

the certification group
enhancing building performance

25 February 2009

Pittwater Council
PO Box 882
Mona Vale NSW 1660

Dear Sir/Madam,

**Re Development Application No N0513/08
Our Construction Certificate No 109/2009
Premises 5 Forest Road, Warriewood**

Please find attached a copy of the following -

- Construction Certificate, stamped approved plans and relevant documentation
- Notice to Commence Building Work
- Appointment of a Principal Certifying Authority

In accordance with the regulations we have enclosed a cheque for the sum of \$30 00 for the submission of the Part 4A certificate

Should you have any further enquiries please do not hesitate to contact us and we will be pleased to assist you

**NB (Please forward receipt for the above \$30 00 fee to The Certification Group,
PO Box 870 Narrabeen NSW 2101)**

Yours faithfully,


Mark Wysman
The Certification Group

Rec-255259 R 28/2/09

28 MAR 2009

Unit 3/6 Wilmette Place Mona Vale NSW 2103 PO Box 870 Narrabeen NSW 2101

tel 9944 8222 fax 9944 6330 email info@certgroup.com.au www.certgroup.com.au abn 47 121 229 166 - trading as The Certification Group

Accredited Certifiers · Principal Certifying Authority (PCA) · Critical Stage Inspections · Local Council Consultant Services · Building Code & Planning Consultants

PLANS AND SPECIFICATIONS

The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with The Certification Group stamp

DRAWING NUMBER	DATE
Architectural Plan No Site plan No AWD-101 Rev DA (dated 11/04/2008) prepared by Architecture Interiors Project Management (dated 03/08/2008) Drawing 01 & 2 prepared by Sunshade Australia (dated June 2008)	See Adjoining dates

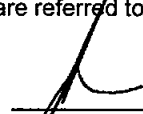
ATTACHMENTS

Structural Plan No S00 Rev A (dated 17/10/06 1140-S01 Rev A 1140-S02 Rev A 1140 S03 Rev A (dated 05/08/08)	See Adjoining dates
Shade fabric specification prepared by Halifax Vogel Group	February 2007
Form 2 – Geotechnical Risk Management prepared by Paul Stubbs & Todd Halliday	27 January 2009
Sydney Water Quick Check Stamp Property No 5338403	13 January 2009
Construction Certificate Application Form	13 January 2009

CERTIFICATE

I certify that work completed in accordance with documentation accompanying the application for this certificate (with such modifications as verified by the undersigned as may be shown on that documentation) will comply with the requirements of the Environmental Planning and Assessment Regulation as are referred to in section 81A(5) of the Environmental Planning and Assessment Act 1979

SIGNATURE



DATE OF ENDORSEMENT

25 February 2009

CERTIFICATE NO

109/2009

CERTIFYING AUTHORITY

Name of Certifying Authority
Name of Accredited Certifier
Registration No
Contact No
Address

THE CERTIFICATION GROUP
Mark Wysman
BPB 0449 – NSW Building Professionals Board
PH (02) 9944 8222 FAX (02) 9944 6330
PO BOX 870 NARRABEEN NSW 2101

DEVELOPMENT CONSENT

Council
Development Consent No
Date of Determination

Pittwater Council
N0513/08
8 December 2008

BUILDING CODE OF AUSTRALIA CLASSIFICATION

10a

industrial materials

Extrablock Datasheet

Description	Extrablock is designed for use in tension structures, sails, awnings & umbrellas Manufactured using 16 gauge monofilament and tape, Extrablock has high tensile strength and near equal elongation in warp, weft & bias directions ★ Fire Retardancy comes standard in Sunblaze, <u>Silver</u> , Forest Green & <u>True Blue</u> - colours nominated while all colors have exceptionally high UVR & UPF levels
Application	Tension Structures, Sails, Roofing, Awnings, Umbrellas
Weight	330gsm
Roll Width	3mtrs
Roll Length	32mtrs center folded and 50 & 32mtr layflat rolls
Colors:	Sunblaze, Cream, Beige, Silver, Forest Green & True Blue (Available soon Black, Charcoal & Latte)
Construction	16 Gauge Mono Yarn & Tape in HDPE
UVR Levels	Sunblaze 97 6, Cream 95 4, Beige 95 3, Silver 97 3, Forest Green 95 7, True Blue 97 1
UPF Levels	Sunblaze 41, Cream 21, Beige 21, Silver 37, Forest Green 23, True Blue 34
Shade Cover	Sunblaze 94 9, Cream 81 4, Beige 86 8, Silver 97 5, Forest Green 93, True Blue 94 5
★ FR AS1530 2.	<u>Flammability 1</u> , Spread Factor 0, Heat Factor 1
FR AS1530 3	Ignitability - 13, Spread of Flame - 7, Heat Evolved - 2, Smoke - 5
C F R:	Meets California Fire Marshalls requirements, Title 19, Section 1237
UV Warranty	10 Years
Burst Strength	Mean 3000 KPa, AS2001 2 4 -1990
Strip Tensile Test	Warp 18 kN/m, Weft 26 kN/m, ASTM D 4595-86
Tear Strength	Warp 200N, Weft 196N, ASTM D 1424
Elongation At Break	Warp 68%, Weft 58%, ASTM D 4595-86
Break Force. (Grab test)	Warp 979N, Weft 1228N, AS2001 2 3 2 - 2001

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APPROVED CONSTRUCTION CERTIFICATE
DOCUMENTATION

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DOCUMENTATION

Product Performance and Suitability All of the descriptive information and recommendations for use of this product shall only be used as a guide. Furnishing such information in no event constitute a warranty of any kind. Buyers shall independently test and determine the suitability of the material for the purpose for which it is intended. No one is authorized to give any warranty, guarantee or make any representation in addition or contrary to the above. (Feb 2007)



Halifax Vogel Group in Australia & New Zealand
 p 1300 558 892 (Australia wide) +61 (02) 9556 6000 (Outside Australia)
 f 1300 658 889 (Australia wide) +61 (02) 9556 6066 (Outside Australia)
 w www.halifaxvogel.com.au



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

Development Application for MATER MARIA COLLEGE
Name of Applicant
Address of site FOREST ROAD, WARPIEWOOD

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

I Todd Halliday on behalf of Dontrop Engineers
(insert name) (trading or company name)

on this the 27/1/09
(date)

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

Geotechnical Report Details


Report Title GEOTECHNICAL ASSESSMENT
Report Date 23 JUNE 2008 Report Ref No 154275L3-PT
Author MR L J SPEECHLEY

Structural Documents list

DRAWING No 500 REV A DATE 17/10/06, DRAWING No 1140-SC1 REV A
DATED 05/08/08, DRAWING No 1140 SC2 REV A DATED 05/08/08,
DRAWING No 1140 SC3 REV A DATED 05/08/08

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


Todd Halliday
(name)

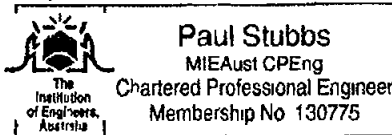

(signature)

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

We/I prepared and/or technically verified the abovementioned Geotechnical Report as per Form 1 dated 17/10/06 and now certify that I have viewed the above listed structural documents prepared for the same development 17/10/06 and satisfied that the recommendations given in the Geotechnical Report have been appropriately taken into account by the structural engineer in the preparation of these structural documents

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

Signature 
Name Paul Stubbs
Chartered Professional Status
Membership No



For and on behalf of Jeffery and Katauskas Pty Ltd

**SYDNEY WATER
APPROVED**

COUNCIL COPY

- 1 Position of structure in relation to Sydney Water's assets is satisfactory
- 2 Connections to Sydney Water sewer/water services may only be made following the issue of a permit to a licensed plumber/drainor
- 3 It is the owner's responsibility to ensure that all proposed fittings will drain to Sydney Water's sewer
- 4 Any Plumbing and/or Drainage Work to be carried out in accordance with the Sydney Water Act 1994, AS 3500 and the NSW Code of Practice
- 5 Gullies Inspection Shafts and Boundary Traps shall not be placed under any Roof, Balcony, Verandah, Pergola or other cover unless otherwise approved by Sydney Water
- 6 Property No 5338403

