# Bernie Cohen & Associates Pty Ltd Trading as

# **ESSENTIAL CERTIFIERS LIVERPOOL**

ACN: 100386650 ABN: 84047117254

Telephone: (02) 9824-1545

PO Box 5387 Prestons NSW 2170 w 6/387-393 Hume Hwy, Liverpool 2170

т Facsimile: (02) 9824-1754



.C. No:	This certificate is issued by a Private Certifying Authority and verifies that, if the applicant carries out the proposed work in accordance with the plans and specifications that are approved, the work will comply with the Environmental Planning and Assessment Regulation 2000.		
C2006-00893			
COUNCIL:	PITTWATER		
APPLICANT			
Name	Machon Paull Consultancy Pty Ltd		
Address	PO Box 1173, LANE COVE 2066		
Contact no (telephone/fax)	0412 466 166		
OWNER	•		
Name	Thompson Health Care P/L		
Address	PO BOX 658, GORDON 2072		
Contact no (telephone/fax)	8467 9333		
SUBJECT LAND			
Address	25-33 Bassett Street, MONA VALE 2103		
Maria	Lot No 2		
	DP - 74842		
DESCRIPTION OF DEVELO	PMENT		
Type of Work	Building work Subdivision work		
Description	Alterations and additions to provide accommodation for aged care residents, including installation of new lift and access for the disable		

Essential Certifiers Liverpool Certificate No. CC2006-00893

COUNCIL'S D/A CONSENT

Development Consent No

153/05

D.A Approval Date

26/07/2005

**BUILDING CODE OF AUSTRALIA** 

**BUILDING CLASSIFICATION** 

9c

BUILDER or OWNER/BUILDER

Name

Elmslie, Mr Andrew

Contractor Licence No/Permit No in case of Owner Builder

Not Applicable

**\$ VALUE OF WORK** 

Building/Subdivision

\$300,000.00

DATE C.C. APPLICATION RECEIVED

Date Received

10/10/2005

DETERMINATION

Decision

Approved

Date of Decision

1/11/2005

# **ATTACHMENTS**

Sketch layout of beams dated 19/10/05 & Structural Certificate dated 29/09/05 by Paterson Wholohan Grill Pty Limited, Design Certificate for Mechanical Services dated 30/09/05 & Design Certificate for Fire Services dated 06/10/05 by George Floth Pty Limited, Access Report dated 23/05/05 by Thomson Health Care Pty Ltd, Landscape plan job no 0524 dwg no 0524/CC-L01 dated 28/09/05 by Trish Dobson, \$600.00 cheque for Long Service Levy fee, \$30.00 cheque for Council submission fee

IMPORTANT NOTE: It is the applicant's responsibility to ensure the mandatory PCA site sign supplied herewith, is displayed at this building site throughout construction.

# PLANS AND SPECIFICATIONS APPROVED/REFUSED

List plan no(s) and specifications reference

Architectural plans dwg no WD-01a, WD-02a, WD-03a, WD-04a, WD-06a & WD-07a 28/09/05 & Specification Booklet by Machon Paull

Consultancy Pty Ltd

# **RIGHT OF APPEAL**

under S109K where the Certifying Authority is a Council an applicant may appeal to the Land and Environmental Court against the refusal to issue a Construction Certificate or imposition of conditions on the consent within 12 months from the date of the decision.

# ACCREDITATION BODY

DIPNR, 20 Lee Street, Sydney 2000

#### **CERTIFICATE**

Certificate Final

I certify that the work if completed in accordance with these plans and specifications (with such modifications verified by the Certifying Authority as may be shown on that documentation) will comply with the requirements of the Environmental Planning and Assessment Regulation 2000 as referred to in Section 81A(5) of the Environmental Planning and Assessment Act 1979.

# **CERTIFYING AUTHORITY**

Name of Certifying Authority

Essential Certifiers Liverpool

Name of Accredited Certifier

Paul Aramini

Accreditation No

4790

Contact No

(02) 9824-1545

Address

The Reilly Centre, Suite 6, 387-393 Hume Hwy, Liverpool 2170

SIGNED

P. are:





# ESSENTIAL FIRE SAFETY MEASURES

The following is a list of essential fire safety measures that are applicable to this building under Clause 166 of the EP&A regulations 2000.

Schedule of Essential Fire Safety Measures - Proposed

Essential Service	Reference to BCA & Standard
Automatic fire suppression system	E1.5, Specification. E1.5, E2.2, AS2118.1 –
Automatic tile supplession oyotetti	1999
E	E4.2, AS2293.1 – 1998
Emergency Lighting	E4.5, E4.6, AS2293.1 - 1998
Exit Signs	C3.8, AS1905.1 – 1997
Fire doors	E1 3 AS2419 - 1994
Fire hydrant systems	E2.2, AS1668.1 - 1998 and 2 – 1990
Mechanical air handling systems	E1.6, AS2444 – 2001
Portable fire extinguishers	E2.2, AS1670-2004
Smoke Detectors and Heat Detectors	D2.23, EPA Regs, Clause 183
Warning & Operational signs	D2.25, 1111 regs, clause 100

Note: All existing and proposed fire safety measures are to be assessed annually and a copy referred to the relevant local council and to the NSW Fire Brigades. The Annual Fire Safety Statement is to be prominently displayed in each building.

25-33 Bassett Street Mona Vale

01/11/05 CC 2006/893



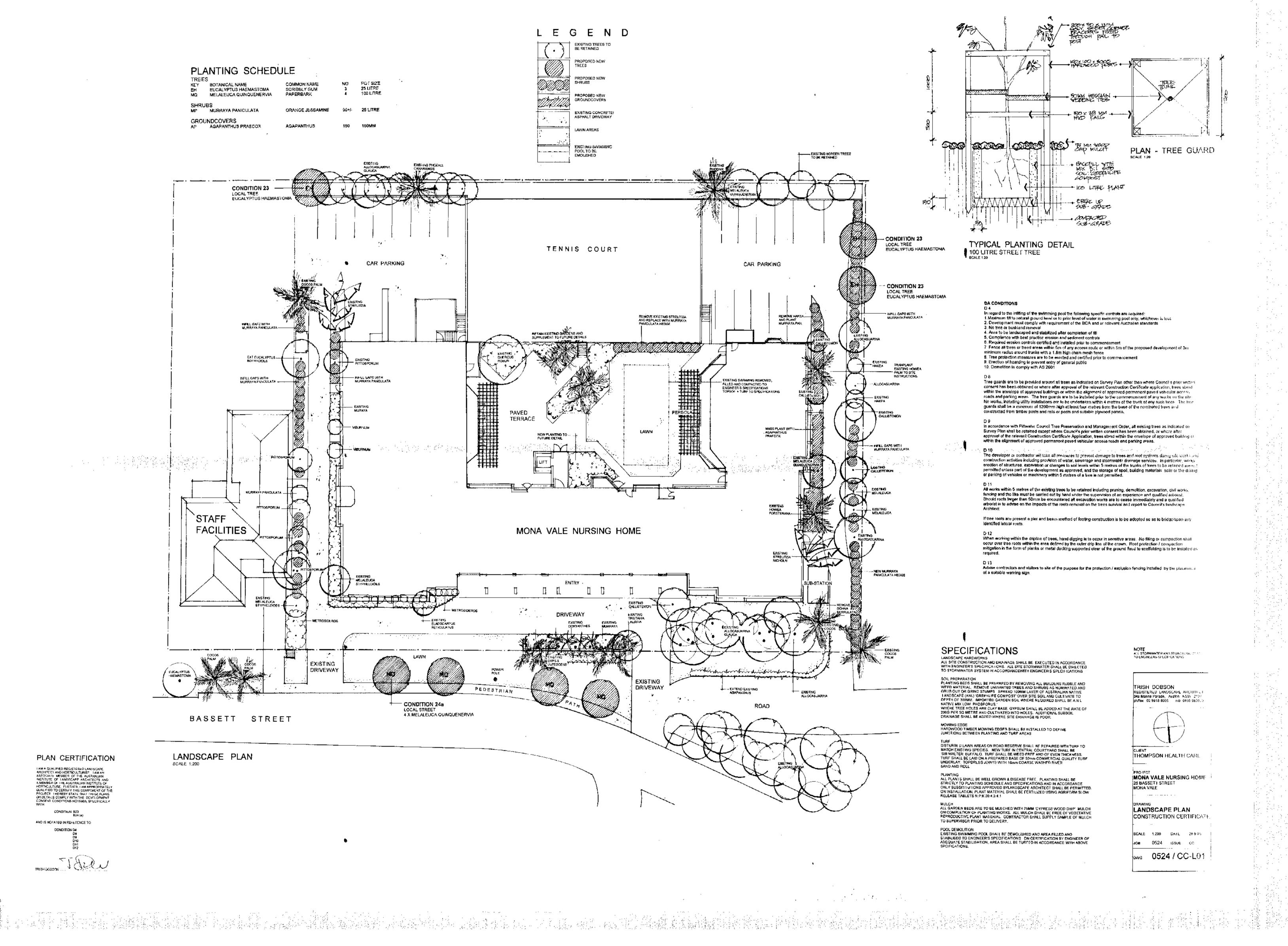
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# **ESSENTIAL CERTIFIERS** LIVERPOOL

PO Box 5387 Prestons NSW 2170
Suite 6, 387-393 Hume Highway
Cnr Reilly Street, Liverpool NSW 2170
Telephone 02 9824 1545 • Facsimile 02 9824 1754

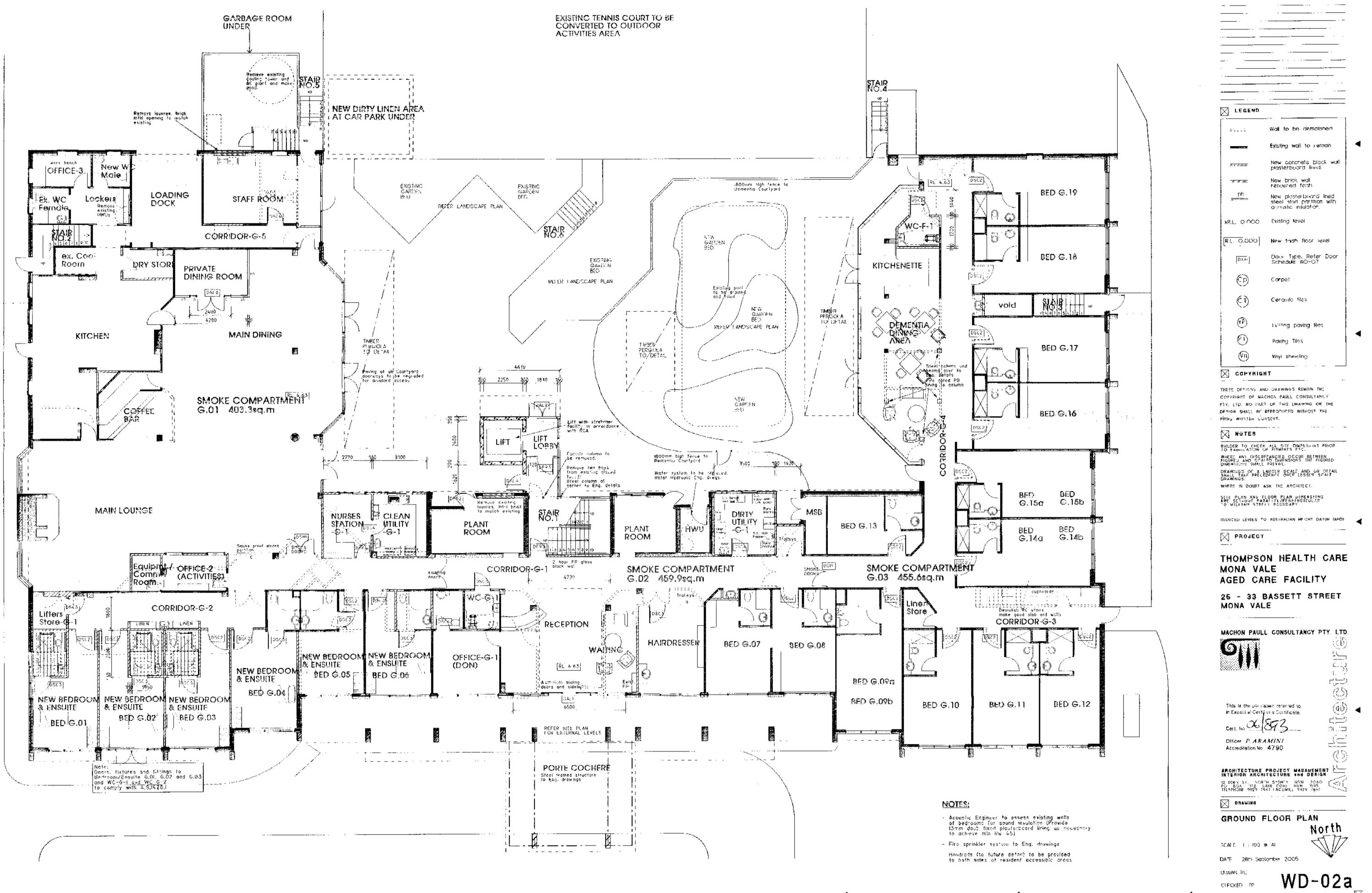
www.esscert.com.au

ACCREDITED CERTIFIERS • CONSTRUCTION CERTIFICATES
INSPECTIONS • FIRE SAFETY SERVICES • BUILDING CONSULTANCY



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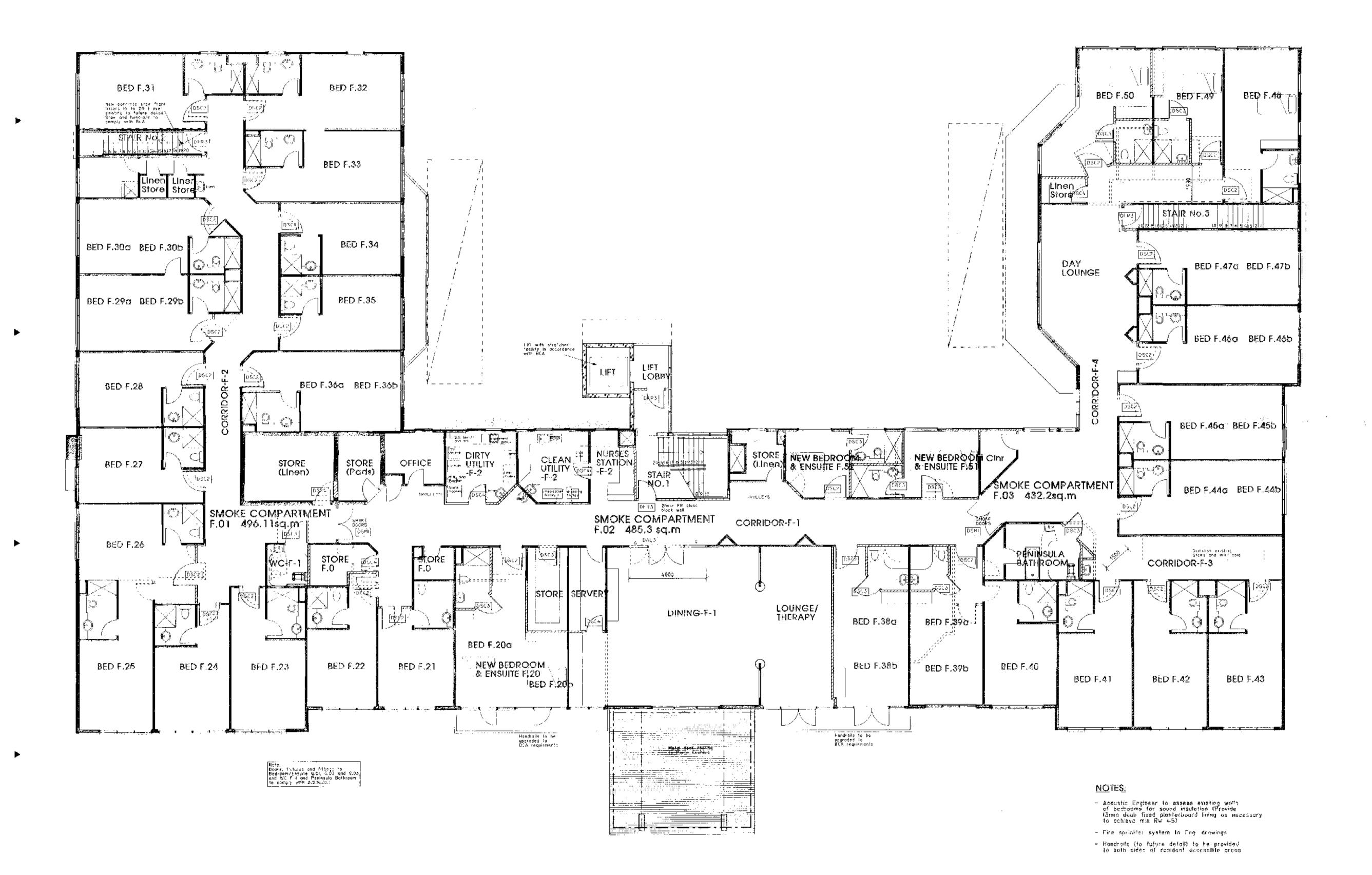
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	25 - 33 BASSETT STREET Mona vale
	MACHON PAULL CONSULTANCY PTY. LTD.
	GYENE (I)
	This is the plan/spec referred to
	In Easential Certifica's Certificate.
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	Ottmar P. ARAMINI Accreditation No. 4790
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	ARCHITECTURE PROJECT MANAGEMENT INTERIOR ARCHITECTURE and DESIGN
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	SITE PLAN North
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28% September 2000 | Cheft Issue

29th September 2005 - Construction Certificate issue

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AMENDMENTS - ISSUE

28th Decrepater 2005 - Jens 2006 3 20th September 2005 - Construction Carthingto symp

Existing walt to remain

New concrete block wall plasterboard fined.

New brick wall rendered finish

New plasterboard lineal steel stud partition with acoustic resultation.

XRJ. 0.000 Existing level

R.L. 0.000 New finish floor level

Door Type, Refer Door Schedule WD-07

Carpel

Carpel

Carpel

Existing paving files

Paving files

Viny: sheeling

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PROJECT

THOMPSON HEALTH CARE MONA VALE AGED CARE FACILITY

25 - 33 BASSETT STREET MONA VALE

MACHON PAULL CONSULTANCY PTY. LTD.

This is the plantspec referred to in Essential Certifier's Certificate.

