 2 - BBQ JOINERY** 1 : 20



7 CC029 **SECTION 1 - BBQ JOINERY** 1 : 20

AP-01 Acoustica Quietspace 50 fabric faced acoustic panel adhesive fixed to wall. Provide Slilx 50 x 3mm aluminium aluminium angle to exposed edges. Colour to be "Vivasbl".

BBQ-01 Proprietary BBQ to be selected.

BL-01 Semi frameless glass balustrade to AS1288 with nominal 54mm diameter circular cone drilled clear anodised aluminium standons and button mounted handrail. Space standons evenly across runs. Maximum opening size 115mm. Handrail to be 140 x 30 Class 1 dressed all round kiln dried hardwood with 12mm radius to upper edge. Finish handrail with Sikkens Filter 7. Fix handrail to balustrade with electroplated stainless steel tube brackets, stainless steel screws and back to back button fixings.

CL-02 10mm acoustic perforated plasterboard lining with all joints taped and set on studwork, battens, furring channels or Rondo Key-Lok suspended ceiling system as required. Provide Fletcher Pink Sonomat Blanket 100mm acoustic insulation backing installed to manufacturer's instructions. Provide Rondo P50 shadowline cornice. Finish with Dulux ceiling paint. Colour to be Dulux "Natural White". Confirm setout of acoustic sheets.

DK-01 Nom 140 x 25 KD Class 1 H4V DAR decking with pencil round edges. Fix to H3 treated battens at 450 centres over concrete slab to structural engineers details. Install decking with 5mm gaps. Fix with stainless steel square drive decking screws, 3 per board. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey.

DT-03 Internal Doors – Solid core flush panel with Dulux Wash n' Wear semi gloss paint finish in steel frame to masonry wall or clear anodised aluminium frame to studwork wall. Provide Madinoz LR45 handle with Satin Stainless steel finish. Provide rebated mortice lock, privacy lock and signage as required. Provide commercial grade push plate to external face and pull handles to internal face of bathroom doors. Provide door closers to all wet area doors and magnetic door stops to all other doors. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

DT-06 Internal sliding door - Solid core flush panel "Timberformed" cavity sliding door by CS Cavity sliders with Dulux Wash n' Wear semi gloss paint finish. Provide Madinoz MD2 FP170 SSS Flush pulls. Colour to be Dulux "Olive Reserve A221" or "Orangeade A100" (To be confirmed).

FT-06 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details with washed blue metal aggregate finish.

FT-10 Timber strip floor comprising nom. 130mm wide natural feature grade Tallowwood end jointed tongue and grooved top nailed flooring fixed to H2 treated battens at max. 450mm centres. Provide vapour barrier over concrete. Provide levelling compound if required and black silaflex joint to all sill junctions. Sand and polish with Peerless Jet Hydrochrome "Sport" installed to manufacturer's instructions. Provide expansion joints to Australian Standards.

JH-01 Joinery door pull - Edge of joinery panel to be routed out to provide door pull nom. 150mm wide x 20mm deep with round end.

JH-04 Hafele Joinery Lock

JM-01 16mm H-MR particleboard with white melamine to both sides and 2mm edge strips.

JP-01 17mm Black Formply plywood with sealed edges and no trade markings. Provide concealed fixings. Handle to doors to be 150 x 20mm routed round and slot as shown on drawings.

JP-03 32mm A Bond AC Hoop Pine veneer plywood flush panel pivot door with Sikkens TS Interior Mat Plus 003 finish. Provide Anglehose concealed pivot hinge or equal. Provide heavy duty ball or magnet catch to each door. Provide signage to comply with AS2441-2005 where required.

JS-01 Timber seat comprising 3 no. 140 x 40 DAR Class 1 hardwood rails with pencil round edges and Sikkens TS Interior Mat Plus Clear 003 finish. Fix to existing salvaged seat brackets or provide new aluminium structural angle brackets as detailed at maximum 900mm centres with stainless steel screws.

JT-01 18mm A bond plywood with nom 6mm thick x 120 wide butt jointed lining boards to match CD-01 adhesive fixed to substrate. No edge strips - stain raw edges black. Boards to run vertically and be aligned across cupboards. Finish with Timber solutions CE 102 Clear Wood Preservative and allow to weather grey. Provide Madinoz MDZ 148150 PSS cabinet handle and keyed alike cabinet locks.