THE CERTIFICATION GROUP
APPROVED CONSTRUCTION CERTIFICATE
DOCUMENTATION

ARCHITECTURE
INTERIORS
PROJECT MANAGEMENT
HEALTH PLANNING

Per *Rebecca*
 07 3291 1511
 07 3291 1500
 Quick Check Agent on behalf of
SYDNEY WATER
 Tweed Heads
 Level 1
 40 Frances Street
 P.O. Box 285
 Tweed Heads NSW 2485

APPROVED DEVELOPMENT CONSENT PLANS

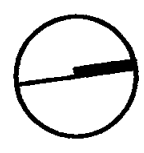
07 5536 6611
 07 5536 7174
 Sydney
 Level 3
 35 Spring Street
 Bondi Junction
 NSW 2022

NOTE - THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF

**MATER MARIA COLLEGE
FOREST ROAD, WARRIEWOOD
PROPOSED ADDITIONAL SHADE
STRUCTURES**

DRAWING TITLE PROJECT

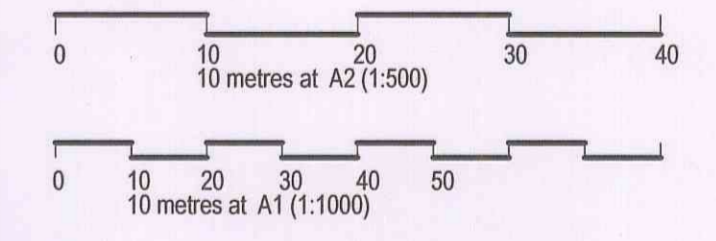
SITE PLAN



CHECKED	ARCHITECT	PARTNER
	GI	GI
SCALE	DRAWN	DATE
AS SHOWN	GI	03/08
PROJECT NUMBER	DRAWING NUMBER	REVISION
7002-WW-02C	AWD-101	DA

COPYRIGHT
 This drawing shows design features and elements of a design prepared by Fulton Trinder & Partners and is to be used only for work authorized in writing by the designers. It cannot be copied, directly or indirectly, in whole or in part, nor shall it be used for any other building purposes. Unauthorised use will be considered an infringement of these rights.

Figured dimensions take precedence over scale dimensions. Contractors must verify all dimensions on site before commencing any work or making shop drawings.



REV	DESCRIPTION	DATE	INT.
DA	Development Application	11/04/08	GI

THE CERTIFICATION GROUP
 CONSTRUCTION CERTIFICATE No. 109/2009
 Consent No. 109/2009 Date 25/12/2008
 Plans or documentation associated with the issue of the Construction Certificate
 Date 25/12/2008
 Mark Wysman Accreditation BFPB0449

ARCHITECTURE
 INTERIORS
 PROJECT MANAGEMENT
 HEALTH PLANNING

WARNING
 PLEASE NOTE: The stamping of this plan by The Certification Group does not relieve the Applicant's responsibility to obtain approval from Sydney Water or other Authority or utilities prior to commencement of any works.
DIAL BEFORE YOU DIG 1100

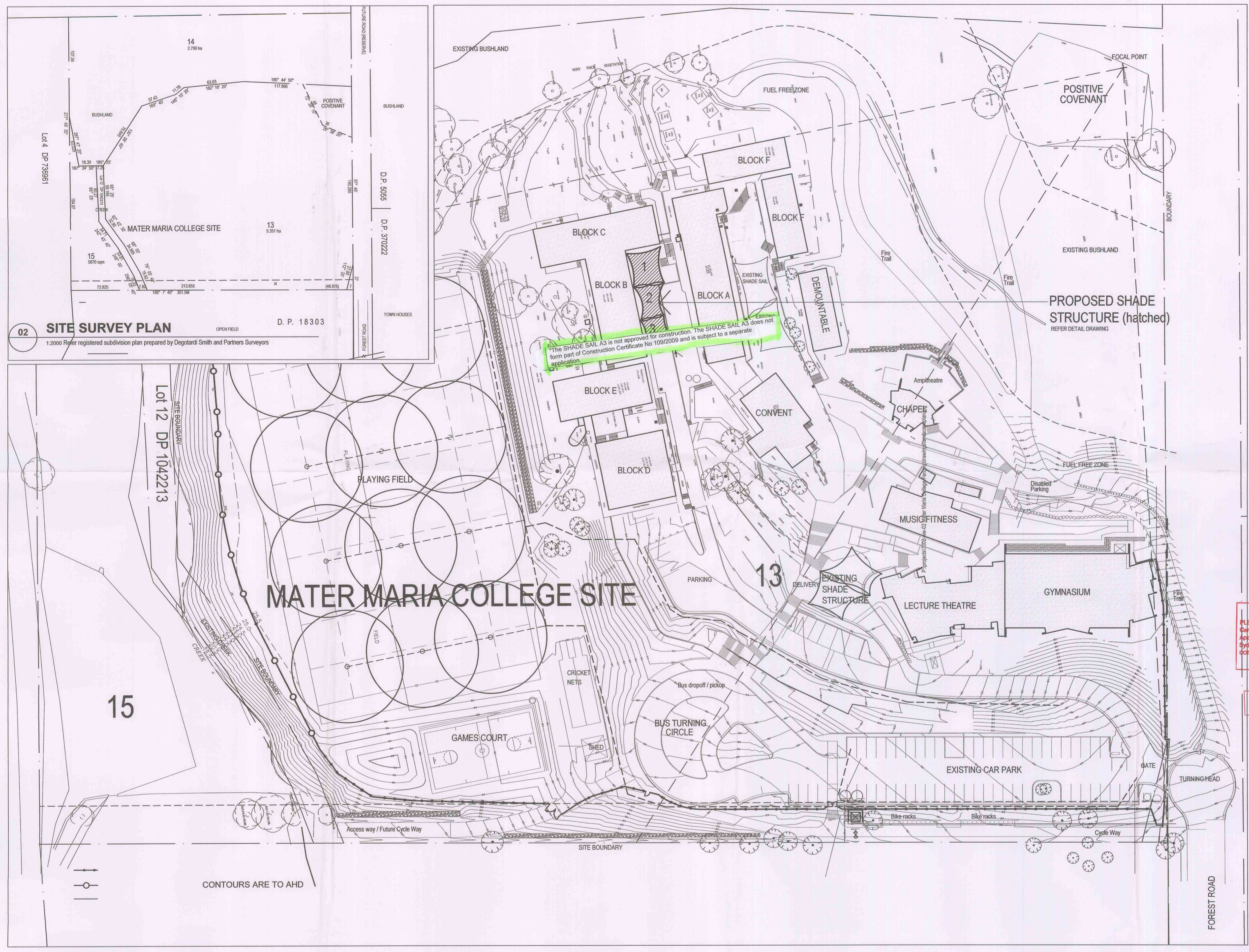
THE CERTIFICATION GROUP
 APPROVED CONSTRUCTION CERTIFICATE DOCUMENTATION.