Cert. No. 200 873

ARCHITECTURE PROJECT MARKAGEMENT INTERIOR ARCHITECTURE BAS DESIGN

12 EDEN ST. NORTH SYDNLY NEW 2060 PO 30X ILLS LANC COVI NEW 1595 TELEPHONE 9929 7941 FACSIMILI 9929 7642

DMAWING

Additional Mo. 4790

FIRST FLOOR PLAN

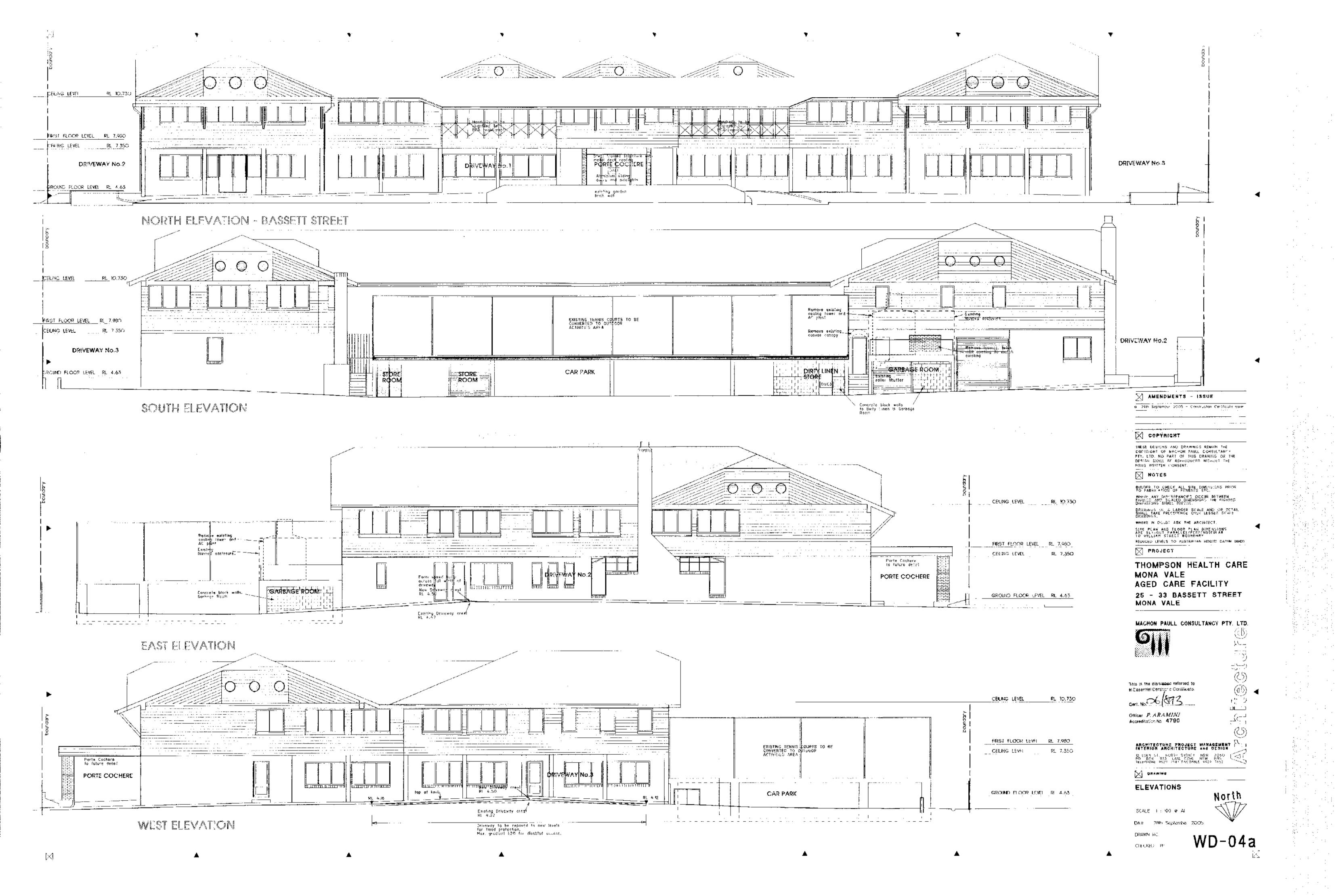
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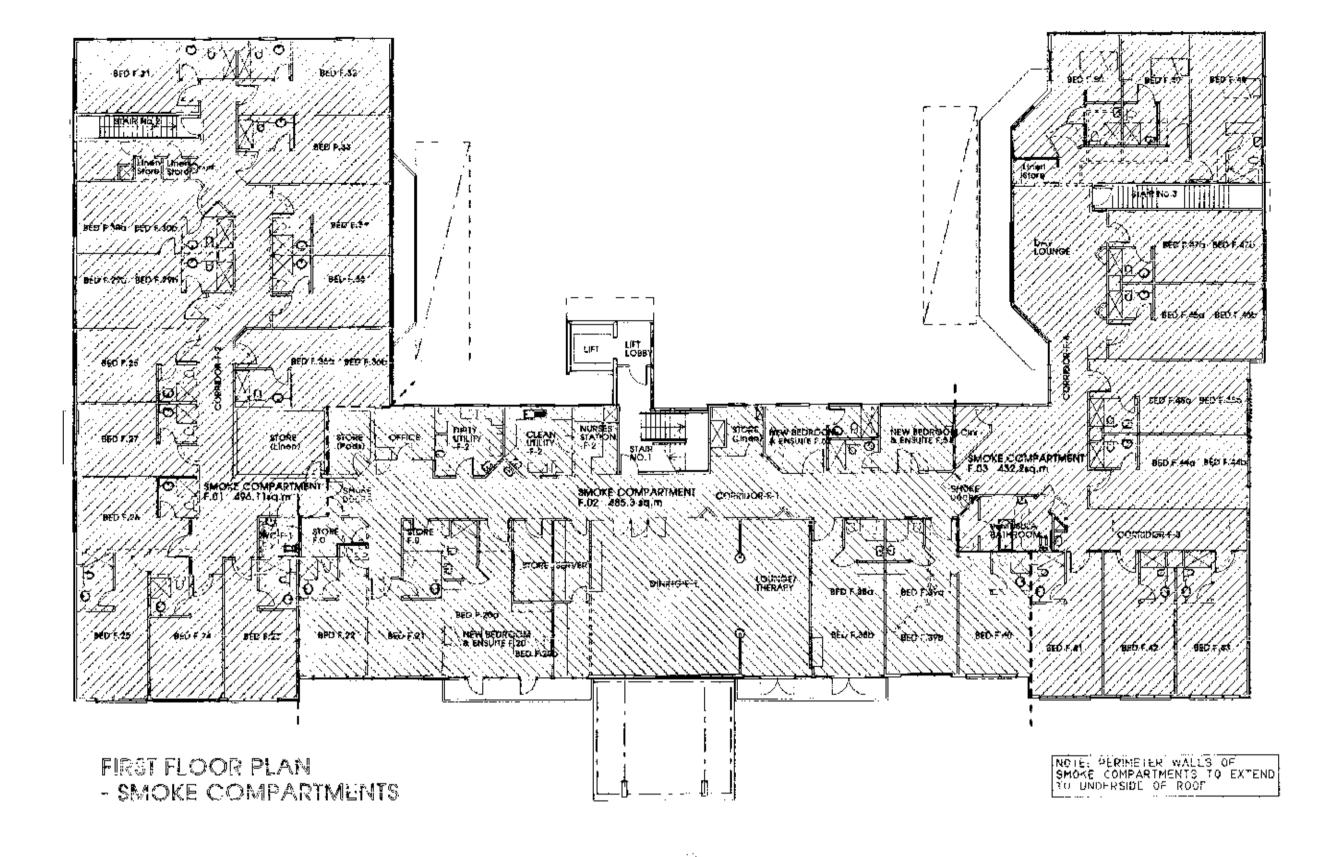
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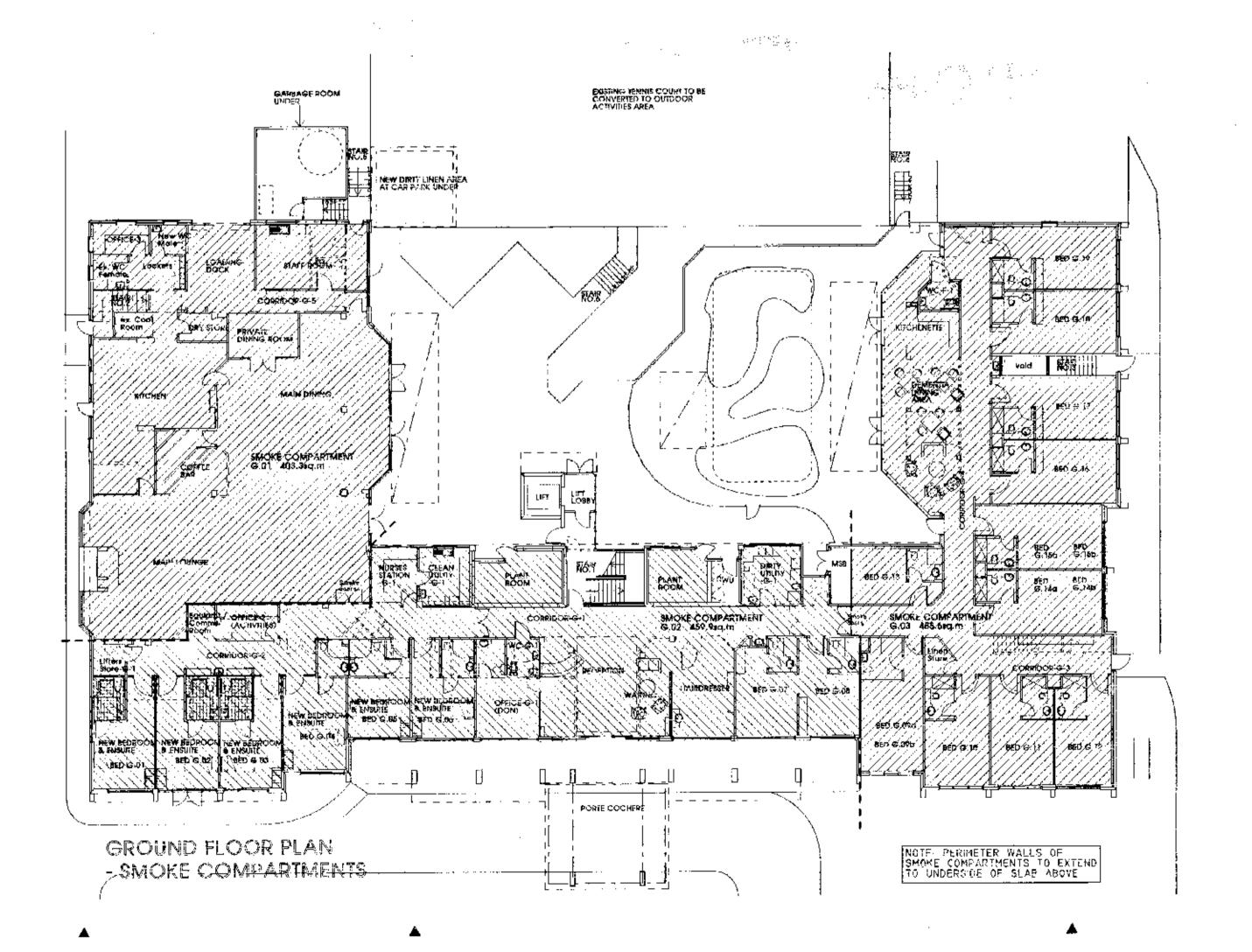
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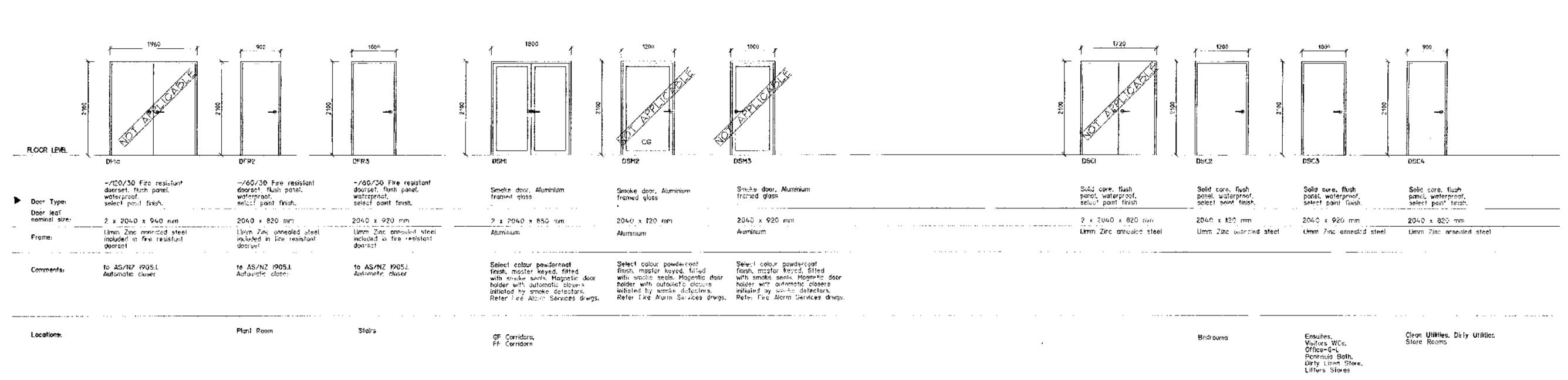






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Door Type:	Frameless glozed doors with sidelights	Aluminhad किल्लारचे glozed doors	Alaminum framed glazed doors with sid-Rights	Aluminium framed glazed door	
Door leaf nominal size:	2 x 2400 x (230 mm	2 x 2340 x 860 mm	2 x 7540 x 820 mm	2540 x 920 mm	······································
Frame:	Aluminiam	Aturnii mutA	Aluminian	Aluminum	
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Laculions:	F.ptry	Lift Lobby	Private Dining Room, Cining F I	Lift Cobbins	

1 EGEND

- FCG FIXED CLEAR GLASS
- FGL CLEAR GLASS ADJUSTABLE LOUVRES
- CG CLEAR GLASS
- OB OBSEURE GLASS
- FV FIXED VENTILATION SJ SILICON JOINT

NOTES

- Approximate structural opening sizes shown only. Builder to allow for lining thicknesses and tolerunces.
- Alt doors and frames to compty with the Building Code of Australia and applicable Australian Standards.

c. 79th September 2005 - Construction Certificate issue. X FEGEND

X AMENDMENTS - ISSUE 28in September O5 Client save ίΧÌ

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PROJECT

THOMPSON HEALTH CARE MONA VALE AGED CARE FACILITY

25 - 33 BASSETT STREET MONA VALE



16861

MINNAUG

Door Schedule

SCALE 450 @ Ar

DATE 28th September 2005

Goodon

**FACSIMILE** TO: GOEDS FINDE FROM: W. WHOLOIFAN 10. ATTN: **REF NO:** Doss CHIU. ST STATUS: Urgent Normal Confidential

ATTACHED HRE SKETCH LATOUR OF BOMMS + TYPICAL DETAILS FOR SCATING / FIXING OF BOTH BEAMS + COMMOS

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I will some you something on the ENTRANCE AREA SOON.

Project No: Fax No:

No. of Pages (including this Page):

WHOLOHAN PTY GRILL CONSULTING CIVIL AND STRUCTURAL ENGINEERS

PO BOX 355 ST LEONARDS NSW 2065. 621 PACIFIC HIGHWAY ST LEONARDS AUSTRALIA TEL: (02) 9906 3999 FAX: (02) 9906 1219 A.B.N. NO: 16 003 298 146 Cover (lago

pwgeng@ozemail.com.au







# SITE INSTRUCTION

Project No: 05037

This instruction is issued on the understanding that the Builder shall inform the Architect / Client in writing if compliance with the instruction involves a variation to the contract. If a variation to the Contract is involved, the Builder shall obtain a Variation Order before proceeding with the work, unless otherwise instructed by the Architect / Client

PROJECT: BASSETT ST. AGOD CADED DATE: 19.10.05

SUBJECT: Beaus to Slab Areg cc: MACHON PAUL

@ Doucuta Dinine

-Ross Cotiu.

INITIATOR: MICHAGE WHOLOJAN

- · Au STUBLL LOBOLL TO BUT HOT-DIP GALVANISED
- · Belfect Connections MID 8.8 Botts.
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  - o hevel top of B/work Morter & Più P 2410 Chausets.
    - · ALLOW TO WEDGE & DRY PACK COLUMN
      CAP R + BEAMS TO U/SIDE OF SLAB
      TO EUGURE FUll SUPPORT RETAIN
      ALL PROPPINE TO SUAB & ANY EXISTING
      BLAMS FOR ABKS ON AS SPECIFIED BY
      DRY PACK GROUT MATERIAL FOR CURING.

Pagel

SUBJECT TO THE ABOVE INSTRUCTIONS THE WORKS REFERENCED ABOVE:-

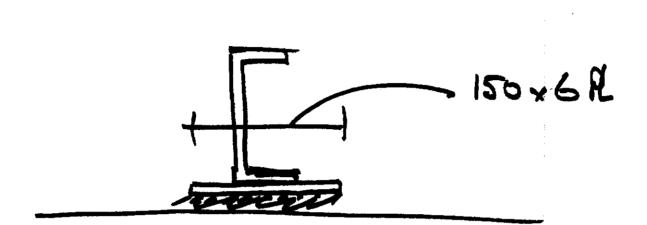
SIGNED

PATERSON WHOLOHAN GRILL PTY LIMITED



PATERSON WHOLOHAN GRILL

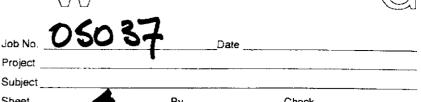
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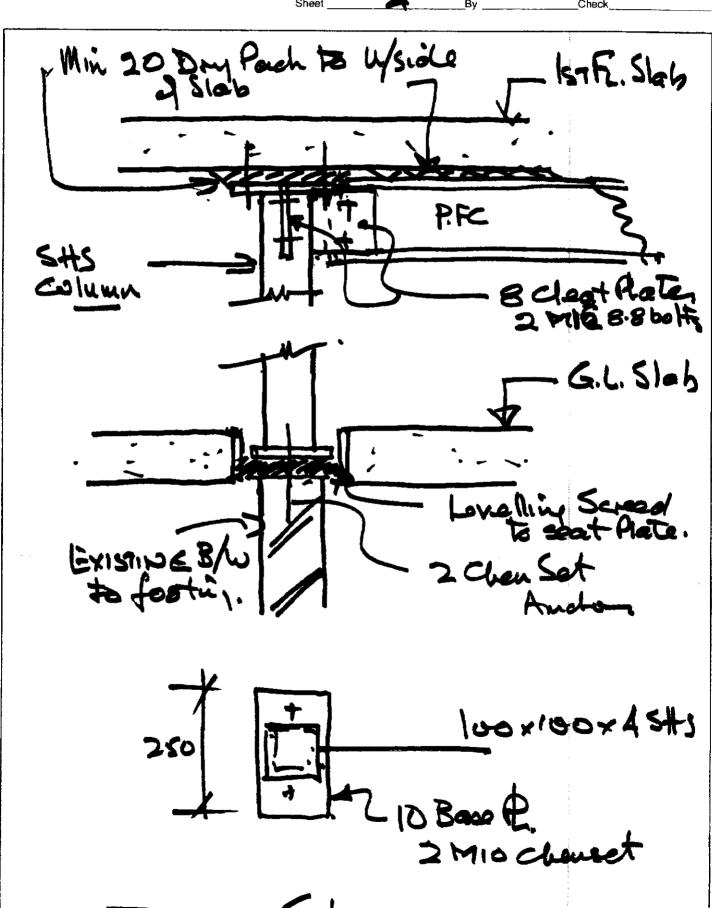


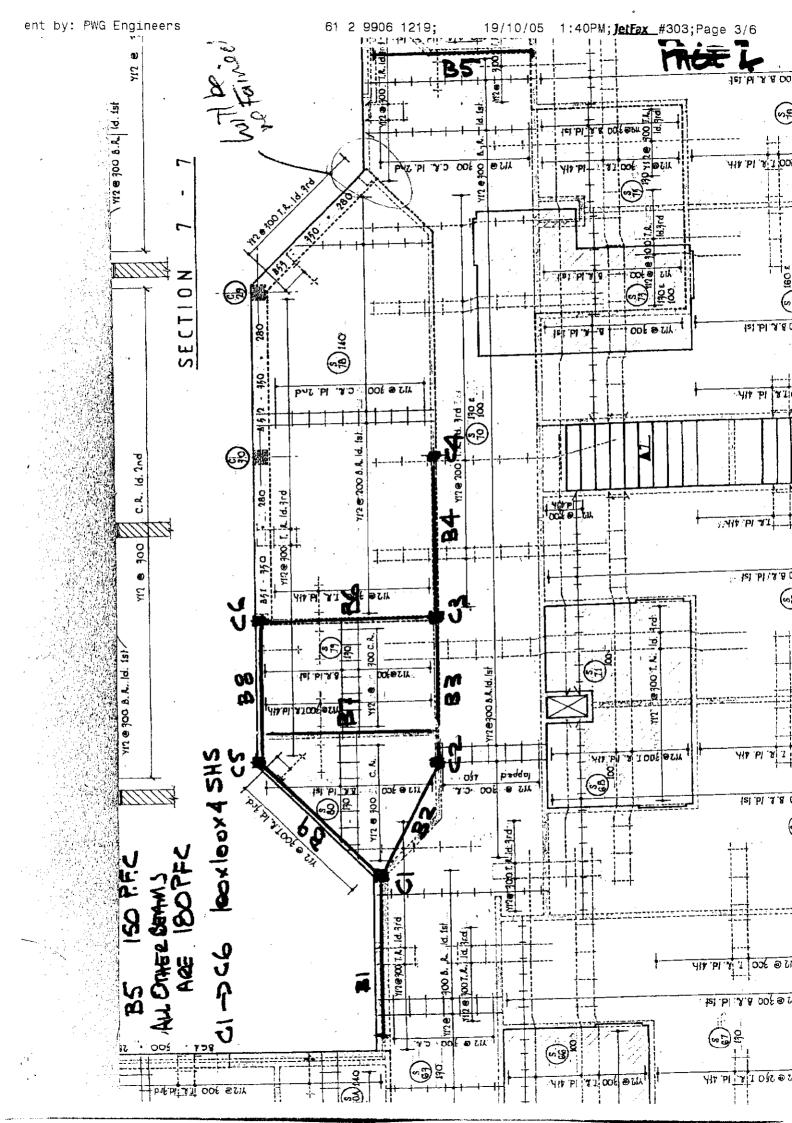
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PATERSON WHOLOHAN GRILL







**4**100

nt by: PWG Engineers : Machon Paull 61 2 9906 1219; At: 99297652

29/09/05 3:14PM; JetFax #91; Page 1/1

P



G

29 September 2005

Ref: L25457 Project No: 05037

To Whom it May Concern c/o Machon Pauli Consultancy Pty Ltd Fax: 9929 7652

Attention: Phil Paul!

Dear Sir.

# RE: PROPOSED ADAPTATION TO AGED CARE FACILITY FOR THOMPSON HEALTH CARE OF THE PROPERTY AT 25 BASSETT STREET, MONA VALE (DA CONSENT No. N0153/05)

We have reviewed the works intended to be carried out to the above property to achieve the project aims and herewith respond to items C3 and C4 of the "Matters to be satisfied prior to the issue of the Construction Certificate" cited in consent No. N0153/05.

Structural details are in preparation (based on the works intended, the existing structural details, the original geotechnical report and our recent site visits) which will depict all new structural items and any strengthening required. All designs will be in accordance with the BCA and the relevant Australian Standards including the Loading Codes — AS1170.0, AS1170.1, AS1170.2, AS1170.3, and AS1170.4. The undersigned is widely experienced in residential, institutional and all other building types and is eligible to become a corporate member of the Institute of Engineers.

Subject to minor strengthening details (which are in preparation by our consultancy (see C3 above), the existing structure is adequate to support the new and additional loadings.

Yours faithfully,

W. Paterson, B.E. (Hons) 1963

Managing Director

PATERSON WHOLOHAN GRILL PTY LIMITED

CONSULTING CIVIL AND STRUCTURAL ENGINEERS
PO BOX 355 ST LEONARDS NSW 2065. 621 PACIFIC HIGHWAY ST LEONARDS AUSTRALIA
TEL: (02) 9906 3999 FAX: (02) 9906 1219 A.C.N. 051 404 463 A.B.N. NO: 16 003 298 146
pwgeng@ozerneil.com.au



#### **GEORGE FLOTH PTY.** LIMITED

**CONSULTING ENGINEERS** 

ACN 002 869 007

6TH FLOOR 282 VICTORIA AVENUE CHATSWOOD, NSW 2067 **AUSTRALIA** 

TELEPHONE 61-2-9419 4100 FACSIMILE 61-2-9411 8460 EMAIL gfsyd@gfloth.com.au

S05165 M/L

# **DESIGN STATEMENT** FOR **MECHANICAL SERVICES**

DATE: 30th September, 2005

Machon Pauli Consultancy Pty Ltd 12 Eden Street **NORTH SYDNEY 2060** FAX: 9929 7652

Attention:

Mr Phillip Paull

Building.

Mona Vale Aged Care Facility

25-33 Bassett Street Mona Vale, NSW

It is hereby certified that the following aspects of the development will be designed to meet the standard of performance nominated.

Item	Standard(s) of Performance
Fire Dampers	BCA 2005 Clause E2 2;
	AS 1668.1 1998
	AS 1668.1:1998/Amdt 1:2002,
	AS 1682.1-1990, AS 1682.2-1990
Mechanical Air Handling Systems	BCA 2005 Clauses E2.2,
	NSW F4.5(b), F4 9, F4 11, F4.12,
	AS 1668 1:1998,
	AS 1668.1:1998/Admt 1 2002,
	AS1668.2-2002, AS1668.2/Amdt 1 2002, AS1668.2/Amdt 2 2003, AS1668.2 Supp 1-2002
Smoke Dampers	BCA 2005 Clause C2.5;
	AS 1668.1:1998,
	AS 1668 1:1998/Amdt 1:2002,
	AS 1682 1-1990, AS 1682 2-1990
Building Code of Australia Assessment Report Dated 21 February 2005 Version C	

Signature:

By Holmes Fire & Safety

Name:

George Floth CP Eng NPER 193885









# GEORGE FLOTH PTY. LIMITED

CONSULTING ENGINEERS

ACN 002 869 007

6TH FLOOR, 282 VICTORIA AVENUE CHATSWOOD, NSW. 2067 AUSTRALIA TELEPHONE 61-2-9419 4100 FACSIMILE 61-2-9411 8460 EMAIL gfsyd@gfloth.com.au

S05165 M/L

## **DESIGN STATEMENT**

**FOR** 

#### MECHANICAL SERVICES

DATE: 30th September, 2005

Machon Paull Consultancy Pty Ltd 12 Eden Street NORTH SYDNEY 2060 FAX: 9929 7652

Attention:

Mr. Phillip Paull

Building:

Mona Vale Aged Care Facility

25-33 Bassett Street Mona Vale, NSW

It is hereby certified that the following aspects of the development will be designed to meet the standard of performance nominated.

