

Construction Certificate Determination

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

Certificate No. 2005/587**Council** Pittwater**Determination** Approved
date of determination 11 May 2005**Subject land**

Address

Lot No, DP No.

8A Nooal Street, Newport
Lot 492 DP 609837**RECEIVED****13 MAY 2005****PITTWATER COUNCIL****Applicant**

Name

Address

Contact No. (phone)

Mrs C Gaunt

8A Nooal Street, Newport NSW 2106

0419 961 154

Owner

Name

Address

Contact No. (phone)

Mrs Cheryl Gaunt

8A Nooal Street, Newport NSW 2106

0419 961 154

Description of Development

Type of Work

New Two Storey Dwelling

Builder or Owner/Builder

Name

Contractor Licence No/Permit

Musgrove Constructions Pty Ltd

170556C

Value of Work

Building

\$597,000.00

Attachments

1. Pittwater Council receipt no. 165106, dated 6 April 2005, for payment of Long Service Levy

**Plans & Specification
approved**

List plans no(s) & specifications
Reference

1. **Architectural Details & Construction Specifications** (including Pool Safety Fence Details), reference no. 0417, Drawing nos. A-01, 02, 04, 04 & 05 (Issue E), prepared by Sean Gartner Architects, dated March 2005
 2. **Copy of Sydney Water Approval** dated 28 April 2005
 3. **Structural Details** reference no. 041156 Drawing no's S01, S02(A), S03(A), S04(A), S05, S06, S07, S08, A10, S11 & S13, prepared and certified by Northern Beaches Consulting Engineers Pty Ltd dated April 2005
 4. **Sediment and Erosion Control Measures** reference no. 041156 Drawing no. D01 & D02, prepared and endorsed by Northern Beaches Consulting Engineers Pty Ltd, dated April 2005.
 5. **Landscape Detail** reference no. Drawing no L01E prepared and certified by Matt Gibbs, Horticulturist dated 5 April 2005
 6. **Certificate of Structural Adequacy** reference no. 041156, issued by Northern Beaches Consulting Engineers Pty Ltd, dated 10 May 2005
 7. **Stormwater Drainage Plan** reference no. 041156 Drawing No D03, prepared and endorsed by Northern Beaches Consulting Engineers Pty Ltd, dated May 2005
-

Certificate

I certify that the work if completed in accordance with these plans and specifications will comply with the requirements of S81A(5) of the Environmental Planning and Assessment Act 1979.



Signed

**Date of endorsement
Certificate No.**

**11 MAY 2005
2005/587**

Certifying Authority

Name of Accredited Certifier

Accreditation No.

Accreditation Authority

Contact No.

Address

Tom Bowden

93

Dept of Infrastructure, Planning & Natural Resources
(NSW Accreditation Scheme)

(02) 9999 0003

13/90 Mona Vale Road, Mona Vale NSW 2103

Development Consent

Development Application No.

Date of Determination

NO622/04

30 March 2005

BCA Classification

1a

Pittwater Council

OFFICIAL RECEIPT

06/04/2005 Receipt No 163106

To Mr & Ms Gaunt

PO BOX 1122
MONA VALE

Applic	Reference	Amount
GL Pa	QLSL-Buil	\$1,174.10
	1 X DANG022/04	

Total: \$1,174.10

Amounts Tendered

Cash	\$0.00
Cheque	\$1,174.10
Card	\$0.00
Money Order	\$0.00
Agency Rec	\$0.00
Total	\$1,174.10
Rounding	\$0.00
Change	\$0.00
Nett	\$1,174.10

Printed 06/04/2005 9:53:43

Cashier GHill



DIRECTORS

Certificate of Existing Structural Adequacy

Date: 10th May 2005 Job No. 041156
Builder: Musgrove Constructions Engineer: LM

Site: 8a Nooal St Newport

NB Consulting Engineers P/L carried out a site inspection at the above residential premises on the 10th May 2005. The purpose of the visit was to inspect and comment on the capacity of the existing structure to support the proposed additions and alterations as detailed in the architectural plans prepared by Sean Gartner Architects dated Oct 2004 revision C.

The assessment consisted of a walk over style visual inspection of the building.

In summary, the dwelling is considered sound and provides an adequate structure for the proposed works, provided that engineering plans are complied with and that all structural works are certified during construction. However, some minor brickwork cracking may occur as the building adjusts to the new load distribution. This is not expected to adversely affect the buildings overall structural integrity.

Note: This certification does not cover any defects to the structure that were not accessible at the time of inspection. If in the event that defects are uncovered during construction or become apparent after construction is complete, then the engineer should inspect the areas of concern and prepare a specification for remedial works. (These works will be carried out at hourly rates.)

We trust that this certificate meets with your requirements. Please contact the author if further clarification is required.

NB CONSULTING ENGINEERS P/L

Per Lucas Molloy
BE CPEng NPER
Director NBConsulting

NAENG NBC\2004\041156\SA001.doc

**COUNCIL
COPY**

SEWER AFFECTED SYDNEY WATER SUPERVISION REQUIRED OTHERWISE LETTER OF COMPLIANCE WILL NOT BE ISSUED

The applicant is required to engage an accredited constructor of minor works (sewer) to encase Sydney Water's sewer. The constructor is required to lodge an application with Sydney Water or a Quick Check Agent prior to the commencement of work and a supervision fee will apply.

Plumbers please note:

50°C Hot Water
Requirement

SYDNEY WATER

Proposed building is APPROVED for construction over/adjacent to Sydney Water's sewer provided

1. Foundations are below 1.1m zone of influence
2. No part of the building or its foundations is less than 0.6m horizontal distance from the centre-line of the sewer
3. Foundations are constructed in accordance with Engineers detail plans as submitted to and stamped by Sydney Water

NOTE: ABOVE CONDITIONS, AND ANY OTHERS, MUST HAVE SYDNEY WATER SUPERVISION OTHERWISE LETTER OF COMPLIANCE WILL NOT BE ISSUED

Supervision can be arranged by phoning Inspector on 9975-5204 between 8.30a.m. and 3.30 p.m. giving at least 48 HOURS NOTICE

See file: BOS 3437719
3437719

TECHNICAL SERVICES
T/CUSTOMER CENTRE
28/4/05

SYDNEY WATER CORPORATION

- ④ CONCRETE ENCASEMENT BY SYDNEY WATER ACCREDITED MINOR CONSTRUCTOR OF SEWERMAIN WITH A MIN. OF 600mm OF CONCRETE EXTENDING BEYOND STRUCTURES
- ⑤ PIERS TO ENG'G DETAILS
- ⑥ 24 HRS. UNRESTRICTED TO MAINTENANCE HOLE / MANHOLE
- ⑦ NO STRUCTURES CLOSED THAN 1m TO THE EDGE OF MAINTENANCE HOLE / MANHOLE.

COUNCIL COPY

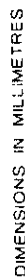
3.46 3.36
1.35
R.L. HW
0.15 0
1.37
Van Rd
1.37
3.32
3.36
3.35
3.36

OOTPR

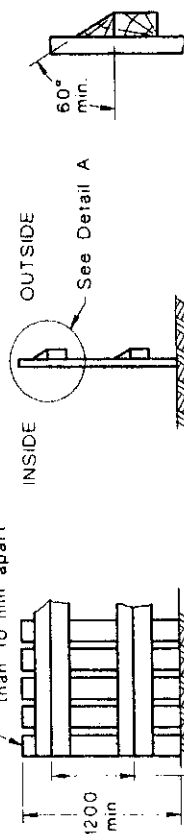
TREES

BUILD

E BUIL



Vertical members
spaced not more
than 10 mm apart



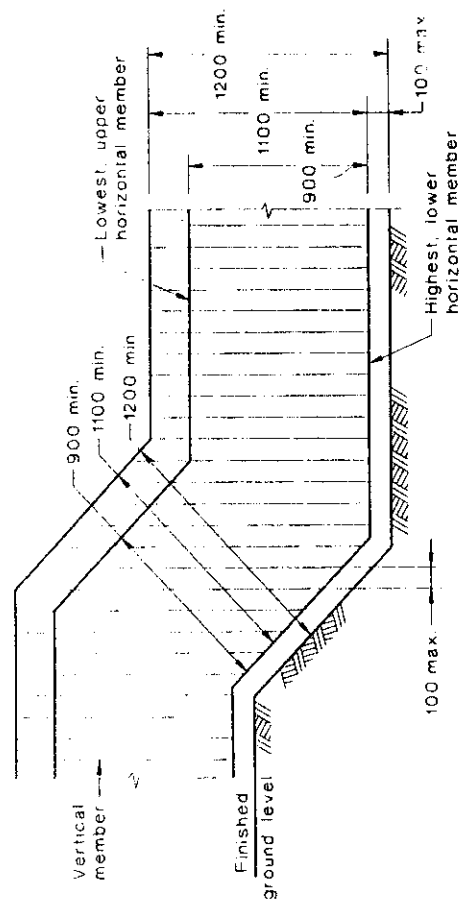
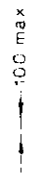
DETAIL A

SECTION

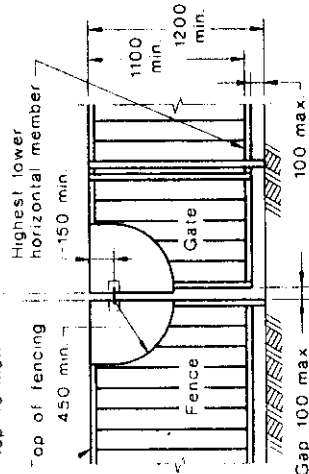
FENCE WITH HORIZONTAL MEMBERS NOT ACTING AS A HOLD FOR CLIMBING

SWIMMING POOL SAFETY FENCE DETAILS

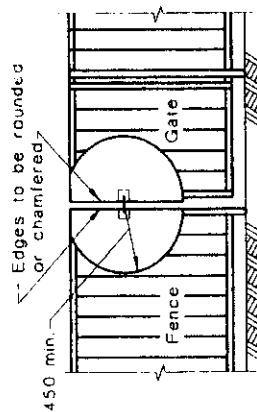
8A Nooal Street, Newport



PERPENDICULAR FENCING DIMENSIONS ON SLOPING GROUND

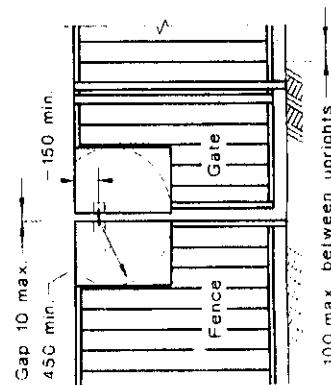


(a) Basic requirements

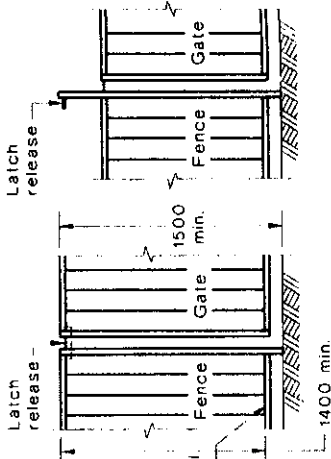


(b) Latch more than 150 below top of fence (shielding is centred on latch)

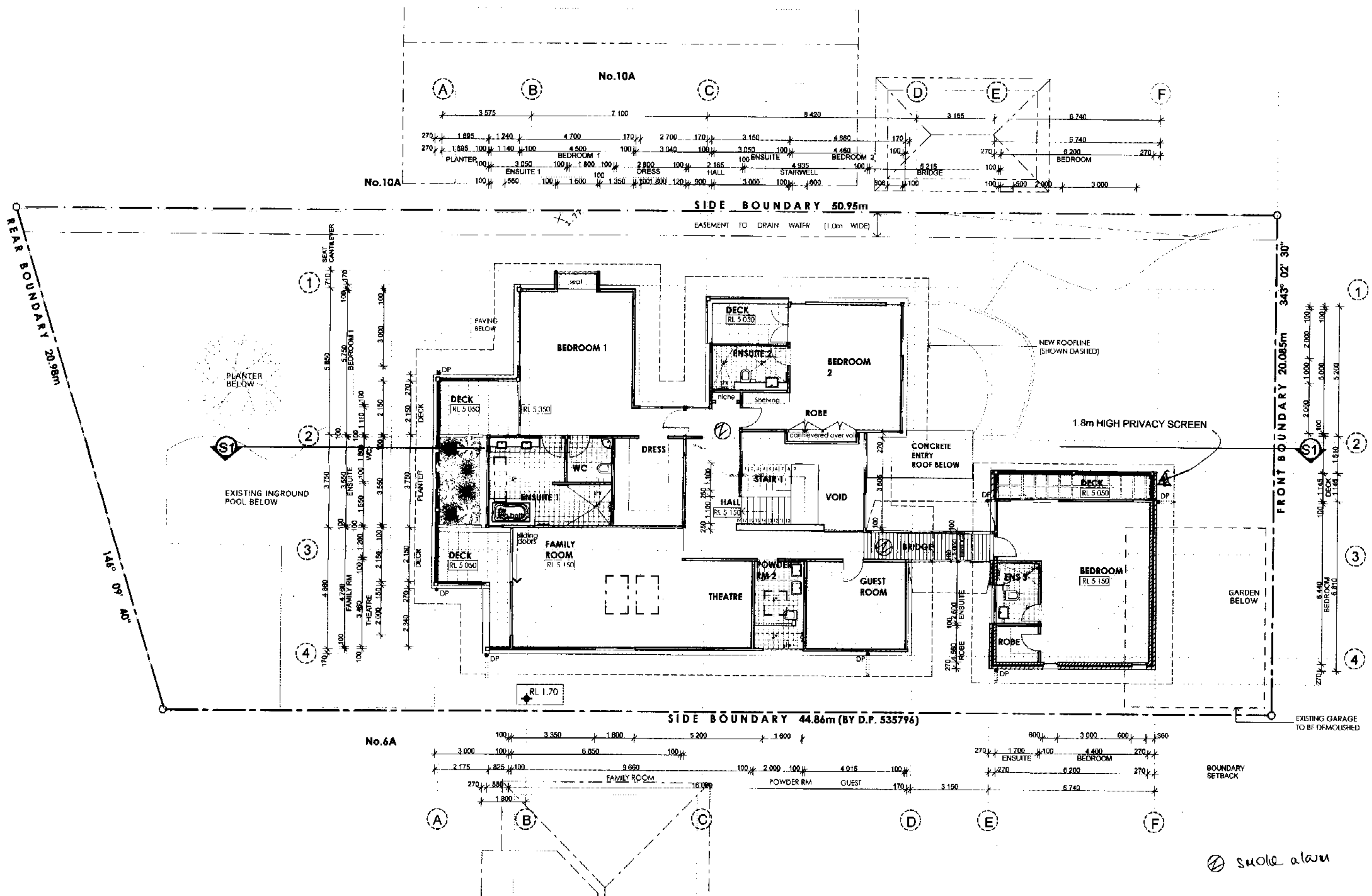
LATCH POSITIONING AND SHIELDING REQUIREMENTS