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MATER MARIA COLLEGE
 FOREST ROAD, WARRIEWOOD
 PROPOSED ADDITIONAL SHADE STRUCTURES

SITE PLAN

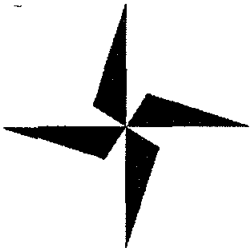
CHECKED	ARCHITECT	PARTNER
AS SHOWN	GI	GI
PROJECT NUMBER	DRAWN	DATE
7002-WW-02C	GI	03/08
DRAWING NUMBER	DRAWING NUMBER	REVISION
AWD-101		DA



02 SITE SURVEY PLAN
 1:2000 Refer registered subdivision plan prepared by Degotard Smith and Partners Surveyors

01 SITE PLAN
 1:500

CONTOURS ARE TO AHD



the certification group
enhancing building performance

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APPROVED CONSTRUCTION CERTIFICATE
DOCUMENTATION

APPLICATION FORM

Made under the Environmental Planning and Assessment Act 1979 Sections 81A(2)(4) 84A 85A & 109C
Environmental Planning and Assessment Regulation 2000 clauses 126 139 and 149
To complete this form please place a cross in the boxes and fill out the white sections as appropriate

Application Sought

- Complying Development Certificate Construction Certificate
 Occupation Certificate Principal Certifying Authority

Office Use Only
cc 109/2009
Job WHN13-09

Subject Land

Address 5 FOREST ROAD WARRIEWOOD

Lot No DP SP voll/fol Etc 12 1042213

Details of the applicant

Name /Company MATER MARIA CATHOLIC COLLEGE Contact Person MARK SUTERS

Postal Address 5 FOREST ROAD WARRIEWOOD Postcode NSW 2102 State NSW

E mail mark.suters@dbb.edu.au Daytime telephone 9997 7044

Fax 02 9997 7044 Mobile 0404 875190

Applicant Signature _____

Date _____

Consent of Owner(s)

I/We as the owner/s of the above property authorise for Mark Wysman to provide Construction Certification and to act as the Principal Certifying Authority for the subject building works including site inspections and to lodge the Notice of Commencement / Appointment of the Principal Certifying Authority with the relevant Council

Name(s)/ Company MATER MARIA CATHOLIC COLLEGE

Address 5 FOREST ROAD WARRIEWOOD Postcode NSW State 2102

Phone No 02 9997 7044 Mobile _____ Fax 02 9997 6042

Signature of Registered owner(s) Company stamp or seal to be affixed if applicable

Mark Wysman

Date 13/1/2009



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Description of the work proposed

Type of work proposed

New Building Additions / Alterations

Class of Building under Building Code of Australia 10a

Description of the work SHADE STRUCTURE

Construction Cost of Works \$ 15K

Details of Builder

Contact Person SMASHADE AUSTRALIA

Name /Company DOC LAWSON

Fax 02 9974 4580 Mobile 0416 221 078

Daytime telephone 02 9974 5019 Email _____

Builders address PO BOX 287 AVALON NSW 2107 Postcode _____

Details of the relevant Development Consent granted

Consent No DA N0513/08 Date the consent was granted 8/12/2008

Applicant Checklist

- Complete Application Form – Pages 1 & 2
- Attach supporting documentation as nominated on Page 3
- Complete statistical Return on Page 4

Private Policy

The information you provide in this notice is required under the Environmental Planning and Assessment Act 1979 if you are going to erect a building. If you do not provide the information to the consent authority you cannot commence the work. The information will be held by the consent authority and by the council (if the council is not the consent authority). Please contact the certification group if the information you have provided in this notice is incorrect or changes.

Date of receipt (To be completed by Certifying Authority)

Date 20-2-2009



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APPROVED CONSTRUCTION CERTIFICATE
DOCUMENTATION

STATISTICAL RETURN FOR AUSTRALIAN BUREAU OF STATISTICS

What is the site area of land? Area in square meters 5.6h

Gross floor area of existing building? If no existing building, write NIL. Area in square meters _____

What is the existing building or site used for at present? Main Uses Education

Other Uses _____

Does the site contain dual occupancy? Yes No

Gross floor area of proposed building? In square meters 20m²

What will the proposed building be used for? Main Uses shade structure

Other Uses _____

How many dwellings? one

Are pre-existing at this property? Dwellings NO

Are proposed to be demolished? Dwellings NO

Are proposed to be constructed? Dwellings YES

Are attached to an existing building? Dwellings NO

Are attached to a new building? Dwellings NO

How many storeys will the building consist of? Storeys single

What are the main building materials? (Please tick appropriate boxes)

WALLS

- Full Brick
 Brick Veneer
 Concrete or Stone
 Steel
 Fibrous Cement
 Timber/weather board
 Cladding aluminium
 Curtain glass
 Other
 Unknown

ROOF

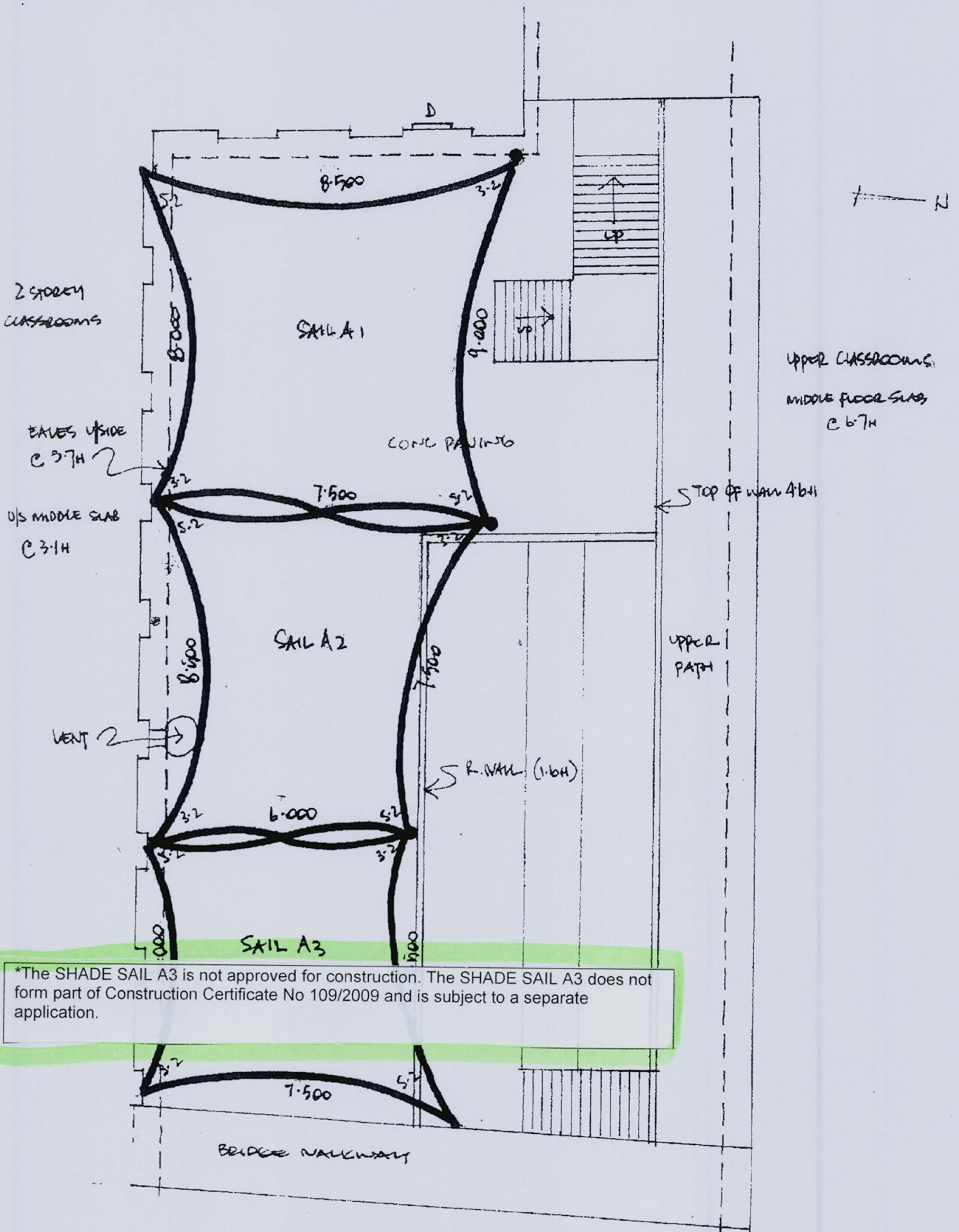
- Aluminium
 Concrete or Slate
 Tile
 Fibrous Cement
 Steel
 Other
 Unknown