Item	Standard(s) of Performance
Fire Dampers	BCA Clause E2.2,
	AS 1668.1, AS 1682.1,
	AS 1682.2
Mechanical Air Handling Systems	BCA Clause E2.2,
	NSW F4.5(b), F4.9, F4.11,
	F4.12, AS 1668.1 & 1668.2
Smoke Dampers	BCA Clause C2.5,
	AS 1668.1, AS 1682.1, AS 1682.2

Signature:

Name:

George Floth CP Eng NPER 193885





# GEORGE FLOTH PTY. LIMITED

**CONSULTING ENGINEERS** 

ACN 002 869 007

6TH FLOOR, 282 VICTORIA AVENUE CHATSWOOD, NSW. 2067 AUSTRALIA TELEPHONE 61-2-9419 4100 FACSIMILE 61-2-9411 8460 EMAIL gfsyd@gfloth.com.au

S05165 CC

# DESIGN STATEMENT FOR HYDRAULIC SERVICES

DATE: 6<sup>th</sup> October, 2005

Machon Paull Consultancy Pty Ltd 12 Eden Street NORTH SYDNEY 2060 FAX: 9929 7652

Attention:

Mr. Phillip Paull

Building:

Mona Vale Aged Care Facility

25-33 Bassett Street Mona Vale, NSW

It is hereby certified that the following aspects of the development have been designed to meet the standard of performance nominated.

Item	Standard(s) of Performance
Cold Water	AS 3500.1
Hot Water	AS 3500.4
Sanitary Plumbing & Sanitary Drainage	AS 3500.2
Stormwater Drainage	AS 3500.3
Gas	AG 601

Signature:

Name:

lan Stalker







# George floth Pty. Limited

CONSULTING ENGINEERS

ACN 002 869 007

6TH FLOOR, 282 VICTORIA AVENUE CHATSWOOD, NSW. 2067 AUSTRALIA TELEPHONE 61-2-9419 4100 FACSIMILE 61-2-9411 8460 EMAIL gfsyd@gfloth.com.au

S05165 CC

# DESIGN STATEMENT FOR FIRE SERVICES

DATE: 6<sup>th</sup> October, 2005

Machon Paull Consultancy Pty Ltd 12 Eden Street NORTH SYDNEY 2060 FAX: 9929 7652

Attention:

Mr. Phillip Paull

Building:

Mona Vale Aged Care Facility

25-33 Bassett Street Mona Vale, NSW

It is hereby certified that the following aspects of the development have been designed to meet the standard of performance nominated.

M	Ctondond(a) of Donforman
<u>Item</u>	Standard(s) of Performance
Automatic Smoke Detection and Alarm System	BCA Spec E2.2a Clause 4-7,
	AS 1670.1 and AS 1668
Automatic Fire Suppression System (Sprinkler)	BCA Clause E1.5
	AS 2118.1
Portable Fire Extinguishers	BCA Clause E1.6
	AS 2444
Emergency Warning Intercommunication System	BCA Clause E4.9
	AS 2220

Signature:

Name:

Jan Stalker

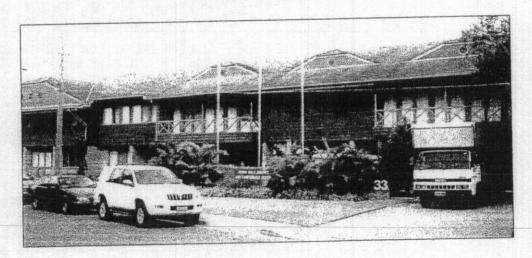




# ACCESS REPORT

# 25-33 BASSETT STREET MONA VALE

# AGED CARE FACILITY DEVELOPMENT



PREPARED FOR - THOMSON HEALTH CARE PTY LTD

By Mark Relf

23RD May 2005



Acressibility Solutions (NSW) PTY LTD

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# Assessment Report of Development Application for

# 25-33 Bassett Street Mona Vale Under SEPP - Seniors Living Policy

# **Executive Summary**

This accessibility assessment has considered, in detail the accessibility requirements Division 2 of the Seniors Living Policy requiring Aged Care Facilities to comply with Part D3 of the Building Code of Australia as specified by the Commonwealth Government.

This report also considers the provisions of clause 25 of the Seniors Living Policy in terms of access to public transport, shops and services.

In my opinion the proposed development complies with the above access requirements in the following manner;

- The common domain pathways and areas of the development will provide appropriate access for people with disabilities consistent with Part D3.2 and D3.3 of the BCA;
- There will be 100% visitability to all rooms/suites consistent with Table D3.2 and Part D3.3 of the BCA for a class 9C development;
- Three rooms (4 beds) and ensuites will be accessible in a manner that complies with AS1428.1 and AS4299 to satisfy Table D3.2 of the BCA and the Commonwealth Government's Aged Care Certification Guidelines;
- The location is also within 400 metres of a public bus service (routes E88, L88/188, L89/189, L90/190) that travel to Mona Vale, Newport, Avalon, Warriewood, Narrabeen, Dee Why, Brookvale shopping centres and the City while the development also proposes an on-site communal bus, which comprises a comprehensive transport plan for residents and visitors.

Consequently, it is evident that the nursing home development (aged care facility) demonstrates significant compliance with the various accessibility requirements of the BCA, Commonwealth Government Aged Care Standards and Building Certification Guidelines and State Government's Seniors Living Policy for a Class 9C Aged Care development.

Mark Relf

Access Consultant (ACAA)

#### Introduction

The purpose of this report is to provide an accessibility review of the subject development to ascertain whether the development is consistent with the Building Code of Australia for a Class 9c Aged Care Facility.

This report has been prepared of behalf of Thomson Health Care Pty Ltd to provide an Access Report to Pittwater Council for a proposed nursing home development on a site at 25-33 Bassett Street Mona Vale, which seeks to adapt the former motel development known as Mona Vale Convention Centre.

#### Assessment Criteria

This assessment considers the following legislation, planning instruments and standards pertaining to access for people with disabilities for an aged care facility:

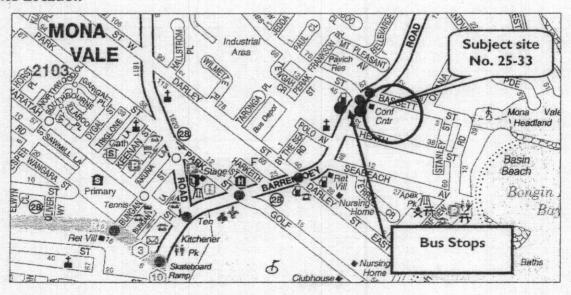
- (1) Seniors Living Policy [2004].
- (2) Building Code of Australia (BCA) for a class 9C development.
- (3) Aged Care Guidelines published by Commonwealth Government for Aged Care Facilities.
- (4) Australian Standard AS1428 Design for Access and Mobility and referenced standards.
- (5) Pittwater DCP 21.

#### **Development Application Plans**

The plans relied upon for this accessibility assessment include the following:

Project & Drawing No.	Issue	Description
00862 – Dwg - 1		Site Plan
00862 – Dwg - 2		Proposed Ground Floor Plan
00862 - Dwg - 3	•	Proposed First Floor Plan

#### Site Location



accessibility solutions...

# Part A - BCA Accessibility Assessment

# **Assessment Methodology**

Part A of the review considers the accessibility requirements of the Building Code of Australia as expressed by Parts D3, E3.6 and F2.4 and the various referenced standards AS1428.1 – Design for Access and Mobility, AS2890.1- Off-Street Parking and AS1735.2 – Lifts for a class 9c Aged Care Facility development.

The comments do not cover detail issues pertaining to construction documentation such as internal fittings of accessible toilet facilities, evaluation of slip resistant floor materials, lift specification, door schedule, tactile ground surface indicators, lighting levels, signage and the like, which can be covered by an appropriate condition of consent subject to consent being granted.

# External Pathway Links (Part D3.2 of the BCA)

		BCA Compliance	Complies
1. The plans indicate the existing driveway is at-grade with the footpath and provides a very gradual 1:25 to 1:40 pavement to the building entry landing, which indicates an overhead awning for resident and visitor convenience.		YES	
2.	The plans show the driveway will be regraded to remove the existing 75mm kerb to provide a flush transition to continue the at-grade pathway to the building entrance with a level doorway threshold entry through automatic sliding doors to comply with Parts D3.2 and D3.3 of	The second secon	YES
	the BCA.	Existing driveway and building entrance.	

# Parking (Part D3.5 of the BCA)

BCA Compliance		Complies
3.	<b>Parking</b> - The development provides 43 existing parking spaces including 2 X 3800mm width accessible parking spaces in the southern carpark. Subject to the installation of "shared zone" signage on the driveways and a new pathway extension from the western drive to the principle front building entrance the parking will be in accordance with AS1428.1, AS2890.1 and Part D3.5 of the BCA.	YES
4.	To satisfy Council's P21 DCP the development proposes a 3200mm width space adjacent a 2000mm plus walkway at the front entrance suitable for side-loading vans, which requires a minor amendment to the CC plans.	YES

	BCA Compliance	Complies
5.	The accessible parking will be situated on generally level pavement no steeper than 1:40 to comply with AS2890.1.	YES
6.	Overall, the 3 X 3200mm minimum width Accessible Parking spaces comply with the 1% minimum of required by BCA Table 3.5 and the 3% minimum required by P21 DCP.	YES

# Building Entrances & Internal Accessways (Part D3.3 of the BCA)

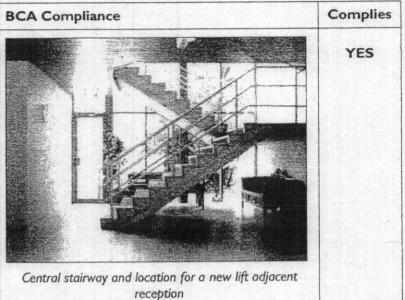
Having regard to the requirements of Part D3.3 of the BCA the assessments considers the on-site accessibility between the entry level, parking levels, internal circulation space, lift access and internal accessibility of required sole occupancy units.

	BCA Compliance	Complies
7.	<b>Street Frontage</b> – as previously described the development will provide an principle entrance with automatic sliding doors at an appropriate central location to access the common foyer and all ground floor areas to comply with the BCA.	YES
8.	Internal Access: Ground Floor The existing building and proposed plans demonstrate level access throughout the ground floor areas providing 1800mm width common passageway for easy access to all sole-occupancy units and common facilities, which complies with AS1428.1 and Parts D1.6 and D3.3 of the BCA.	YES
9.	9. Within the ground floor area the plans show that the various corridor approaches provide appropriate doorway circulation space to enter the required sole-occupancy units on the ground floor (Units 1, 2, 3) and the various administration, lounge dining areas and other indoor communal spaces in accordance with ASI428.1 and Part D3.3 of the BCA.	
10.	0. While the doorway approaches to the abovementioned areas comply with AS1428.1 the width of doors and door hardware will be confirmed at construction certificate stage to ensure compliance with AS1428.1 and Part D3.3 of the BCA.	
11.	The development also proposes to install a lift adjacent the principle entrance to enable easy access to the first floor area. With regard to access to the lift landings the doorways adjacent the existing central stairway shall be held open by electromagnetic devices as part of the upgraded fire safety provisions thereby enabling direct and easy access consistent with AS1428.1 and Part D3.3 of the BCA.	YES

BCA Compliance	Complie
<ol> <li>The lift landings on the ground and first floor provide generous 2000mm X 4800mm areas to facilitate ample circulation space to satisfy AS1428.1 and Part D3.3 of the BCA.</li> </ol>	YES
3. Internal Access: First Floor – The first floor lift landing provides a similar 1800mm minimum width corridor to every residential care unit, common facility and staff service area which inherently provides appropriate doorway circulation spaces to comply with AS1428.1 and Part D3.3 of the BCA in terms of general internal circulation and access to "unique features".	YES
4. Lounge/Dining — The ground floor and first dining and lounge areas provide wheelchair access throughout in a manner that readily complies with ASI428.1 and Part D3.3 and Table D3.2 of the BCA concerning access to unique common facilities.	YES
<ol> <li>Outdoor Communal Areas – The plans propose to modify the outdoor landscaped courtyard areas, which includes the in-filling of the existing swimming pool to provide a new courtyard adjacent a future dementia wing at the western end.</li> </ol>	YES
6. The construction certificate drawings and documentation shall confirm that the external doorways to the central courtyard areas from the lift/reception area, lounge/dining and western lounge shall provide stepless thresholds and 920mm minimum width doors in accordance with AS1428.1 and Part D3.3 of the BCA.	

# Lifts (Part E3.6 of the BCA)

Life Land	1. 이 집은 프랑테 에 전 마르겠다고 있다면 보고 있는 것이 되었다면 하나는 생각을 했다.
17.	While the development provides a new central lift to satisfy Part D3.3 BCA in enabling vertical access from ground to first floor levels the details of internal floor car areas, controls, handrails and the like will be provided at construction
	documentation stage to
	confirm compliance with
	Part E3.6 of the BCA.



# Accessible Sanitary Facilities (Part F2.4 of the BCA)

BCA Compliance	Complies
18. Common Toilets - The plans show unisex accessible toilets on the ground floor adjacent the reception and within the common bathroom on the first floor adjacent Bed 39 and subject to construction details and fittings will comply with AS1428.1 and Part F2.4 of the BCA.	YES

# Identification - Braille and tactile signage (Part D3.6 of the BCA)

BCA Compliance	Complies
19. Details concerning the provision of raised tactile and Braille signage for required by Part D3.6 and Specification D3.6 of the BCA will be construction certificate stage.	

# Tactile ground surface indicators (Part D3.8 of the BCA)

BCA Compliance	Complies
20. Details concerning the provision of tactile ground surface indicators (TGSI's) required by Part D3.8 of the BCA will be provided at construction certifica stage that will be adjacent the at-grade transition from the porte cochere to the main building entrance.	YES

# Accessible Sole Occupancy Units (Table D3.2 of the BCA)

	BCA Compliance	Complies
21.	In accordance with Table D3.2(b) of the BCA for class 9C Aged Care buildings the development proposes that three (3) sole-occupancy units (SOU) providing four (4) beds will be accessible, which complies with Table D3.2 of the BCA for this development. The assessment considers the accessibility of the unit entrances, bathrooms, bed and general living circulation space.	YES
22.	Floor plans provide two types Unit 1 providing two beds and Units 2/3 providing a single bed in the following configuration.	
23.	Unit $1-$ provides two single beds with an adjoining ensuite bathroom.	
24.	Units 2/3 - provide a single bed, living area and an adjoining ensuite bathroom in an alternate layout to unit 1.	
25.	The following assessment considers whether the two room/suite types comply with AS1428.1 as required by Table D3.2 and Part D3.3(c).	
26.	SOU Entrances – Both room/suite types provide at least 1550mm X 1550mm circulation space in the corridors and internal areas adjoining the entry doors to comply with AS1428.1. The CC Plans shall confirm double door sets providing 870mm and 520mm width doors to comply with AS1428.1 while also enabling 1070mm clear opening width in accordance with Part D1.6(iv) of the BCA.	YES
27.	Unit 1 - With regard to the internal SOU entrance and doorway circulation the CC Plans will confirm 1600mm width corridor with 870mm and 520mm doors to provide appropriate access in accordance with Fig 12(f).	
28.	Units 2/3 - With regard to the internal SOU entrances and doorway circulation the 1500mm width corridors provide at least 470mm latch side clearance for Units 2 and 3 in accordance with Fig 12(g) by installing 870mm and 520mm double door set.	
29.	Unit I Bedroom – provides an area of 3700mm X 5800mm clear of the wardrobe, which provides ample clearance around two single beds while the 1450mm width corridor provides appropriate doorway circulation to approach and enter the ensuite door which has a sliding door to comply with AS1428.1.	YES
30.	Units 2/3 Bedroom – provides an area of 3700mm X 3300mm clear of the wardrobe, which provides ample clearance around a single bed while the 1450mm width corridor provides appropriate doorway circulation to approach and enter the ensuite door which has a sliding door to comply with AS1428.1.	YES
	<b>Bathrooms</b> in ALL room/suite types provide an area of 2100mm X 2700mm with a layout of a hobless shower, WC pan and washbasin in accordance with AS1428.1. The showers propose curtains only to maximise internal circulation and easy access with grab rails and other fittings installed to fully comply with	YES

	BCA Compliance	Complies
	AS1428.1 and Part F2.4 of the BCA.	
32.	The plans also show that an appropriate distribution of bathrooms are left and right handed in accordance with AS1428.1 where multiple rooms are provided.	
33.	Lounge/Dining – The ground floor and first dining and lounge areas provide wheelchair access throughout in a manner that readily complies with AS1428.1 and Part D3.3 and Table D3.2 of the BCA concerning access to unique common facilities.	YES
34.	Laundry services are provided for residents.	N/A
35.	<b>Parking</b> – as previously mentioned there are 3 X 3200mm width accessible parking spaces in the basement in close proximity to the lift and accessways that enable direct and convenient access to the designated accessible rooms/suites to comply with Part D3.5 and Table D3.2 of the BCA.	YES
36.	The three (3) accessible parking resident spaces (in a total of 44) easily satisfies the requirements of Part D3.5 of the BCA to provide one per 100 spaces.	
37.	Summary – subject to further construction details concerning bathroom fitout, electrical switches and the like I am satisfied that the <i>required</i> accessible Units I, 2,3 comply with AS1428.1, Table D3.2, Parts D3.3 and F2.4 of the BCA.	BCA

# Part B - Site Related Matters

# Access to transport and services

I.I While the Commonwealth Government Guidelines For Aged Care Facilities have no mandatory requirements regarding access to transport the development proposes to provide an on-site courtesy bus for resident's access and convenience to access shops, services and recreational options within the area.



Example of 10 seater van

1.2 In addition to the Commonwealth Government requirements for aged care Facilities this accessibility review considers provisions of the State Government's Seniors Living Policy (SLP) concerning access to transport, shops and services as outlined in clause 25 of the SLP.

Clause 25 of the Seniors Living Policy includes specific criteria concerning;

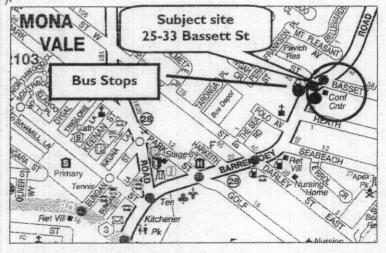
- Distance to shops and services.
- Quality of footpath access.
- Distance to bus transport, route destinations and frequency of bus services.
- Variety of retail and commercial services available to intended resident by bus transport links.

The following assessment has considered the above criteria and provides evidence regarding suitability of the location and surrounding environment.

# Distance to shops and services

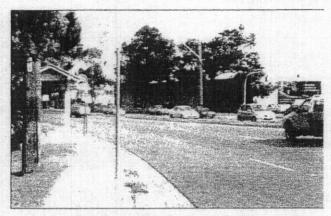
1.3 While the site is approximately 700 metres to the commencement of the Mona Vale shopping precinct the assessment considers the provisions of clause 25(2)(b) of the Seniors Living Policy (SLP).

Clause 25(2)(b) requires a development to be within 400 metres of a bus service that travels at appropriate times to a shopping centre that consists of an appropriate range of shops and services that satisfy clause 25(1) of the SLP.



#### 1.4 Distance to Bus Service

The site analysis confirms that the site is approximately 120 to 200 metres to the nearest bus stops on Barrenjoey Road that provide access to bus routes E87, E88/188, E89/189, L90/190 that travel to Mona Vale, Newport, Avalon, Warriewood, Narrabeen, Dee Why, Brookvale and the City shopping precincts, which demonstrates compliance with clause 25(2)(b)(i) and (ii).



Bus stop on Barrenjoey Road opposite Bassett Street

# 1.5 Frequency of Bus Services

The combined timetable for the abovementioned services shows 93 bus services daily Monday to Friday from 4.40am to 1.27am with 42 services available during the prescribed hours of 8.00am to 6.00pm, which clearly demonstrates the bus service complies with clause 25(2)(b)(iii) of the SLP. The timetable also shows 45 services on Saturday and 40 on Sunday.

## 1.6 Pedestrian Footpath Access to Bus Service

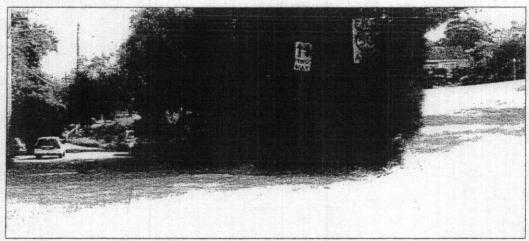
The pedestrian route to the subject bus stops provides stairway access from Bassett Street to the Barrenjoey Road footpath as shown in the adjoining photo.

The gradient of Barrenjoey Road from Bassett Street to both bus stops, including the signalised traffic crossings varies from 1:15 to almost level providing an average of less than 1:20 to comply with clause 25(2)(a) of the SLP.



Barrenjoey Road footpath

1.7 The alternate route to Barrenjoey Road includes vegetation for 25-30 metres and requires people to use the roadway from the site driveway to Barrenjoey Road as shown in the photo below.



1.8 In summary while the route to the public transport does not provide wheelchair access it is evident that the on-site courtesy bus provides wheelchair access for residents of the nursing home.

In my opinion the provision of a wheelchair accessible courtesy bus service will enable safe and obvious access in a manner that is consistent with the intent clauses 25(2)(b) and 36(b) of the Seniors Living Policy for this Aged Care Facility.

The provision of an onsite courtesy bus is consistent with aspects of the Seniors Living Policy relating to Serviced Housing not unlike Aged Care Facilities.

1.9 Shopping facilities

It is evident from a survey of the nearest major shopping precinct at nearby Mona Vale that there are a variety of shops, banks, chemists, grocery stores, green grocers and medical services available that meet the expectation of clause 25(1) – see example lists of services and local shops at Appendix D.

Mona Vale and surrounding suburbs also provide recreational opportunities at local service clubs along with a range of community services as listed in the Manly, Pittwater & Warringah Guide to services for older people.

## 1.10 Transport Services Summary

It is apparent from the close proximity to public buses, bus route and timetable analysis that public transport is readily available from the proposed site to shops and services and does comply with SLP clauses 25(1), 25(2)(b) and 36(b).

1.11 The provision of the on-site courtesy bus is consistent with the Extra Service Status benchmarks under the Aged Care Standards accreditation administered by the Aged Care Standards and Accreditation Agency (Commonwealth) thereby demonstrating the nursing home development will provide a high level of building standards and service quality in terms of access and mobility.

accessibility

#### Appendix A – Statement of Expertise

Mark Relf is the principal consultant of Accessibility Solutions consultancy which specialises in providing advice to clients seeking to develop new and modify existing buildings, facilities and services to be accessible to people with disabilities to comply with legislation and regulations relevant to people with disabilities.

Relevant legislation and regulations that underpins advice includes the Disability Discrimination Act (DDA), NSW Disability Policy Framework and Disability Services Act, Building Code of Australia, Australian Standards 1428, Advisory Notes on Premises and Transport and State Environment Planning Policy No. 5 Housing for Older People or People With a Disability (SEPP 5).