100 max between variants



(d) Shield not required for latch or release located at 1500 or higher



Date:	Issue:	Description:
Apr 2005	1	PRELIMINARY CC DRAWINGS



SEAN GARTNER ARCHITECTS

SURE 15/17 BUNGAN STREET (PO BOX 1122)
MAGNA HILL, NSW, 2103

P 02 9979 4411
F 02 9979 4477
E seangartnerarchitects.com.au

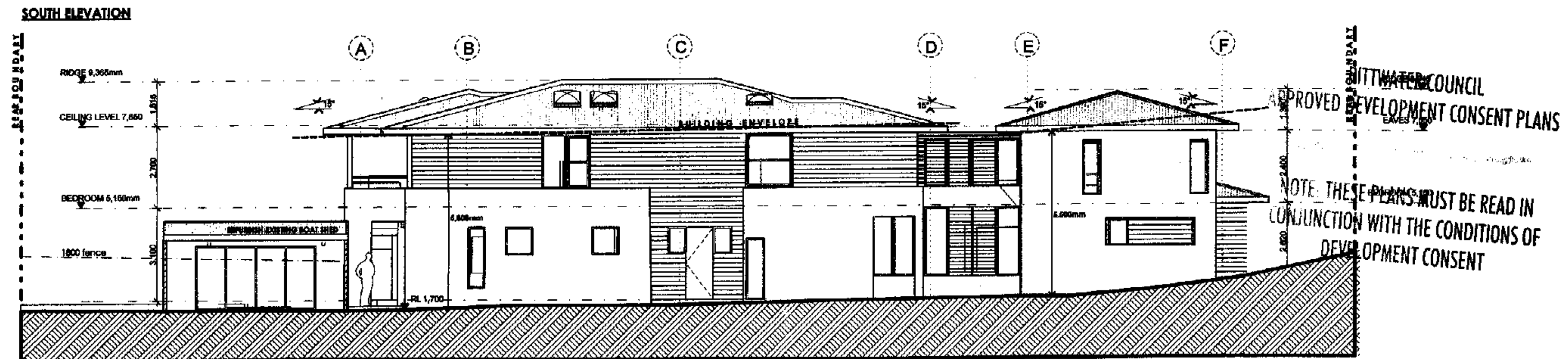
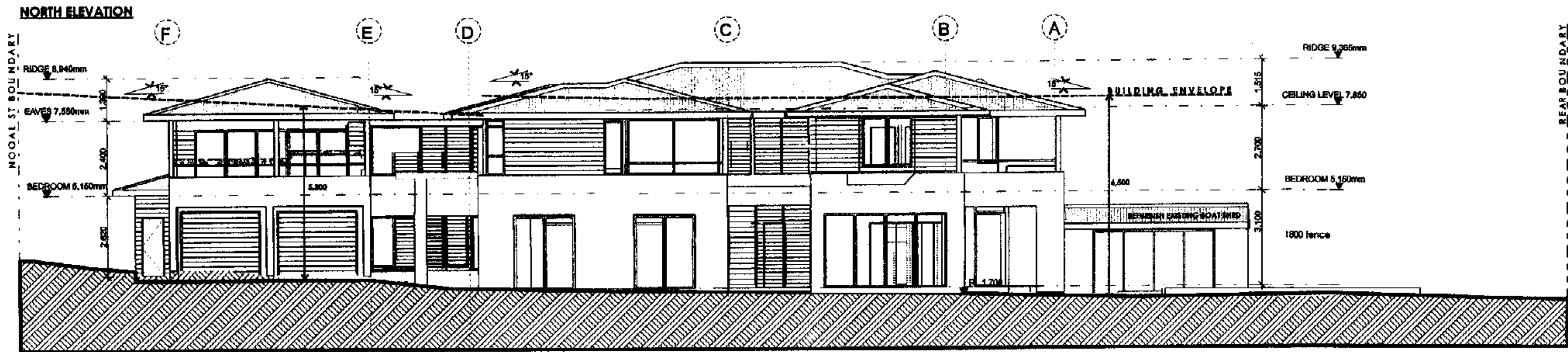
Project: **ALTERATIONS & ADDITIONS at:
8A NOOAL STREET, NEWPORT**

Client: **GAUNT**

Drawing: **FIRST FLOOR PLAN**



Drawn/Designed:	KD	Date:	APRIL '05
Project Number:	0417	Scale:	1:100 (A2)
Drawing Number:	A-03	Issue:	E



March 2008	B	NO CHANGE
January 2008	D	AMENDMENT OF HTS & DETACHED
October 2004	C	AMENDMENT OF DA SUBMISSION
August 2004	B	DA SUBMISSION
July 2003	A	SKETCH DESIGN



SEAN GARTNER ARCHITECTS

Suite 10/9 BUNOAN STREET PO BOX 1188
MONA VALE NSW 2500

P 02 9777 4411
F 02 9777 4422
E. sean@seangartner.com.au

Project: ALTERATIONS & ADDITIONS AT:
8A NOOAL STREET, NEWPORT

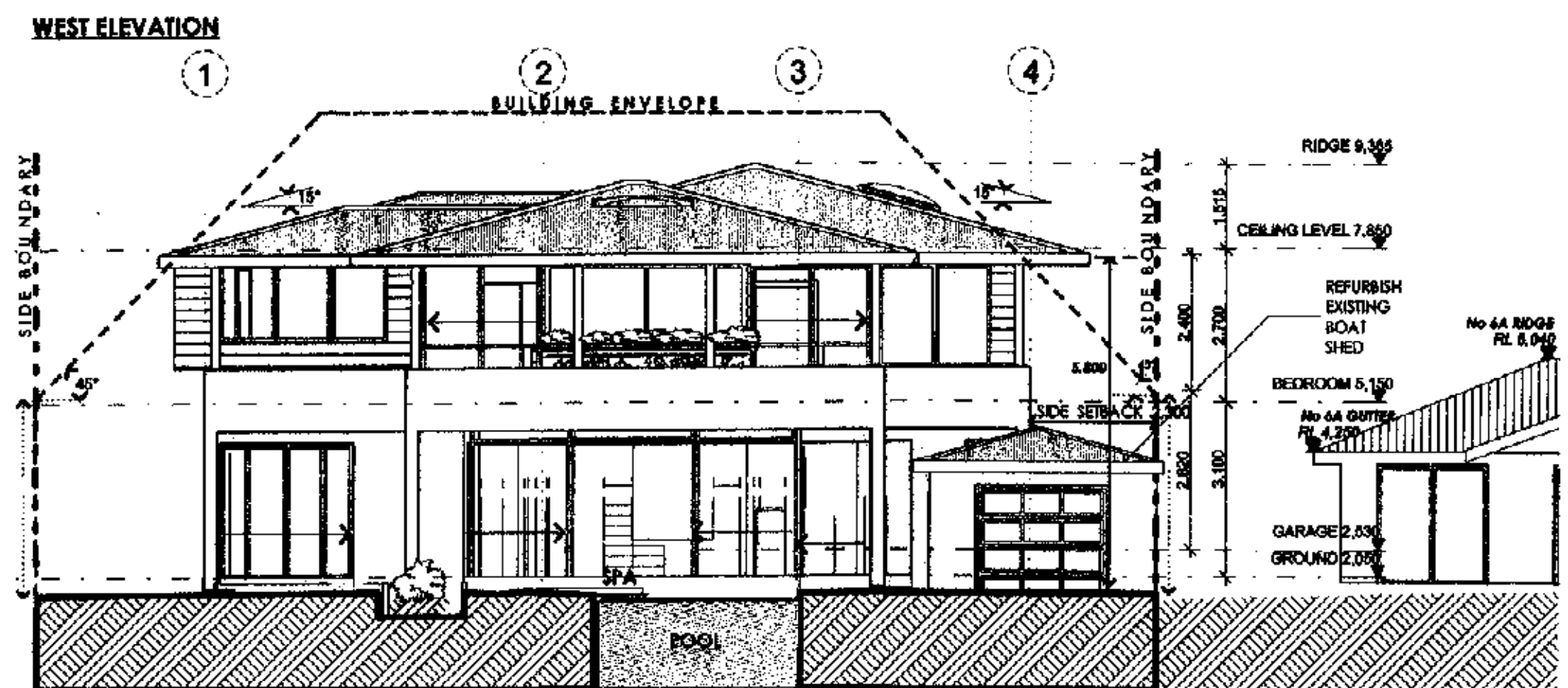
Client: GAUNT

Drawing: NORTH & SOUTH ELEVATIONS

Drawn/Designed: KID Date: 14-MAR-2008

Project Number: 0417 Scale: 1:100 (A2)

Drawing Number: A-04 Name: E



Drawn/Designed : KO	Date : MAR 2005
Project Number : 0417	Scale : 1:100 (A2)
Drawing Number : A-05	Issue : E

GENERAL NOTES:

GENERAL

- G1. The drawings are to be read together with all Architects drawings and specifications.
- G2. Dimensions shall not be obtained by scaling from the drawings. All setting out dimensions shall be verified and discrepancies shall be referred to the Engineer prior to commencement of work.
- G3. Care is required during construction so that structural elements are not over stressed and that the works and excavations required therefore are kept stable at all times.
- G4. Design, materials and workmanship are to be in accordance with current S.A.A standards and statutory authority regulations except where varied by these documents.
- G5. Design live loads are in accordance with AS 1170.1

FOOTINGS

- F1. Foundation strata is assumed for design purposes in accordance with AS 2870. See footnote. Classification to be verified by a Geotechnical Engineer commissioned by the client if certification of foundation is required.
- F2. Footings to be constructed and back filled as soon as possible following excavation to avoid softening by rain or drying out by exposure.
- F3. Footings must bear into undisturbed natural ground clear of organic material. Refer to details.
- F4. If rock or variable bearing strata is encountered during excavation of the footings all footings/piers are to be excavated to similar material of greater bearing capacity. The Engineer is to be contacted at that time for approval or review.
- F5. Footings to be cast in approved material having an allowable capacity as follows:

Sand Foundations:

- SA1. Required bearing capacity 100 kPa.
- SA2. Trenches must be cleaned of all debris and hand compacted prior to placement of reinforcement.

Clay Foundations:

- CL1. Required bearing capacity 150 kPa.
- CL2. Trenches must be cleaned of all debris. Soft spots must be cut out and filled as per compacted fill notes, prior to placement of reinforcement.

Shale Foundations:

- SH1. Required bearing capacity 400 kPa.
- SH2. Excavation for footings into shale must be cast or capped with plain concrete on the same day as excavation.

Sandstone Foundations:

- SS1. Required bearing capacity 650 kPa.
- SS2. Scrape weathered surface to remove cleaved sandstone under footings. Refer adjacent for assumed Design bearing strata.

- F6. Future development of neighboring properties may effect ground water conditions on this site. Consequently, reactivity in subgrade beneath footings may be locally altered therefore putting footing at risk of differential settlement. We recommend that, particularly in clay subgrades, agricultural drainage is installed to the upstream perimeter of the building at a distance from the building which is outside the zone of influence of the footings. The agricultural drain must be installed below the fluctuating seasonal zone which should be identified by geotechnical investigation.

CONCRETE

- C1. All workmanship and materials shall be in accordance with AS 3600.
- C2. Concrete quality shall be as follows and shall be verified by tests.
- C3. All concrete unless otherwise noted shall have a slump of 80mm at point of placement, a max. aggregate size of 20 mm. No water shall be added to the mix prior to or during placement of concrete. Strength as specified on plans.
- C4. Clear concrete cover to reinforcement shall be as follows unless otherwise shown-

ELEMENT	INTERIOR	EXTERIOR	EXTERIOR CAST AGAINST GROUND
FOOTINGS	-		50
COLUMNS/PEDESTALS	30 UNO	REFER TO PLAN	-
SLABS/WALLS	25	REFER TO PLAN	40 ON MEMBRANE
BEAMS	25 UNO	REFER TO PLAN	50
BLOCKWORK	55 FROM APPROPRIATE FACE		

C5. Sizes of concrete elements do not include thickness of applied finishes.

C6. All Construction Joints locations shall be approved by the Structural Engineer.

- C7. Beam depths are written first and include slab thickness, if any.
- C8. No holes or chases other than those shown on the structural drawings shall be made in concrete elements without the prior approval of the engineer.
- C9. Shrinkage reducing admixtures such as 'Eclipse' or approved equivalent, if specified, must be added to mix prior to pour.
- C10. Water reducing agents, if specified, must be added to mix prior to pour. No extra water is to be added to increase slump.
- C11. Where vertical slab/beam surfaces are formed against a masonry (or other) wall, provide 10 mm styrene separation material.
- C12. Water must not be added to concrete mix prior to placement of concrete.
- C13. Above covers may have to be adjusted if fire rating is a requirement.

REINFORCEMENT

- R1. All reinforcement specified is Grade D500 unless noted otherwise.
- R2. Reinforcement is represented diagrammatically it is not necessarily shown in true projection.
- R3. Top reinforcement is to be continuous over supports. Bottom reinforcement to be lapped at supports.
- R4. Welding of reinforcement shall not be permitted unless shown on the structural drawings.
- R5. Pipes or conduits shall not be placed within the zone of concrete cover to the reinforcement without the approval of the engineer.
- R6. All reinforcing bars and fabric shall comply with AS 4671-2001.
- R7. Reinforcement symbols:
N - Grade 500N deformed bar (D500) Normal Ductility
R - Grade 250N plain round bar (R250) Normal Ductility.
SL - Grade 500L welded deformed ribbed mesh (D500) Square Low Ductility.
RL - Grade 500L welded deformed ribbed mesh (D500) Rectangular Low Ductility.
The number immediately following these symbols is the number of millimeters in the bar diameter.

Example :

- 8 N12-250, denotes 8, Grade 500N deformed bars, 12 mm diameter at 250 cts.
- R8. Fabric reinforcement to be lapped 1 complete square + 25 mm unless noted otherwise.

- R9. All reinforcement shall be firmly supported on bar chairs spaced at a maximum of 750 centres both ways under slab and fabric reinforcement. Reinforcement shall be tied at alternate intersections.

FORMWORK

FW1. Formwork must be cleaned of all debris prior to casting of concrete.

FW2. Minimum stripping times for form work shall be as recommended in AS 1509 or as directed by the engineer.

FW3. The finished concrete shall be a dense homogeneous mass, completely filling the form work, thoroughly embedding the reinforcement and free of stone pockets. All concrete elements including slabs on ground and footings shall be compacted with mechanical vibrators.

FW4. Curing of all concrete is to be achieved by keeping surfaces continuously wet for a period of 3 days, followed by prevention of loss of moisture for seven days followed by a gradual drying out. Approved sprayed on curing compounds may be used where no floor finishes are proposed. Polythene sheeting or wet hessian may be used if protected from wind and traffic.

BRICKWORK

BR1. Brickwork is to be constructed to AS 3700.

BR2. Two layers of approved greased metal based slip material shall be used over all load bearing walls that support concrete slabs and placed on smooth brickwork or trowelled mortar finish. Non load-bearing walls shall have 10 mm compressible material and ties to the slab soffit.

BR3. No brickwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slab and the concrete has the specified 28 day cylinder strength verified by tests.

BR4. Control joints to be placed at a maximum of 8m centres or in accordance with AS 3700.

BR5. Exposure grade bricks to be used below damp proof course.

BR6. Vertical control joint material where specified on plan between slabs and brick walls shall be: 10 mm Spandex External UNO. Bitumastic fibreboard internal UNO.

BR7. Provide stainless steel wall ties below DPC to AS 3700. Provide galvanized wall ties above DPC to AS 3700 & Local Council Specifications.

BLOCKWORK

- BL1. Concrete blocks shall have a minimum compressive strength of 15 MPa and conform to AS 1500. Masonry to be constructed to AS 3700.
- BL2. Where cores of hollow blocks are to be filled, properly compacted 20MPa concrete with 10 mm aggregate and 230 mm slump shall be used. Clean out openings must be utilized for all cores.
- BL3. Location of actual starters is critical to suit block cores, allow 55 mm cover from the outside face of blockwork. All reinforcement lap lengths to conform to AS 3600.
- BL4. Control joints to be placed at a maximum of 8 m centres or in accordance with AS 3700.
- BL5. Vertical control joint material where specified on plan between slabs and brick walls shall be: 10 mm Spandex External UNO. Bitumastic fibreboard internal UNO.
- BL6. Retaining walls or any reinforced and concrete core filled block walls to be of Double 'U' Block Construction.
- BL7. No blockwork shall be constructed on suspended slabs until all propping has been removed from the underside of the slab and the concrete has the specified 28 day cylinder strength verified by tests. Unless approved by the Structural Engineer.
- BL8. Max. pour height for unrestrained blockwork is 2000.

STEEL

- S1. All Structural steelwork to be Grade 300 or greater. Design, fabrication and erection to be in accordance with AS 4100.
- S2. Materials and workmanship shall comply with AS 1250 - 1981, SAA Steel Structures Code and the specification for Structural Steel.
- S3. Rolled steel sections including steel plates shall comply with AS 3678 - 1990.
- S4. Cold formed steel sections shall be Grade 450 Zinc coated in accordance with AS 1538-1985.
- S5. Welded and seamless steel hollow sections shall comply with AS 1163. Grade 350.
- S6. Bolt Designation:
4.6S - Commercial bolts Grade 4.6, snug tightened.
8.8S - High Strength structural bolts Grade 8.8, snug tightened.
8.8TB - High Strength structural bolts Grade 8.8, fully tightened to AS 1511 and acting as a Bearing Joint.
8.8TF - High Strength structural bolts Grade 8.8, fully tensioned to AS 1511 and acting as a Bearing Joint.
Unless noted otherwise, all bolts will be 8.8S.
- S7. Unless shown otherwise, minimum connection shall be 2M16 bolts, 10 thick gusset plates, 6mm continuous fillet welds.
- S8. Load indicating washers shall be used in all fully tensioned joints. (8.8TF & 8.8TB).
- S9. All welding shall be carried out in accordance with AS 1554 SAA Structural Steel Welding Code.
- S10. Unless noted otherwise all welds shall be category SP using E41xx Electrodes. All butt welds shall be complete penetration butt welds category SP.
- S11. Grouting of anchor bolt sleeves and base plates shall be completed by the contractor using High Strength, Non-Shrink grout.
- S12. Fabrication and erection tolerances for Structural Steelwork shall be in accordance with AS 4100.
- S13. Purlin bolts shall be M12 - 4.6S galvanized.
- S14. Steel work shall have one of the following grades of corrosion protection:-
INTERNAL

- a. Thoroughly cleaned wire brushing, followed by two coats of zinc phosphate primer equivalent to Dulux Luxaprim applied by hand using brushes to achieve a total dry film thickness of 70 microns.