FLOOR

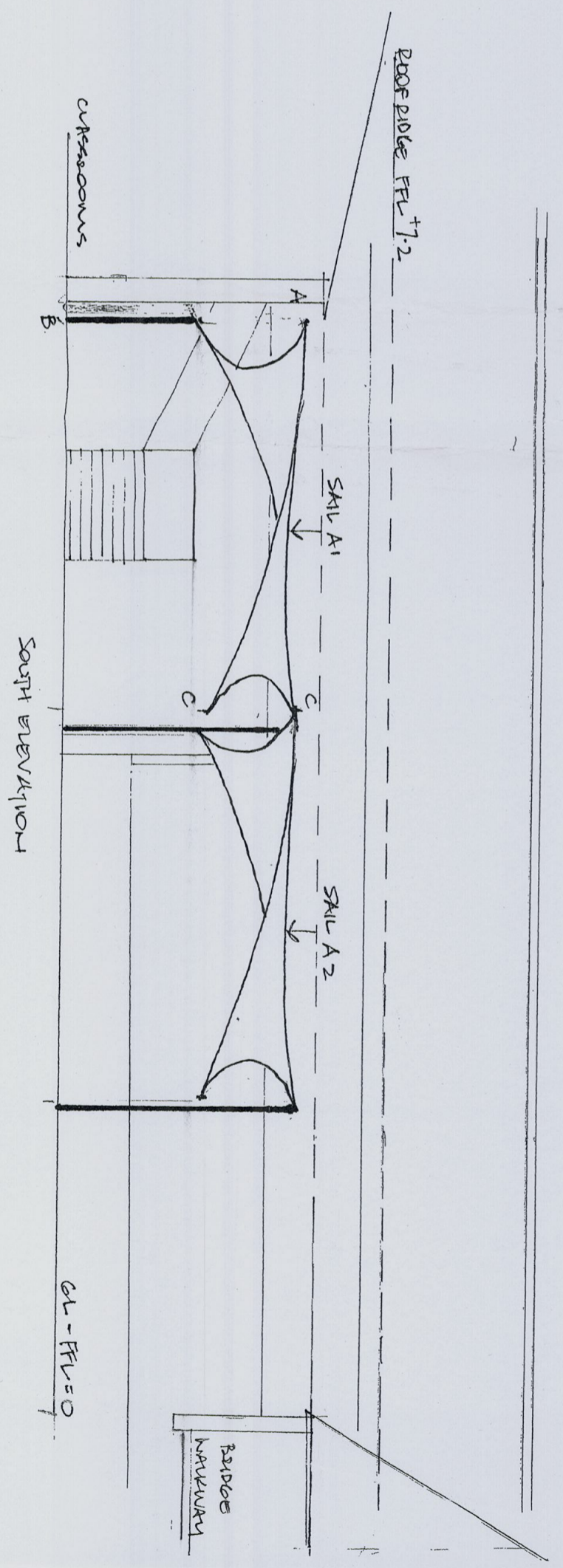
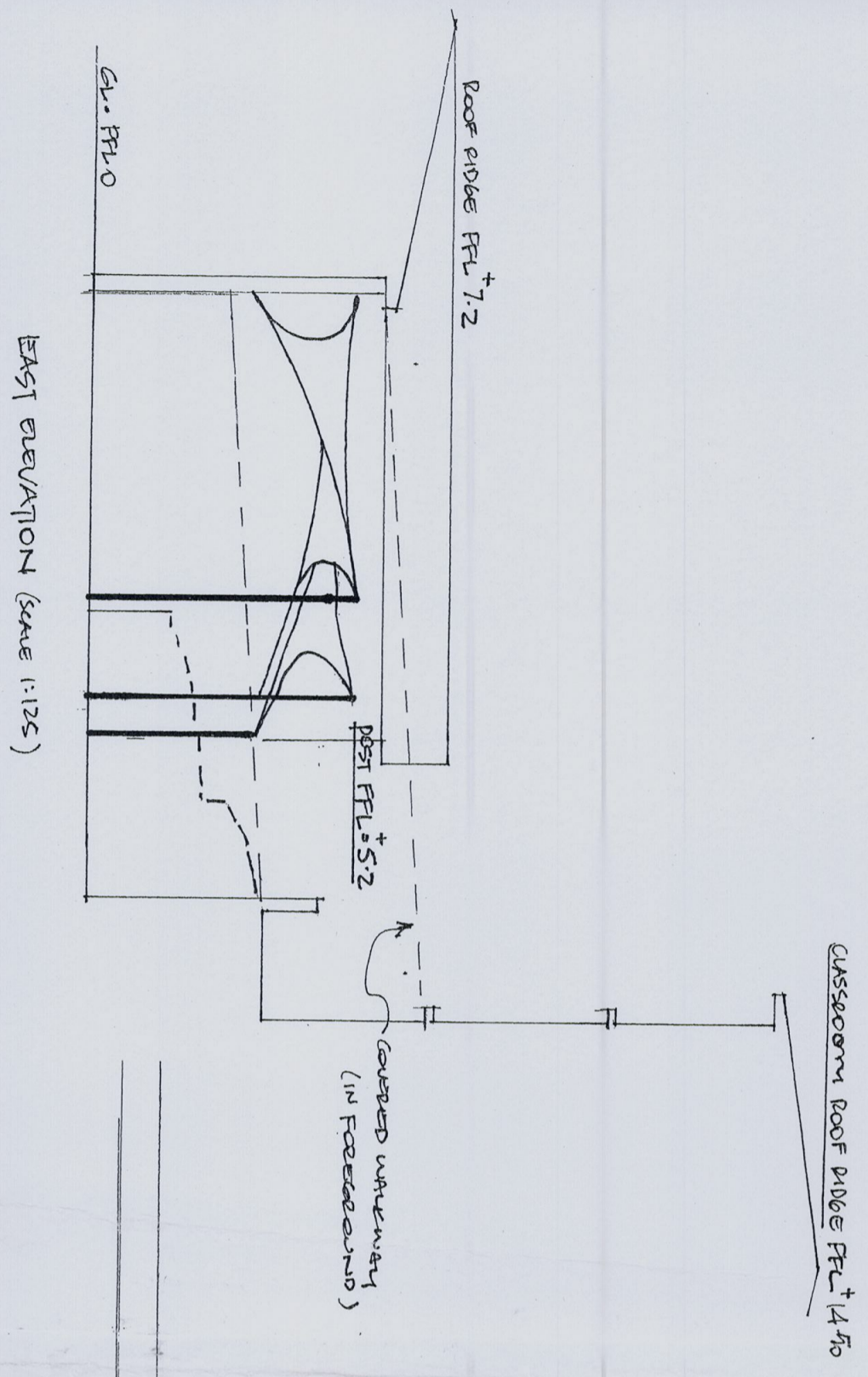
- Concrete or slate
 Timber
 Other
 Unknown

FRAME

- Timber
 Steel
 Aluminium
 Other
 Unknown



*The SHADE SAIL A3 is not approved for construction. The SHADE SAIL A3 does not form part of Construction Certificate No 109/2009 and is subject to a separate application.



WATER W/PLA COVERED . 5 FOREST ED WOODENWOOD
PROPOSED STAIRS GALLS . SANITOD REV. AREA
ELEVATIONS

SUNSHADE AUSTRALIA @ JUNE 08 SCALE 1:125
P 1300764481 F 1300764485 DWG#4

SUN SHADE AUSTRALIA

CONSTRUCTION ISSUE

GENERAL

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH SPECIFICATIONS AND OTHER CONSULTANTS DRAWINGS
- G2 ALL DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK
- G3 DO NOT SCALE DRAWINGS
- G4 ALL WORKMANSHIP TESTING MATERIALS AND SUPERVISION ARE TO BE IN ACCORDANCE WITH THESE SPECIFICATIONS THE OCCUPATIONAL HEALTH AND SAFETY ACT 1985 ENFORCED BY THE WORKCOVER AUTHORITY AND CURRENT RELEVANT AUSTRALIAN STANDARDS
- G5 PROPRIETARY ITEMS SPECIFIED SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS DO NOT VARY SPECIFIED PROPRIETARY PRODUCTS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER
- G6 UNLESS OTHERWISE SPECIFIED FOR SPECIFIC INSTANCES IN THE DESIGN DRAWINGS THE ARRANGEMENT DESIGN AND INSTALLATION OF TEMPORARY WORKS REMAINS THE RESPONSIBILITY OF THE CONTRACTOR (THE CONSULTING ENGINEER HAS DESIGNED THE PERMANENT STRUCTURE)
- G7 TEMPORARY BRACING AND SUPPORT OF STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MAINTAINED DURING ALL STAGES OF CONSTRUCTION
- G8 THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH S4 CODES REFER TO INDIVIDUAL SITE DRAWINGS FOR WIND LOADING DESIGN CRITERIA