The services consider issues concerning people with all types of disability including; physical; vision; hearing, intellectual and other cognitive impairments that may affect access for people with a disability consistent with them Disability Discrimination Act.

#### STATEMENT OF EXPERTISE

Mark Relf is the principal consultant and is a recognised Access Adviser approved by the NSW Ageing and Disability Department and has attained accreditation with the Association of Consultants in Access Australia for the purposes of providing advice concerning access to the built environment and services for people with disabilities.

His expertise has been gained over more than 15 years working in the disability sector and since 1994 providing advice to clients on access issues. Mark also participates on various key committees concerning access for people with disabilities and his current qualifications and affiliations are:

• Accredited Member of the Association of Consultants in Access Australia

<u>ACA</u>

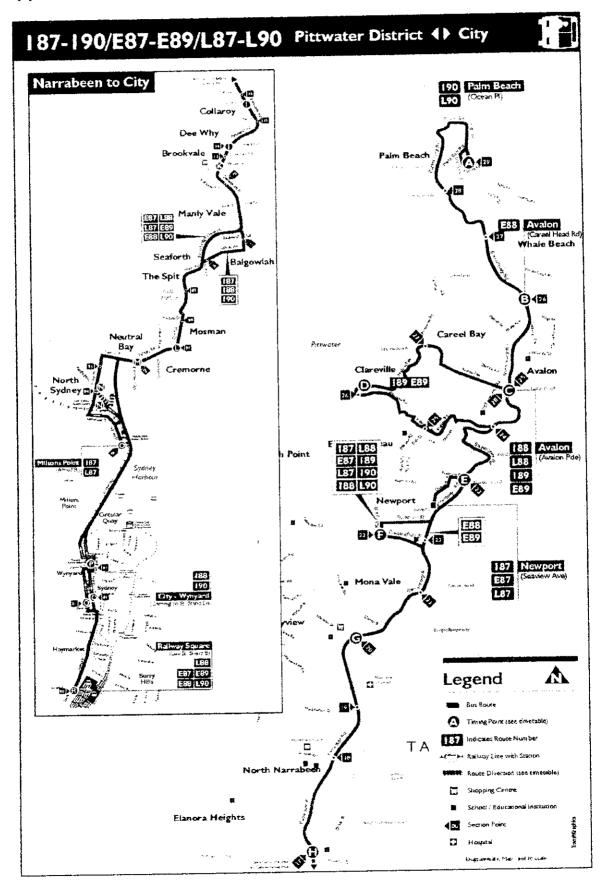
Accredited Member of the Access Institute of NSW

**AUSTRALIA** 

- Member, Standards Australia ME/64 Committee responsible for AS1428 suite of standards
- Member, Heritage Office's Fire, Access and Services Advisory Panel.
- Executive Committee, Physical Disability Council of NSW.
- Former Member, NSW Attorney General's Disability Advisory Council 1999-2005.
- Member, of the former Accessible Public Transport Forum, advisory body to the NSW Minister for Transport.

accessibility

## Appendix B - Public Bus Transport



#### SERVICES TO CITY

nos.	Showing Route Number	Palm Beach (Ocean Rd)	Avaion (Careel Hd Rd)	Avalon (Avalon Pde)	Taylors Point (Hudson Fde)	Newport Shops . (Coles Pde)	Newport Hotel (Kalinya St)	Mona Vale Junction (Barrenjoey Rd)	Narrabsen (Waterloo St)	Collaroy Shops (Collaroy St)	Dee Why (Howard Ave)	Warringah Mall (Pittwater Rd)	Spit Junction (Spit Ad)	Naulral Bay Junction (//ycombs Rd)	City - Wynyard (York, St)	Cily · OVB	Railway Square (Lea St)
ootina Peritoo	1000 0 8 6 0 0 0 8 6 6 8 9 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5:34	4:50 5:20 5.42 6:01 6:12 6:35	4:24 4:53 5:23 5:45 6:04 6:03 6:15 a6:33 6:40 6:27 6:48	6.35	4.30 4.59 5:29 5.51 6:10 6:31 6:39 6:46 6:47 6:54 6:54 6:56 7:03	4:33 5:02 5:32 5:54 6:12 6:24 6:42 6:57 6:59	Mond 4:40 5:09 6:01 6:18 6:21 6:33 6:41 6:56 6:56 7:04 7:04 7:06 7:07 7:13	y to F 4:47 5:16 5:46 6:08 6:30 6:42 6:50 7:05 7:06 7:13 7:15 7:16 7:22	4:52 5:50 6:12 6:31 6:34 6:46 6:54 7:09 7:17 7:19 7:20 7:26	4:58 5:25 5:55 6:17 6:39 6:59 7:09 7:14 7:15 7:23 7:25 7:32	5:04 5:30 6:00 6:22 6:44 6:56 7:14	5.22 5.42 6:12 6:35 6:57 7:09 7:30	5:28 5:46 6:139 6:57 7:01 7:13 7:35 7:39 7:40 7:52 7:52 7:57	5:36 5:54 6:24 6:47 7:05 7:09 7:22 7:30 7:44 7:48 7:49 7:57 8:00 8:06	5:39 5:57 6:27 6:50 7:08 7:125 7:33 7:47 7:51 8:00 8:04 8:03 8:03 8:14	5.45 6.03 6:36 6:59 7:77 7:22 7:35 7:43 7.57 8:01 8:10 8:14 8:13 8:19
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#### SERVICES TO CITY

Time Period	Showing Route Number	Palm Beach (Ocean Rd)				Newport Hotel (Kalinya St)	Mona Vale Junction (Barrenycey Rd)	Narrabeen - (Waterlop St)	Collaroy Shops (Collaroy St)	Doe Why (Howard Ave)	Warringah Mail (Pitwater Rd)	Spit Junction (Spit Pd)	Neutral Bay Junction (Wysonbe Rd)	City - Wynyard (York St)	CITY OVB	Railway Square incee St.
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	1.90 1.38	9:30		9.46 10:01		9 57 10:12	10:06 10:21	10:16 10:31	10 20 10 35	10.25 10:40	10:30 10:45	10:44 10:59	10 48 11:03	10 53 11:13	11/01 11/16	11 08 11 23
	1.30		10:11			10:27	10.36	10:48	10 50	10.55	11 00	11 14	11 18	11.28	11 31	1138
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	1.88			11.01		11:12	11.21	11:31	11 35	11 40	11:45	11.59	12:03	12:13	12:16	12:23
	L20	11:00	11;11			11.27	11:36	11:46	11.50	11:55	12:00	12:14	12:18	12:28	12:31	12:38
	1.68 1.50	11:30	11:41	11:31 11:46		11.42 11:57	11.51 12:06	12:01 12:16	12:05 12:20	12:10 12:25	12:15 12:30	12:29 12:44	12:33 12:48	12:43 12:58	12:46 1:01	12:53 1:08
PM	L28			12:01	12:09	12:12	12:21	12:31	12.35	12:40	12:45	12:59	1:03	1:13	1:16	1:23
	1.50 1.88		12:11	12:16 a12:31		12:27 12:42	12:36 12:51	12:46 1:01	12:50 1:05	12:55 1:10	1:00 1:15	1:14 1:29	1:18	1:28 1:43	1:31 1:46	1:38 1:53
	1.90	12,30	12:41	12:46	12:54	12:57	1:06	1:16	1,20	1:25	1:30	1:44	1:48	1;58	2:01	2:08
	i,58 l.90		1:11	1;01 1;16	1:09	1:12 1:27	1:21 1:36	1:31	1:35 1:50	1:40 1:55	1:45 2:00	1:59 2:14	2:03 2:18	2;13 2:28	2:16 2:31	2:23 2:38
	L89			1:31	1:39	1:42	1:51	2:01	2:05	2:10	2:15	2:29	2:33	2:43	2:46	2.53
	L38	1:30	1:41	1:46 2:01	1:54 2:09	1:57 2:12	2:06 2:21	2:16 2:31	2:20 2:35	2:25 2:40	2:30 2:45	2:44 2:59	2:48 3:03	2:58 3:13	3:01 3:16	3:08 3:23
	L90	2:00	2:11	2:16		2:12	2:36	2:46	2:50	2:55	3:00	3:14	3:18	3:28	3:31	3:38
	L88	0.20	0.44	2:31	2:39	2:42	2:51	3:01	3:05	3:10	3:15	3:29	3:33	3:43	3:46	3:53
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	F30	3:00	3:11	3:16		3:27	3:36	3:46	3:50	3:55	4:00	4:14	4:18	4:28	4:31	4:38
	L88 L90	3:30	3:41	3;31 3;46	3:39 3:54	3:42 3:57	3:51 4:06	4:01 4:16	4:05 4:20	4:10 4:25	4:15 4:30	4;29 4; <b>44</b>	4:33 4:48	4:43 4:58	4:45 5:01	4:53 5:08
3	LSB		,	84:01	4:09	4:12	4:21	4:31	4:35	4:40	4:45	4:59	5:03	5:13	5:16	5:23
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	1.90	4:30	4:41	4:46	4:54	4:57	5:06	5:16	5:20	5:25	5:30	5:44	5:48	5:58	6:01	6:08
	L88 L90	5:00	5:11	5:01 5:16	5:09 5:24	5:12 5:27	5:21 5:36	5:31 5:46	5:35 5:50	5:40 5:55	5:45 5:00	5:59 6:14	6:03 6:18	6:13 6:28	6:16 6:31	6:23 6:38
	1.88			5:31	5:39	5:42	5:51	6:01	6:05	6:10	6:15	5:29	6:33	5:43	6:46	6:53
	1.90 1.88	5:30	5:41	5:46 a6:08	5:54 6:15	5:57	6:06 6:25	6:16 6:33	6:20 6:37	6:25 6:41	6:30 6:45	6:44 6:59	6:48 7:03	6:58	7:01	7:08 7:23
	L90	5:10	6:20	6:23	6:30	6:17 6:32	6:40	5:48	6:52	6:56	7;10	7:14	7:18	7:13 7:28	7:16 7:31	7:38
	L88 L90	6:40	e.e.n	6:38	6:45	6:47 7:02	8:55	7:03	7:07	7:11	7:15	7:29	7:33	7:43	7:46	7:53
₽₩	F88	6:40	6:50	6:53 a7:08	7:00 7:15	7:17	7:10 7:25	7:18 7:33	7.20 7.37	<u>7:26</u> 7:41	7:36 7:45	7:44 7:59	7;48 8:03	7:58 8:13	8:01 8:16	8:08 2:23
	1.90	7:17	7:25	7:28	7:34	7:36	7:43	7:48	7:52	7:56	2:07	8:14	8:18	8:28	8:31	6:38
	L88 L90	a7:47	7: <b>5</b> 5	7:43 7:58		7:51 8:06	7:57 8:13	8:05 8:18	8:07 8:22	8:11 8:26	8:15 8:34	8:29 8:44	8:33 8:48	8:43 8:58	8:46 9:01	8:53 9:98
	188			8:13	8:19	8:21	8:27	8:33	8:37	8:43	8:48	****	*****		****	
	L90			8:28 8:58		9:06			8:52 9:22	8:56 9:26				9:28	9:31 10:01	9:38 10:08
	L Sci	a9:17	9:25	9:28	9:34	6:36	9:42	9:48	9:52	9:56	10:00	10:14	10:18	10:28	10:31	10:38
	L90						19:12									
	L90	f10:19	f10:27	f10:30	f10:36	f10:38	g10:42 ( f10:44	10:50	110:54	f1 0:58	f11:02	f11:16	f11:20	111:30	111:33	11:40
	190	g10:47	g10:55	g10:58	g11:04	g11:06	g11:12	11:18	011:22	g11:28	g11:33	g11:49	g11:55	g 12:05	g12:08	•
	190	g11:07	g11:15	g11:18	911:24	g11:2 <del>0</del>	f11:14 g11:32	11:38	g11:42	g11:48	g11:53	g12:09	g12:15	g12:28	g12 31	
	190	h11:09	h11:17	h11:20	h11:26		f11:32 111:55	11:38	111:42	f11:48	111:53	112:09	r12:15	112:27	f12 30	
AM	1 <b>90</b> 190	412:32	τι1:38 t:2:40	t13:41 t12:43	111:47	117:49	111:55	m2.12	112 16	112.22 f1:22	112:27 11:27	112:51 (1:51	r12:55	11:05 12:05	f1:07 f2:07	
	Ľ÷0		j1.10		j1.19			1,42	1:46	1:52	1:57		n2:25	2:35	2:37	
F × 5 1	6 NI 63	TIONS	-			l								-		

#### EXPLANATIONS Sign Description

- Wheelchair accessible

- Wheelicharr-accessible.

  Operates Friday only,

  Does not operate Friday.

  Operates Friday only.

  Operates Friday only.

  Operates Friday only.

  Does not operate via Newport Hotel.

  Connects at Mona Vale with Route 151 bus to City QVB. Transfers not available in conjunction with TravelTens or Cash Fare tickets.

  Operates ALL STOPS via North Sydney.

  Operates Friday only, Operates ALL STOPS via North Sydney.

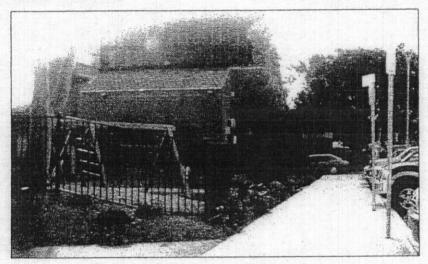
  On Fridays only, connects at Mona Vale with Route 151 bus to City QVB. Transfers not available in conjunction with TravelTens or Cash Fare tickets.

#### Appendix C - Access to Services

#### Access to Recreational Services and Activities

The following provides a range of community based and commercial recreational services and activities to demonstrate compliance with clause 25(1) of SEPP SLP. An additional list of clubs and services on the northern beaches which are mostly accessible via public transport are provided at Appendix B of this report.

#### Service / Activity



Mona Vale Library – Park Street, Mona Vale

Mona Vale Hotel - Park Street, Mona Vale

Bowling Club - Pittwater Road, Mona Vale

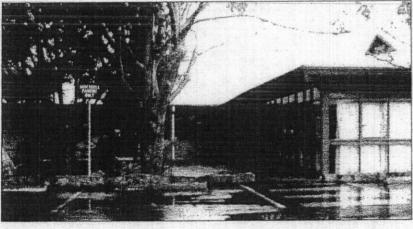
## Travel options Via bus routes L88-l

Via bus routes L88-L90 stopping 200 metres from the entrance

Via bus routes L88-L90 stopping 50 metres from entrance

Via bus routes L88-L90 stopping 150 metres from entrance

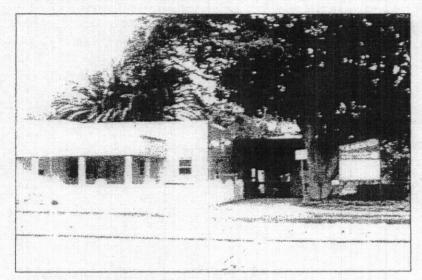
Via bus routes L88-L90 stopping 150 metres from entrance



Peninsula Bridge Club - Nelson Heather Community Centre on Jacksons Road, Warriewood

Warriewood Cinema - Vuko Place, Warriewood

Via bus routes L88-L90 stopping 300 metres from the entrance



Via bus routes L88-L90 stopping 250 metres from entrance

Tramshed Community Theatre – Pittwater Road, Narrabeen Collaroy Cinema – Pittwater Road, Collaroy

Dee Why RSL Club - Pittwater Road, Dee Why

Manly-Warringah Leagues Club - Pittwater Road, Brookvale

Pittwater RSL Club - Mona Vale Road, Mona Vale

Mona Vale Beach - Mona Vale

Bayview Golf Course - Darley Street, Mona Vale

Via bus routes L88-L90 stopping 150 metres from entrance

Via bus routes L88-L90 stopping 250 metres from entrance

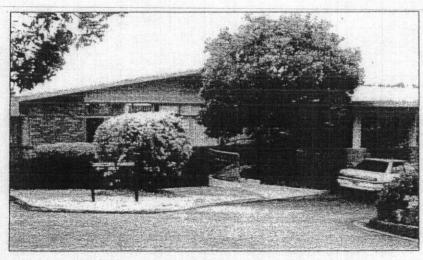
Via bus routes L88-L90 stopping 250 metres from entrance

Via private transport or community bus

Via private transport or community bus

Via private transport or community bus

Via bus routes L88-L90 stopping 300 metres from entrance



Mona Vale Golf Course - Golf Avenue,

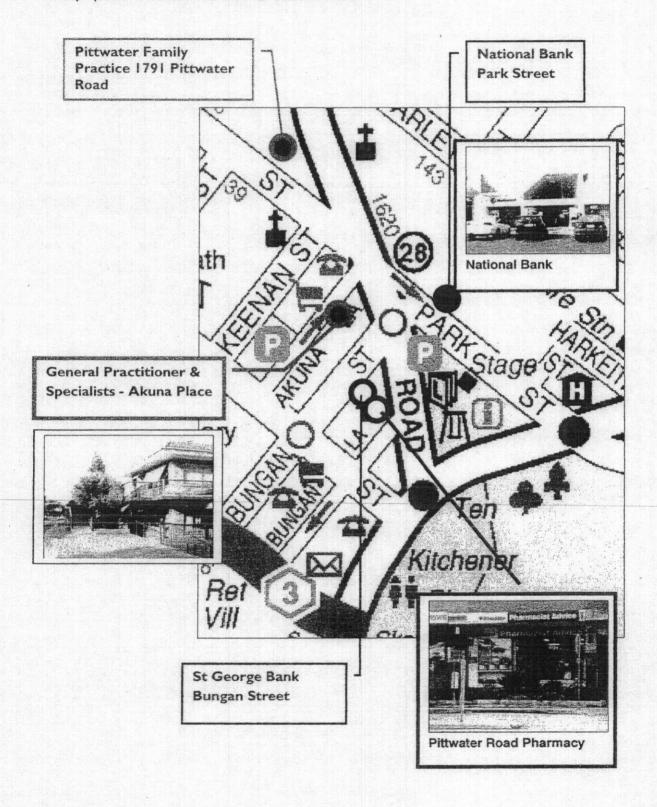
Bayview Park – Pittwater Road, Bayview for picnics, boating and outdoor activities

Via bus routes L88-L90 stopping 50 metres from entrance

accessibility

#### Access to General Practitioners and Other Services

The following map provides a brief sample of medical practitioners and services that are available to future residents of the proposed development that are within 400 metres of the bus stops o Barrenjoey Road for bus routes L88-L90 and 188/19/190.



#### Licensed Clubs

Avaion Beach RSL Club Ltd	Info/Review		
Мар			
Manly Fishing & Sporting Association	Info/Review		:
Map Avalon Golf Course			
WASIGU GOU CORISC			
Avalon Junior Rugby League Club			• .
Мар			
Balgowiah Golf Club		·	
Map Balgowiah Golf Club Pro Shop			1 7 2 5
Baigowiah RSL Memorial Club		An grand	# 1 + 5
Map		***	
Bayview Golf Club Ltd		y and the second	TALLY SHA
Belrose Rugby League Football Club		v - the contract	£k k
Costas Restamant			Tariff (s. 1208 - godina
Cromer Golf Club Ltd (Private)		1 - 2001 - 12	
Harbord United J R L C		Section 2	€ <sup>King</sup> and a
Ice Speed Skating Association of NSW		e e e e e e e e e e e e e e e e e e e	TN STATE
Map Long Reef Golf Club Pro Shop		ma ji nek	· ; %.)
Manly Rugby Union Club Ltd		16 H . 17	Ctar ,
Mac		4	
Manly Rugby Union Football Club Inc			
Manly Senior Citizens Centre		. i t. is	e Vest
Manly Warringah D.R. L.F.C. Ltd		on Peral Section	Section 18 Section

1 1 March 2 2 -

Manly-Warringah District Rugby League Football Club

Monash Country Club Ltd

North Curl Curl Knights Junior League

Map

Palm Beach Rsl Club

Мар

Pittwater RSL Club Ltd

Map

Terrey Hills Golf & Country Club

Map

#### Cinemas and Theatres

Avalon Cinema Centre

Info/Review Map

**Collaroy Cinema** 

Info/Review Map

**Manly Twin Cinemas** 

Info/Review Map

**Warriewood Cinema Centre** 

Into/Review Map

Warringah Hall Hoyts Cinemas

Info/Review

Hayden Cinema Centre

Mag

Hoyts 7 Warringah Mali

Peninsula Theatre Company The



## Bernie Cohen & Associates Pty Ltd Trading as **ESSENTIAL CERTIFIERS LIVERPOOL**

ACN 100386650 ABN 84047117254 Suite 6,387-393 HUME HIGHWAY LIVERPOOL N.S.W. 2170 Postal Address: PO Box 5387 Prestons N.S.W. 2170 PH: (02) 9824-1545 FAX: (02) 9824-1754 BUILDING CONSULTANCY:INSPECTIONS:CERTIFICATION OF ESSENTIAL SERVICES:TOWN PLANNING

#### **CONSTRUCTION & OCCUPATION CERTIFICATE**

Issued under the Environmental Planning & Assessment Act 1979 Sections 109C(1)(b), 81A(2) and 81A(4)

	APPLICATION	<u>ON FORM</u>
PART A: Des	cription of land to be de	veloped
LOT NO: 2	STREET NO: 25 - 33	DP NO: 74 842
STREET & SUBURI		MONA VALE
PART B: Agr	eement of Owner/s (all O	
MR/MRS/MS:	SURNAME: Thomps	son Health are PIL
	FIRST NAME/S:	
_	PO BOX 658 GOV	
	467 9333 FAX: 8467	
A REAL PROPERTY OF THE PARTY OF	& consent to this application:	Dated: 29 · 9 · 05
SIGNATURE	) FOWNER'S: Than	ASSIM .
PART C: Bui	lder or Owner/Builder de	talls
FULL NAME DETA	ils: Not selected	d.
FULL ADDRESS D	ETAILS:	
BUILDER'S LICENCE	NO: or OWNE	ER/BUILDER PERMIT NO:
PHONE:	FAX:	MOBILE:
PART D: App	olicant details & Billing d	letails
MR/MRS/MS: S	SURNAME:	FIRST NAME/S:
or COMPANY NAM	E: Machon Faul	Consultancy Fulta
FULL ADDRESS:	P.O. Box 1173 La	me Cove NSW 1595
PHONE:	FAX:	MOBILE:
SIGNATURE	OF APPLICANT:	Dated: 29 · 9 · 05
IMPORTANT: If BILL BILLING NAME:	ING name & address are same as above,	write "As Above". If not, please complete details below:-
BILLING ADDRESS	•	

PART E: Description of works requiring Construction Approval
FULL DESCRIPTION OF PROPOSAL: Alterations & additions to provide. accommodation for aged care residents, including installation of new life & access for disabled.
VALUE OF WORK: \$ 300,000 YOUR JOB/REFERENCE NO: THO. Mona Vale
NO. OF STOREYS: 2 NO. OF STRUCTURES: 1
PART F: Relevant Local Council details
COUNCIL AREA SUBJECT SITE IS LOCATED WITHIN: Pitt water
COUNCIL'S DEVELOPMENT CONSENT NO: 153/05 DATE OF DETERMINATION: 26/7/05
BUILDING CLASSIFICATION/S NOMINATED ON DEVELOPMENT CONSENT: Not worm gred but
PART G: Plans & Specifications for approval
List all plan number/s & specification reference details requiring approval: wD 01 - 07 md. Landscape Flan. Specifications (3 copus of each)
PART H: Applicant's Declaration
I certify that the work will be completed in accordance with the plans & specification, & will comply with the relevant requirements of Section 81A(5) of the Environmental Planning & Assessment Act, 1979.
Signature/s: FFFaww Date of Endorsement: 29.9.05
RIGHT OF APPEAL
Under Section 109K where the Certifying Authority is a Council, an applicant may appeal to the Land & Environment Court against the refusal to issue a Construction Certificate within twelve (12) months from the date of decision.