EXTERNAL ELEMENTS, & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS

- b. Preparation Blast clean to a minimum standard Class 2.5 in accordance with AS 1627 Part 4.
Primer 2-pack epoxy phosphate at dft 75 microns (Dulux Durepon P14).
Barrier Coat 2-pack epoxy micaceous iron oxide, dft 100 microns
Finish Coat 2-pack epoxy high gloss acrylic to dft 75 microns (e.g. Dulux Acrathane 1 F) in an approved colour.
- c. Hot dipped galvanized to AS 4680.
Where the galvanic (Hot Dip Galvanized) coating is compromised by welding, bolting or damage, inorganic zinc-rich paint (minimum 95% zinc content) is to be applied after wire brushing affected area (use 3 coats minimum), or Hot Metal Spray in accordance with AS 4680.

S15. Workshop drawings shall be prepared and two copies submitted to the engineer for review prior to fabrication commencement.

ASSUMED FOUNDATION CLASSIFICATION FOR DESIGN PURPOSES - 'A'
ASSUMED BEARING STRATA FOR DESIGN PURPOSES - ROCK, 600 kPa.

TIMBER

- T1. All workmanship and materials to be in accordance with AS 1684, AS 1720 and AS 3459. All soft wood to be Grade F7 unless noted otherwise. All hardwood to be minimum Grade F14 unless otherwise noted. Exposed timber to be CCA treated (to AS 1604) redried after full impregnation, or durability class 1 or 2.
- T2. All joists deeper than 150 to have blocking over support bearers and at a maximum 3000 centres.
- T3. Roof trusses to be designed by the manufacturer to the relevant standards. Pre camber to be an amount equal to dead load deflection u.n.a.
- T4. All holes for bolts to be exact size. Washers to be used under all heads and nuts and to be at least 2.5 times the bolt diameter. Bolts to be M16 grade 4.6 unless noted otherwise.
- T5. Treat all exposed cut ends with Resol by Protim to manufacturers specification to achieve required Hazard Level Exposure Classification.
- T6. Batters for T & G to be Kiln Dried to 12 %
38mm minimum deep treated pine or as recommended by supplier. Flooring to be installed no sooner than 28 days after slab pour.
- T7. Hot dip galvanized nails/clou/screws to be used with all timber connections.
- T8. Continuous nailing must not be used for any timber connections.

COMPACTED FILL

- CF1. Only to be used with approval Engineer & to be certified by a geotechnical Engineer.
- CF2. Clear organic material and topsoil under proposed slabs/footings.
- CF3. Filling shall be granular material compacted in not more than 200 mm layers to a minimum dry density ratio (AS 1289/E4.2 1982) of 98 percent.
- CF4. During clearing and excavation for slabs and footings cut out soft spots and fill as above.

INSPECTIONS BY ENGINEER

48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION

- Bearing strata of all footings prior to concrete pour.
- Any reinforcement prior to concrete pour.
- Timber and Steel framing prior to cladding or lining.
- Steel lintels after installation.
- CONTACT YOUR PCA (Principal Certifying Authority) AS TO REQUIREMENTS FOR MANDATORY CRITICAL STAGE INSPECTIONS IN ACCORDANCE WITH REVISED EPAA ACT REGULATIONS EFFECTIVE JULY 1, 2004.

DRAWING SCHEDULE:

- S01 - GENERAL NOTES AND DRAWING SCHEDULE
- S02 - FOOTING AND GROUND FLOOR SLAB PLAN
- S03 - FOOTING AND GROUND FLOOR SLAB DETAILS SHEET 1
- S04 - FOOTING AND GROUND FLOOR SLAB DETAILS SHEET 2
- S05 - FIRST FLOOR SLAB PLAN
- S06 - FIRST FLOOR SLAB PLAN BOTTOM REINFORCEMENT
- S07 - FIRST FLOOR SLAB PLAN TOP REINFORCEMENT
- S08 - FIRST FLOOR SLAB DETAILS SHEET 1
- S09 - NOT USED
- S10 - ROOF FRAMING PLAN
- S11 - FRAMING DETAILS
- S12 - NOT USED
- S13 - MISCELLANEOUS SLAB AND FOOTING DETAILS SHEET 1
- S14 - MISCELLANEOUS SLAB AND FOOTING DETAILS SHEET 2

ISSUED FOR CONSTRUCTION CERTIFICATE SUBMISSION ONLY

A2

DOCUMENT CERTIFICATION

Date: APR 05
Lucas Molloy
(Director Northern Beaches Consulting Engineers)

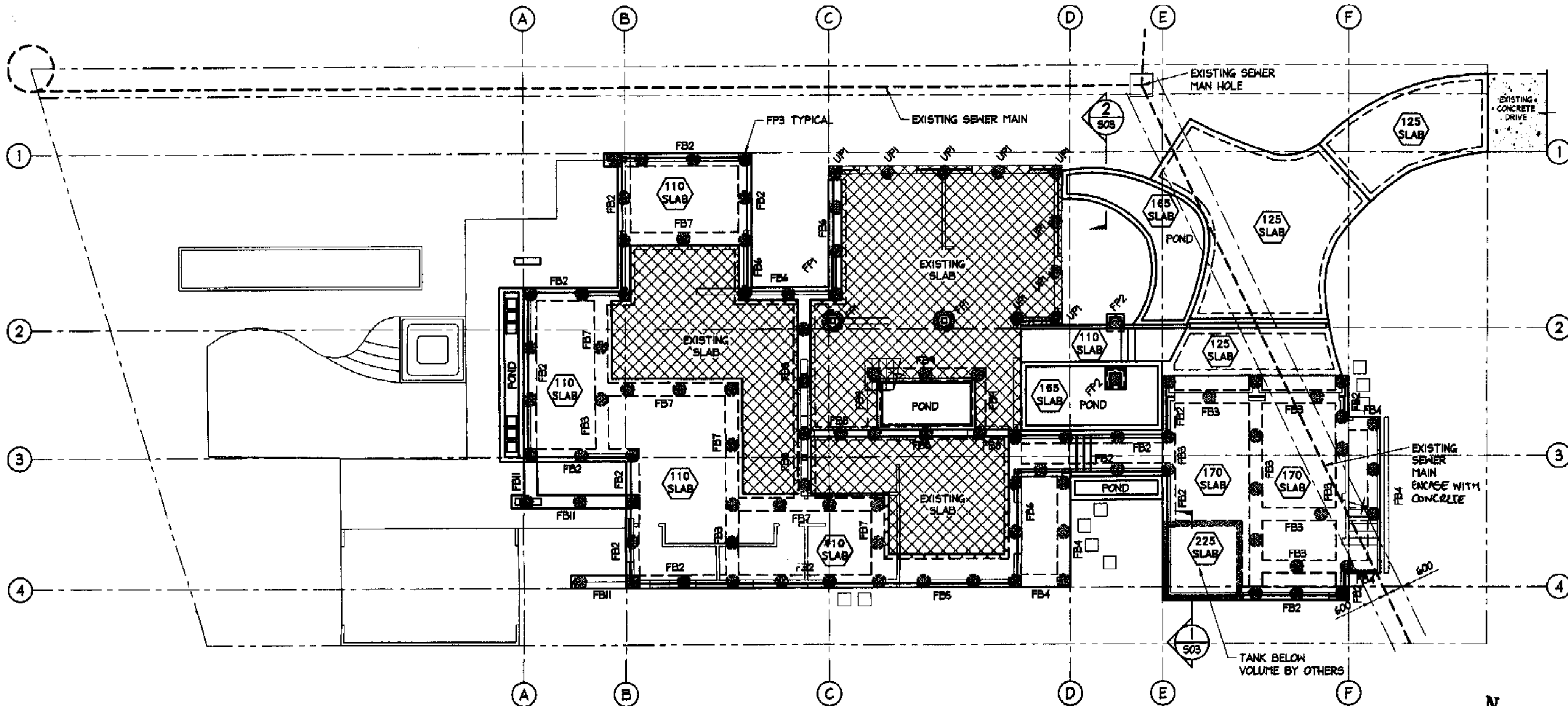
I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
BE(Civil), CPENG, MIEAust., NPER.
Institute of Engineers Membership No. 760184
I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.

NB NORTHERN BEACHES Consulting Engineers P/L.
A.C.N. 078 121 616 A.B.N. 24 078 121 616
Suite 207, 30 FISHER ROAD
DEE WHY N.S.W. 2089
Ph: (02) 9584 7000 Fax: (02) 9584 7444
e-mail: nb@nbconsulting.com.au

Project:
PROPOSED ALTERATIONS
at: 8A Noval Street
Newport
for: Gaunt Family

Drawing Title:
GENERAL NOTES AND DRAWING SCHEDULE
The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.

Date: April 2005
Drawn: P. Bruce
Checked: P. Bruce
Drawing No: 501
Rev: -



FOOTING AND GROUND FLOOR SLAB PLAN

SCALE = 1 : 100

NOTE:

CONCRETE STRENGTH:

FOOTINGS:

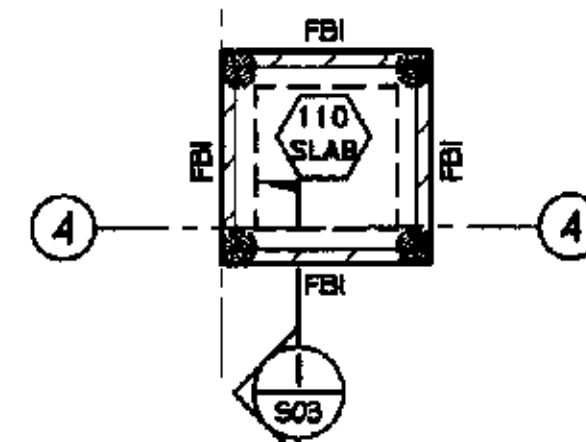
$f_c = 25 \text{ MPa}$, COVER = 65 mm

INTERNAL SLABS:

$f_c = 32 \text{ MPa}$, COVER = 30 mm

EXTERNAL SLABS:

$f_c = 40 \text{ MPa}$, COVER = 45 mm



TANK BASE PLAN

SCALE = 1 : 100

**ISSUED FOR
CONSTRUCTION
CERTIFICATE
SUBMISSION ONLY**

NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

A2

DOCUMENT CERTIFICATION

Date: 14.04.2006
Lucas Molloy
(Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
SE(Civil), CPEng, MIE Aust., NFER.
Institute of Engineers Membership No. 708854
I hereby state that this drawing is in compliance
with the provisions of the Building Code of
Australia and/or relevant Australian Industry
Standards.



**NORTHERN BEACHES
Consulting Engineers P/L**
A/C.N. 678 121 018 A/C.N. 34 878 121 018
Suite 207, 30 FIDLER ROAD
DIE VERT N.S.W. 2080
Ph: (02) 9554 7000 Fax: (02) 9554 7444
e-mail: nb@nbcengineering.com.au

Project:
**PROPOSED ALTERATIONS
at: 8A Noval Street
Newport
for: Gaunt Family**

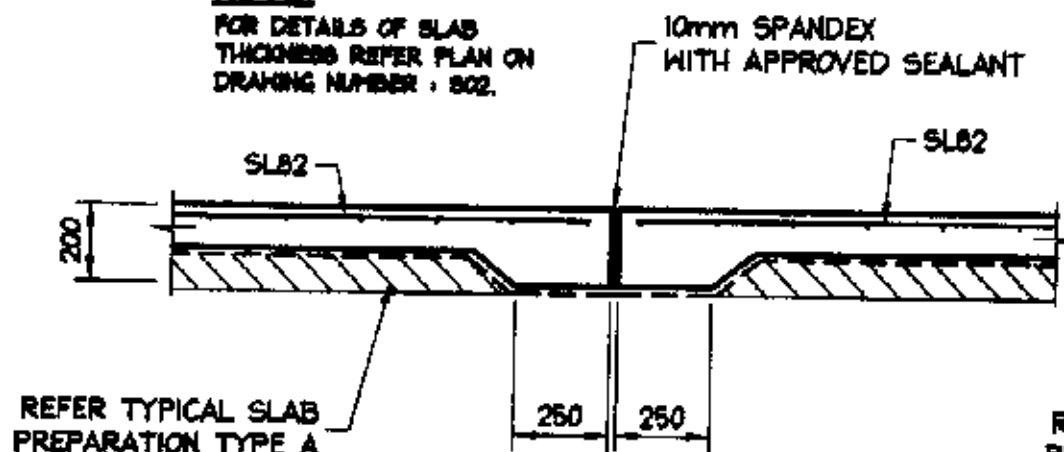
Drawing Title:

**FOOTING AND GROUND
FLOOR SLAB PLAN**

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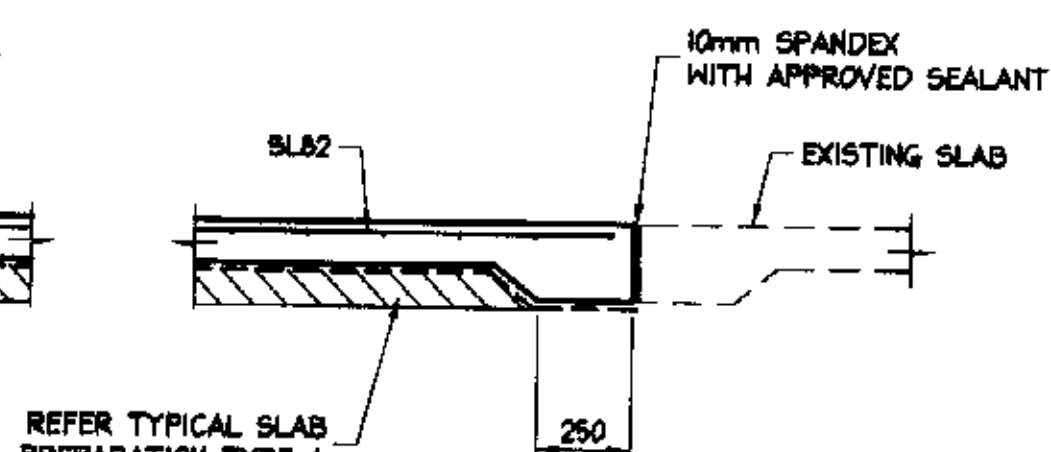
Date: April 2006	Design: L.M. B.S.	Drawn: Paul R Bruce CPEng	Checked:
Job No: 041156	Drawing No: S02	Rev:	A

NOTE:
FOR DETAILS OF SLAB THICKNESS REFER PLAN ON DRAWING NUMBER: 502.