LN-01 13mm thick impact resistant plasterboard lining with all joints taped & set. Paint finish with Dulux Wash & Wear 1 sheen acrylic, colour to be Dulux "Natural White". Wet areas to be 6mm thick CSR fibre cement wall board w/ joints taped & set. Colour to be Dulux "White on White".

LN-02 1200 x 2400 x 12mm AC Face C Bond plywood with hoop pine veneer equal to Austral Premium AC (interior) Acoustic with 4 columns of slots per sheet and 5mm black shadowline between sheets. Fix to split battens with invisible fixings. Finish with Sikkens Cetol TS Interior 003 clear. Provide Plywood strips at edges to conceal battens.

RC-02 Class 2 off-form concrete with clear masonry sealer finish equal to Cromshield Enhance WG. Align joints and plug spacer holes with matching material.

RC-09 Reinforced concrete slab with Xypex C-1000 NF admix installed to manufacturer's instructions and to structural engineer's details. Soffit to be Class 2 off-form concrete. Floor surface to be steel trowelled finish with approved sealer equal to Cromrnelin Enhance Satin with Crommelin Slip Resistant additive.

SF-04 Steel services beam with corrosion protection to AS2312. Provide 300 x 200 RHS with 50 CHS suspension brackets conceal fixed to roof structure. Provide openings to conceal electrical and gas services within CHS members. Taper ends to profile as shown on drawings. Finish to be Dulux "Ferreko No.5" Micaceous Iron Oxide paint, Colour "Mid Grey".

SK-02 Clipsal Modulline 150 x 35mm ducted skirting with clear anodised finish.

SW-05 Double GPO's nominally 300 to CL AFFL unless located in ducted skirting. GPO's to be Clipsal Slimline SC3000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-09 Audio Input plate connected to PA system. Switch plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-10 Data switch plate (double) nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-12 Cable TV switch plate nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour.

SW-13 Aerial switch plate nominally 300 to CL AFFL unless located in ducted skirting. Plates to be Clipsal Slimline SC2000 series with brushed aluminium (BA) flat plate with white electric base colour. Connect to roof Mounted aerial.

WT-02 90/50/92 Cavity veneer blockwork with flush joints and sponge finish tagging with paint finish. Provide Solatex Super 15 Foilboard rigid foam insulation to cavity installed to manufacturer's instructions. Provide Dulux Weathershield Paint finish to exterior colour to be "Natural White" internally and "Handmade Linen Quarter" externally. Provide Fletcher Pink Wall Batts 90mm R2.0 bulk insulation to studwork.

WT-03 90mm thick steel studwork on MGP10 H3 treated radiata pine or equal studwork wall. Provide Fletcher Partition Blanket ISRS 85mm acoustic insulation to internal stud walls.

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole BArch(Hons) II (Architecture) Reg. No. 6208

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE EXECUTION OF THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND / OR COMMENCEMENT OF ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK AFFECTED. DRAWINGS UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION. SO MARKED IN THE TITLE BLOCK. ALL DESIGN AND DETAILS ARE SUBJECT TO THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STATE, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