FOUNDATIONS

- F1 UNLESS NOTED OTHERWISE THE FOUNDATIONS HAVE BEEN DESIGNED ON THE BASIS OF 300mm MAXIMUM OF TOP SOIL UNDERLAY BY STIFF CLAY WITH AN ALLOWABLE BEARING PRESSURE OF 150 kPa
- F2 A RISE OF 1m AND A RUN OF 1.5m SHALL NOT BE EXCEEDED FOR THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS
- F3 FOOTINGS SHALL BE LOCATED CENTRALLY UNDER POSTS UNLESS NOTED OTHERWISE
- F4 WHERE ADDITIONAL EXAMINATION IS REQUIRED DUE TO UNSATISFACTORY FOUNDATION MATERIAL POUR 100MPa MASS CONCRETE TO THE UNDERSIDE OF FOOTINGS
- F5 ENSURE THAT THE STABILITY OF ADJACENT BUILDINGS IS MAINTAINED DURING ALL STAGES OF CONSTRUCTION

CHEMICAL ANCHORS

- C401 UNLESS NOTED OTHERWISE CHEMISTS SPECIFIED IN THESE DRAWINGS REFER TO BUNSET CHEMSET INJECTION 801 (GALVANISED)
- C402 ALTERNATIVE CHEMICAL ANCHORS MAY BE SUBSTITUTED WITH PRIOR PERMISSION FROM THE SUPERINTENDENT
- C403 MINIMUM EDGE DISTANCE AND SPACING SETOUT OF THE ANCHORS ARE SPECIFIED ON THESE DRAWINGS IF THE INSTALLED DISTANCES ARE LESS THAN THAT SPECIFIED NOTIFY THE SUPERINTENDENT FOR INSTRUCTION
- C404 CHEMICAL ANCHORS ARE TO BE STRICTLY INSTALLED TO MANUFACTURERS INSTALLATION PROCEDURE
- C405 DIAMETER OF HOLES TO MANUFACTURERS SPECIFICATION FOR NOMINATED EOT/BAR DIAMETER DRILL HOLES USING A ROTARY PERCUSSION DRILL DO NOT CORE DRILL HOLES
- C406 CLEAN AND DEBRASS BOLTS/BARS PRIOR TO INSTALLATION
- C407 ENSURE CHEMICAL IS ALLOWED TO FULLY CURE IN ACCORDANCE WITH MANUFACTURER'S DETAILS PRIOR TO LOADING BOLTS/BARS

STEELWORK

- S1 FABRICATE AND ERECT STRUCTURAL STEELWORK IN ACCORDANCE WITH AS4100
- S2 PROVIDE HOLES CLEATS AND FRAMING FOR TIMBER FRAMING FINISHES ETC SHOWN ON ARCHITECTURAL DRAWINGS
- S3 ALL BOLTS SPRINGS HOLD DOWN BOLTS MASONRY ANCHORS SHALL BE HOT DIP GALVANISED TO AS1214
- S4 MINIMUM TILD STRESS
 - HOT ROLLED SECTIONS = 350MPa
 - SQUARE HOLLOW SECTIONS = 350MPa
 - RECTANGULAR HOLLOW SECTIONS = 350MPa
 - CIRCULAR HOLLOW SECTION = 350MPa
- S5 SURFACE TREATMENT UNLESS NOTED OTHERWISE
 - PROTECTED FROM WEATHER - CLASS 1 CLEAN (MECHANICAL BRUSH ONLY) APPLY 50 MICRONS OF AUTO PRIMER (SP1-A IN AS/NZS2312)
 - EXPOSED TO WEATHER - LPI L23 L24 L25 L26 G2P OR GZSELF FINISH TO AS/NZS2312
 - CONTRACTOR TO PROVIDE DETAILS OF THE SELECTED PAINT SYSTEM
 - BUILT INTO AN EXTERNAL MASONRY WALL - CLASS 2.5 BLAST CLEAN FOLLOWED BY 70 MICRONS OF INORGANIC ZINC SLUDGE WP1-A AS/NZS 2312 OR GALVANISED WITH MINIMUM COAT OF 600g/sq m
 - IF GALVANISING IS THE FINISHED COATING ADD
 - SELF FINISH REFERS TO THE STANDARD OF GALVANISING FINISH REQUIRED WHEN AESTHETIC APPEARANCE IS NEEDED IT IS ADDITIONAL TO THE STANDARD OF FINISH REFERRED TO IN AS/NZS 4680:1999 FOR THE PURPOSES OF DECORATIVE USE THIS SPECIFICATION SHALL BE PROVIDED TO THE CONTRACTOR PRIOR TO COMMENCEMENT OF GALVANISING
 - THE SURFACE FINISH OF THE COATING SHALL BE FREE FROM RINS DIPS SPICES UNEVEN SURFACES AND ROUGHNESS THE COATING THICKNESS SHALL BE UNIFORM WITH A MAXIMUM DEVIATION OF +/- 10% FROM THE COATING THICKNESS NOMINATED IN AS/NZS 4680:1999 THE APPEARANCE AND SURFACE CONDITION OF THE COATING SHALL TAKE ACCOUNT OF THE NEED FOR VISIBLE UNIFORMITY AND BE ABLE TO COPE WITH HANDLING AND PHYSICAL CONTACT IN PUBLIC AREAS
 - DAMAGE TO THE COATING THAT DOES NOT EXCEED 0.2sq m MAY BE REPAIRED USING A ZINC STICK IN ACCORDANCE WITH AS/NZS 4680:1999 WITHIN 48HRS COMPONENTS CONTAINING AREAS OF DAMAGE EXCEEDING 0.2sq m SHALL BE STRIPPED AND REGALVANISED NOTE REPAIR USING ZINC RICH PAINT IS NOT ACCEPTABLE
 - SPECIAL NOTE STEEL USED SHALL CONTAIN BETWEEN 0.15 AND 0.22 PERCENT SILICON AND A MAXIMUM OF 0.05 PERCENT PHOSPHORUS TEST CERTIFICATES SHALL BE SUBMITTED TO VERIFY THIS BEFORE FABRICATION
 - S6 BOLT SYMBOLS
 - 8/5 - SLUG FIT
 - 8/8/TF - FULLY TENSIONED FRACTION TYPE (USE LOAD INDICATOR WASHERS)
 - 8/8/7B - FULLY TENSIONED BEARING TYPE (USE LOAD INDICATOR WASHERS)
 - S7 HIGH STRENGTH BOLTS (8/8) ARE NOT TO BE WELDED
 - S8 UNLESS NOTED OTHERWISE USE
 - 10mm GUSSET FIN AND END PLATES
 - M16 8/8/5 BOLTS
 - 6mm CONTINUOUS FILLET WELDS MADE WITH EA818 MILD STEEL ELECTRODES
 - ALL WELDS SP CATEGORY

CONCRETE

- C1 CARRY OUT ALL CONCRETE WORK IN ACCORDANCE WITH AS3600 AND NATSPEC CONCRETE STANDARDS
- C2 CONCRETE SHALL OBTAIN A COMPRESSIVE STRENGTH OF 20 MPa AFTER 28 DAYS
 - MAXIMUM AGGREGATE SIZE = 20mm U.N.O
 - SLUMP = 80mm
- C3 HOLD DOWN BOLTS SHALL BE HOT DIPPED GALVANISED
- C4 UNO CLEAR CONCRETE COVERS SHALL BE
 - MEMBERS IN DIRECT CONTACT WITH THE GROUND
 - COVER 50mm
 - MEMBERS SEPARATED FROM GROUND BY MEMBRANE
 - COVER 30mm
 - MEMBERS IN EXTERIOR ENVIRONMENTS
 - COVER 40mm
- C5 REINFORCEMENT SYMBOLS
 - S = STRUCTURAL GRADE PLAIN ROUND BAR TO AS1302 (250MPa/0.04P
 - N = HOT ROLLED DEFORMED BAR TO AS/NZS 4671 (500MPa)
 - SL = LOW DUCTILITY SQUARE MESH (500 MPa)
 - RL = LOW DUCTILITY RECTANGULAR MESH (500 MPa)
 - L = LOW DUCTILITY TRENCH MESH (500 MPa)
- THE NUMBER FOLLOWING THE SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES
- CLASS L REINFORCEMENT SHALL NOT BE USED UNO
- C6 MINIMUM CONCRETE COVER TO STEEL POSTS IN FOOTINGS SHALL BE 100mm

WARNING

PLEASE NOTE: A comprehensive check of the Structural Design has not been carried out. The stamping of this STRUCTURAL PLAN by The Certification Group does not relieve the Structural Engineers responsibility to certify the structural adequacy of this development including any variations that may occur during construction.