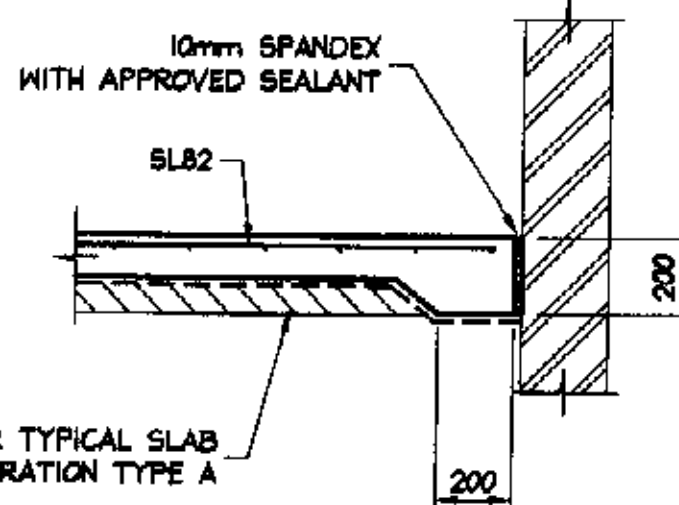
**EXPANSION JOINT DETAIL
DENOTED E.J. ON PLAN**

SCALE = 1 : 20



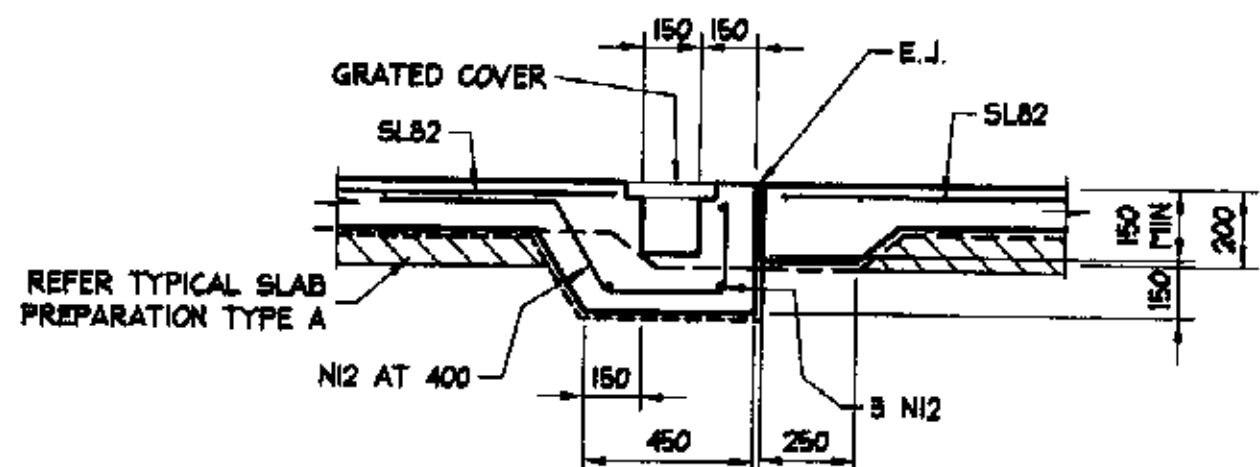
**ISOLATION JOINT DETAIL
DENOTED I.J. ON PLAN**

SCALE = 1 : 20



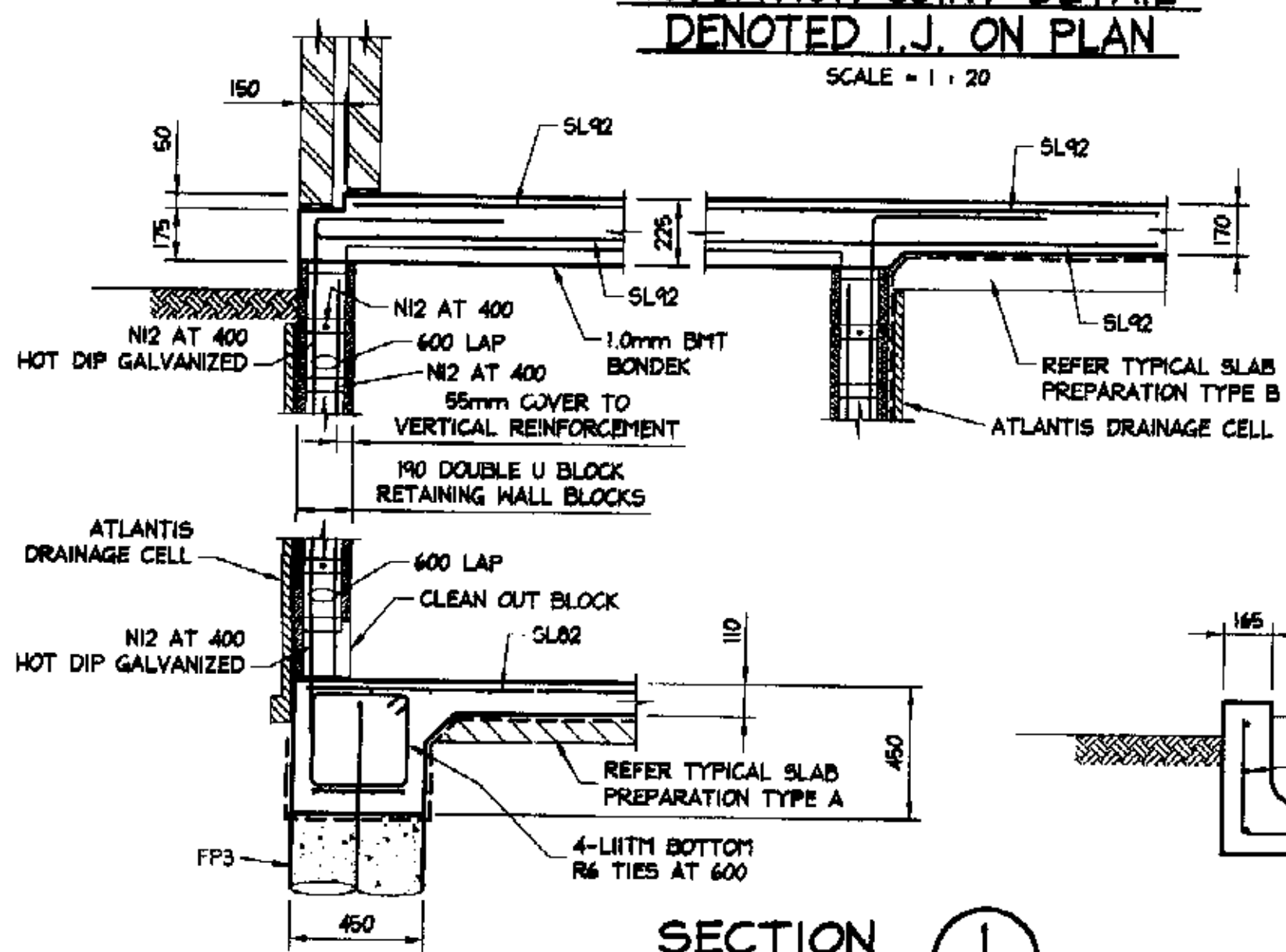
**THICKENED EDGE DETAIL
DENOTED T.E. ON PLAN**

SCALE = 1 : 20



TYPICAL DETAIL - GRATED DRAIN

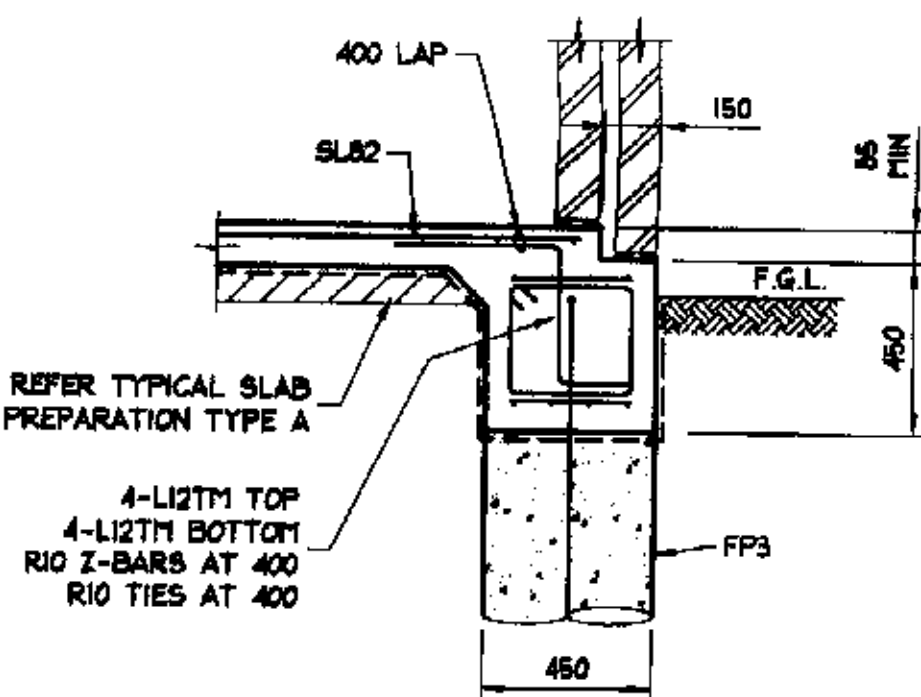
SCALE = 1 : 20



TYPE FB1 FOOTING BEAM

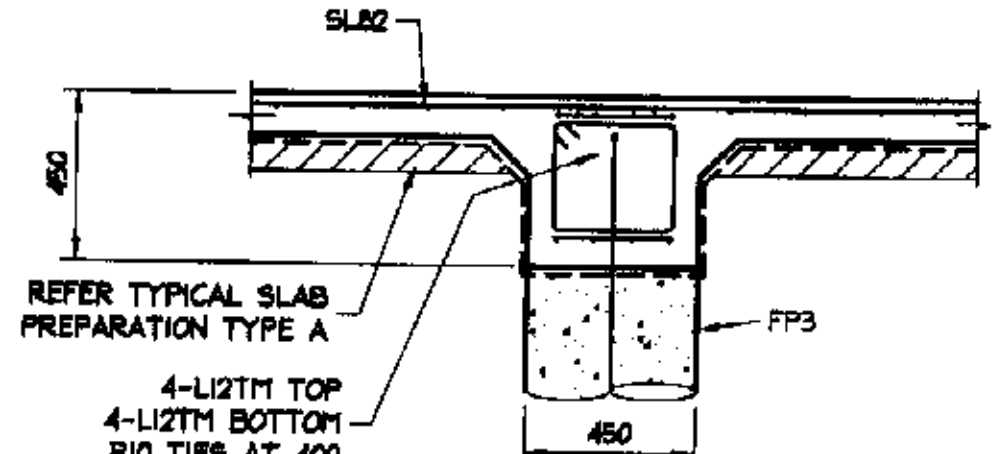
SCALE = 1:20

1
502



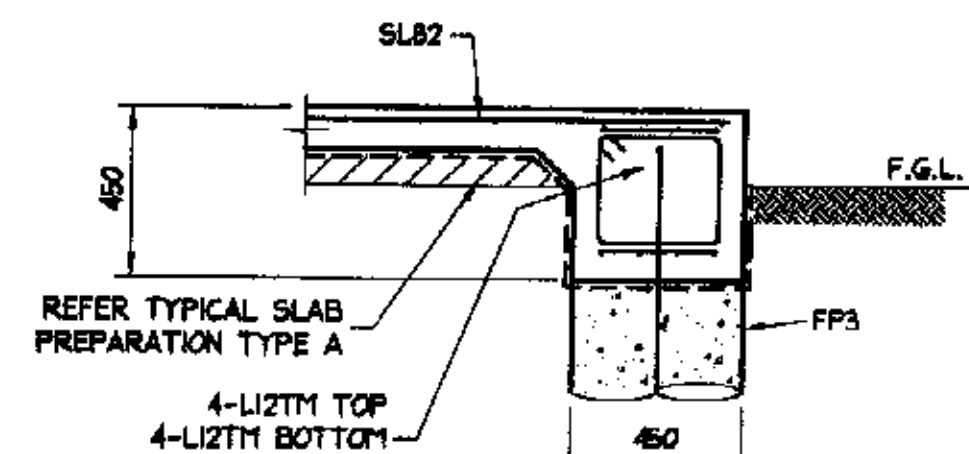
TYPE 'FB2' BEAM

SCALE = 1 : 20



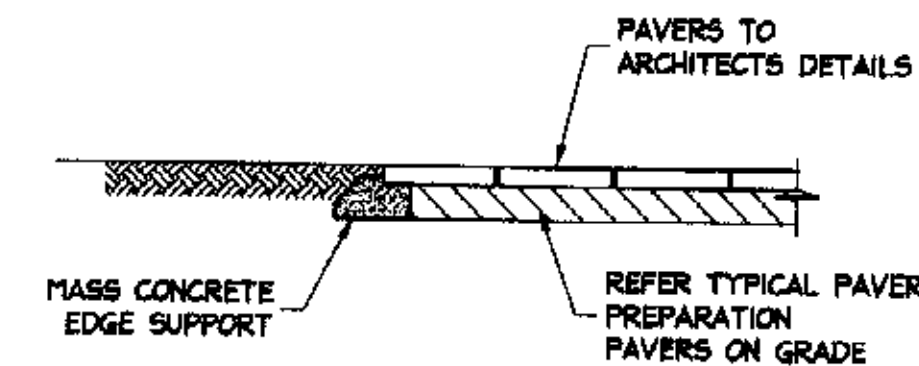
TYPE 'FB3' BEAM

SCALE = 1 : 20



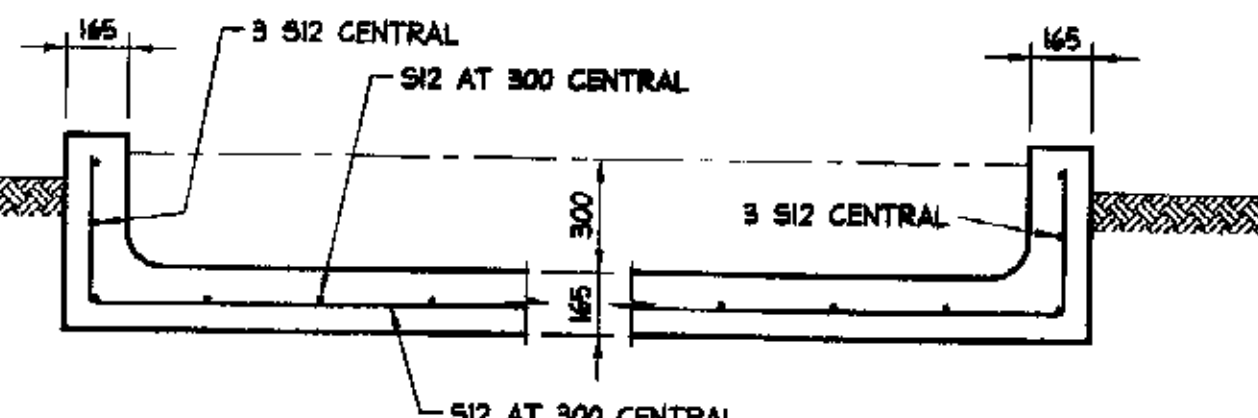
TYPE 'FB4' BEAM

SCALE = 1 : 20



TYPICAL PAVER DETAIL

SCALE = 1 : 20



SECTION 1

SCALE = 1:20

2
502

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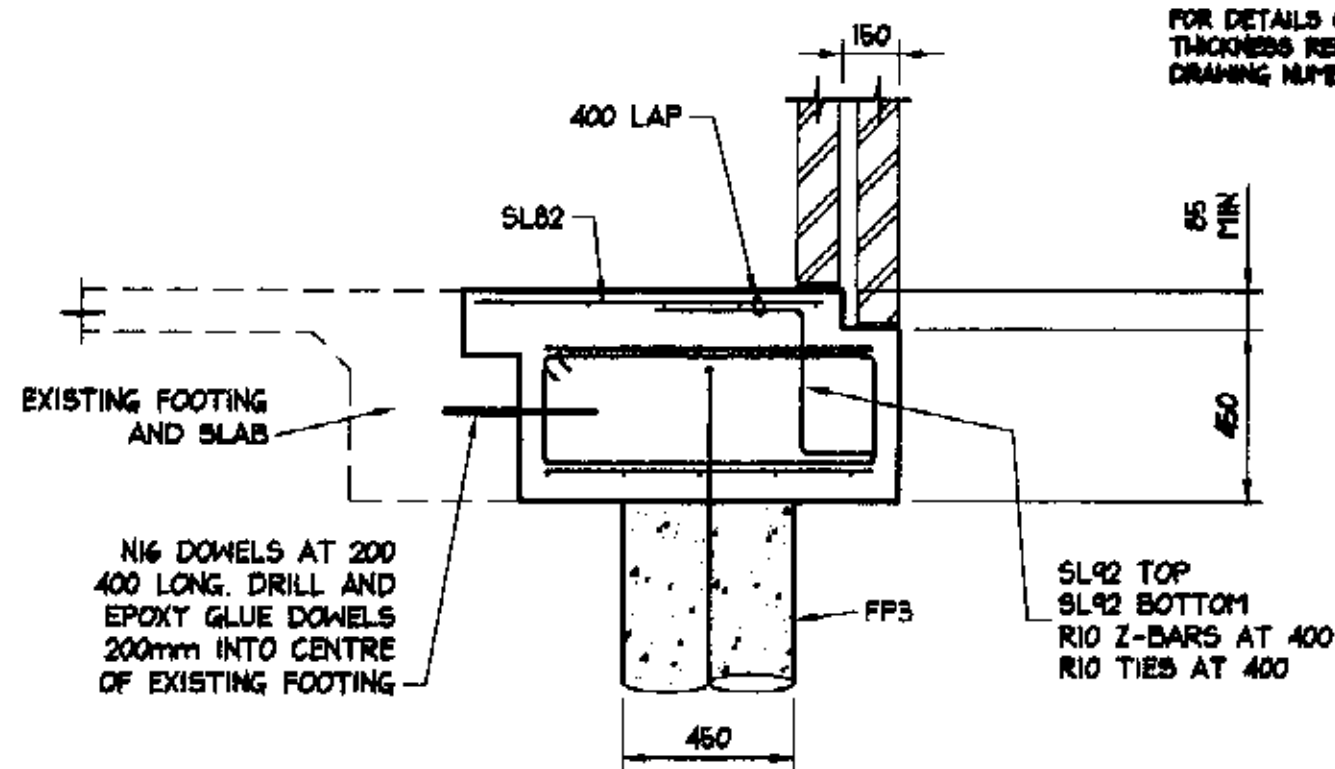
NOTES:

1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: 501.