#### **PLEASE NOTE:**

You may be required to pay a Long Service Levy under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 (or where such levy is payable by installments, the first installment of the levy), before the Certifying Authority can issue a certificate to you.

# SCHEDULE OF DETAILS FOR THE AUSTRALIAN BUREAU OF STATISTICS

Please note: This information is compulsory & must be completed in full by the applicant

Construction Certificate N	o: ८८ हिन्द्	Council's D/A Consent No:	153/05					
	* * *	of the Proposal						
Area of subject site in m2:	5574.2 m2	Does the site contain a Dua	al Occupancy? No					
Current use of existing bu	ilding/s on subject site (if	vacant, please state "vacant")	):					
Vacant by		. ,						
Floor area of existing buil	ding/s in m2 except if being	g demolished: 2,85	6 m <sup>2</sup>					
Gross floor area in m2 of	proposed addition/s or ne	w building/s. If multiple buildir	ngs, please itemise:					
60 m2								
			<b>.</b>					
Proposed use of all parts	of the addition/s or new br	uilding/s: Lift & C	rean utrity					
Foom &	lurses Stan	um.						
ing the second supplied to the second								
This S	ection for Res	sidential Dwelli	ngs only					
**			· — · · · · · · · · · · · · · · · · · ·					
Number of pre-existing d	wellings:	Number of dwellings to be	demolished:					
Number of proposed new	dwellings:	Number of storeys of proposed dwelling:						
	Ruilding Mate	rials to be used						
	building mate	itals to be used						
Tick the box alongside wh	nich best describes the material/	s to be used in the construction of the	ne proposed new work/s.					
		<del></del>						
WALLS	ROOF	FRAME	FLOOR					
****	(100)							
Brick Veneer	Aluminium	Timber	Concrete					
Full Brick	Concrete	Steel	Timber					
Single Brick	Concrete Tiles	Other (describe below)	Other (describe below)					
Concrete Block	Fibrous Cement							
Concrete/Masonry	Fibreglass		-					
Concrete	Masonry Shingle							
Steel	Terracotta Shingle	1 8						

Fibrous Cement

Timber/Weatherboard

Other (describe below)

Cladding/Aluminium Curtain Glass

Hardiplank

Tiles - other

Terracotta Tiles

Other (describe below)

Slate

Steel

MACHON PAULL CONSULTANCY PTY. LTD





## SPECIFICATION of BUILDING WORKS

for

PROPOSED NURSING HOME

This is the plan/spec referred to in Essential Certifier's Certificate.

for

Cert. No. 06 | 815

Officer P. ARAMINI Accreditation No. 4790

THOMPSON HEALTH CARE PTY LTD

at

25 BASSETT STREET MONA VALE

ARCHITECTURE | INTERIOR DESIGN | SPACE PLANNING | DEVELOPMENT | REAL ESTATE

12 EDEN STREET NORTH SYDNEY NSW 2060. Mailing Address P.O.BOX 1173 LANE COVE NSW 1595

ABN 23 074 570 979 Email phili.pauli@machonpauli.com.au FAX 02 9929 7652 TEL 02 9929 7941.

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#### **SECTION 01-PRELIMINARIES**

#### 1A GENERALLY

#### 1A.01 PRINCIPALS & CONSULTANTS

The following terms or designations used within the Contract Documents shall have the meanings and extent shown herein:

**Proprietor** 

Thompson Health Care Pty Ltd Suite 20, level 4

924 Pacific Highway Gordon NSW 2072

Architect &

**Project Co Ordinator** 

Machon Paull Consultancy Pty Ltd

12 Eden St North Sydney North Sydney NSW 2060

Tel 02 9929 7941 Fax. 02 9929 7652

Landscape Architect

Trish Dobson

Mechanical, Electrical, Hydraulic & Fire Services

**Engineers** 

George Floth Pty Ltd 282 Victoria Avenue Chatswood NSW 2067

Structural Engineer

Paterson Wholohan Grill Pty Ltd

621 Pacific Highway St Leonards NSW 2065

#### 1A.02 The Site

Site location: 25 Bassett Street Mona Vale. Lot 2, DP 748426

The Builder shall not use the site or permit or suffer the site to be used for any purpose other than the performance of the works.

Without restricting the generality of the foregoing, the site shall not be used for advertising of any kind unless approved in writing by the proprietor.

#### 1A.03 Description of the Works

Refer Architectural drawings for extent of building works, siteworks, carparking and landscaping.

#### 1A.04 Builder to Inform Himself

The Builder is deemed to have:

- Examined all the information available to him by the Principal for the purpose of tendering including the Drawings, Specification, Schedules, Contract conditions and the like; and
- Examined all information relevant to the risks, contingencies and other circumstances which could affect his tender, and which is obtainable by the making of reasonable enquiries; and
- Examined the site and its surroundings; and
- Informed himself as far as practicable of all relevant physical conditions upon and below the surface of the site, and the climatic conditions at or near the site; and
- Informed himself as far as practicable of the nature of the work and materials necessary for the execution of the work under the Contract, the means of access to and facilities at the site, and transport facilities for deliveries to the site.

Failure by the Builder to do all or any of the things he is deemed to have done under this clause will not relieve him of his liability to perform all his obligations under the Contract.

#### 1A.05 Statutory Requirements & Payment of Fees

Prior to entering into this agreement, the Proprietor has applied for and received Building Approval and paid the Construction Certificate Fees, Council Deposits and Long Service Levy contribution.

The Builder shall comply with all By-Laws and regulations of all Authorities having jurisdiction over the work.

#### 1A.06 Conditions of Contract

The Contract to be used will be nominated by the Architect prior to commencement of the works.

#### 1A.07 Payment of Extra Monies

It shall be deemed that Builder's tender shall include all payments to employees for annual holiday pay, taxes, awards for wet weather, awards for sickness and statutory holidays, awards for fares and traveling time, awards for dirty work, work at heights, working with plant, unemployment relief tax, building superannuation scheme, site allowances and any other allowance or bonus that may become payable during the course of the project.

#### **1A.08 Responsibility**

The Builder shall bind every sub-contractor, specialist sub-contractor, supplier and all other parties necessary and involved in this Contract and the aforesaid parties shall agree to be bound by the full terms and conditions of the Contract and this Specification.

#### 1A.09 Guarantees and Warranties

The Builder shall be deemed by the signing of the Contract to guarantee the due and proper performance of all works involved in this Contract and to warrant that all workmanship and materials shall be of the required quality in accordance with the best standards of practice.

Where guarantees/warranties are required by this Specification, the Builder shall obtain a written guarantee addressed to the Proprietor from the firm supplying the materials or carrying out the works and submit same to the Project Coordinator.

The guarantees shall state that workmanship, materials and installations are guaranteed for a period as specified from the date of practical completion and that any defects that may arise during that period shall be made good and any such work in other trades resulting from such making good shall be executed at the expense of the firm doing the work, upon written notice from the Project Coordinator to the Builder to do so.

#### 1A.10 Samples

When required, the Builder shall furnish for approval with such promptness as to cause no delay in the work, all samples as directed by the Project Coordinator. Where proprietary brands of materials or equipment are used they shall be used in full cognizance and compliance with the manufacturer's directions and directly out of their brand containers.

The Builder shall be solely responsible for the consequences of delay resulting from failure to allow adequate time for the assessment and approval or samples, or from the rejection of samples which do not comply with the Specification, or the like. The Project Coordinator shall require twenty (20) days to assess and approve samples.

#### 1A.11 Abbreviations

Abbreviations used in the Contract Documents shall have meanings as defined therein, or if not defined, as commonly accepted in the building industry or defined below:-

AEM = approved excavated material

AES = as elsewhere specified

OTR = other than rock

UOS = unless otherwise specified

The Contract Documents include the form of Contract agreement executed by the parties. It and the conditions attaching thereto may be referred to hereafter for brevity as the Conditions of Contract of as the Conditions.

#### 1A.12 Documents

If the Builder requests and is supplied copies of any documents in addition to those copies supplied without charge, he shall pay for the additional copies at the cost of reproduction and handling.

Do not scale drawings which are clearly diagrammatic and/or marked "not to scale" or NTS. Written dimensions are to take precedence over scaled dimensions.

Spot levels shall take precedence over contour lines and ground profile lines.

Discrepancies disclosed by check survey work must be marked on check survey drawings for study by Project Coordinator. Should a discrepancy exceed the permissible tolerance shown on the drawings or specified, or agreed to be the Project Coordinator, after discussion with the Builder and Structural Engineer, the Project Coordinator may order the rectification of the offending work.

The Project Coordinator will determine the corrective measures to be applied above any minor mis-aligned work permitted to remain in position. No extra to the contract amount will be allowed for the cost of corrective work.

The drawings supplied for tender define the scope of work, where any item of work is not wholly indicated on these drawings, the Builder shall allow in his tender for all work required to complete that item of work in the best tradesmanlike manner and in accordance with the best building practices. During the course of construction working drawings will be issued, known as "future documents" in the conditions of Contract, no variation will be approved for additional work detailed on working drawings which could reasonably be anticipated would be required from the tender drawings.

All Sections of the Specifications are to be read in conjunction with one another and any provisions of clauses in any one Section are to be taken as referring to all other Sections if such provisions or clauses are in any way applicable.

#### 1A.13 Insurances

The Builder will take out and will maintain current for the appropriate period, insurance cover in respect of the Works under a combined Contract Works and Public Liability insurance policy. Such policy shall cover the respective interests of the Proprietor, the Project Coordinator and the Builder and all trade contractors and suppliers, including provision for the reimbursement of further fees and expenses for consultants, subject to any excesses applicable thereto. The Builder shall make available to the Project Coordinator copies of all such insurance policies relating to the Works for approval by the Proprietor.

The Builder shall effect and maintain current a policy of appropriate Work Cover insurance with common law extension in relation to any of its employees and shall cause trade contractors from time to time on the Site to effect and maintain current, a similar policy or policies in respect to their employees and shall indemnify and keep indemnified the Proprietor and the Project Coordinator against any claim made by any such employee by reason of any personal injury (including death) occurring to any such employee on or about the Site. The Builder shall regularly call for the production of certificates of currency from trade contractors for their Work Cover insurances with a view to ensuring that all such contractors are and remain duly insured for the duration of the execution of the Works. The Builder shall make available to the Project Coordinator, copies of all such insurance policies pertaining to the Works for approval by the Proprietor.

The Builder shall effect and maintain insurance in relation to all owned plant and equipment whether on or off the Site either purchased for or hired for the purposes of the execution of the Works by it.

#### 1A.14 Progress Claims

Submit for checking a written schedule of work completed and claimed showing:-

- a) Actual cost of work in position
- b) Value of materials on site.
- c) Proportionate cost of the completed work of various trades.
- d) Value of all variations approved with proportionate cost of work completed.
- e) Values claimed previously.

Claim to be submitted on the last working day of every month.

#### 1A.15 Final Certificate

Final Certificate will be issued when all outstanding maintenance work has been completed and final accounts checked and approved. Before issue of the final certificate the Builder shall lodge with the Project Coordinator:-

- a) All guarantees specified.
- b) Complete statements of accounts and variations to the Contract.
- c) Certificates of approval from all Authorities having jurisdiction over the works issuing such approval.
- d) All drawings, details and specifications which have been issued to him by the Project Coordinator.
- e As built drawings required under the services nominated sub-contract.

#### 1A.16 Extensions of Time

The rainfall reports printed and issued by the Weather Bureau for the station closest to the site, shall be taken as conclusive evidence as to the validity of claims for inclement weather.

The minimum period for which an extension of time may be claimed shall be four consecutive hours, eight hours extension shall constitute one day's extension. Where one day's extension of time has been approved, such extensions shall be made up due to the loss of eight hours in any one day or from the accumulation of individual hours (totaling not less than four consecutive hours) approved which when accumulated, total eight hours.

Extension of time shall not be granted for delay in activities which are not critical to the construction program nor will they be granted for union disputes which do not affect the Building Industry as a whole. Claims for extensions of time shall be submitted to the Project Coordinator who shall process same and approve or reject the claim.

Without limiting the requirements of the General Conditions:

'Critical Activity' means a building activity which is likely to result in a delay to the Practical Completion of the Works or Completion of a Stage.

Delay in activities which are not critical, or are not Critical Activities, shall not justify extension of the time.

In the event of a delay to an item, not clearly evident to the Project Coordinator as a Critical Activity on the Nett Overall Construction Program or any subsequent revision, the onus is on the Builder to prove that the delay is in fact critical. This will be at least by submission of a sub-network addressing the matter in question. This sub-network must be submitted within 14 days of the end of the cause of the delay in question, along with supporting information. Any claims not submitted in the required 14 days may be disqualified at the discretion of the Project Coordinator. No extension of time for inclement weather will be granted for delays after the building is capable of being sufficiently waterproofed in the normal course of the construction so as to permit internal works to proceed.

Where unavailability of documentation from the Proprietor, or those for whom he is responsible, is claimed as a cause for an extension of time, it shall only be a valid basis of claim where ample notice (no less than 4 weeks) has been given in writing to the Project Coordinator by way of a written request for information or documents and the information or documents have not been forthcoming by the required latest date.

#### **1A.17 Building Services**

The building services component of the project have been specified on a design and construct basis in accordance with the briefs prepared by the respective consultants.

The specifications for these trades have been prepared under separate covers for ease of tendering however, they are to be read and construed as being part of this document.

Whilst certain assumptions have been made in the preparation of the design briefs regarding works to be carried out by the specialist sub-contractors, it remains the Builder's responsibility to ensure that all items of work including builders work in connection, attendance, facilities and special attendances are carried out to provide a complete working system on completion.

The Builder is to be responsible for the co-ordination of all building services with each other as well as with the Architect and the Structural Engineer.

#### 1A.18 Services Sub-Contractors

The Builder shall submit to the Project Coordinator all companies he wishes to use on the bulk building works, for approval.

The Builder may submit to the Project Coordinator all other companies he wishes to be considered for other nominated sub-contracts.

The Project Coordinator shall nominate selected sub-contractors for the various works listed under Contract Allowances of this specification.

The companies used will be direct sub-contractors to the Builder and <u>not</u> regarded as having been nominated by the Project Coordinator.

#### **IB ADMINISTRATION**

#### 1B.01 Construction Program

The Builder shall, prior to the first progress certificate being issued, supply to the Project Coordinator a construction program showing the dates or the times within which the various stages or parts of the work under the Contract are to be executed.

Each month the Builder shall review the construction program in the light of the progress of the work under the Contract and shall submit, if the works fall significantly behind, a revised program for approval.

The approval of revised construction programs shall not constitute approval for extensions of time.

Without in any way detracting from the Builder's obligations with respect to programming, as contained in the General Conditions of Contract, for the purpose of the programs to be prepared by the Builder, each program shall, as a minimum, contain:

- (1) A net overall contract program (excludes all delay contingency).
- (2) A gross overall contract program (with the delay built in).
- (3) A document procurement, tender letting and off site activities program, referred to hereinafter as the Off Site Program, geared to the nett overall contract program.

The programs shall comply with the following conditions and requirements:

- (1) The Construction Programs shall be prepared as a time scaled network (not in bar chart or form), with sub networks as required, to describe and detail adequately the critical activities.
- (2) The Construction Programs shall indicate durations of significant activities including the interdependencies necessary for the Practical Completion of the Works.
- (3) The Construction Programs will indicate the various stages of the works under the Contract.
- (4) The Construction Programs shall provide details of the estimated duration, the interdependencies and the occurrence of every significant activity necessary for the Practical Completion of the Works and Completion of each State, including the supply only and the supply and fixing of works by sub-contractors and suppliers.
- (5) The Construction Program shall be prepared on the basis of six (6) day working week worked on a four week cycle.

- (6) The hours and days during which building work may be carried out shall be restricted to between 7.30 a.m. and 5.30 p.m. Mondays to Fridays and 7.30 a.m. and 1.00 p.m. Saturdays with no work being carried out on Sundays, unless with prior written approval from the Local Authority.
- (7) The Builder will provide supporting information to the Contract Construction Program as and when required by the Project Coordinator.
- (8) The Off Site Program will be sufficiently comprehensive to enable the Project Coordinator to determine the latest date by when the supply of critical information and/or documentation is required so as not to delay the progress of the Works in accordance with the nett construction program.

The Builder will monitor the construction no less than monthly, and report in writing at regular Project Meetings on the status of the Project and any delays, with respect to the critical path and all significant off site activities.

In the event of delay, effecting a completion date, the Project Coordinator may instruct the Builder to reprogram the works to achieve the contract completion date, or adjusted contract completion date as may be the case. Such Programs will be referred to as the Revised Nett Construction Program as may be the case.

The Builder shall prepare and issue each week up to the Date Practical of Completion a one month rolling schedule hereinafter called 'the Monthly Schedule' of activities scheduled to start within the month next following the week of issue thereof. The Monthly Schedule shall work within the parameters of the nett and gross Construction Program with additional detail and are to be drawn up in bar chart format with a calendar time scale showing all working days, holidays, scheduled overtime and weekend work.

#### 1B.02 Site Meetings

At regular intervals throughout the duration of the Contract, the Builder shall arrange meetings with appropriate Sub-contractors and the Project Coordinator shall keep minutes of such meetings and have copies thereof forwarded to those present and other concerned parties within three working days after each meeting.

At the first site meeting, submit to the Project Coordinator the names and telephone numbers of all responsible persons administering the Contract.

#### 1B.03 Inspections

If this Specification requires notice of inspection to be given in respect of any part of the work under the Contract, that part of the work shall not have further work placed thereon or be covered up or put out of view without the prior approval of the Project Coordinator.

#### 1B.04 Shop Drawings

Six sets of all shop drawings shall be submitted to the Project Coordinator for approval, where required by this Specification. At the time of submission the Builder shall indicate the date by which approval is required. The Project Coordinator shall require a minimum of two (2) weeks to approve shop drawings.

Approval from the Project Coordinator shall be for content only and not for dimensions.

Prior to submitting Shop Drawings for approval, the Builder shall check the drawings of every Sub-contractor for accuracy and shall ascertain that all work having any bearing on the work shown in such drawings is accurately and distinctly illustrated and that as shown is in conformity with the Contract requirements. Omissions there from of work or materials shall not relieve the onus of supplying such work or materials although such drawings may have been approved.

#### 1B.05 Cost Adjustment

This is a lump sum Contract and shall not be subject to cost adjustment. The Builder shall make appropriate allowances in his tender price for increases in the cost of labour and materials from the date of submitting the tender price until acceptance and also for the duration of the works.

#### 1B.06 Security

Two bank guarantees shall be provided by the Builder as security for the amount of 2.5% of the Contract Sum each and shall be lodged with the Proprietor at the time of signing the Agreement between the parties.

Failure to lodge the security at that time shall be deemed a substantial breach of the Contract such that the Proprietor, if he elects, determine the employment of the Builder and he may also institute proceedings to recover any damages he may have sustained by reason of the breach.

#### 1B.07 Computation of Time

Where a notice is to be given or any other act, matter or thing is to be done in a stated number of days, the said number shall be calculated exclusive of Sundays, Statutory or Public Holidays and rostered days off.

#### 1B.08 Hours of Work

The Builder is advised that under the terms of this contract, work on the site is only permitted between the hours of 7.30a.m. and 5.30p.m. on Mondays to Fridays inclusive and 7.30a.m. and 1.00p.m. on Saturdays, no work is permitted on Sundays or Good Friday or Christmas Day, unless written permission is obtained from the Local Council.

Notwithstanding the above conditions, the Builder is to minimise any nuisance as a result of his working hours coinciding with peak traffic time or any other critical factor and is to minimise cause for complaint or injunction.

#### 1B.09 Overtime Work

Overtime work shall be permitted where this is necessary to fulfil the requirements of the Contract, and only as approved by the Project Coordinator.

No extra to the Contract amount will be allowed in respect of overtime work, excepting where related to ordered or authorised variation work particularly calling for overtime labour as agreed with the Project Manager and such work is not the result of the Builder's error, oversight, lack of pre-planning, co-operation, co-ordination, or other related reason.

#### 1B.10 Goods & Services Tax

The Builder shall pay any tax which may apply to goods, materials or equipment supplied under the Contract.

#### 1B.11 Defects Liability

The Defects Liability Period shall be 26 weeks from the date of Practical Completion.

Defects reported during the Defects Liability Period shall be rectified progressively and not allowed to accumulate. Defects which affect safety or health or which seriously interfere with the essential functions of the works shall be rectified immediately they are reported, other defects within a reasonable period thereafter.

Such inspections shall be attended by the Builder, the Architect, Structural Engineers and Consultants and Sub-contractors as the Project Coordinator may require. The Project Coordinator shall compile and issue to the Builder a Defects List showing defects currently outstanding.

#### 1C CONDITIONS AND WORKING INSTRUCTIONS

#### 1C.01 Protection of Property

The Builder shall be held responsible for the adequate protection of services, roadways, paths and shall make good at his expense all damage to them caused by building operations. Keep street gutters clean at all times. The interest of the Proprietor must be safeguarded in every way.

Provide all hoardings, barricades, covers and screens and all protective measures including lighting, as required by the Authorities having jurisdiction over the site. Obtain and pay for all licences and fees. Maintain and remove on completion.

#### 1C.02 Care of the Works

The Builder shall be solely liable for the care of the Works, the Temporary Works, Constructional Plant and all materials and other things brought on to the site for the purpose of the carrying out of the work under the Contract by or on behalf of the Builder or any of his Sub-contractors.

The Builder shall, at his own cost, make good any loss or damage to the Works, the Temporary Works, Constructional Plant and the aforesaid materials and other things resulting from any cause (other than the Excepted Risks defined below) when such making good is necessary for the satisfactory completion of the Works.

- a) Any negligent act or omission of the Principal, his agents or employees.
- b) War, invasion, hostilities, revolution, insurrection.
- c) Any risk specifically excepted in the Specification.