THE CERTIFICATION GROUP
APPROVED CONSTRUCTION CERTIFICATE
DOCUMENTATION.

COUNCIL COPY

DRAWN A Sarkiss DESIGNER M D Ursd JOB MANAGER T Halliday JOB VERIFIER T H

ISSUE	AMENDMENT	DATE	VERIFIED	APPROVED
A	For Construction	17-10-06	TH	TH

Todd Halliday
Structural Engineer
BE ME Studios MIEAust CPENG NFER 975270

(Signature)
Nednors Digital Signature

NORTHROP CONSULTING ENGINEERS
GRAWFTON ROAD STORE
50 HEDSON ROAD
F.O. BOX 4971
AUSTRALIA
Sydney, New South Wales 2151
Telephone: (02) 8241 4188
Facsimile: (02) 8241 4254
Email: info@northrop.com.au

AUSTALIA
14 DE 5912 5015 FAX 9974 6580
14 DE 5912 5015 FAX 9974 6580
14 DE 5912 5015 FAX 9974 6580

PROJECT
**SUNSHADE AUSTRALIA
STRUCTURES**

DRAWING TITLE
STRUCTURAL NOTES

JOB NUMBER
06444

DRAWING NO
S00

DATE
Oct 06

REV
A

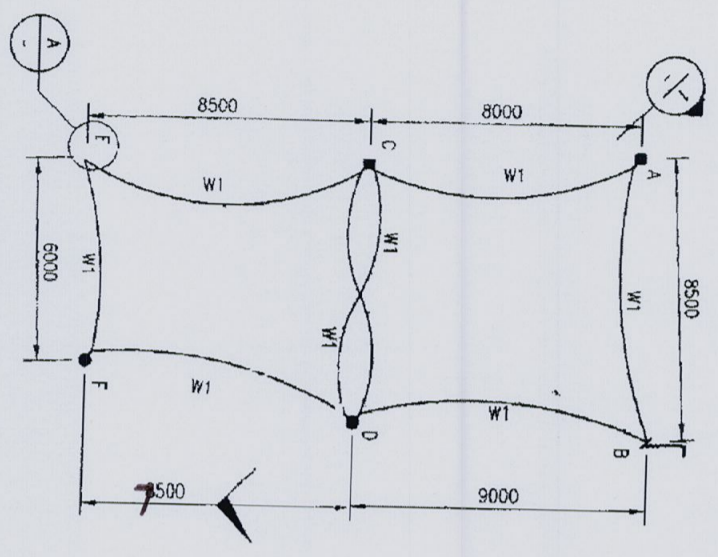
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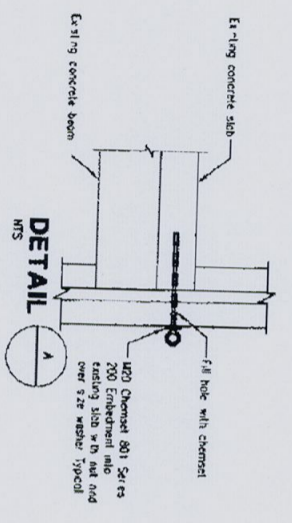
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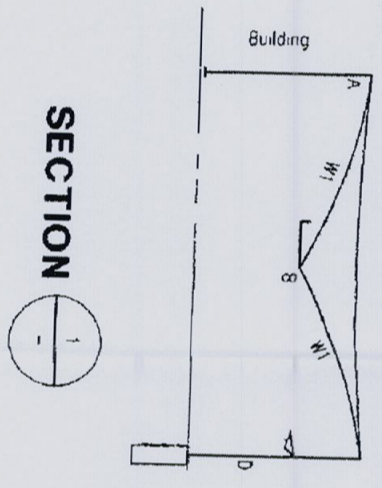
DRAWN SSZABATH DESIGNER SSZabath JOB MANAGER T Halliday JOB VERIFIER TH



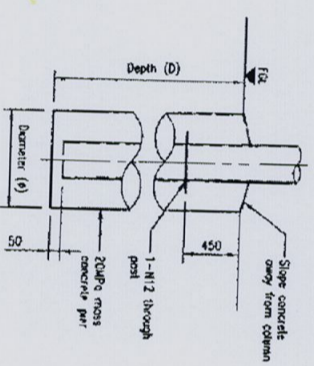
PLAN



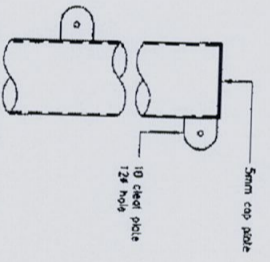
DETAIL



SECTION



TYPICAL FOOTING DETAIL



TYPICAL SAIL CLEAT TO POST DETAIL

MEMBER SCHEDULE			
MARK	HEIGHT	MEMBER	COMMENTS
POSTS			
A	5200	150 x 150 x 5.0 SHS	REFER TO DETAILS ON DRAWINGS S02
B	3200	Bracket out of 150 PFC	REFER TO DETAIL ON DRAWING S03
C	5200	150 x 150 x 5.0 SHS	REFER TO DETAILS ON DRAWING S03
D	5200	219.1 x 4.8 CHS	REFER TO TYPICAL FOOTING DETAIL
E	3200	EYE BOLT	REFER TO DETAIL A
F	5200	168.3 x 4.8 CHS	REFER TO TYPICAL FOOTING DETAIL
WIRCS		8mm GR2070	

- NOTES**
- This drawing is to be read in conjunction with 06444 S00
 - Basic Criteria
Wind Classification (AS4055) - N1
U.L.S. Design Wind Speed - 34m/s
Region - A
 - Assumed Foundation Conditions
Terrain Category - IC3
Soil Class - SH1
Clay
150kPa dipmode Bearing Capacity
300mm Topsoil

ISSUE	AMENDMENT	DATE	VERIFIED APPROVED
A	ISSUED FOR CONSTRUCTION	05.08.08	TH

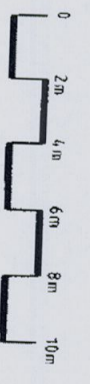
NORTHROP CONSULTING ENGINEERS
GRATON ROAD STORE
SCHEPERS ROAD
11, PO BOX 100
FRENCH CREEK QLD 4212
Phone: 07 5524 4324
Fax: 5524 4324

SUNSHINE
14-16 SPYGLASS ROAD
MOUNTAIN VIEW QLD 4212
Phone: 5524 4324
Fax: 5524 4324

PROJECT

MATER MARIA COLLEGE
5 FOREST RD,
WARRIEWOOD

Registered Professional Engineer 975270
Mr Todd Halliday
MIEAust CPENG
Signature: [Signature]
Date: 7/8/08
N P E R
Registered for the NPSM in the area of practice of Structural
National Professional Engineers Register