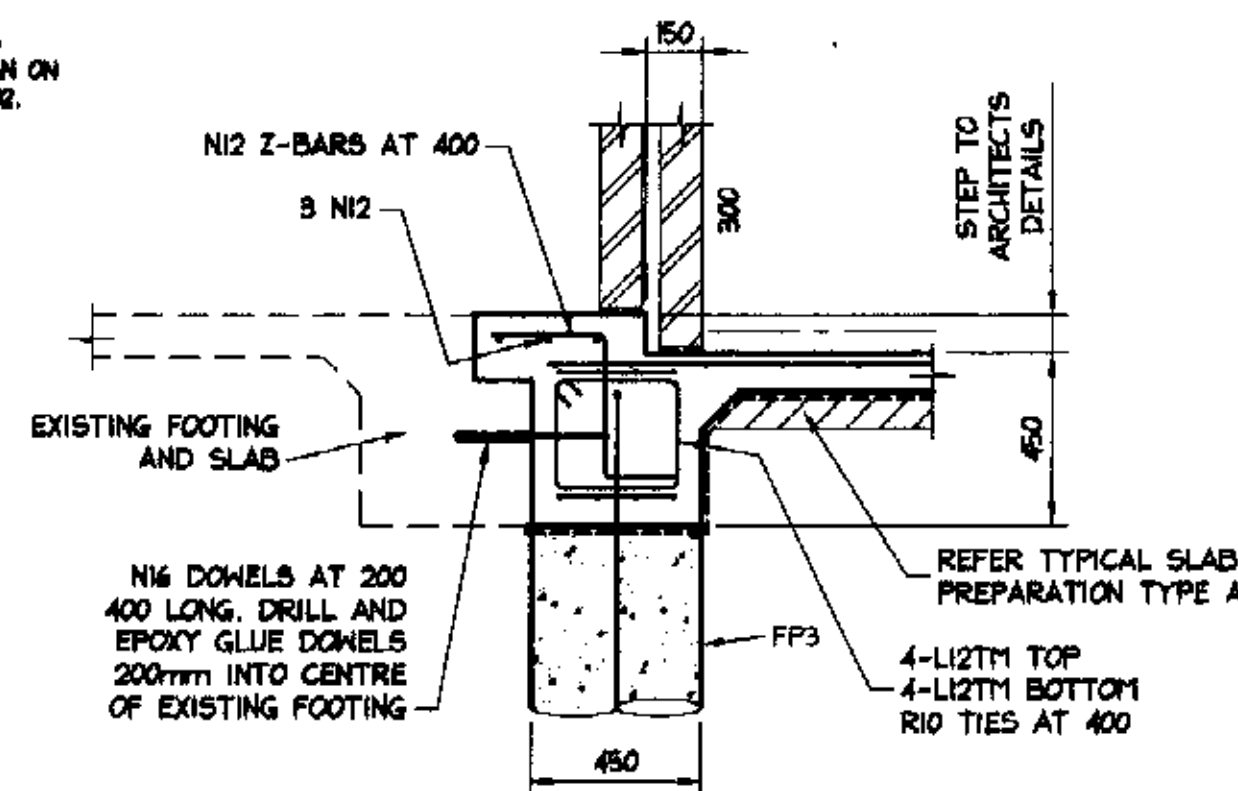
A2

DOCUMENT CERTIFICATION			I am a qualified Structural/Civil Engineer. I hold the following qualifications: BSc (Civil), CP Eng, MISAust., NPER, Institute of Engineers Membership No. 788884 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.		Project: PROPOSED ALTERATIONS at: 8A Noval Street Newport for: Gaunt Family		Drawing Title: FOOTING AND GROUND FLOOR SLAB DETAILS SHEET 1		Date: April 2005	Design: L.M. B.S.	Drawn: Paul R Bruce CPREng.	Checked:
Date: 14.04.2005	Rev: A	Amendment: DETAILS MOVED FROM 504	Date: 14.04.2005		Job No: 041156		Drawing No: S03		Rev: A			

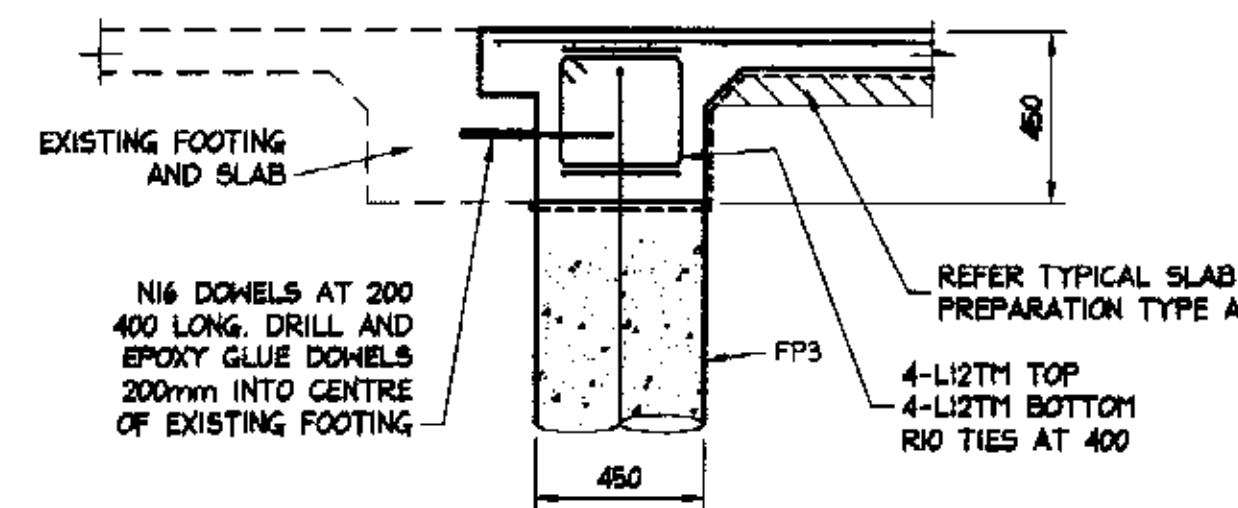
NOTE:
FOR DETAILS OF SLAB
THICKNESS REFER PLAN ON
DRAWING NUMBER: 502.



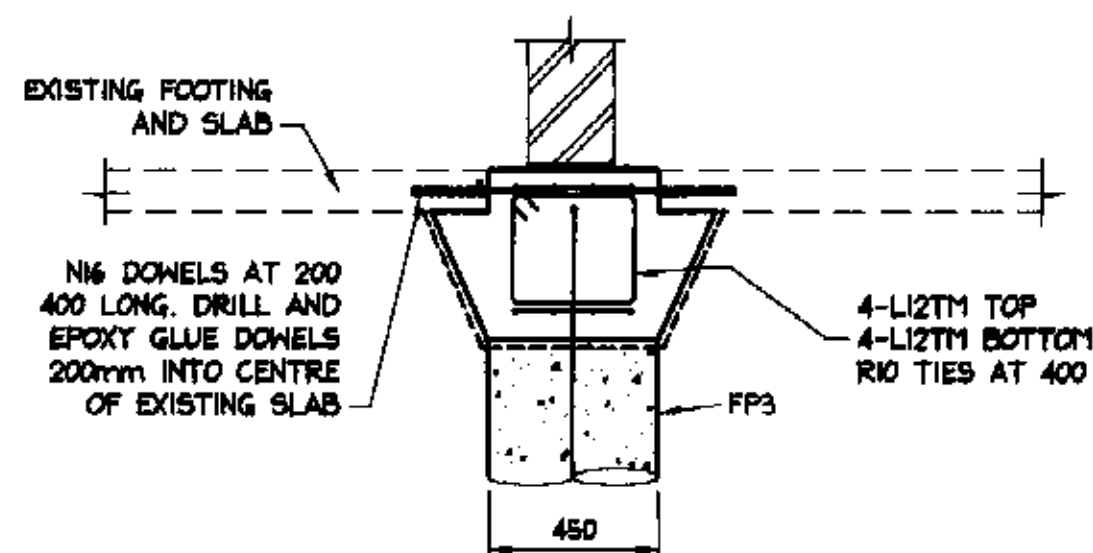
TYPE 'RF5' BEAM
SCALE = 1 : 20



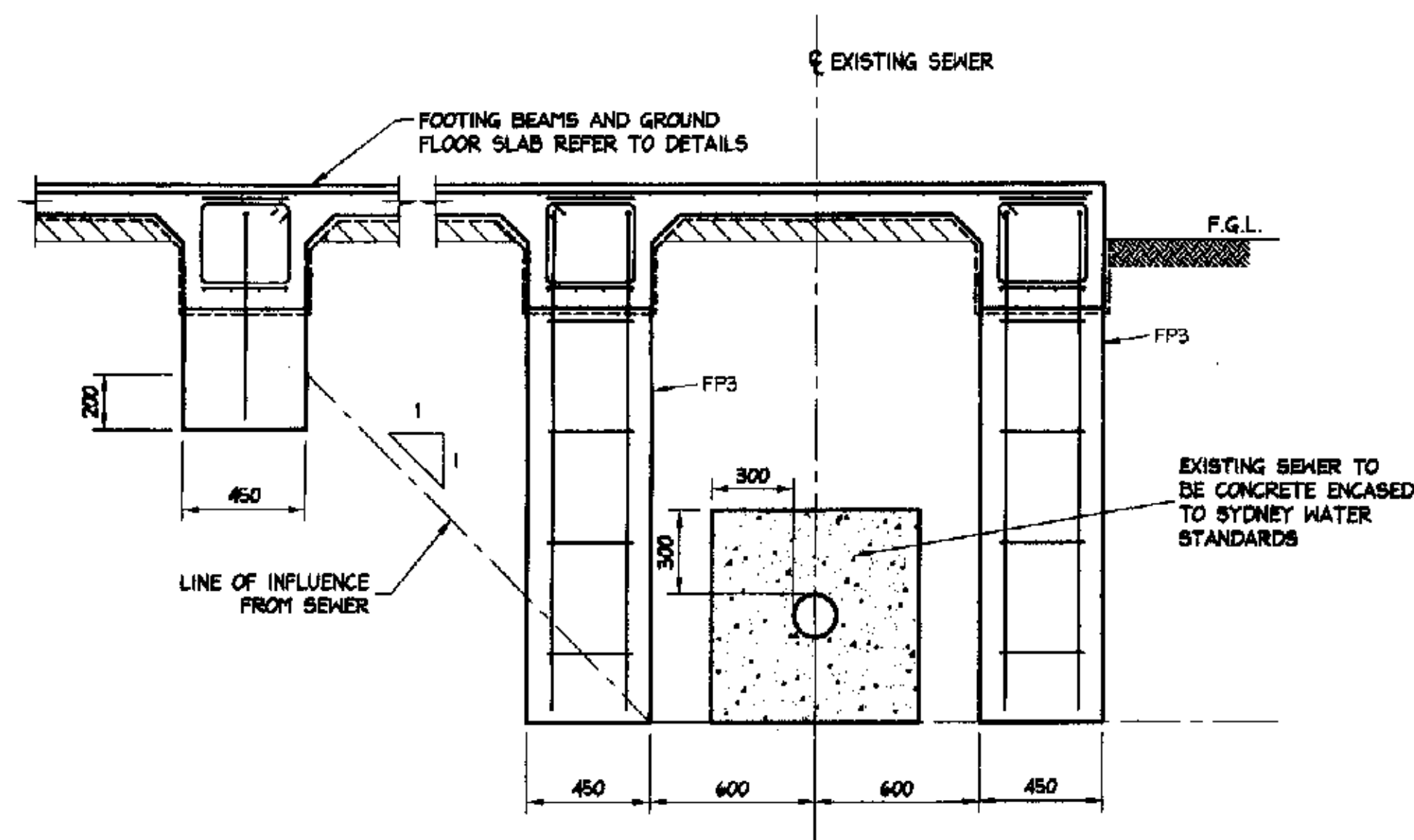
TYPE 'RF6' BEAM
SCALE = 1 : 20



TYPE 'RF7' BEAM
SCALE = 1 : 20



TYPE 'RF8' BEAM
SCALE = 1 : 20



TYPICAL SEWER ENCASEMENT DETAIL
SCALE = 1 : 20

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 2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: 501.

DOCUMENT CERTIFICATION

Date: 14.04.2005
A
DET. MOVED TO 503 DET. ADDED
Lucas Molloy
(Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
BSE(CivE), CPSEng, MIEAust, NPER,
Institute of Engineers Membership No. 788184
I hereby state that this drawing is in compliance
with the provisions of the Building Code of
Australia and/or relevant Australian/Industry
Standards.