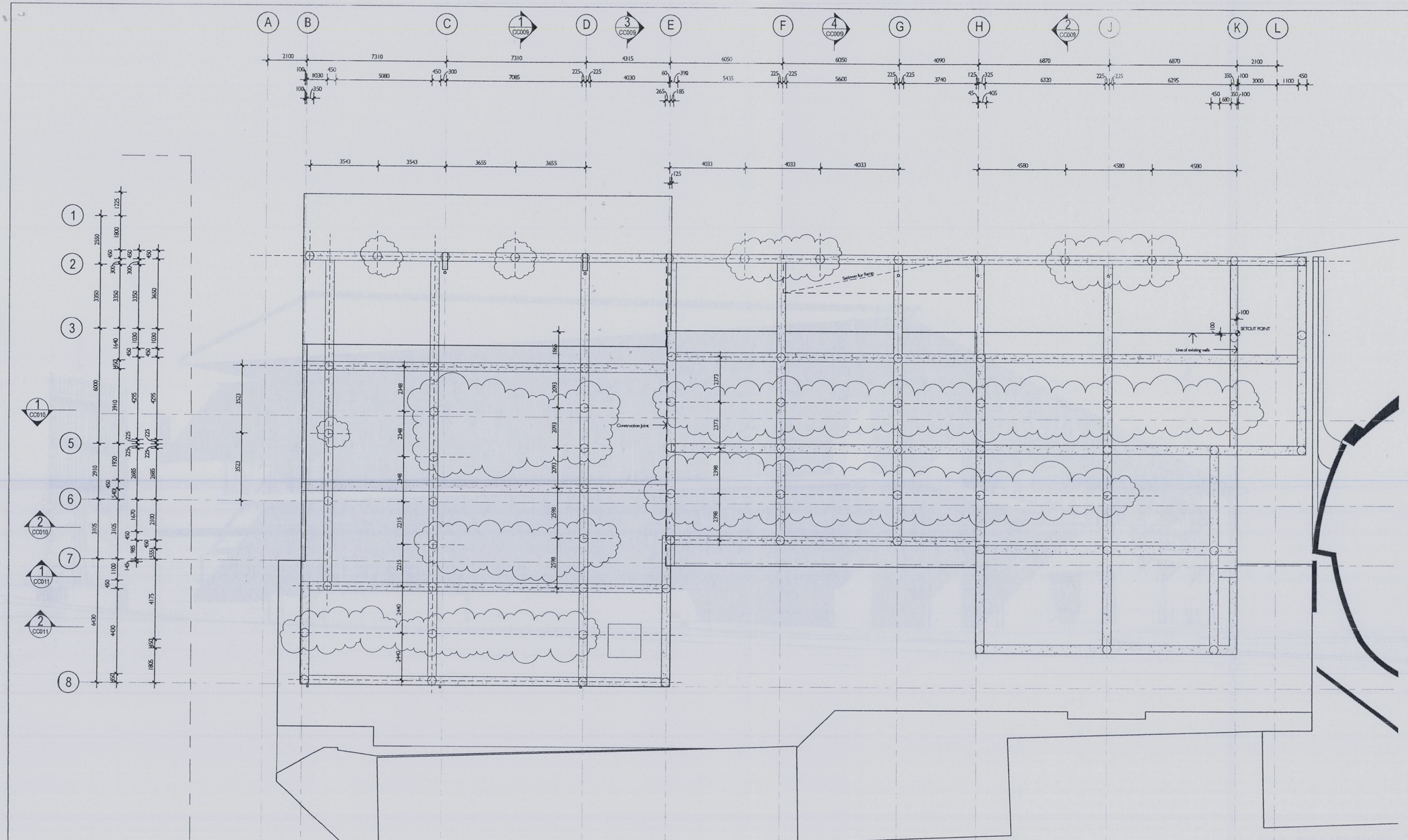
No.	Revision Description	Date
J	Issued for Tender	06-12-12
K	Preliminary CC	02-04-13
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

JOINERY DETAILS

Project number	1001		CC029
Date	30-04-13		
Drawn by	RC		
Checked by	RC	Scale	As indicated



1 PLAN - FOOTING SETOUT
1 : 100

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Sc.(Arch) (Hons I) B.Arch(Hons I) Reg. No. 4508

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED OR REPRODUCED FOR THE PURPOSES OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. THE BUILDER SHALL VERIFY ALL DIMENSIONS ON SITE PRIOR TO ORDERING ANY MATERIALS AND FOR SETTING OUT WORKS AND PRIOR TO COMMENCEMENT OF THE AFFECTED WORKS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. ANY DISCREPANCIES OR AMBIGUITIES OR DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