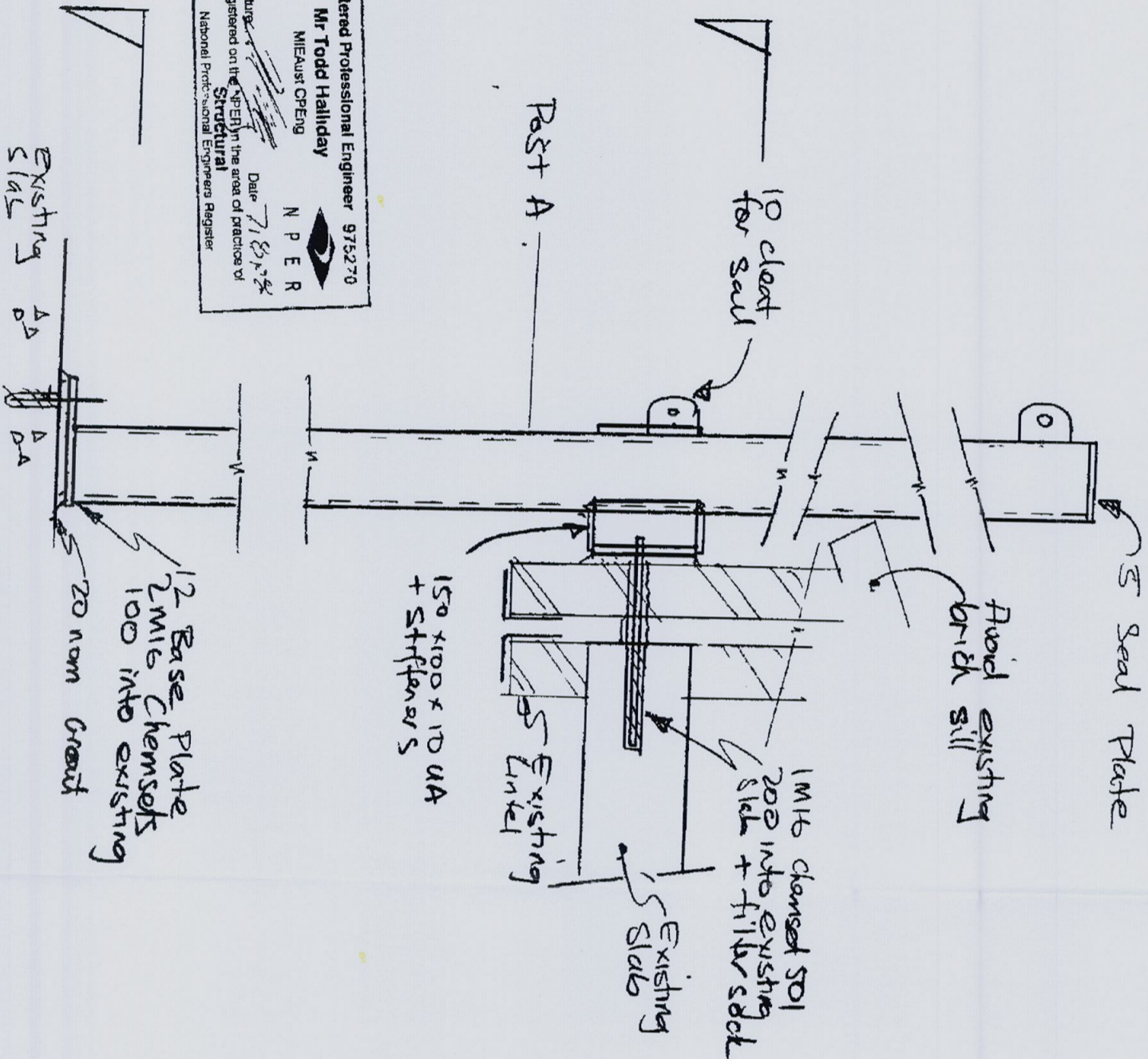
DRAWING TITLE
STRUCTURAL NOTES,
PLAN, DETAILS AND
ELEVATIONS

JOB NUMBER
06444
DRAWING NUMBER
1140-S01
REV
A

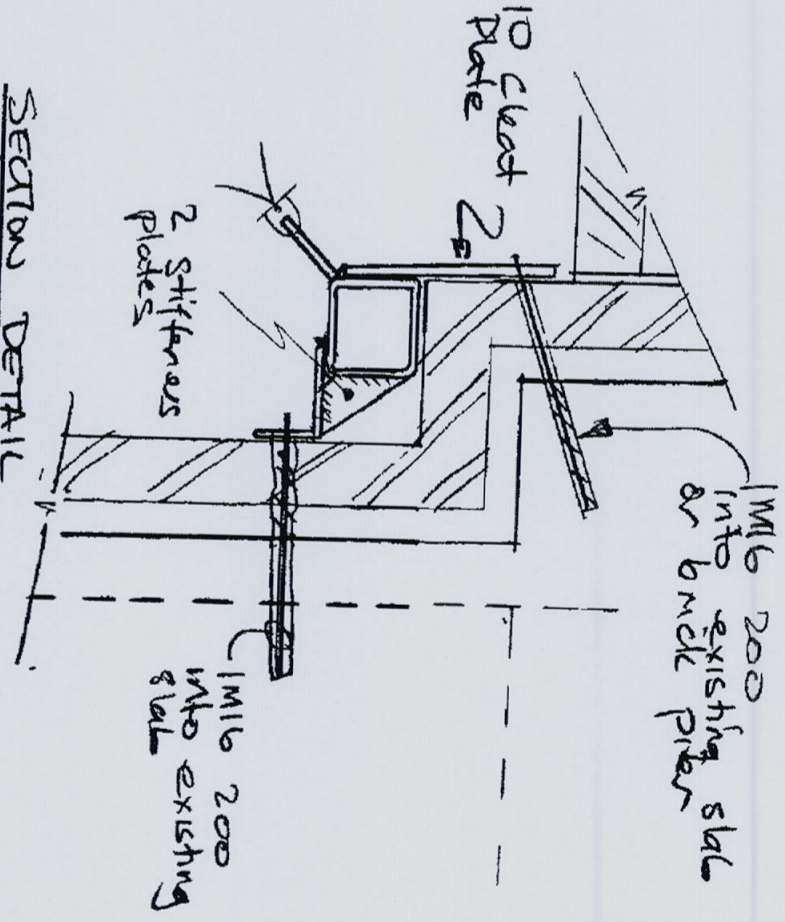
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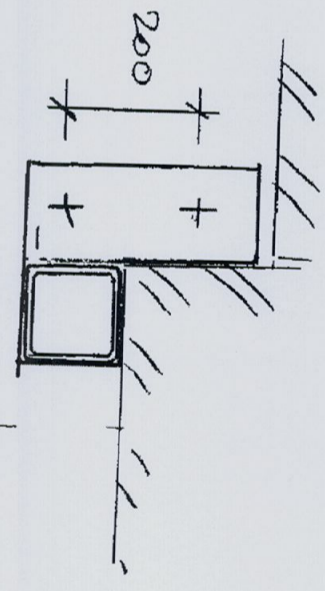
Registered Professional Engineer 975270
 Mr Todd Halliday
 MIEAust CP Eng
 N P E R
 Signature: [Signature]
 Registered on the NPERB in the area of practice of Structural
 National Professional Engineers Register
 Date: 7/18/28



POST A' ELEVATION



BASE PLATE PLAN



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NORTHROP CONSULTING ENGINEERS
 60 REDFERN ROAD
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PROJECT
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 5 FOREST RD,
 WARRIEWOOD