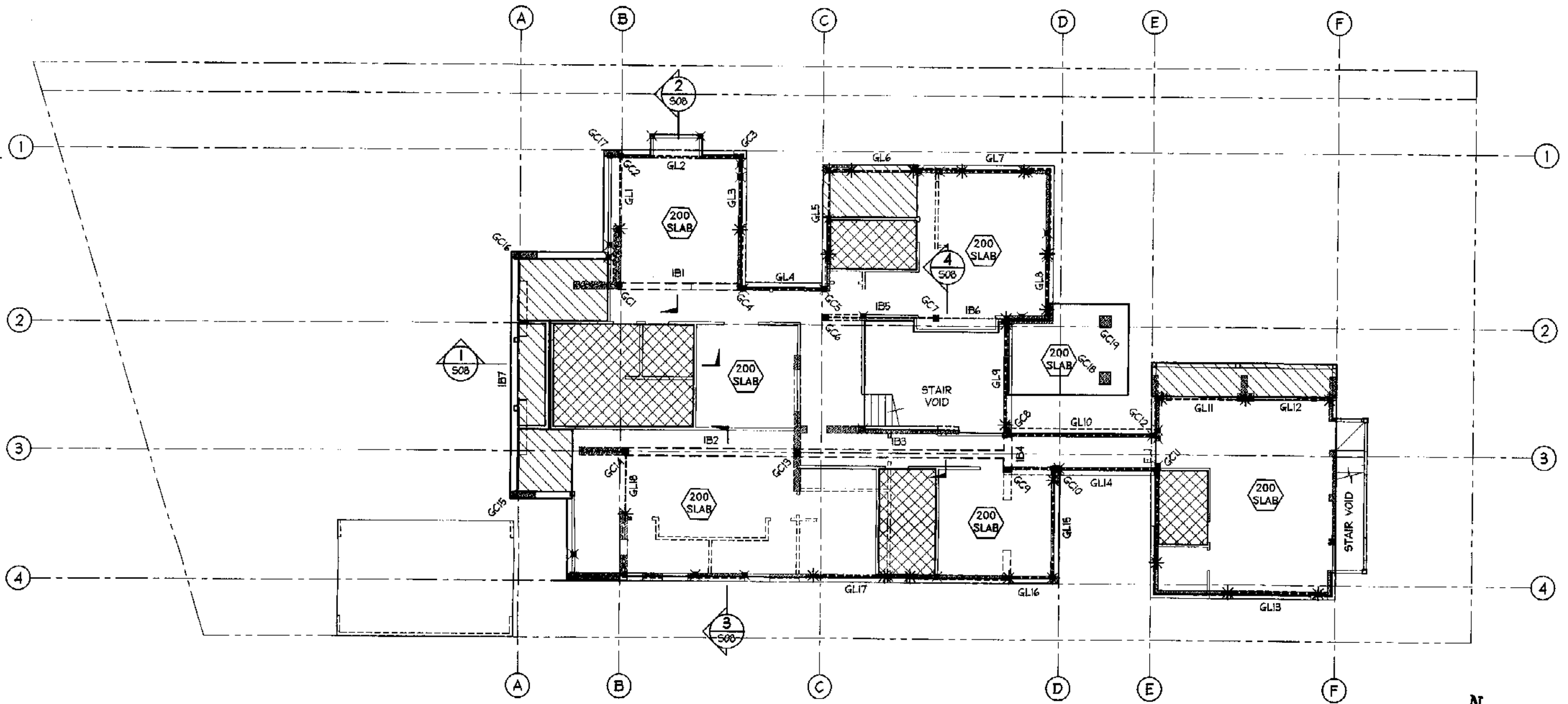


**NORTHERN BEACHES
Consulting Engineers P/L**
ACR 018 121 018 A.S.N. 24 079 121 018
Suite 207, 30 FERNER ROAD
DIEP HUI N.S.W. 2099
Ph: (02) 9884 7880 Fax: (02) 9884 7444
e-mail: info@nbc-engineering.com.au

Project:
**PROPOSED ALTERATIONS
at: 8A Noval Street
Newport
for: Gaunt Family**

Drawing Title:
**FOOTING AND GROUND
FLOOR SLAB
DETAILS SHEET 2**

Date: April 2005
Design: L.M. B.S.
Drawn: Paul R Bruce
041156
504
A



MEMBER SCHEDULE		
MARK	MEMBER	REMARKS
FIRST FLOOR FRAMING		
GL1, GL3, GL5	150 PFC + 250x10 PLATE HOT DIP GALVANIZED	LINTEL
GL2	250 PFC + 250x10 PLATE HOT DIP GALVANIZED	LINTEL
GL6, GL7, GL8	150x100 GALINTEL INTERNAL SKIN 150x100 GALINTEL EXTERNAL SKIN	LINTEL
GL9, GL13, GL15	200 PFC + 250x10 PLATE HOT DIP GALVANIZED	LINTEL
GL10	300 PFC + 250x10 PLATE HOT DIP GALVANIZED	LINTEL
GL11, GL12	150 PFC + 250x10 PLATE CONTINUOUS HOT DIP GALVANIZED	LINTEL
GL14	200 PFC + 250x10 PLATE CONTINUOUS HOT DIP GALVANIZED	LINTEL
GL16	2 x 150x100 GALINTELS	LINTEL
GL17, GL18	150 PFC + 250x10 PLATE HOT DIP GALVANIZED	LINTEL
FOR LINTEL SPANS LESS THAN 1200mm USE 100x100 GALINTELS		
GENERAL FRAMING		
⊗	LOAD CONCENTRATION POINT OVER	
□	COLUMN OVER	
*	BEAM SUPPORT LOCATIONS DIRECT ONTO BRICK WALL BEARING - 100mm MINIMUM END BEARING	

ALL SLAB PANELS TO BE 200mm THICK U.N.O.
FIRST FLOOR SLAB PLAN
 SCALE = 1 : 100

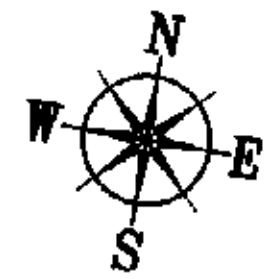
NOTE:
 CONCRETE STRENGTH:
 INTERNAL SLABS:
 f_c = 32 MPa, COVER = 30 mm
 EXTERNAL SLABS:
 f_c = 40 MPa, COVER = 45 mm

LEGEND:

150mm THICK SLAB
SET DOWN 50mm FOR DECK

170mm THICK SLAB
SET DOWN 30mm FOR FALL
IN TILES IN WET AREAS

MEMBER SCHEDULE		
MARK	MEMBER	REMARKS
FIRST FLOOR FRAMING		
GC1	150x100x6 SHS HOT DIP GALVANIZED	COLUMN
GC2	100x100x6 SHS HOT DIP GALVANIZED	COLUMN
GC3, GC4	150x100x6 SHS HOT DIP GALVANIZED	COLUMN
GC5	100x100x6 SHS HOT DIP GALVANIZED	COLUMN
GC6, GC7	150x150x9 SHS HOT DIP GALVANIZED	COLUMN
GC8, GC12	150x100x6 SHS HOT DIP GALVANIZED	COLUMN
GC9, GC10, GC11	150x150x9 SHS HOT DIP GALVANIZED	COLUMN
GC13, GC14	150x150x9 SHS HOT DIP GALVANIZED	COLUMN
GC15, GC16	900x250 REINFORCED CONCRETE	COLUMN
GC17	525x250 REINFORCED CONCRETE	COLUMN
IB1 - IB4 incl	600x270 W REINFORCED CONCRETE	BEAM
IB5, IB6	250 UB 25 CONTINUOUS HOT DIP GALVANIZED	BEAM
IB7	1100x200 W REINFORCED CONCRETE	BEAM



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- NOTES:**
- ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
 - FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

DOCUMENT CERTIFICATION

Date: 11/05/05
 Lucas Molloy
 (Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
 I hold the following qualifications:
 BE(Civil), CPENG, MIEAust, NPER,
 Institute of Engineers Membership No. 756154
 I hereby state that this drawing is in compliance
 with the provisions of the Building Code of
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NB

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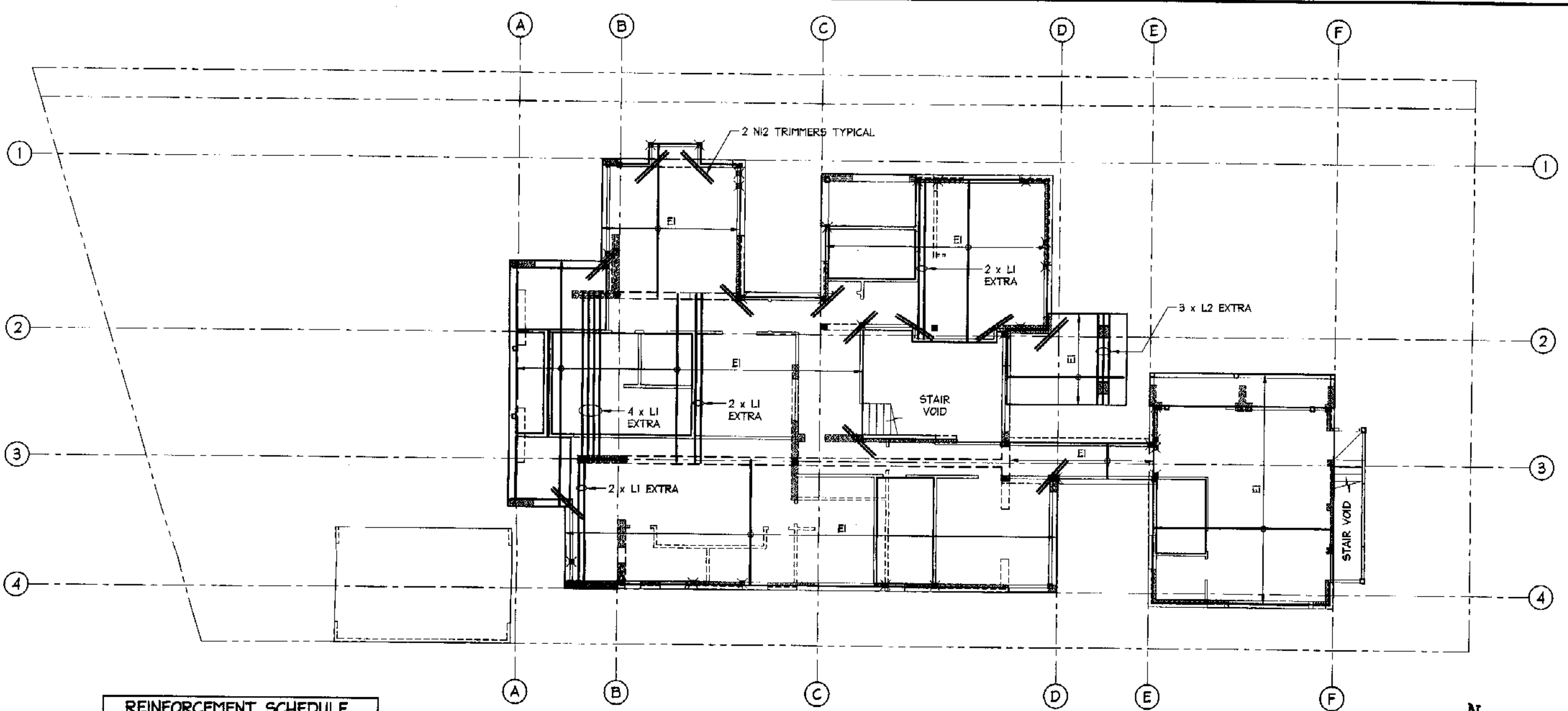
ACN 078 121 618 ABN 24 078 121 618
 Suite 207, 30 FISHER ROAD
 DEE WHITY NSW 2088
 Ph: (02) 9864 7000 Fax: (02) 9864 7444
 e-mail: nb@nbconsulting.com.au

Project: **PROPOSED ALTERATIONS
at: 8A Nooral Street
Newport
for: Gaunt Family**

Drawing Title:
**FIRST FLOOR
SLAB PLAN**

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Date: April 2005	Design: L.M. B.S.	Drawn: Paul R Bruce CIBESet.	Checked:
Job No: 041156	Drawing No: S05	Rev:	



REINFORCEMENT SCHEDULE			
MARK 'X' (prefix)	BAR SIZE	BAR SPACING	LAYER 'Y' (suffix)
A	N12	600	1 BTM 1st
B	N12	400	2 BTM 2nd
C	N12	300	3 TOP 3rd
D	N12	250	4 TOP 4th
E	N12	200	
F	N12	150	
G	N12	100	
H	N16	400	
J	N16	300	
K	N16	250	
L	N16	200	
M	N16	150	
N	N16	100	

NOTE:
THE REINFORCEMENT SHALL BE SPECIFIED ON PLAN USING THE XY (PREFIX/SUFFIX) e.g.
N16 AT 400 LAID SECOND IN THE BOTTOM WILL BE SPECIFIED ON PLAN AS - H2

SECONDARY REINFORCEMENT TO BE N12 AT 200 LAID 2nd
FIRST FLOOR SLAB PLAN
 BOTTOM REINFORCEMENT
 SCALE = 1 : 100

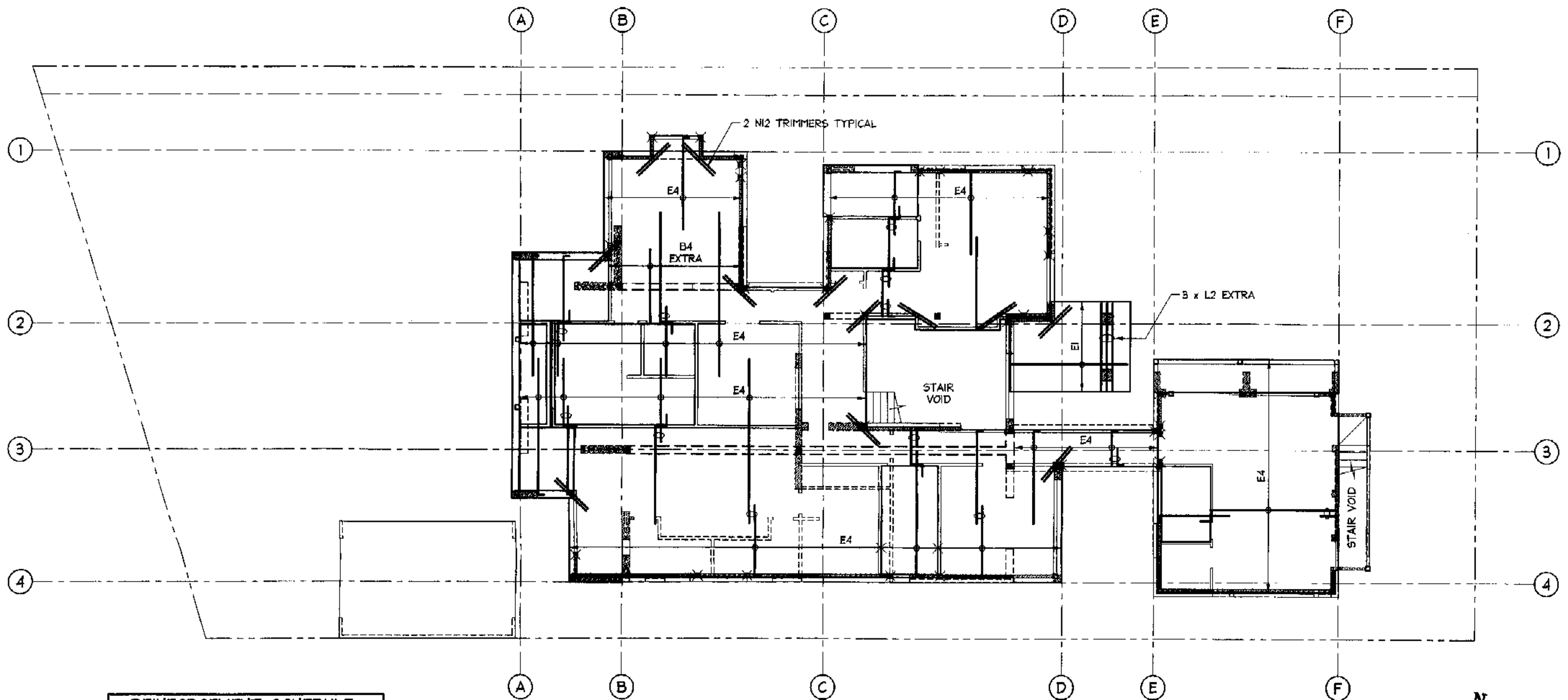


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- NOTES:**
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 - FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

A2

DOCUMENT CERTIFICATION Date: <i>12/05/05</i> Lucas Molloy (Director Northern Beaches Consulting Engineers)		I am a qualified Structural/Civil Engineer. I hold the following qualifications: BE(Civil), CPENG, MIEAust, NPER. Institute of Engineers Membership No. 788184 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian Industry Standards.	NORTHERN BEACHES Consulting Engineers P/L A/C.N. 076 121 616 A.B.N. 24 076 121 616 Suite 207, 39 FISHER ROAD DEE WHY NSW 1530 Ph: (02) 9884 7000 Fax: (02) 9884 7444 e-mail: nb@nbconsulting.com.au	Project: PROPOSED ALTERATIONS at: 8A Noval Street Newport for: Gaunt Family	Drawing Title: FIRST FLOOR SLAB PLAN BOTTOM REINFORCEMENT The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.	Date: April 2005 Designer: L.M. B.S. Drawing No: 041156	Drawn: Paul R Bruce CPEAust. Drawing No: S06	Checked: Rev:
--	--	---	--	--	---	--	---	----------------------



REINFORCEMENT SCHEDULE				
MARK 'X' (prefix)	BAR SIZE	BAR SPACING	LAYER 'Y' (suffix)	
A	N12	600	1	BTM 1st
B	N12	400	2	BTM 2nd
C	N12	300	3	TOP 3rd
D	N12	250	4	TOP 4th
E	N12	200		
F	N12	150		
G	N12	100		
H	N16	400		
J	N16	300		
K	N16	250		
L	N16	200		
M	N16	150		
N	N16	100		

NOTE:
THE REINFORCEMENT SHALL BE SPECIFIED ON PLAN USING THE XY (PREFIX/SUFFIX) e.g. N16 AT 400 LAID SECOND IN THE BOTTOM WILL BE SPECIFIED ON PLAN AS - H2

SECONDARY REINFORCEMENT TO BE N12 AT 200 LAID 3rd
FIRST FLOOR SLAB PLAN
 TOP REINFORCEMENT
 SCALE = 1 : 100

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 - FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

DOCUMENT CERTIFICATION

Date: *APR 05*
 Lucas Molloy
 (Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
 I hold the following qualifications:
 BE(Civil), CPEng, MIEAust, NPER.
 Institute of Engineers Membership No. 788104
 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian Industry Standards.