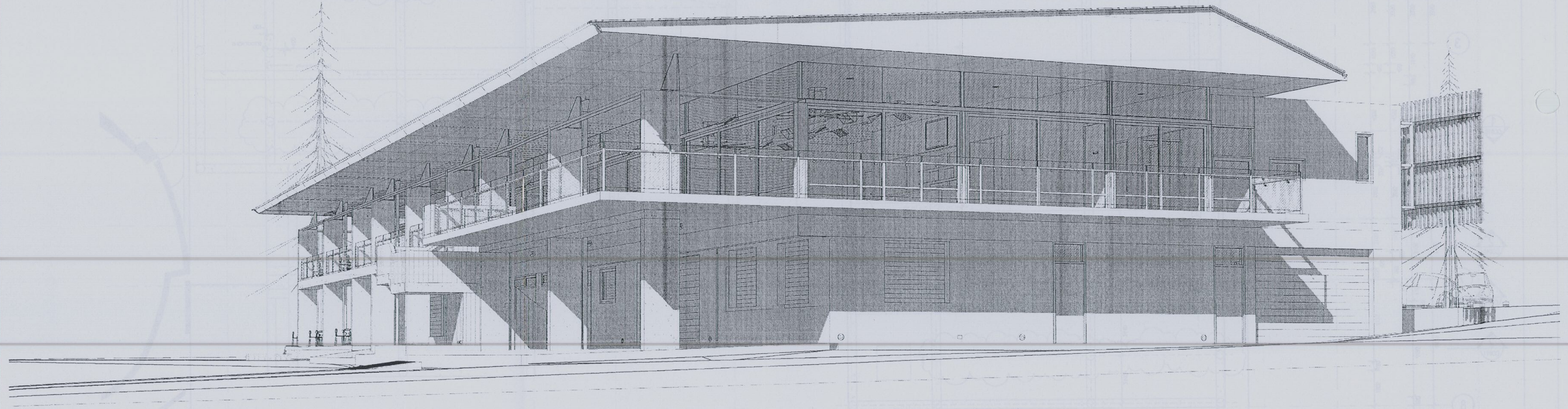
No.	Revision Description	Date
0	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

FOOTING SETOUT

Project number	1001		CC030
Date	30-04-13		
Drawn by	Author		
Checked by	Checker	Scale	1 : 100



1 VIEW FROM NORTH EAST

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

nominated architect: Richard Cole B.Arch(Hons) (Hons 1) B.Arch(Hons1) Reg. No. 6328

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE ERECTION OF THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO ORDERING ANY MATERIALS AND / OR BUILDING ELEMENTS AND / OR COMMENCING ANY WORK OR SHOP DRAWINGS. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. DO NOT SCALE OFF DRAWINGS. ANY DISCREPENCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY. DRAWINGS ARE NOT TO BE USED FOR, UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION. SO ISSUED FOR CONSTRUCTION DRAWINGS MUST BE SIGNED AND DATED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, BALUSTRADES, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
O	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

AVALON BEACH S.L.S.C.

PERSPECTIVES

Project number	1001
Date	30-04-13
Drawn by	Author
Checked by	Checker

PR-08

Scale



1 VIEW FROM SOUTH WEST

richard cole architecture

139 PALMGROVE ROAD
AVALON BEACH NSW 2107

t: 02 9918 3843
f: 02 9918 3492
m: 0418 627 024
richard@richardcolearchitecture.com.au
www.richardcolearchitecture.com.au

acn 073 392 413 abn 38 592 392 413
nominated architect: Richard Cole, B.Sc.(Arch) (Hons.) (), B.Arch(Hons1) Syd, No. 4808

ROBERT HOPTON
PROJECT DIRECTOR
T: 02 89074901
M: 0412 328 887

THIS DRAWING IS SUBJECT TO COPYRIGHT AND IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THE CONSTRUCTION OF THE SUBJECT BUILDING ON THE SUBJECT SITE WITHOUT THE CONSENT OF RICHARD COLE ARCHITECTURE PTY LTD. ALL TIMBER SIZES ARE TO BE VERIFIED ON SITE PRIOR TO THE ORDERING OF MATERIALS AND / OR BUILDING ELEMENTS AND PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. FIGURED DIMENSIONS TAKE PRECEDENCE. LARGE SCALE DETAILS TAKE PRECEDENCE OVER GENERAL AND SMALLER SCALE DRAWINGS. THE BUILDER IS TO REPORT ANY DISCREPANCIES AND / OR OMISSIONS IN THE DOCUMENTATION IMMEDIATELY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS ISSUED FOR CONSTRUCTION, SO SIGNED BY THE PRINCIPAL OF RICHARD COLE ARCHITECTURE PTY LTD. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT STAIRS, SKYLIGHTS/LIDS, WATERPROOFING AND OTHER BUILDING ELEMENTS COMPLY WITH THE CURRENT AUSTRALIAN STANDARDS AND THE BUILDING CODE OF AUSTRALIA.

No.	Revision Description	Date
0	Construction Issue	30/04/13

AVALON BEACH S.L.S.C.
CONSTRUCTION
558A BARRENJOEY ROAD
AVALON BEACH NSW 2107

for
AVALON BEACH S.L.S.C.

PERSPECTIVES

Project number	1001		PR-19
Date	30-04-13		
Drawn by	Author		
Checked by	Checker	Scale	