#### 1C.03 Setting Out the Works

The Builder shall employ an independent and licensed Surveyor to set out all lines and levels for the works at all stages, including the building lines in relation to the building site in accordance with the plans and title dimensions of the site.

Where required, the Builder shall submit results of surveys to the Project Coordinator.

#### 1C.04 Adjoining Properties

All works are to be carried out without damage to the adjoining properties and if any such damage occurs the Builder shall reinstate and make good the same at his own expense.

#### 1C.05 Dilapidation Survey

If required the Builder is to carry out a Dilapidation Survey of adjacent properties to the satisfaction of the Project Coordinator.

#### 1C.06 Signboard

Provide and erect one signboard 2.5m x 2.5m framed and painted with particulars of works, sign to be painted by signwriter to Architect' detail.

#### 1C.07 Items of Historical Interest, Coins and Antiquities

All fossils, artifacts, coins, articles of value or antiquity and structures and other remains or things of geological, historical or archaeological interest discovered on or under the surface of the land shall be the absolute property of the Proprietor.

The Builder shall immediately upon discovery of such articles referred to above inform the Proprietor of such discovery and carry out, at the reasonable expense of the Proprietor the delivery up or disposal of such articles or things.

#### 1C.08 Builder's Staff

The Builder shall notify the Project Coordinator in writing the name of the competent person he proposes to maintain on the Works during their progress to superintend the Works and the name of any other representative at any other place in which any activities relating to the carrying out of the work under the Contract are taking place, of any subsequent changes and shall obtain the Project Coordinator's approval in writing.

The 'competent person' referred to above shall not do tradesmen's or labourer's work to the detriment of the superintendence.

#### 1C.09 Workmanship and Materials

The whole of the work to be faithfully executed in the most tradesmanlike and substantial manner.

Materials to be new and of the best quality of the respective kinds, excepting materials particularly specified to be of lesser quality and materials for temporary structures which may not be new but to be sound and clean.

#### 1C.10 Co-ordination of Works

The Builder shall co-ordinate the work to ensure a logical and economic sequence and shall be totally responsible for all services co-ordination.

The Builder shall assess requirements and organise for procurement of material, plant, equipment and services as soon as practicable after signing the Contract so that the completion date of the Contract is not jeopardised nor the works program adversely affected by delays which could have been avoided.

#### 1C.11 Temporary Services

Make separate connection to all service mains necessary for temporary services required during the works. Install meters, valves and switchboards in accordance with the installation and use of such services. Alter, adopt and maintain all such services as necessary and remove on completion of the works.

The Builder shall arrange for installation of a Telecom Australia telephone service for the receipt of incoming calls to his site office. A mobile phone shall be provided for use by the Builder's foreman on site when absent from this office.

The service to the operative as soon as possible after work at the site commences; the Builder shall pre-arrange for installation to avoid delay and inconveniences and ensure that calls are answered throughout the working hours and during meals and tea breaks.

#### 1C.12 Sanitary Accommodation

The Builder shall provide for the supply, delivery and erection at the commencement of, maintenance during and the demolition and removal at completion of the Contract of the temporary sanitary accommodation and washing facilities for use on site by his employees or Sub-contractors and consultants, all as required by the Awards and Authorities concerned.

#### 1C.13 Offices for Supervisory Staff

The Builder shall provide at commencement of the Contract and maintain throughout the Contract, ample weathertight, safe and secure offices for supervisory personnel and consultants.

Offices shall be grouped, but partitioned for privacy, insulated against temperature extremes, and sealed against entry of dust.

#### 1C.14 Temporary Sheds

The Builder shall provide suitable floored weatherproof sheds for storage of materials including explosives; also provide messing and change room accommodation for workmen as required by any applicable industrial award or agreement and conforming to all statutory requirements.

#### 1C.15 Cleaning of Sites

Temporary site offices, toilets, also amenities for workmen to be kept clean and tidy by the Builder's supervisory staff. Offices and toilets to be swept out daily; floors and glass washed weekly and at times which do not inconvenience office staff.

#### 1C.16 Protective Clothing

The Builder shall arrange for, and pay costs and charges for the provision of workmen's protective clothing as required by relevant industrial awards and agreements.

The Builder shall insist upon the wearing of approved pattern protective head gear by workmen at the site and maintain ample stocks, including for other persons visiting the works.

#### 1C.17 Works Inspection Aids

The Builder shall provide any temporary facilities, ladders, staging, walkways and the like found to be necessary to enable authorised personnel to conveniently and safely supervise and/or inspect work done or in progress.

#### 1C.18 Helmets For Visitors

The Builder shall provide safety helmets for visitors' temporary use whilst on the site, whose presence on the site is authorised, permitted or necessary under the provisions of the Contract.

#### 1C.19 Plant Equipment

The Builder is to provide all tools, plant and equipment necessary for the efficient and proper execution of the Works under this Contract and ensure that it complies with the requirements of the relevant authorities.

The Builder shall make provision for hoisting and lowering the equipment, cranes, hoists, chutes, ladders, scaffolding, staging, tackle and other construction and materials handling plant and equipment, temporary coverings and protective devices, also for all labour and material to install, operate, move, adapt, maintain and remove after use.

Each item of plant and equipment to be available for use without delay as needs arise.

Plant and equipment requiring operations by licensed or otherwise qualified personnel shall be manned during normal working hours, also as necessary outside normal hours to enable time schedules to be maintained, or time schedule lags to be overtaken, or materials handled or work done to best advantage.

No extra to the Contract amount will be allowed should a competent authority refuse or restrict the type, use, location of Builder's plant, equipment or other aid to construction and materials handling.

Operating instructions for plant and equipment to be provided, placed, fixed, maintained by the Builder together with warning signs and safety first signs in appropriate places.

#### 1C.20 Safety

The Builder shall not at any time leave any work in an unsafe condition or in a condition which might cause damage to other existing work, plant, machinery or equipment, but shall continue that work until it is at a safe state.

The Builder shall take every precaution to ensure the safety and protection at all times of all persons on or about the site, including all workmen and others employed on the works, and to this end shall provide and maintain all facilities both necessary and proper to comply with the safety rules and regulations of any body or authority having jurisdiction thereto.

The Builder shall take adequate precautions against fire and explosion hazards.

Bulk storage at the site of highly inflammable materials, fuels, adhesives, painters' materials, etc., to be avoided and when such materials are being handled, the Builder shall ensure that ignition by smoking of tobacco, naked flame, ember, electric arc and/or other means does not take place.

The Builder shall erect warning signs and clear dangerous gas from confined spaces by thoroughly ventilating.

No extensions of time will be granted for industrial disputes involving safety, as the Builder is deemed to be totally responsible for the safety of the site throughout the execution of their works.

#### 1C.21 Fire Protection

The Builder shall provide to authority requirements approved hand fire extinguishers, which shall be maintained in working order at all times. Extinguishers shall be removed upon completion of the work.

#### 1C.22 Storage On Site

Store all materials and equipment on site so as to prevent mechanical and climatic damage including, but not limited to, staining, warping, scratching and denting. Keep storage areas in a neat and tidy manner to minimize hazards to persons, materials and equipment.

Comply with any instructions given concerning storage or use of flammable or combustible materials.

Do not use roads, driveways, paths, hardstandings and the like forming part of the Works for access or storage unless prior written approval has been given.

#### 1C.23 Noise Control

Take all practicable precautions to minimize noise resulting from work under the Contract. Fit all construction equipment with noise suppressors and use so that noise is minimized.

Fit all jackhammers and other noisy hand-held tools used in the performance of the work with effective silencers of a type recommended by the jackhammer manufacturer. Keep all tools and silencers in first class condition. Supervise operators of jackhammers to ensure that the silencers are always in place while the tools are being used.

Fit all compressor sets used in the performance of the work with effective acoustic canopies and special engine exhaust silencers of a type recommended by the compressor manufacturer. Alternatively use compressor sets specially designed for quiet operation. Keep compressor sets and canopies in first class condition. Keep any access panels in acoustic canopies closed while sets are running.

Comply with noise regulations of any Authority having jurisdiction over the Works.

#### 1C.24 Disposal Of Contaminants

Properly dispose of all solid, liquid and gaseous contaminants in accordance with all statutory and contractual requirements.

#### 1C.25 Disposal Of Refuse

For dropping refuse, use hoppers and shutters, chutes or refuse buckets which are covered or of such a design as to confine the material completely and prevent dust emission.

#### 1C.26 Hoardings

The Builder shall allow for all hoarding or alterations of hoardings required by the construction activities.

The Builder shall allow for the removal of the hoarding upon completion of the Works.

The Builder shall obtain consents for the above mentioned hoardings and/or protective fences, pay all fees and charges, erect said hoardings and said fences all in accordance with the Pittwater Council and Workcover.

Vertical posts at the entry point for vehicles shall be effectively braced and reinforced to prevent dislodgment by reason of collision by vehicles.

The entry point across the footway shall be kept clear of debris, loose materials and obstructions of every kind at all times.

Entry gates shall be chain wire gates suitably framed and braced with steel tube framing.

Manholes and services access points shall not be covered by any part of the protective fencing and access to these points shall be kept clear at all times.

A safe means of access shall be provided and maintained at all times for persons required to work upon or frequent the overhead protective structure.

#### 1C.27 Site Security

The Builder shall be wholly responsible for the proper and adequate safeguarding of the Works and of fixed and unfixed materials on the site during both working and nonworking hours.

No claims for extensions of time or extra costs will be allowed in respect of damage or loss of materials or interruption of work due to the Builder's failure to adequately safeguard the Works.

#### 1C.28 Practical Completion

Without prejudice to meanings which may be stated or implied elsewhere in the Contract, 'Practical Completion' shall mean that stage in the execution of the work under the Contract when;

The Works are complete except for minor omissions and minor defects:

- a) which do not prevent the Works from being reasonably capable of being used for their intended purpose, and
- b) which the Project Coordinator determines that the Builder has reasonable grounds for not correcting promptly, and
- c) rectification of which will not prejudice the convenient use of the Works, and
- d) those tests which are required by the Contract to be carried out and passed before the Works are handed over to the Proprietor have been carried out and passed, and
- e) such documents and other information required under the Contract which;, in the opinion of the Project Coordinator, are essential for the use, operation and maintenance of the Works, have been supplied.

Without limiting the generality of the foregoing, the following particular requirements shall have been met:-

- a) air conditioning and ventilation systems are balanced and working;
- b) the Contractor's hoist, crane, scaffolding and other major items of Constructional Plant have been removed from the Works;
- c) all keys have been labelled appropriately and handed over:
- d) the requirements of statutory authorities have been satisfied.

# 1C.29 Initial And Final Cleaning

The Builder shall keep the work under the Contract clean and tidy as it proceeds and regularly remove from the site rubbish and surplus material arising from the execution of the Work including any work performed during the Defects Liability Period or any operational maintenance period specified.

On completion of the Works employ professional cleaners to clean the inside of the building and both sides of all glazing.

# 1C.30 Certificate of Compliance

On Practical Completion of the Works or earlier if appropriate, the Builder is to pay all fees and costs incurred, arrange for all inspections, obtain all necessary certificates, and lodge an application for a Certificate of Occupancy.

# **1C.31 Industrial Requirements**

The Builder should note that the development and maintenance of harmonious industrial relations on the Site are regarded by the Proprietor as matters of significant importance.

The Builder shall immediately upon notification by the Project Coordinator in writing of qualified acceptance of his Tender commence negotiations with the appropriate Executive Officers, both Federal and State, of those Trades Unions whose members would be expected to constitute the majority of the workforce employed on the site in the execution of the Works. The Builder shall as may be appropriate to those negotiations liaise with relevant officers of the Master Builders' Association of New South Wales in the undertaking of those negotiations.

These negotiations shall be directed towards resolving and reaching agreement, in a manner as shall be as binding as possible on the relevant Trade Unions and their members employed on the site.

The Builder shall not and must ensure his Sub-contractors/suppliers shall not engage in what is known in the building industry as 'pyramid', sub-contracting, all in payments and/or cash-in-hand payments. Should any breach of this provision be detected such breach shall be forthwith be rectified by the Builder and/or his Sub-contractors.

Should breaches occur and cause industrial action on the project works, no extension of time or any additional cost claim will be allowed.

# 1C.32 Daywork

If the Project Coordinator directs that any work be carried out as Daywork, the Contractor shall record each day in a manner to be approved by the Project Coordinator the time spent by each workman and each item of plant and materials used for the execution of the Daywork. The Project Coordinator shall endorse these records as true and correct or otherwise. The Contractor shall present his claim for payment in writing with these records at intervals as directed by the Project Coordinator.

The Project Coordinator shall determine the amount to be paid to the Contractor having regard to the following:-

- The amount of wage and allowances paid or payable by the Contractor at the rates obtaining on the site at the time as established by the Contractor to the satisfaction of the Coordinator Manager or at such other rates as may be approved by the Project Coordinator.
- The amount of paid or payable to the Contractor in accordance with any statute or award applicable to day labour additional to the wages paid or payable as stated above.
- The charge for Constructional Plant.
- The actual cost of services and of the supply and delivery of materials and equipment.
- A charge to cover overheads, administrative costs and profits.

The charges for Constructional Plant and for overheads, administrative costs and profits shall, if practicable, be agreed upon in writing betweens the Contractor and Project Coordinator prior to the commencement of the Daywork.

#### 1D.04 Co-ordination

For the purposes of co-ordination Contractors will be required to submit negatives of their Drawings to the Project Coordinator for overlaying other services drawings.

# **SECTION 02 - EXCAVATION**

# 2.01 EXTENT OF WORK

Carry out all excavation work indicated on the drawings and to reduced levels nominated for footings, slabs and drainage.

# 2.02 WORK BY OTHERS

Co-ordinate with a licensed plumber and electrician to disconnect or divert existing services.

### 2.03 TREES AND SHRUBS

Protect all tress and shrubs adjacent to the works throughout the course of the work, unless noted otherwise.

# 2.04 DISPOSAL OF MATERIALS

Unless otherwise specified or noted on the drawings, excavated materials shall become the property of the Builder and shall be immediately removed from the site.

# 2.05 SHORING, BRACING AND UNDERPINNING

Provide any necessary shoring and strutting during the progress of the excavation works.

### 2.06 BACKFILLING

Backfill around footings, service lines, and sub floor walls all in accordance with the Engineer's details.

No backfilling is to commence until all service lines, drainage, footings and walls have been inspected and approved by the appropriate authorities and/or consultants.

# **SECTION 03 - CONCRETE WORK**

## 3.01 EXTENT OF WORK

Provide all materials and labour necessary to complete the work indicated on the structural engineers drawings and as summarised below;

a) Insitu concrete footings beams and slabs

b Concrete kerbs and slabs associated with external works.

# 3.02 MATERIALS AND WORKMANSHIP

Generally all materials and workmanship shall conform to the relevant codes of the Standards Association of Australia and in particular the following;

AS 1480 Concrete Structures Code
AS 1315 Portland Cement
AS 1379 Ready Mixed Concrete
AS 1478 Admixtures

All concrete slabs on ground shall be laid on a waterproof membrane, equal to 'Fortecon' 0.2mm thick, over 50mm sand bed and turned up 150mm at wall abutments and service pipe penetrations. All joints shall be lapped 200mm and sealed with pressure sensitive tape recommended by the manufacturer.

# 3.03 SUPERVISION OF CONCRETE WORK

The concrete work shall be carried out only under the direct supervision of a capable foreman experienced in reinforced concrete construction.

#### 3.04 INSPECTION OF CONCRETE WORK

At least two (2) working days notice shall be given to the Consultants and the relevant department of the local Council of the intention to pour any concrete.

All formwork, reinforcement, cores, etc. shall be in place before an inspection will be made. No concrete shall be poured until this inspection by the Consultant Engineer and Council has been completed and the work approved by both parties.

# 3.05 MATERIALS

#### Water:

Clean, potable, free from oil, salt, acid, alkali or other deleterious substances.

#### Sand

To AS. 1465. Clean, sharp and free from salt, clay, vegetable or other impurities.

#### Cement:

To AS. 1315. Type A Portland cement, unless otherwise noted on Title Pages.

<u>Aggregate:</u> To AS.1465. Clean, hard, tough and durable crushed stone and/or gravel, free from elongated pieces, dust, clay or other deleterious matter.

Reinforcement:

Plain round bars (R) or hot-rolled deformed bars (S) shall conform to the requirements of AS.1302.

Hard drawn steel wire for Reinforced Concrete shall conform to AS.1303, as amended.

Welded wire fabric (F) and trench wire mesh (TM) shall conform to the requirements of AS.1304.

#### 3.06 READY MIXED CONCRETE

Ready mixed concrete conforming with this specification and the requirements of AS.1379, both in manufacture and handling by the manufacturer and the Builder, must be used for all structural concrete.

Before ordering, the Engineer's written approval of the ready mix supplier must be obtained. For the purpose of obtaining such approval, the builder shall submit to the Engineer the name and address of the supplier and plant from whom he proposes to obtain concrete not less than seven (7) days before orders are placed.

The Builder must provide adequate means for handling and placing ready mixed concrete. Notwithstanding any contrary requirements in AS.1379 as amended, ready mixed concrete shall be completely discharged, placed and compacted in its final position in the forms within 1.1/2 hours of the introduction of the cement to either the water, the aggregate or the mixer.

Crushing tests shall satisfy the requirements of this specification. All dockets for concrete delivered shall be marked with compressive strength and slump of same and a copy given to the Project Coordinator.

#### SAMPLING & TESTING

Sampling, slump and compression tests shall be carried out strictly in accordance with Prepare specimens when required by Superintendent using standard AS. 1012. cylinders and arrange testing by a N.A.T.A. registered laboratory. Allow for cost of preparing and testing specimens.

# Frequency of Sampling:

Samples shall be distributed evenly over the number The minimum frequency of sampling of the concrete of each specification placed on any day in the job shall be in accordance with the following:

(A) For concrete to be deposited in critical elements as designated on the drawings.

Ready mixed concrete: One sample per truck

(B) For other elements placed continuously between construction joints:

Ready mixed concrete one truck one sample

2 to 5 trucks

two samples

6 to 10 trucks

three samples

11 to 20 trucks

four samples

For each additional 10 trucks

one sample

Unless otherwise directed, take samples in accordance with the above schedule. Each sample shall be dated and marked and a record shall be kept of the location and slump test results of same. The samples shall be cured and then forwarded to an approved testing laboratory with instructions to crush test at 28 days or as directed.

# Sampling:

When ordered by the Engineer, a sample shall comprise three (3) cylinders and a test shall be the average compression strength of the three (3) cylinders.

### 3.08 STRENGTH OF CONCRETE

The characteristic compressive strength (F'c) as defined in A.S. Codes is to be 25 MPa for all structural concrete unless otherwise noted on the drawings and 15 MPa for paths etc. (Non-structural concrete).

The properties of the tested cylinders shall be deemed to be the properties of the concrete from which the samples were taken.

Should the results of the tests fail to satisfy all of the above requirements, the concrete represented by the group of samples shall be regarded as not having attained the specified compressive strength required by the designer and shall be classed as defective concrete and be liable to rejection: in which case the Project Coordinator may order cores to be cut from that portion of the work affected and have such laboratory tests carried out as he deems fit, or he may order static test load or both, all at the Builder's expense.

#### 3.09 REINFORCEMENT

Reinforcement shall comply with the Australian Standards AS.1302 & AS.1304. Where required by the Engineer the Builder is to supply Mill Certificates to the effect that the material complies with these specifications.

Reinforcement, before being placed, shall be thoroughly cleaned of millrust scale, and of coatings which will destroy or reduce the bond. Reinforcement appreciably reduced in section shall be rejected .Where there is delay in placing concrete, reinforcement shall be re-inspected and cleaned if necessary.

Reinforcement shall be carefully formed to the dimensions indicated on the plans. Cold bends shall be made around a pin having a diameter of five times the least dimensions of the reinforcement bars. Steel for reinforcement shall not be bent or straightened in a manner which will injure the material, and bars with kinks or bends not shown on the drawings shall not be used.

Reinforcement shall be accurately positioned and secured against displacement by using iron wire of not less than 1.62mm gauge, or suitable clips at intersections. Skilled persons shall be employed to place reinforcement and they shall be present at

pourings for adjustments.

Bottom reinforcement in slabs, beams and footings shall be supported on approved steel chairs of height required to provide the cover specified hereunder. Top reinforcement shall be similarly supported at correct height on approved steel chairs of sufficient strength to withstand the weight of workmen without buckling or bowing. Spacing of chairs is to be sufficient to carry construction loads without displacement. Extra supports and additional care shall be provided for the support of light gauge reinforcements or for the support of reinforcement in general when slab is cast against the ground.

Reinforcement shall be in the positions indicated on the drawings. Splices shall be made only where shown.

Reinforcements on the job not readily identifiable as to grade and location will be liable to rejection and shall be removed immediately from the job.

Clear cover to reinforcement unless otherwise noted

	Slabs	Beams	Column
Permanently clear of ground	20mm	25mm	40mm
Permanently cast against ground	45mm	62mm	75mm
Slabs over polythene moisture - barrier	32mm		
Firmed and backfilled	32mm	40mm	50mm

This cover shall be clear of all stirrups, ties, wires, etc.

# 3.10 REJECTION OF CONCRETE

The Engineer shall have the right to reject any fresh concrete before it is deposited in the forms if it appears not to conform with the specified tests' requirements: alternatively, at his discretion he may order the taking of additional tests. Where hardened concrete is classed as defective and liable to rejection, the criteria for rejection shall be as previously set out herein.

#### 3.11 MEMBRANE

Ensure the compacted blue metal base has been blinded with sand to form an even and protrusion free surface to avoid puncturing the membrane. Prior to laying the membrane wet the sand base. Over this base lay an approved high impact resistant polythene film to AS 1326.

Lap joints not less than 200mm. Face the laps away from the direction of the concrete pour. Seal the laps with pressure sensitive adhesive tape to AS 1599, serial no. 19.

Similarly seal around unavoidable penetrations such as service pipes and the like. Take the underlay up vertical faces as far as the damp proof course where applicable and fix at the top by tape sealing.

# 3.12 FORMWORK STRIPPING

Leave formwork in position until concrete has developed sufficient strength to support design as specified and as scheduled hereinafter. Completely remove all timber formwork and clean underfloor areas of all superfluous timber prior to completion of contract.

No permanent building component shall be erected nor any loading applied on any part of the structure while that part is still supported by formwork.

### 3.13 **CURING**

Exposed surfaces of the concrete shall be kept constantly in a damp condition for at least the first seven (7) days after placing by covering with building paper lapped at least IOOmm.

Curing compound shall only be used with the approval of the Engineer. If approved, curing compound, shall be of such nature as to effectively reduce dehydration and provide maximum retention of the original mixing water within the concrete and then gradually disappear and leave the surface of the concrete unaffected. Rendering or plastering shall not be applied until curing compound

film has completely disappeared. No compound which has an adverse effect on subsequent applied coatings will be permitted. Approval of any compound shall not relieve the builder of responsibility for its sufficiency.