**NORTHERN BEACHES
Consulting Engineers P/L**
 A.C.N. 076 121 616 A.B.N. 24 076 121 616
 Suite 207, 30 FISHER ROAD
 DEE WHY N.S.W. 2089
 Ph: (02) 9984 7000 Fax: (02) 9984 7444
 e-mail: nb@nbconsulting.com.au

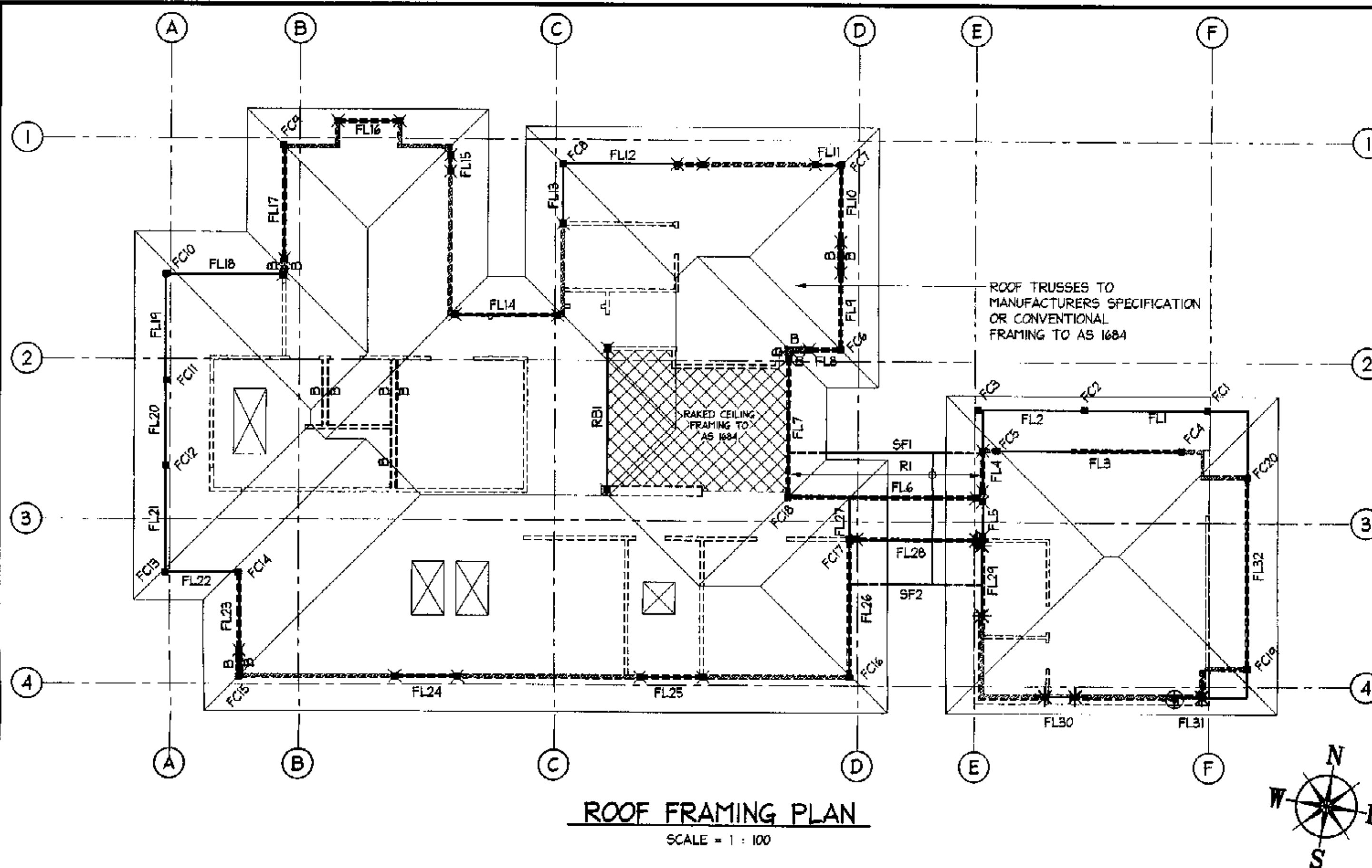
Project:
PROPOSED ALTERATIONS
 at: 8A Noval Street
 Newport
 for: Gaunt Family

Drawing Title:
**FIRST FLOOR
SLAB PLAN
TOP REINFORCEMENT**

Date: April 2005	Design: L.M. B.S.	Drawn: Paul R Bruce DREAust.	Checked:
Job No: 041156	Drawing No: S07	Rev: -	

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S08



NOTES:

- ORGANIC TERMITE TREATMENT TO BE CARRIED OUT TO PERIMETER OF ENTIRE BUILDING AND SUB-FLOOR AREAS. ANNUAL INSPECTIONS AND TREATMENT AS REQUIRED SHALL BE THE RESPONSIBILITY OF THE PROPRIETOR.
- WALL FRAMING SHALL BE IN ACCORDANCE WITH AS 1684 TIMBER FRAMING CODE AND NSW TIMBER FRAMING MANUAL. 90x45 F7 KILN DRIED T2 TREATED STUDS AT 450 CTS.
- BRACE WALLS AND ROOF IN ACCORDANCE WITH AS 1684 TIMBER FRAMING CODE AND NSW TIMBER FRAMING MANUAL.
- TIE DOWNS TO ROOF RAFTERS AND BEAMS SHALL BE IN ACCORDANCE WITH AS 1684 TIMBER FRAMING CODE AND AS 1170.2 WIND LOADING CODE.
- TRIM ROOF OPENINGS WITH EQUIVALENT RAFTER SIZES UNLESS NOTED OTHERWISE.
- EXTERNAL/EXPOSED HYSPAN LVL OR TASBEAM MEMBERS TO BE SUITABLY PRESERVATIVE TREATED TO H3 LEVEL (AS 1604) THEN STAINED OR PAINTED.
- EXTERNAL/EXPOSED HARDWOOD MEMBERS TO BE DURABILITY CLASS 2 OR BETTER (AS 1604) THEN STAINED OR PAINTED.
- ENGINEER TO INSPECT AND CERTIFY ALL FRAMING AND BRACING PRIOR TO SHEETING.

MEMBER SCHEDULE

MARK	MEMBER	REMARKS
ROOF FRAMING		
FL1, FL2	230 PFC HOT DIP GALVANIZED	LINTEL
FL3	280 PFC HOT DIP GALVANIZED	LINTEL
FL4	200x70 F7	LINTEL
FL5	200x70 F7	LINTEL
FL6, FL7	400x63 HYSPAN LVL	LINTEL
FL8 - FL11 incl	200x63 HYSPAN LVL	LINTEL
FL12, FL13	240x63 HYSPAN LVL	LINTEL
FL14	300x45 HYSPAN LVL	LINTEL
FL15, FL16	200x63 HYSPAN LVL	LINTEL
FL17 - FL23 incl	240x63 HYSPAN LVL	LINTEL
FL24, FL25	200x63 HYSPAN LVL	LINTEL
FL26	400x63 HYSPAN LVL	LINTEL
FL27	200x70 F7	LINTEL
FL28	400x63 HYSPAN LVL	LINTEL
FL29, FL30	2 x 100x100 GALINTELS or 2 x 80x100 ULTRA LINTELS	LINTEL
FL31	100x100 GALINTELS or 80x100 ULTRA LINTELS EXTERNAL SKIN 230 PFC INTERNAL SKIN	LINTEL
FL32	280 PFC HOT DIP GALVANIZED	LINTEL
RI	190x45 F7 KILN DRIED	RAFTERS AT 600 CTS
RBI	400x63 HYSPAN LVL	BEAM
FC1, FC2, FC3	195x135 F7 H3 TREATED	POST
FC4, FC5	89x89x6 SHS HOT DIP GALVANIZED	COLUMN
FC6, FC7, FC8	90x90 F7	POST
FC9 - FC15 incl	195x135 F7 H3 TREATED	COLUMN
FC16 - FC20 incl	89x89x6 SHS HOT DIP GALVANIZED	COLUMN
SF1, SF2	2 x 190x45 F7 KILN DRIED GLUE AND NAIL LAMINATED	STRUCTURAL FASCIA
GENERAL FRAMING		
SB	PRYDA STRAP BRACING WITH TENSIONERS TO UNDER SIDE OF FLOOR JOISTS AND RAFTERS WHERE INDICATED ON PLAN	
A	ANGLE BRACING TO WALLS REFER TYPICAL DETAILS	
B	PLY BRACING TO WALLS REFER TYPICAL DETAILS	
DR	DOUBLE RAFTERS GLUE AND NAIL LAMINATED	
NP1	45mm THICK F7 KILN DRIED NAILING PLATE DEPTH TO MATCH ADJACENT MEMBER. FIX TO BRICK WALL WITH M12 EPOXY SET ANCHORS AT 900 CTS	
NP2	45mm THICK F7 KILN DRIED NAILING PLATE DEPTH TO MATCH ADJACENT MEMBER. FIX TO STUD WALL WITH M12 COACH BOLTS AT 900 CTS	
*	BEAM SUPPORT LOCATIONS DIRECT ONTO BRICK WALL BEARING - 100mm MINIMUM END BEARING	
⊗	2 STUDS NAIL LAMINATED or 90x90 F7 POST	LOAD CONCENTRATION POINT BELOW
⊕	M10 THREADED ROD TIE DOWN TO FLOOR SLAB, HOT DIP GALVANIZED	TIE DOWN LOCATION

NOTE:

- ASTERISK (*) BESIDE MEMBER SIZE INDICATES MEMBERS DESIGNED TO SUIT ARCHITECTS REQUIREMENTS FOR MINIMUM SIZE, SPACING AND LOCATION OF MEMBERS.
- MGP 12 MAY BE SUBSTITUTED FOR F7 SOFTWOOD OR LESS.
MGP 15 MAY BE SUBSTITUTED FOR F11 SOFTWOOD OR LESS.
MGP MUST NOT BE USED AS A SUBSTITUTE WHERE HARDWOOD IS SPECIFIED.
- ALL TIMBER SHALL BE KILN DRIED, DO NOT USE GREEN TIMBER.
- ALL SOFTWOOD TIMBER FRAMING TO HAVE A MINIMUM TREATMENT PROTECTION OF H2 or T2 TREATED FOR TERMITE PROTECTION UNLESS NOTED OTHERWISE.
- PROVIDE BRIDGING TO PURLINS AT MID SPAN TO MANUFACTURERS SPECIFICATION.

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SUBMISSION ONLY**

NOTES:

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DOCUMENT CERTIFICATION

Date: **APR 05**
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(Director Northern Beaches Consulting Engineers)

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A.C.N. 076 121 616 A.B.N. 24 076 121 616
Suite 207, 30 FISHER ROAD
DEE WHY N.S.W. 2099
Ph: (02) 9994 7000 Fax: (02) 9994 7444
e-mail: nb@nbconsulting.com.au

Project:
**PROPOSED ALTERATIONS
at: 8A Noval Street
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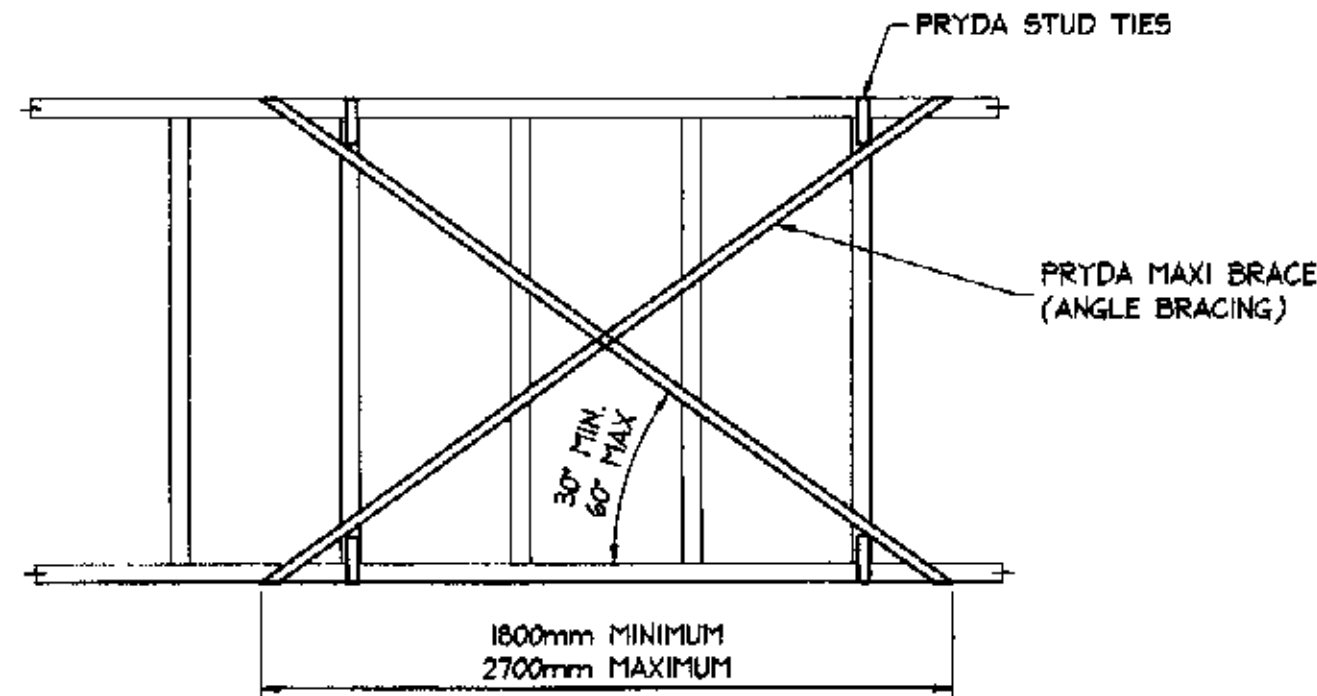
Drawing Title:
**ROOF
FRAMING PLAN**

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Date:	Design:	Drawn:	Checked:
April 2005	L.M. B.S.	Paul R Bruce CPENG Aust.	
Job No:	Drawing No:	Rev:	
041156	S10	-	

METAL TENSION STRAP BRACING:

PRYDA MAXI BRACE (ANGLE BRACING)
FIXED WITH TWO GALVANISED FLATHEAD NAILS
Ø8.15mm x 30mm LONG TO EACH STUD, AND THE
FACE OF THE TOP AND BOTTOM PLATE.
AND FOUR GALVANISED FLATHEAD NAILS
Ø8.15mm x 30mm LONG TO THE STRAP RETURN
OVER THE TOP PLATE AND UNDER THE BOTTOM PLATE.



NOTES:

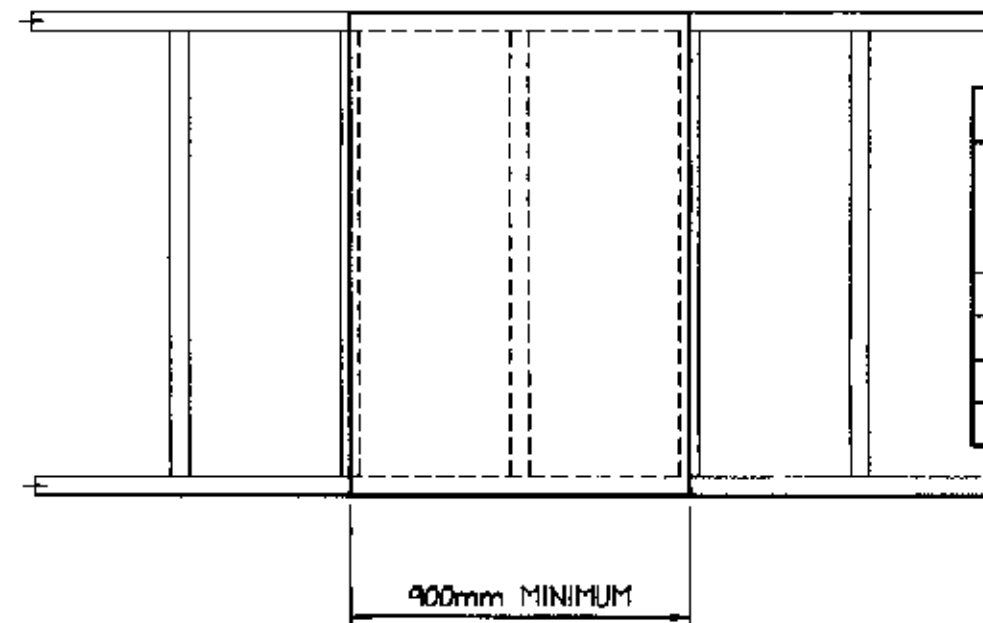
1. FOR POWER DRIVEN NAILS AND STAPLES REFER ABOVE.
2. NOGGINGS HAVE BEEN OMITTED FOR CLARITY.