DRAWING TITLE
DETAILS SHEET 1

JOB NUMBER
06444

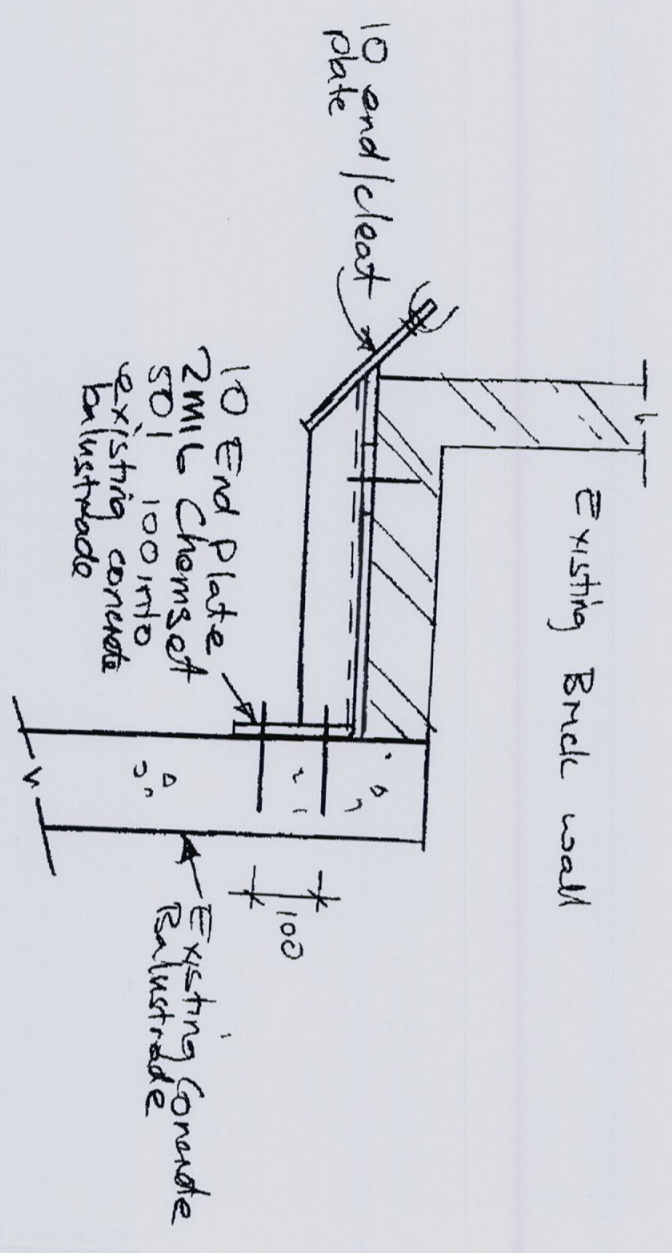
DRAWING NUMBER
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REVISION
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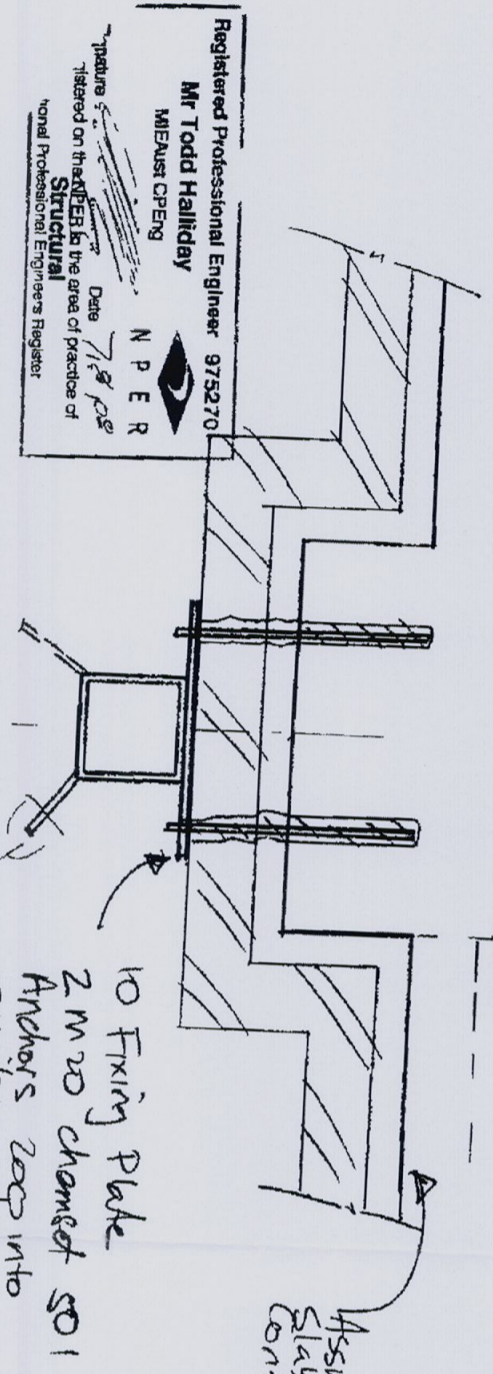
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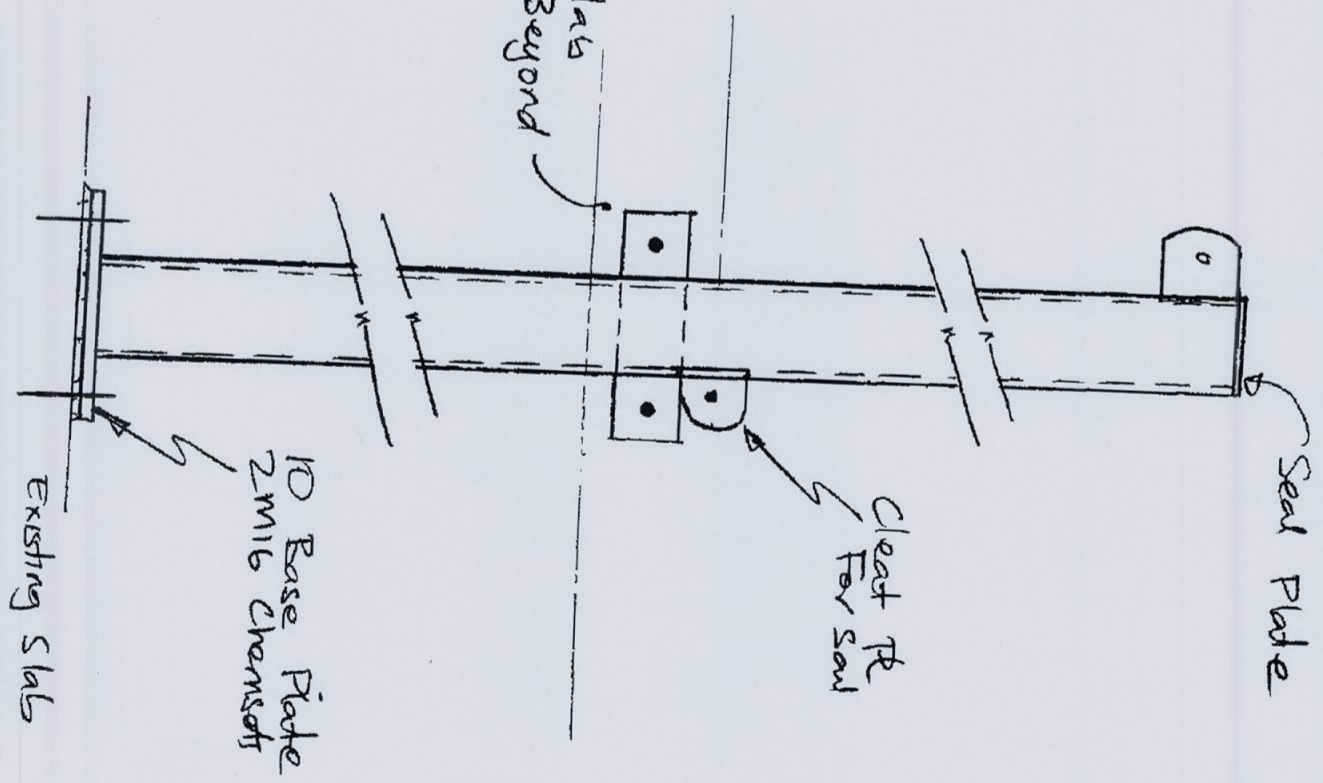


PLAN AT CONNECTION POINT 'B'



PLAN AT CONNECTION POINT 'C' (MUD HEKHT)

Existing Slab & Beam Beyond



Post 'C' ELEVATION

Registered Professional Engineer 975270
Mr Todd Halliday
 MESAUS CPENG N P E R
 Signature Date 7/8/08
 Listed on the Register in the area of practice of
 Structural
 National Professional Engineers Register

ISSUE	AMENDMENT	DATE	VERIFIED	APPROVED
A	ISSUED FOR CONSTRUCTION	07/08/08	TH	MD

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AUSIM
 AUSTRALIA
 1400 531 531
 1400 531 531
 1400 531 531

PROJECT
MATER MARIA COLLEGE.
 5 FOREST RD,
 WARRIEWOOD

DRAWING TITLE
DETAILS SHEET 2

JOB NUMBER
06444
 DRAWING NUMBER
A

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