# 3.14 CONCRETE SURFACES

All concrete surfaces shall be true and fair and free from excessive depressions or projections.

All exposed concrete surfaces shall have a Class A finish.

All concrete shall be subject to inspection and approval after the stripping of formwork and before any finishing or patching work has been commenced. Should any detectable defect indicate inadequate compaction or other unsatisfactory work, the whole of the concrete work shall be removed between such limits as the Engineer may decide and replaced with acceptable concrete work, or such other remedial work as may be directed or approved.

#### 3.15 GUTTER AND FOOTPATH CROSSINGS

Construct footpath crossing and gutter crossing in locations shown, to the requirements of the Local Council.

# 3.16 STRUCTURAL ENGINEERS DRAWINGS AND DETAILS

All notes and specifications as shown on the Structural Engineering drawings shall take precedence over this specification.

# SECTION 04 - BRICKWORK AND BLOCKWORK

# 4.01 EXTENT OF WORK

Provide all labour, materials, accessories and scaffolding necessary to carry out the works indicated on the drawings and incidental to the works.

# 4.02 WORKMANSHIP

01 Generally

All brickwork and blockwork shall be carried out by competent and experienced tradesmen, using best trade practice, all walls shall be set plumb. All bricks shall be laid with frogs up generally, except where supporting a concrete slab in which case all depressions shall be filled to give a level bearing surface.

Each wall cavity shall be kept as clean as is practicable. At each stepped dampcourse level and at ground level, every fourth course shall be left loose, so that walling under construction can be cleaned out and hosed to remove mortar droppings.

Protect newly erected brickwork and blockwork against weather by covering with plastic sheeting.

02 Standards

All brickwork and blockwork shall conform to relevant standards including the following;

AS 1640 SAA Brickwork Code
AS A123 Mortar for masonry construction
AS 1475 SAA Blockwork code.
AS 1500 Concrete building blocks

#### 

The Builder shall conform to the following rod for the brick sizes indicated;

- \* 230x110x76 mm : 7 courses = 600 mm vertical : 10 bricks = 2400 mm horizontal
- \* 290x90x90 mm : 6 courses = 600 mm vertical : 8 bricks = 2400 mm horizontal

04 Bond

Unless otherwise indicated all brickwork shall be laid in stretcher bond.

#### 4.03 MATERIALS

#### 01 Bricks

External bricks shall be first quality face bricks, from an approved source to AS 1225 to match existing. Refer to drawings for extent.
All external bricks to be rendered shall be select approved commons.

All face garden walling is to be constructed from selected face brick in accordance with the details.

02 Concrete Blocks

Concrete blocks shall comply with AS 1500 and shall be first quality, machine made, well cured and matured hard, sound, uniform in shape and size, square and sharp on the arises.

Provide as necessary all part size, jamb, sill, lintel, corner pier, coping and similar blocks all of the same manufacture type and finish as adjacent wall blocks.

Refer to the drawings for full extent of blockwork.

03 Hebel Blocks

Blocks shall be CSR Hebel Autoclaved Aerated Concrete blocks, first quality and installed in accordance with AS 1530, AS 1276, AS 3700, AS 1170, AS 2121, AS 2699, AS 2733, BS 5628 and the manufacturer's instructions. The extent of the blockwork as detailed on the drawings.

Internal walls so designated shall be constructed from 200mm, 150mm or 100mm

blockwork as shown on the Drawings.

All blockwork shall be layed in accordance with CSR Hebel's current published specification.

### 04 Mortar

Type A:

Walls to dampcourse level, dwarf walls brick on edge walling, steps and other wet walling

Mortar shall consist of one (1) part Portland

cement, one-tenth (1/10) part hydrated lime or lime putty and three (3) parts sand (1:1/10:3) mixed with water

Type B:

Walls not indicated above shall be laid in Type B mortar.

Mortar shall comply with AS 1640 Appendix A. Mortar shall be 'compo mortar' consisting of one (1) part Portland cement, one (1) part hydrated lime or lime putty or lime putty and six (6) parts sand (1:1:6) mixed with clean water and used within one hour of mixing.

#### 4.04 BUILDING IN

Build in all lintels, arch bars, brick ties, damp-proof courses, flashings and control joints in accordance with the Engineer's details and Manufacturer's instructions. Refer to 'Metalwork' for the requirements for lintels and arch bars.

Wrap lintels and arch bars in expanded mesh where they are to be plastered or rendered.

# 4.05 DAMP-PROOF COURSE

Unless otherwise specified or shown on the Drawings, build damp-proof courses into the following locations where applicable and in accordance with AS 1640, Section 2.3:

Walls adjoining infill floor slabs on membranes:

In course above underside of slab in internal walls and inner leaves of cavity walls.

Project 40mm and dress down over membrane turned up against wall.

Cavity walls built off slabs on ground:

In the bottom course of the outer leaf, continuos across cavity and up the inner face, turned 30mm into first course of the inner leaf above the slab. Project 10mm beyond external slab edge and turn down at 45 degrees.

Internal walls built off slabs on ground: In first course above floor level. Painted external walls: Second course above ground level in outer leaf.

Lay in long lengths to full width of walls and piers. Lap full width at angles and intersections and 150mm at joints. Step as necessary, but not exceeding 2 courses per step. Preserve continuity of damp proofing at junctions of damp proof courses and waterproof membranes.

## 4,06 FLASHINGS

Unless otherwise specified or shown on the Drawings, build flashings into the following locations where applicable and in accordance with AS 1640, Sections 2.3 & 3.7:

Under sills: 50mm into first joint below sill, extending up across cavity and under sill.

Over lintels to openings: Full width of outer leaf immediately above lintel, continuous across cavity, 50mm into inner leaf, two courses above.

Over Roofs: Full width of external masonry, stepped to roof slope. Turn down not less than 50mm over base flashing. Turn up within cavity, sloping inwards across cavity and fixed to or built into the inner leaf at least 75mm above.

At abutments with structural frames or supports: Vertical flashing in cavity from 150mm wide material, wedged and grouted into groove in frame opposite cavity.

#### **TANKING** 4.07

Supply and install to all locations noted or as required, a waterproof tanking membrane from an approved supplier installed in accordance with AS CA55. Following installation, protect the tanking membrane with a permanent protective boarding.

#### BEARING FOR CONCRETE SLABS 4.08

No concrete slab shall come into direct contact with supporting masonry. Finish top of masonry with a cement mortar bed to a steel-trowelled finish.

Provide a layer of graphite grease aluminium (separation strip) to full width of bearing surfaces all in accordance with the Engineer's details.

Where slabs bridge cavity walls lay 0.5mm thick gaivanised iron flashing over walls on one layer of graphite grease aluminium as before to bridge cavity. Fold iron to form 'V' shape drip into cavity. Lap 150mm at joins.

#### WEEP HOLES

Provide weep holes in the form of open perpends to external leaves of cavity walls in the course above damp-proof courses, flashings, and cavity fill, and at the bottom of unfilled cavities. The spacing of weep holes shall not exceed 1200mm.

## **SECTION 05 - STONE MASONRY**

# 5.01 EXTENT OF WORK

Provide all labour, materials, accessories and scaffolding necessary to carry out the works indicated on the drawings.

#### 5.02 WORKMANSHIP

01 Generally

Store the stone so it is protected from the weather and atmospheric pollution, clear of the ground on supports which do not overstress it.

Stonework shall be liable to rejection if damaged or disfigured during the course of work under this contract.

Perform the necessary cutting and shaping of stone to profiles as shown on the drawings, and including weathering, jointing, chasing, forming mortices, grooves and drilling for handling, fixing and the like. Work the bed, face and back joints of the stone square and true.

All stonework shall be carried out by competent and experienced tradesmen, using the best trade practice.

Build in as necessary all flashings, DPC's, reinforcements, arch bars, lintels, frames, straps, bolts, lugs, ties, metalwork, sills and the like.

Confer and co operate with other trades and cut openings, chases, mortices and the like for services and fixings.

Keep all beds true and level. Arises quoins, jambs, reveals and wall faces to be kept true and plumb.

#### 02 Standards

All stonework to comply with the relevant Australian Standards as before specified.

#### 5.03 MATERIALS

#### 01 Stone

Obtain stone from an approved source of supply. Provide satisfactory evidence that the source and supplier are capable of providing the stone of type, sizes, quantity and quality required.

The natural stone shall be of uniform quality, texture, and strength, sound and free from defects liable to affect its strength, appearance, durability, or proper functioning under the intended conditions of use, and subject to approval in accordance with the requirements of the Contract

Sandstone facings shall be a minimum of 50mm thick.

The wall areas, sills and parapets as shown on the drawings shall be first quality stone consistent with approved samples and to be approved by the Architect.

All stonework to be securely fixed to masonry walls with all necessary cramps, pins and epoxy grout.

Mortar
Mortar shall generally be weaker than the stone, free from shrinkage, cracks or materials which may cause staining. Mix shall be within the following limits:

1:1:6 and 1:1:9 cement: lime: and ,sand used as dry as is practicable.

# 5.04 ON COMPLETION

Cleaning
Keep the stone faces clean as work proceeds. Prevent mortar or jointing material from coming into contact with the external face of the stone. Clean down as necessary and leave stonework clean on completion. Perform the cleaning, including the removal of stains, without damage to the work.

On completion apply to the external stone surfaces, an approved anti-graffiti treatment which does not detract from the character of the finished product. Prepare a sample for approval and testing prior to application.

# SECTION 06 - STRUCTURAL STEELWORK & METALWORK

#### EXTENT OF WORK 6.01

Provide all metalwork and structural steelwork items indicated on the drawings and as summarised below, including all fabrication, fixings, surface treatment, delivery to site, hoisting and erection.

- Structural steel frames, beams, columns and trusses a)
- b) Lintels and arch bars.
- c) d) Floor finish angles.
- Aluminium windows and doors
- Steel handrails and balustrades. e)
- Steel covered Entrance and Walkway frames. f)
- Metal security fencing. Pre-finished metal skirting duct ģ) h)
- Metal louvres and shade grilles.

The Builder shall verify all dimensions by taking on-site measurements.

#### STRUCTURAL STEELWORK 6.02

#### Supply and Fabrication

The work consists of the supply and fabrication of all the steelwork shown on the Contract drawings and includes surface treatment, storage, delivery to the site, steel to steel connections and their fastenings, miscellaneous attachments and anchor bolts all in accordance with the Engineer's Drawings.

#### Erection

The work consists of the erection of all the steelwork shown on the Contract drawings and includes off loading, erection, field welding, high strength bolting, making steel fo steel connections, connection to anchor bolts, permanent grouting and repairs to surface.

#### 6.03 SHOP DRAWINGS

Before commencing fabrication, prepare shop drawings showing clear and complete details of each assembly, component and connection in the work together with all information relevant to their fabrication, surface treatment and erection. Verify that all members can be erected properly. Apply for instructions should a variation appear to be required.

Prepare shop drawings with reference to all relevant Contract Drawings and details. Take responsibility for conformity with the Drawings, as well as for dimensions, Before fabrication, correct and resubmit shop tolerances, and hole positions. drawings which are unsatisfactory.

6.04 STANDARDS

Further to clause "Australian Standards" in "PRELIMINARIES", the following is a summary of Standard Specifications and Codes applicable to this section of the work:

AS 1131 Dimensions of hot-rolled structural steel sections (metric units).

AS 1163 Welded and seamless steel hollow sections for general structural purposes.

AS 1204 Structural steels (ordinary weldable grades)(metric units).

AS 1227 General requirements for supply of hot-rolled steel plates, sections, piling and bars for structural purposes.

AS 1250 SAA Steel structures code

AS 1252 General grade high-strength bolts with associated nuts and washers for structural engineering (150 metric series)

AS 1511 High strength structural bolting code.

AS 1554 SAA code for welding in building.

AS 1627 Preparation and pre treatment of metal surfaces prior to protective coating.

AS 1650 Galvanised coatings on ferrous articles.

AS K211 Zinc chromate primers for structural steel.

#### 6.05 HANDLING AND STORAGE

Handle and store steelwork without overstress or deformation. Store steelwork clear of ground and in such a way that water does not lie on it. Supply bolts, nuts, and washers in grit-free containers and store in water-tight premises. Do not use burred, damaged, corroded or otherwise unserviceable bolts.

Steel shall arrive on site with the protective finish only, so as to permit inspection prior to decorative coats being applied. Take care during delivery, off-loading, stacking and erection so that workshop applied finishes are not damaged.

#### 6.06 WORKMANSHIP

Workmanship and finish shall be in accordance with Section 11 of AS 1250. Where work is exposed to view and forms part of the architectural treatment, give special attention to the finish. Shearing, flame cutting and chipping shall be done carefully and accurately; sharp corners and rough edges shall be faired by grinding or other approved means, and where noted on the Drawings, welds shall be made smooth to approval.

#### 6.07 FABRICATION

01 Generally

Do not commence fabrication of steelwork until the relevant shop drawings have been passed for use by the Architect & Engineer.

All fabrication shall conform to the requirements of AS1250 UOS.

Carry out all fabrication operations, including welding in the fabrication workshop. Clearly show on the drawings where site operations are necessary and where these apply place in positions of easy access. Locate site welds wherever possible in positions for down hand welding.

02 Cutting

The cutting of all members, plates, brackets and the like shall be in accordance with the requirements of AS1250.

03 Machined Surfaces

Where machined surfaces are specified these shall be accurately machined to the dimensions and tolerances shown and with a surface finish equal to or better than a CLA value of 250.

04 Drilling and Punching

Holes may be drilled or punched in material and members in accordance with AS 1250.

Holes for bolts, etc. shall not be made by gas or similar cutting processes, except for foundation bolts in slab bases.

05 Splices and Joints in Structural Members

All structural steel members shall be in single lengths, except as otherwise shown on the drawings.

All splices and joints, if and where shown, shall develop the full strength of the original section UOS.

<u>06 Column Splices - Matching and Alignment</u> Column splices shall be in accordance with AS 1250.

07 Accuracy of Fabrication

Fabrication tolerances shall be in accordance with AS1250.

08 Cambering of Members

Where cambering of members is required, carry out by a method permitted by the Architect and to the dimensions shown on the drawings or specified elsewhere.

09 Weights of Steelwork

Unless otherwise required the weight of steelwork for the purposes of this specification shall be the net theoretical weights of the steelwork, excluding weight adjustments for holes, chamfers, weld metal and the like.

6.08 MECHANICAL FASTENERS

These shall be in accordance with AS 1250.

WELDING 6.09

Manual welding and semi-automatic welding or automatic welding shall be in accordance with AS 1554 and AS1250.

**ERECTION** 

<u>6.10 ERECTION</u>
Carry out all erection of steelwork in accordance with the requirements of AS 1250 UOS.

All steelwork shall be properly bolted and braced at all stages during erection to ensure the safety of the structure and the maintenance of tolerances.

Provide adequate and safe scaffolding to allow inspection of steelwork.

## 6.11 SURFACE TREATMENT

General

Steelwork without surface treatment shall be free from all loose rust, loose mill scale, dirt, oil and grease. Clean down where necessary, generally by means of power wire brushes, chipping or scraping.

Priming

Thoroughly prepare all steelwork in accordance with the requirements of AS 1627, Part 4 Clause 1, UOS prime with Red Oxide Zinc Chromate (ROZC) paint corresponding to ASK211 Type 1 or 2 applied in accordance with Manufacturers recommendations.

Repair damage to surface treatment in a manner consistent with the specified surface treatment.

Galvanising

All exterior exposed steelwork, and or so nominated including columns with integral downpipes, shall be hot dip galvanised in accordance with AS 1650 and AS 2312.

All steel elements which are wholly within the building shall be primed with ROZC as previously specified. Elsewhere steelwork shall be primed with zinc silicate coatings as hereafter specified together with a selected finish paint coating.

Zinc Silicate Coatings

Prepare the surface in accordance with the Shot and Grit Blasting clauses of AS 1627.

Discuss the application of the zinc silicate coatings and other relevant matters with the manufacturer and/or applier prior to the preparation of the surface and the application of the coating is commenced and submit the proposals to the Architect for permission to use.

#### ALUMINIUM DOORS AND WINDOWS 6.12

Aluminium Doors and Windows Generally

Doors and windows shall be carried out by a firms or firms approved by the Architect. Windows and doors shall be glazed in accordance with the 'Glazing' section of this specification.

Unless otherwise specified, this specification and drawings describe performance requirements and not particular proprietary sections and accessories.

Dimensions and Tolerances

Dimensions of openings and spaces into which window and door units are to be installed, shall be determined on site by the Builder prior to the commencement of fabrication.

The following linear tolerances shall apply to the height and width of window and door frames and sashes.

for dimensions 2 metres and less +/- 2 mm

for dimensions greater than 2 metres +/- 4 mm

The difference between the two diagonal dimensions shall not exceed 6 mm.

Performance

Aluminium windows and sliding glass doors shall comply with AS 2047 and AS 2048 for

the appropriate sash type as shown on the drawings.

All new window units shall be designed for wind loads appropriate to applicable category specified by the Structural Engineer in accordance with AS 1170, part 2. The Ultimate design Wind pressure requirements will be 1.8 Kpa. The window subcontractor shall verify this terrain category prior to fabrication. Glass shall be as specified in Glazing but shall be as tabled in the Schedule of Finishes.

Fabrication and Assembly

Set out frames and sashes accurately and assemble square and true. Provide all necessary accessories and fixings for completion of the work.

Make joints by concealed mechanical connections sealed where necessary with a waterlight filler. No corner fixings shall be visible on exposed faces.

Cut-outs, recesses, morticing or milling required for hardware shall be accurately made and reinforced by backing plates where necessary for strength or fixing. All moving parts shall operate freely and smoothly without binding or sticking, at correct tensions or pressures.

**Erection and Fixing** 

Frames hall be plumb, square and level and their alignment and installed generally in accordance with AS 2048.

Flashinas and Weather Bars

Flashings and weather bars shall be compatible with other materials in the installation, and coated with a non-staining compound where necessary.

Door Assemblies

Aluminium door assemblies shall consist of suitable extruded aluminium alloy door and door frame sections fabricated into complete assemblies including all necessary hardware and fixing lugs for attachment to the building structure.

The assembly shall be weather-proof with self draining sill sections and non-skid surfaces where trafficable.

Glass thicknesses shall conform to the relevant parts of AS 1288 and the Building Code of Australia. The BCA shall take precedence. Door assemblies shall be weather stripped all round with resilient gaskets and pile strips as necessary.

Fit doors with approved pull handles and locks. Provide rubber buffers against back slam on frames.

#### **Finishes**

All exposed aluminium surfaces shall be finished with selected Dulux colour

"Powdercoated" polyester paint, minimum 50 microns thick.

# 6.13 FLOOR FINISH ANGLES

Supply and fix aluminium angles as before specified, at edge of tiling at doors. The angle shall be 3mm thick, minimum, fixed to sub-floor with stainless or non-ferrous screws.

#### 6.14 BALUSTRADES AND HANDRAILS (Refer PC Schedule)

<u>01 Generally</u> The whole of the balustrades and handrails shall be of steel, unless otherwise noted on the drawings, with joints neatly finished.

Finish shall be hot dipped galvanised after fabrication, and site welded assemblies to be ground smooth and treated with cold galvanising.

Provide all ramps, bends, stop ends, and the like, shown or required.

Pipe sizes specified are standard NB pipe sizes.

Expanding grouts shall not be used for grouting standards into core holes.

#### Stair Balustrades

All stair balustrades to comply with the BCA. Refer to drawings for setout and construction.

# 6.15 STEEL DOOR FRAMES

01 Generally

Supply and install steel door frames from an approved manufacturer in positions shown on the Drawings and as scheduled.

02 Materials

Internal frames shall be furniture quality steel sheet. External frames shall be galvanized steel sheet

03 Installation

Prior to installation, cut frames for fittings, hinges and furniture. Build frames into place and grout up solid in cement mortar.

## 6.16 SKIRTINGS

Refer to Schedule of Finishes for type of skirting to be used. Extent of skirting all as shown on the Drawings.

#### 6.17 PIPE GUARDS & GRATES

Provide and install guards and grates to sewerage and rainwater downpipes in the Carpark as necessary and in positions shown on the Drainage Drawings.

Fabricate out of 3mm thick sheet steel bent to shape and 900mm high. Form protective base 150mm square for downpipes and 200mm square for sewerage pipes with back edges bent out 40mm and drilled for fixings, unless noted otherwise on drawings.

# 6.18 WC FITTINGS (Refer PC Schedule)

Allow to fix the items as shown on the Drawings and listed in the PC Schedule.

# 6.18 WINDOW SUNSHADES (Refer PC Schedule)

Allow to install window sunshadeS where shown on the Drawings and listed in the PC Schedule.

# SECTION 07 CARPENTRY and JOINERY

#### 7.01 EXTENT OF WORK

Provide all labour and materials necessary for the completion of the work indicated on the drawings.

#### 7.02 STANDARDS

Materials and workmanship shall comply, where applicable, to the relevant standards of the Standards Association of Australia. Materials and workmanship may be rejected if they do not comply with the relevant standards.

The following standards shall apply in particular;

AS 1684 SAA Timber Framing Code AS 1720 SAA Timber Engineering Code

#### 7.03 STORAGE AND HANDLING

No timber or timber products shall be stored, transported or handled in such a manner as would damage or be detrimental to their satisfactory performance when installed and fabricated into the building.

Observe the precautions given in appendix C of AS 1684 and in particular the need to preserve the moisture content of unseasoned hardwood framing material, by block stacking and covering the ends of timber.

Hardwood elements which are to be painted shall be primed as soon as possible after delivery to site.

#### 7.04 TIMBER

01 Generally

Timber shall be straight, sound, free from significant defects including white ants, borer, sap pockets, shakes, loose knots, warp, twist, splits, decay, pith, fractures or bruises. Where timber is to be dressed it shall be quarter sawn and be the best clear grade of the species specified below.

Unseasoned hardwood framing shall be medium shrinkage or better (less than 8%) as defined in AS 1684.

02 Species and Grades

Stress grades for timber elements shall be generally as indicated on the drawings. If no stress grade is indicated, it shall be the grade normally used in the type of framing for which the timber is intended, but shall not be less than F5 for softwood or F8 for hardwood.

# 7.05 WORKMANSHIP

All carpentry work shall be of best trade practice, using competent tradesmen and with all incidental work to produce the finished product.

Arris all edges of visible work. Provide all necessary blocks, trimming joists and fastenings.

Each member shall not be spaced at centres exceeding those specified or indicated on the drawings.

Each dressed timber surface shall be finished smooth, even and free from machine marks, using machine and hand sanding.

End grain or all external timber shall be primed prior to fixing in place.

## 7.06 FASTENINGS

All nails and nailing shall conform to the recommendations of section 6,AS1684. Timber shall be drilled for fastenings where appropriate and where necessary to prevent splitting.

Nail length shall not be less than 2.5 times the thickness of the member the nail is being used to secure, all nails in visible work shall be punched.

All nailing and bolts to framing exposed to weather, shall be galvanised unless otherwise noted or specified.

#### 7.07 MDF BOARD

MDF Board shall comply with AS 1859 and be standard compressed grade for general use equal to Laminex.

# 7.09 HARDBOARD

Hardboard shall comply with AS 0114 and shall be 4.5mm thick unless otherwise specified or detailed.

#### 7.10 VENEERS

Veneers for decorative grade plywood and blockboard and for veneered particleboard and hardboard for clear finishes shall be selected type, finished to not less than a No. 3 abraded surface as specified in AS 1728.

#### 7.11 LAMINATED PLASTIC SHEET

Laminated plastic sheet shall be equal to Laminex and fixed in strict accordance with the Manufacturer's instructions and shall comply with AS K130.

#### 7.13 DOORS

01 Generally

Provide and hang doors and fit furniture and hardware as shown, specified and scheduled. Timber doors shall comply with AS 1908 and AS 1909 where applicable.

02 Flush Doors

Flush doors shall be solid core and comply with AS 1908, Section 4 or 5.

03 Fire Doors

Fire door assemblies shall consist of a door or doors and a frame complete with hardware and operating devices. (A doorset as defined in AS 1905)
The assembly will be of approved manufacture and certificates are to be furnished to the Architect stating the assembly complies fully with all statutory requirements.

<u>04</u> <u>Door Furniture</u> (Refer PC Schedule) Allow to fix all door furniture as specified and scheduled. Refer to PC Schedule for supply only allowance.

#### 7.14 ACCESS PANELS

Provide hinged access panels to service ducts where indicated and as required by the relevant authority.

# 7.15 KITCHEN FITMENT (Refer PC Schedule)

Provide and install all cupboards and benches as detailed on the drawings for the kitchen cupboard works. All finishes are as shown with colours to be selected. Allow to install all appliances, sinks and the like indicated and included in the PC Schedule.

# 7.16 VANITY FITMENTS

Provide and install all Tollet vanity cupboards and benches as detailed on the drawings. All finishes are as shown with colours to be selected. Allow to install all basins, indicated and included in the PC Schedule.

#### 7.17 PERGOLAS

Construct timber framed pergolas in positions shown on the drawings. Pergolas to be constructed from selected dressed timbers to sizes and details as shown on the drawings.

# 7.18 BUILT-IN JOINERY (Refer PC Schedule)

A PC allowance has been included in the PC Schedule for the supply and installation of all other built-in joinery items. The Builder will take full responsibility for the coordination of the delivery and installation of all joinery items when required on the site.

# 7.19 WEATHERBOARD CLADDING

Fix weatherboard cladding to new lift shaft masonry walls and Accessories Store walls as shown on the drawings. Profiles and finishes of weatherboards to match existing.

### SECTION 08 - ROOFING AND ROOF PLUMBING

### 8.01 EXTENT OF WORK

Provide all labour, materials and plant necessary for the work indicated on the drawings to complete the following:

Roof plumbing

#### 8.02 WORKMANSHIP

01 Generally

carry out the necessary operations for the satisfactory performance of the roof, including at junctions, trimming around penetrations, flashing and the like.

Protect the roofing materials and roofing system from damage throughout the work under contract and leave them clean and undamaged on completion. Ensure the rainwater systems are free of foreign matter and leave them unobstructed on completion.

Ensure on completion all roofs are weathertight.

02 Standards

Comply with the relevant standards of the Standards Association of Australia. AS 2049-1989, AS 2050-1989, AS 1170.2-1989, AS 1904-1976, AS 1903-1976

#### 8.03 ROOFING

#### .01 Metal Deck

Supply and fix custom orb corrugated roofing. Refer drawings and Schedule of Finishes for type and location of roof sheeting.

# 02 Fixing

All to be fixed in full accordance with the Manufacturer's recommendations for span requirements and instructions with particular reference to roof fixings to ensure noiseless movement under temperature changes.

#### 8.04 INSULATION

Install to the entire ceiling space immediately below the roofs an approved insulation material with an R Value not less than 2.0 m2 K/W equal to Bradford Fibertex Rockwool lightweight building blanket in accordance with the Manufacturer's instructions.

#### 8.05 SARKING

Fix an approved double sided anti-glare reflective foil sarking, overlapped a minimum 150mm at joins and festooned over rafters allowing a sag of not less than 25mm and not more than 65mm except at the eaves.

# 8.06 RAINWATER GOODS

01 Generally

Provide and install flashings, cappings, gutters, outlets, downpipes and the like necessary to complete the roof system, powder coated to match existing colours. All metal rainwater goods to AS 2179 and AS 2180.

# 02 Flashings

Flash all roof junctions, upstands, abutments and projections through the roof.

Prefabricate where possible. Form to required shapes. Notch, scribe, flute or dress down as necessary to follow profiles of adjacent surfaces. Mitre angles neatly. Lap joints in running lengths 150mm.

## 03 Gutters and Downpipes

Supply and fix eaves gutters, and the like as detailed, complete with all fixing brackets, stop ends ,flashings and spigots.

Supply and install downpipes in the locations indicated on the drawings, connected to the stormwater drainage system.

The entire roof water disposal system is to be fabricated from first quality steel of thicknesses suitable to their practical requirements.

### **SECTION 9 - WALL AND CEILING FINISHES**

#### 9.01 EXTENT OF WORK

Provide all labour, materials and scaffolding necessary to complete the work indicated on the drawings and as summarised below;

Cement render to external walls and columns. Cement render to internal walls and columns. New interior plasterboard linings to masonry walls. New plasterboard linings to ceilings.

#### 9.02 STANDARDS

The materials and workmanship shall comply with the relevant standards of the Standards Association of Australia, the Manufacturer's instructions and in particular the following;

AS 2185 Fibrous Plaster Products
AS 2588 Gypsum Plasterboard
AS 2589 The application of gypsum plasterboard in frameddwelling construction.
AS 2592 Gypsum Plaster for building purposes.

## 9.03 PLASTERBOARD LININGS

# 01 Generally

Masonry surfaces for plasterboard sheeting are to be firm, clean, dry and free from grease, dust, oil and the like.

Establish the basis of a true wall plane before commencing installation.

Suspended and set plasterboard ceilings are to be installed, including wet area ceilings to the extent indicated on the Drawings.

#### 02 Materials

Plasterboard to be fixed to masonry walls shall be 10mm thick, recessed edge, fixed using Gyprock masonry adhesive applied in accordance with the manufacturer's recommendations and AS 2588. A rating of 45 Rw must be achieved.

To wet area masonry walls fix Gyprock Aquacheck in accordance with the manufacture's instructions (CSR Gyprock Brochure No.548) AS 2588, AS 3740.

Joints shall be taped, set and sanded to a smooth finish.

#### 9.04 SUSPENDED CEILINGS

01 Generally

Supply and erect an approved proprietary suspended acoustic tile ceiling system, complete with exposed suspended supporting grid system.

Install in accordance with the manufacturer's instructions and AS 2785.

02 Materials

Set out the ceilings as indicated on the drawing sand installed in accordance with the manufacturer's instructions.

#### 9.05 CEMENT RENDER

01 Generally

Comply with all relevant Australian standards. Namely:

AS CA27, AS 1315, AS 1672, BS 405.

All work is to be carried out by competent tradesmen.

Carry out rendering under conditions which will not adversely affect the finished work. Complete rendering in sufficient time to enable subsequent finishes to be applied under proper conditions.

Apply each coat to the whole of each undivided area in one continuous operation. If joining up is unavoidable, make the junction so that it is invisible in the finished work.

Ensure finished surfaces are even, free from defects and true to the required surface. Fix metal lath where required in accordance with the manufacture's instructions.

Where multi-coat work is required, scratch comb each undercoat in two directions when it has stiffened enough to form a key.

Unless otherwise shown one coat work shall be nominally 13mm thick.

Provide a steel trowel finish to all rendered walls.

02 Extent

The location of areas to be rendered is shown on the Drawings and specified in the Schedule of Finishes.

Generally all external walls of the building that are not faced with sandstone shall be rendered.

Columns and the like requiring recesses or decorative work shall be multi-coat work all as shown on the Drawings.

Where walls are rendered the render shall extend a minimum 75mm above the soffit of ceilings and/or eaves linings.

#### 03 Materials

All materials shall be the best of their respective kinds.

Keep materials clean and dry.

Use proprietary materials in accordance with the recommendations of their manufacturer.

#### 04 Junction Details

Provide movement joints over movement joints in the background Before rendering ensure the background joint is filled with the specified jointing material. During rendering prevent the background joint being bridged by the render.

# 9.06 EXTERNAL COATING SYSTEM.

01 Coating Composition

The coating system shall be composed of an acrylic based pinhole and joint patching compound (as required) equal to GranoPatch, followed by a primer equal to GranoPrime followed by application in two coats of a preparation comprising 100% pure acrylic emulsions, titanium dioxide, concentrated anti-fungicides and highly durable pigments and fillers.

The whole system to be as the GranoImpact system applied in strict accordance with the manufacturer's instructions and by an approved applicator. Provide all warranties as required.

# <u>SECTION 10 - TILING AND FLOOR FINISHES</u> (Refer PC Schedule & Schedule of Finishes)

#### 10.01 EXTENT OF WORK

Provide all labour and materials to complete the works indicated on the drawings, hereafter specified, scheduled and summarised below;

- a) New wall and floor tiling to all new and existing Bathrooms to extent shown on the drawings.
- b) New selected flooring to areas as specified in the Schedule of Finishes and indicated on the drawings.
- c) New floor and wall tiling to existing Kitchen to extent shown on the drawings.

# 10.02 MATERIALS AND WORKMANSHIP

### 01 Materials

Materials shall conform to the relevant standards of the Standards Association of Australia, and as follows;

Sand To AS CA27

Cement To AS 1315, type A portland cement

Lime To AS 1672

Water Clean and drinkable

Vinyl flooring To AS 2055, selected colour.

#### 02 Workmanship

All tiling work shall be carried out by tradesmen.

Cut tiles neatly around fittings and at margins as necessary, drill holes without chipping and return tiles into reveals and openings. Butt up to frames, fittings and other finishes as indicated.

Set out tiles with straight even width joints in both directions, level and plumb, using only whole tiles at margins where practicable, and so that holes for fixtures and the like occur where possible at intersection of tile joints.

Any tiled area laid without straight, even joints, or out of plumb or level with adjacent tiles, may be rejected.

#### 10.03 WALL TILING

Wall tiling shall be to the extent shown on the drawings.

Wall tiles shall be bedded on an approved dry bed adhesive. Where brick walls are to be tiled they shall be rendered prior to tiling. Use proprietary edge trim at all exposed edges, installed in maximum lenghts.

Joints shall be grouted in white cement unless otherwise indicated, and thoroughly cleaned down on completion.

#### 10.04 FLOOR TILING

01 Generally

Floor tiles shall be selected semi glazed vitreous.

02 Flashings

Supply and install PVC or similar approved flashings, at the junction of floor and wall framing, to the perimeter of floor tiling. Bed the flashing the sub-base with adhesive recommended by the manufacturer. Likewise make all joints and junctions with floor wastes with adhesive recommended by the manufacturer

03 Mortar Beds

Floor tiles shall be bedded on cement mortar beds. Lightly dust the surface of the screeded mortar bed with dry cement and trowel level until the cement is damp. Alternatively spread a thin slurry of neat cement, or cement based thin bed adhesive, on to the tile back.

Mixing:\_To AS CA27, from cement and sand with minimum water. Proprietary admixtures may be used if approved. Do not use mortar after the set has begun.

<u>Thick mortar beds</u>: select proportions from the range 1:3 to 1:4 cement: sand. Thick mortar beds may be used with deviations up to 6mm, when tested with a 2 meter straight edge, and with tiles having deep keys or frogs.

<u>Thin mortar beds:</u> Select proportions from the range 1:1 to 1:2 cement: sand. Include an admixture of the rubber latex type. Thin mortar beds may be used when the background deviation does not exceed 2 mm, when tested with a 2 meter straight edge. the entire back of the tile shall be covered with adhesive when the tile is bedded.

Preparation: Wet the background as necessary to achieve suitable suction. Alternatively apply a bonding agent to the background to improve adhesion.

04 Falls and Levels

Grade floor tiling\_to even and correct falls to floor wastes. Make level junctions with walls.

Unless otherwise specified or indicated, maintain finished floor levels without step or break at changes of floor finishes, including carpet.

Deviation of the finished floor from its true form (plane, warped plane, camber and the like) shall not exceed 1:300.

05 Jointing

Grout up floor tiles with cement grout, mixed with fine sand in 1:1 proportion, using minimum water consistent with workability. Proprietary admixtures may be added. Fill the joints solid and tool flush. Clean off surplus grout and wash down when set. Polish the tile surface with a clean cloth on completion.

# SECTION 11 - GLAZING (Refer PC Schedule)

## 11.01 EXTENT OF WORK

- a) Window and door glazing
- b) Mirrors(PC)

#### 11.02 STANDARDS AND CODES

All materials and workmanship shall conform to the following standards:

AS 1170 SAA Loading Code, Part 2 AS 1288 SAA Glass Installation Code

AS 2208 Safety Glazing Materials for Use Buildings (human impact

considerations)

AS 2080 Safety Glass for Land Vehicles

### 11.03 GLASS AND GLAZING

Types and thicknesses of glass for external application shall be designed in conformity with AS1170 part 2 and be selected from AS 1288, section 2(rule 2.3) and Section 3.

Glass shall be installed using methods such that building movement resulting from wind or thermal effects are not transferred to the glass.

On completion of glazing work, replace any damaged glass, clean the glass by non-damaging methods, and leave the whole of the work in good condition.

#### 11.04 MIRRORS

Supply and install new mirrors to all bathrooms of selected sizes and as shown on the drawings.

Mirror glass shall be 6mm thick float of silvering quality, backed with a reflective surface of chrome silver and a coat of moisture sealer.

Edges shall be ground and arrised. Mirrors shall be drilled at each corner for fixing and with intermediate fixing points at not less than 600mm. Fix mirrors to timber background with dome head CP screws.

# **SECTION 12 - PAINTING WORK**

#### 12.01 EXTENT OF WORK

Provide all labour, materials scaffolding, drop sheets, ladders and planks necessary to complete the work.

All surfaces of the building, scheduled to be painted shall be finished with an appropriate coating system including all work and materials necessary to produce a high quality finish.

### 12.02 MATERIALS AND WORKMANSHIP

01 Generally

Materials and workmanship shall comply with the relevant standards of the Standards association of Australia, where not in conflict with this specification. The following standards shall apply in particular;

AS 2311 The painting of Buildings

AS 1580 Methods for test for paints, varnishes

and related materials

Paint shall be premium quality equal to Dulux.

Containers shall not be opened until required for use. Thoroughly stir paint and keep at a uniform consistency during application. Any thinning of primers or undercoats shall be to the manufacturer's specification.

No painting shall be executed during unsuitable weather, and all areas shall be adequately protected with drop sheets or other approved means.

All door furniture, plates, electrical switch plates and the like will be removed prior to painting. DO NOT MASK SUCH PLATES ETC AS A SUBSTITUTE FOR REMOVAL AND CUTTING IN BEHIND.

02 Colours

Colours shall be to future selection and shall be made from the manufacturers standard colours. No colour matching shall be done site unless otherwise authorised

Before commencing painting, provide in locations directed, 1.0 m2 samples of each colour finish specified over the appropriate undercoat.

# 12.03 SURFACE PREPARATION

01 New Woodwork

Interior woodwork shall be sanded down smooth\_and painted with an undercoat as hereafter specified.

Exterior woodwork shall be sanded down and primed on all surfaces with an oil based primer. Fill holes and other imperfections as for existing woodwork.

02 Plasterboard, Aquachek and FC Sheet.

Remove all plaster dust, fill any holes with gypsum based\_filler and sand down smooth.

03 Steelwork

Clean down to remove grease and surface oil, with mineral turpentine.

### 12.04 APPLICATION OF FINISH

# 01 External Finishes

Metal work other than copper

or pre-finished surfaces

1 coat etch primer, 1 coat undercoat 2 coats high

gloss enamel.

Timber work, trims etc.

1 coat primer, sealer, 2 coats gloss enamel. Selected

stain where nominated on the drawings.

Rendered masonry

1 coat sealer, 2 coats acrylic

Granosite to areas nominated applied in accordance with the Manufacturer's instructions and as previously

specified in Section 10.

#### 02 Internal Finishes

Plasterboard walls

and ceilings

1 coat acrylic sealer, 2 coats acrylic

Internal doors, architraves,

Skirtings , trims etc.

1 coat primer/sealer, 2 coats gloss enamel.

Line Marking

Paint line marking to Basement Carpark as shown on the Drawings, 50mm wide using 2 coats of white

pavement paint.

**Toilet Walls** 

To all wet area walls above the tile line, apply semi-

gloss acrylic paint of selected colours.

# **SECTION 13 - HYDRAULIC SERVICES**

## 13.01 EXTENT OF WORK

Provide all labour, materials, equipment and services necessary for the complete installation, testing and operation of hydraulic works, as indicated on the drawings and as specified by the Hydraulic Engineer under separate cover.

# 13.02 GENERALLY

All drainage, plumbing and water services shall comply with the regulations relevant supply authority, and shall be executed by a licensed plumber to the directions of the authorities inspectors.

Make good damage to pavements, paths and any existing services disturbed during the works.

An amount is allowed in the PC Schedule for the supply only of sanitary fittings, complete with matching brackets and accessories. The Builder shall allow for the taking delivery and installing the fittings in the locations indicated.

Provide all access panels to all ducts, inspection panels in walls and ceilings.

Cutting of holes in finished surfaces as required.

Sealing of wet floors to all floor wastes and the like, with an approved sealant.

# SECTION 14 - ELECTRICAL SERVICES (Refer to PC Schedule)

## 14.01 EXTENT OF WORK

Allow the sum nominated in the PC Schedule to complete all electrical works under this contract.

#### 14.02 WORKMANSHIP

All work shall be carried out by a licensed electrician and shall conform to SAA Wiring Rules, AS 3000.

The Builder shall allow for all required penetrations in walls, floors, finished surfaces and the like excluding core holes. Patch and make good following all electrical work.

#### 14.03 TESTS

The electrical installation shall be tested and passed by the supply authority. Any defects shall be made good by the Builder. All labour and material required for testing shall be provided by the Builder.

#### 14.04 NOTICES AND FEES

The Builder shall pay all fees, give all notices and obtain all permits.

#### 14.05 INSTALLATION

The lighting outlets and power outlets shall be installed to future detailing accordance with the Electrical Engineer's Drawings.

Wiring shall be concealed in stud walls, cavities or roof space and run in TPS cable. TPS cable alone shall not be used in any exposed location or where embedded in rendered masonry.

### 14.06 MAINS SUPPLY

Arrange with the supply authority for the location of consumer mains to the substation and switchboard location.

# <u>SECTION 15 MECHANICAL SERVICES</u> (Refer to PC Schedule)

# 15.01 GENERALLY

Allow the sum stated in the PC Schedule for the supply, installation and commissioning of air-conditioning and mechanical ventilation services.

#### 15.02 ASSOCIATED WORK

The Builder is to allow for the following:

- All penetrations for the passage of pipework, ductwork, wiring and the like, as
- Trimming openings in ceilings and walls for the installation of supply, return and b) relief air grilles.
- Construction of piers and/or plinths for all mechanical equipment. C)
- d) Supply and fixing of all external louvres as required.
- Fire rated bulkheads and shafts where required. e)
- f) Provision of all temporary lighting and power for installation of mechanical services.
- Fitting of door grilles where required.
- g) h) Flashings to all external penetrations.

# **SECTION 16 - FIRE SERVICES**

# 16.01 EXTENT OF WORK

Allow the sum stated in the PC Schedule for the supply, installation and commissioning of all fire services other than those included in the Hydraulic Services Section.

Allow to cut all necessary penetrations and the like as before specified in Electrical Services Section.

# SECTION 17 - EXTERNAL WORKS (Refer to PC Schedule)

#### 17.01 EXTENT OF WORK

Supply all labour and materials necessary to complete the works indicated on the drawings and as summarised below;

- a) External paving to paths & walkways. (PC supply only)
- b) Paving and sub-base to driveway.
- c) Surface drains, pits and grates.
- d) Brick garden walls to landscaped areas. (PC supply of bricks only)
- e) Filling in of existing swimming pool in accordance with Engineer's instructions.
- f) Landscaping

# 17.02 SERVICES

Co-ordinate with the drainage sub-contractor and electrical sub-contractor for temporary disconnection and relocation of existing services and the provision of new services and drains.

# 17.03 ROAD & PARKING PAVEMENTS

Take up and relay paved surface to existing entry road to same level as veranda.

# 17.04 EXTERNAL PAVING

Where indicated lay brick paving or equal on consolidated sand sub-base or reinforced concrete slabs to match existing.

Refer to drawings for extent of paving sub bases.

Form concrete kerb and gutter to the street frontage, to council detail, including layback and crossing. In addition construct concrete footpath as detailed.

#### 17.05 GARDEN WALLS

Provide all brick garden walls as shown on the landcsape drawing. Lay bricks in facework with header course to top of walls. Refer PC Schedules for face brick allowance.

#### 17.06 LANDSCAPING

The landscaping planting schedule is shown on the landscape plans. Tenderers shall allow for the preparation and installation of the complete landscaping.

Finish all exposed areas with 25mm bark and wood chip mulch.

Contractors shall submit with their Tenders a performance specification from the landscaping contractor for the following works to be allowed for :

- Sub soil drainage to planters
- Surface preparation
- Soil types to be used
- Plant sizes
- Watering system and control.

SECTION 18 SCHEDULES

01 SCHEDULE OF PC SUMS

# NOMINATED SUB-CONTRACT ALLOWANCES

All Installations will be performed by nominated sub-contractors. The monetary contracts noted below shall be managed by the DPM unless otherwise instructed. Payments will be made direct to sub-contractors and suppliers and retentions held on these contracts will remain with the Principal.(

NOTE: All amounts nominated below are nett allowances. The Builder is to allow for complete attendance, supervision & profit on these services in his tender price. No additional amounts for overhead and profit will be allowed.

**ITEM** 

**DESCRIPTION** 

**AMOUNT** 

1.0	BUILDING TEMS	
.01 .02 .03 .04 .05 .06 .07 .08 .09 .10	Electronic entry doors Security Fences & Gates Entry mat Handrails & Balustrades Site Signboard. Sanitary Fittings & Taps Door Furniture Kitchen Appliances Signage Built in Joinery Miscellaneous Fittings, Mirrors etc. Entrance Canopy, Front	
	SUB-TOTAL	\$
2.0	SUPPLY ONLY ITEMS	
2.0	SUPPLY CINLY HEIVIS	
.01 .02 .03	Toilet Wall and floor tiles External paving bricks Face bricks	

O2 DOOR SCHEDULE

To be read in conjunction with hardware schedule attached.

Door No. Finish Frame Type Leaf Size