TYPE A - WALL BRACING UNIT

SCALE = 1 : 20

PLYWOOD BRACING:

FIX PLYWOOD PANELS WITH GALVANISED FLATHEAD NAILS
Ø2.8mm x 30mm LONG MINIMUM OR EQUIVALENT AT 50mm
CENTRES ALONG TOP AND BOTTOM PLATES, 150mm CENTRES
ALONG VERTICAL EDGES AND 300mm CENTRES ALONG
INTERMEDIATE STUDS.
NAILS SHALL BE LOCATED A MINIMUM OF 7mm FROM PANEL EDGES.
POWER DRIVEN GALVANISED NAILS OR COATED STAPLES MAY BE
USED WHERE THEY PROVIDE AT LEAST THE EQUIVALENT STRENGTH
TO HAND DRIVEN Ø2.8mm x 30mm LONG GALVANISED CLOUTS
OR FLATHEAD NAILS. IN THE CASE OF POWER DRIVEN STAPLES,
STAPLE SPACING SHALL BE 35mm CENTRES AT TOP AND BOTTOM
PLATES, 100mm CENTRES AT VERTICAL PLYWOOD EDGES AND
200mm CENTRES ALONG INTERMEDIATE STUDS.



NOTES:

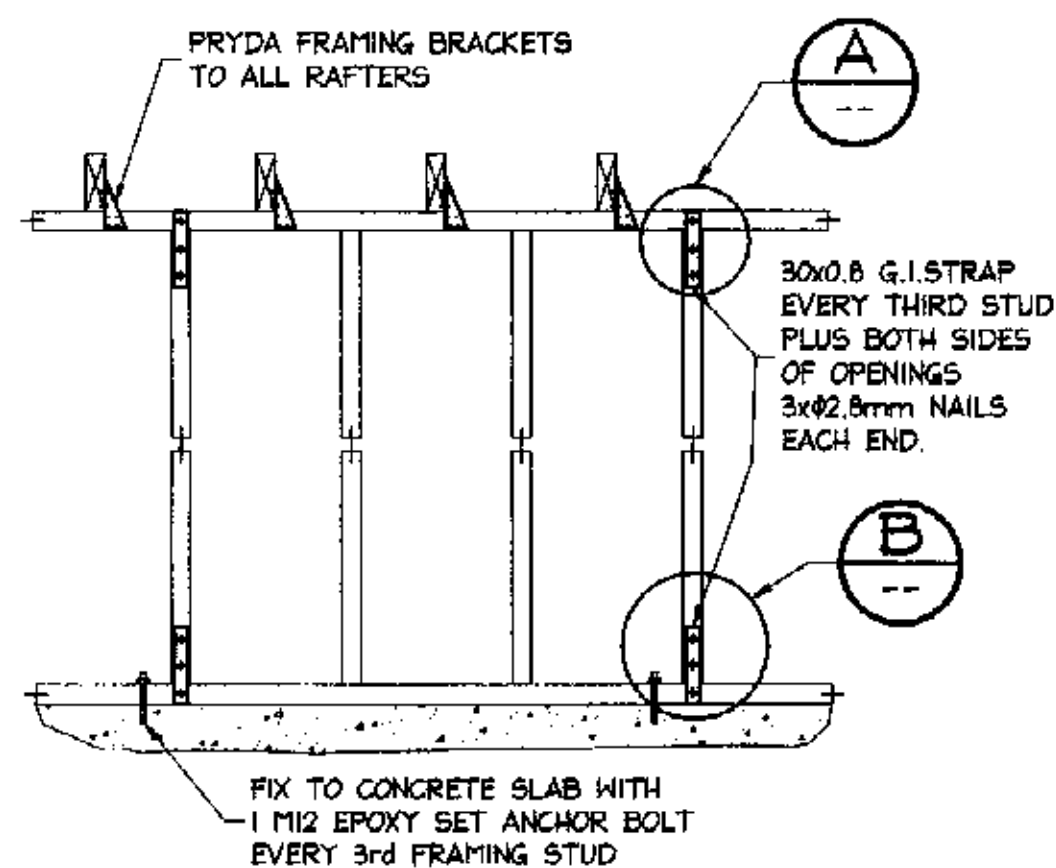
1. FOR PLYWOOD THICKNESS REFER TO TABLE.
2. FOR POWER DRIVEN NAILS AND STAPLES REFER ABOVE.
3. PANEL EDGES SHALL BE SUPPORTED BY STUDS.
4. NOGGINGS HAVE BEEN OMITTED FOR CLARITY.

TYPE B - WALL BRACING UNIT

SCALE = 1 : 20

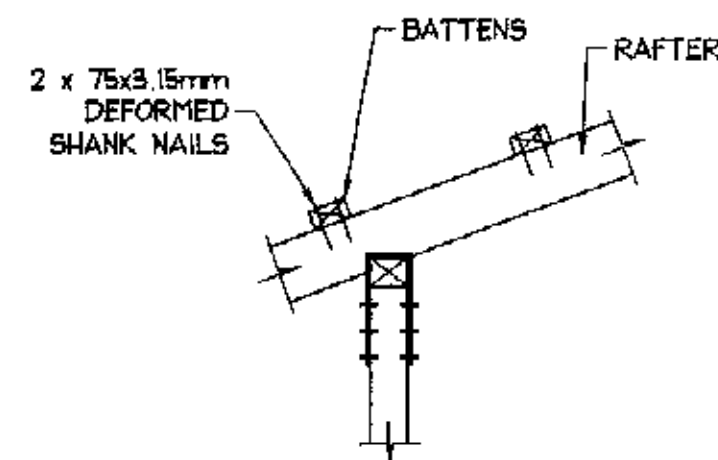
PLYWOOD STRESS GRADE	PLYWOOD THICKNESS	
	MAXIMUM STUD SPACING	
	450mm	600mm
F8	7.0mm	9.0mm
F11	6.0mm	7.0mm
F14	4.0mm	6.0mm
F27	4.0mm	4.5mm

LINTEL/STUD TIE DOWN				
No. OF NAILS REQUIRED EACH END OF STRAP 30mmx0.8mm G.I. STRAP WITH NAILS AS PER BELOW				
OPENING WIDTH	TIE DOWN DISTANCE			
	2.5m	3.6m	5.2m	6.7m
1200mm	3	3	3	4
1800mm	3	3	4	6
3000mm	3	6	-	-
4800mm	6	-	-	-

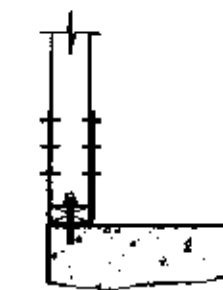


TYPICAL TIE DOWN DETAIL

SCALE = 1 : 20



DETAIL A
SCALE = 1:20



DETAIL B
SCALE = 1:20

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NOTES:

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2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: 501.

DOCUMENT CERTIFICATION

Date: **APR 05**
Lucas Molloy
(Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
BE(Civil), CPENG, MIE Aust., NPER,
Institute of Engineers Membership No. 758184
I hereby state that this drawing is in compliance
with the provisions of the Building Code of
Australia and/or relevant Australian Industry
Standards.



NORTHERN BEACHES
Consulting Engineers P/L
ACN 091 121 819 A.S.N. 24 075 121 819
Suite 207, 30 FISHER ROAD
DEESIDE NSW 2099
Ph: (02) 9884 7000 Fax: (02) 9884 7444
e-mail: nb@nbconsulting.com.au

Project:
PROPOSED ALTERATIONS
at: 8A Nooral Street
Newport
for: Gaunt Family

Drawing Title:
FRAMING
DETAILS

Date:
April 2005

Design:
L.M.
B.S.

Drawn:
Paul R Bruce
CHBAust.

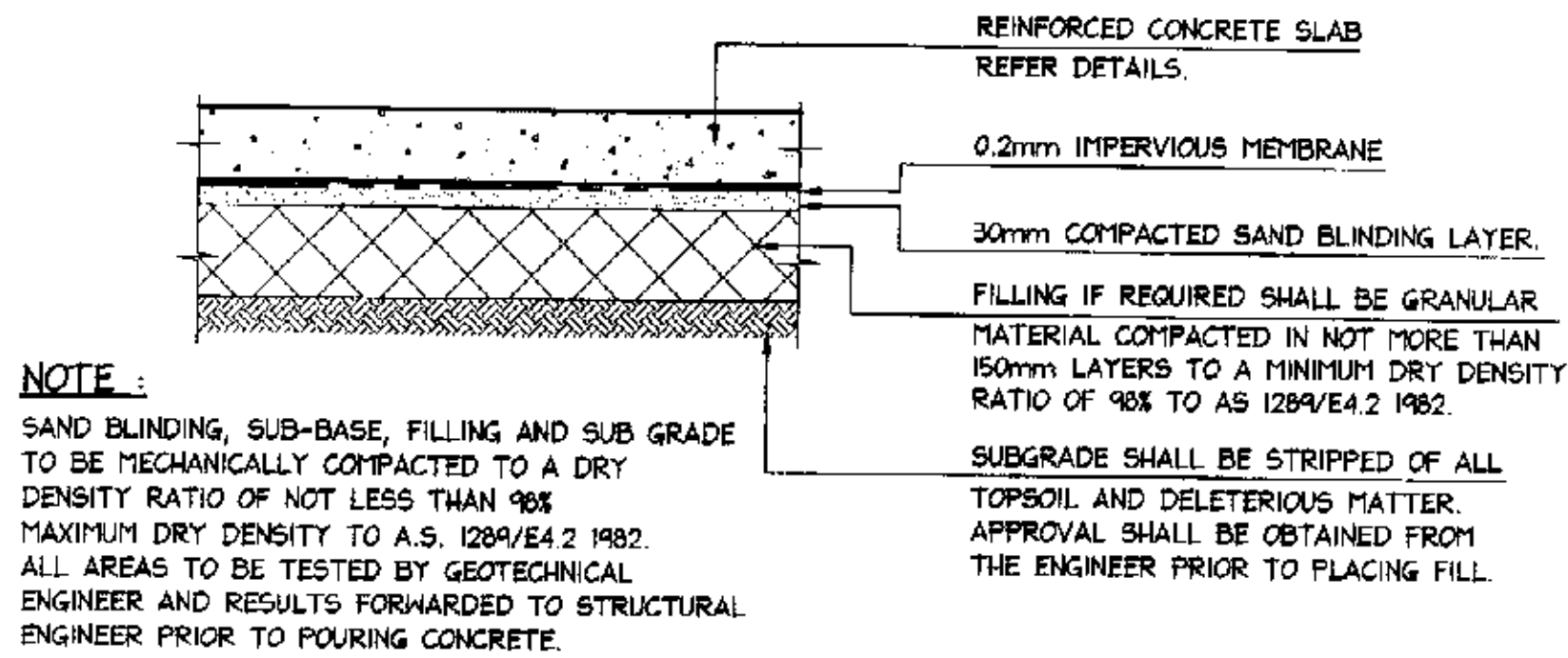
Checked:

Job No:
041156

Drawing No:
S11

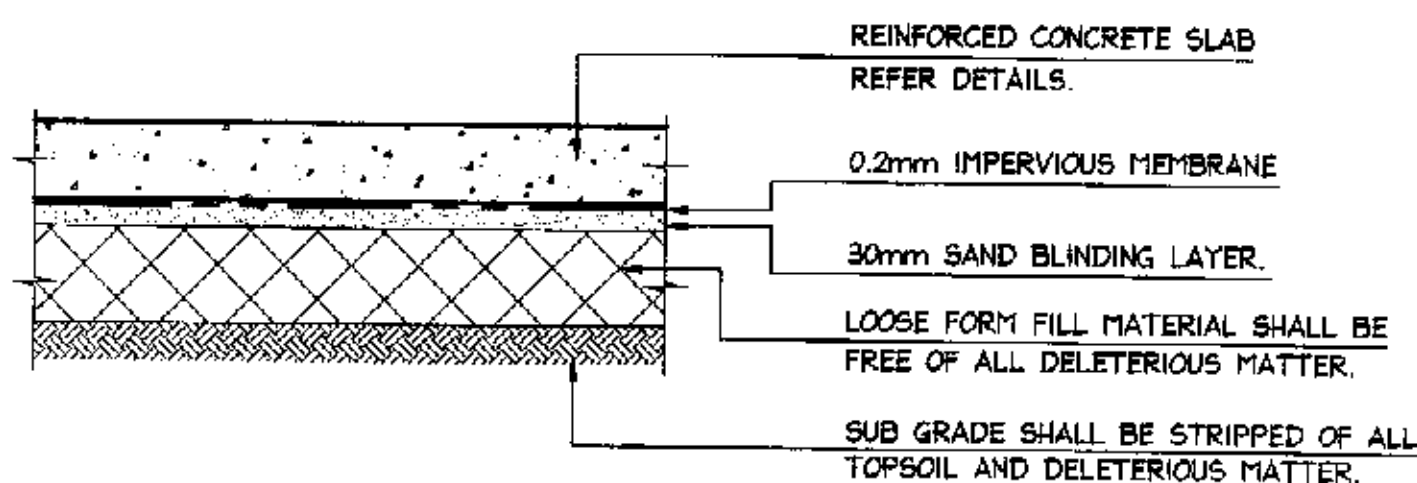
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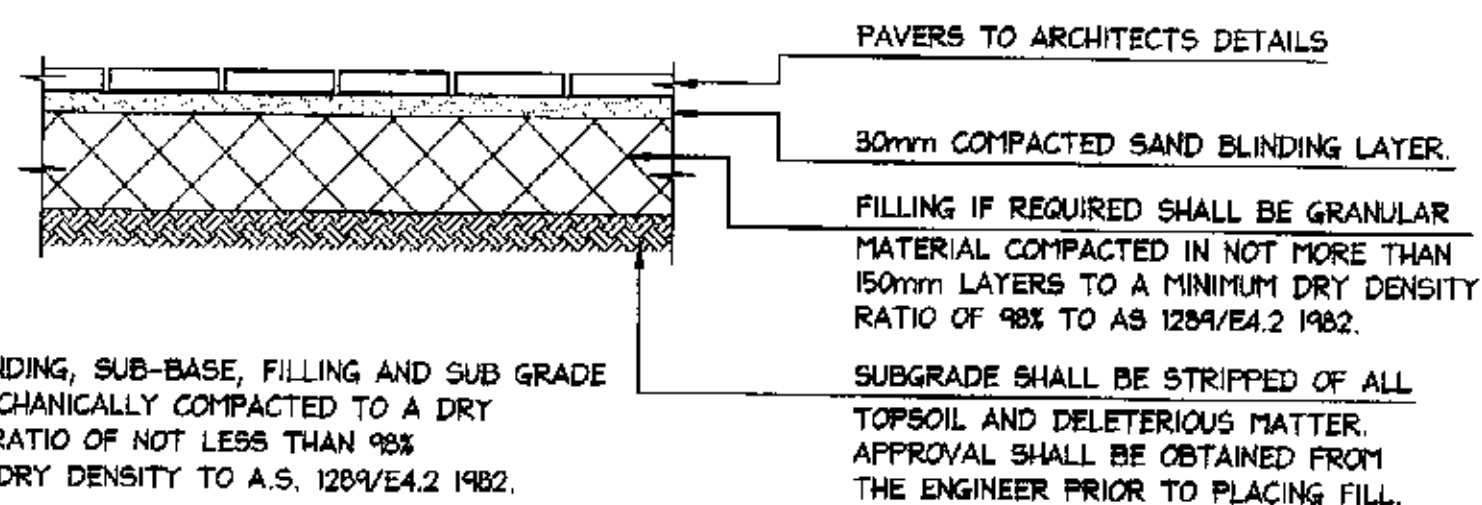
TYPICAL SLAB PREPARATION TYPE A SLAB ON GRADE

N.T.S.



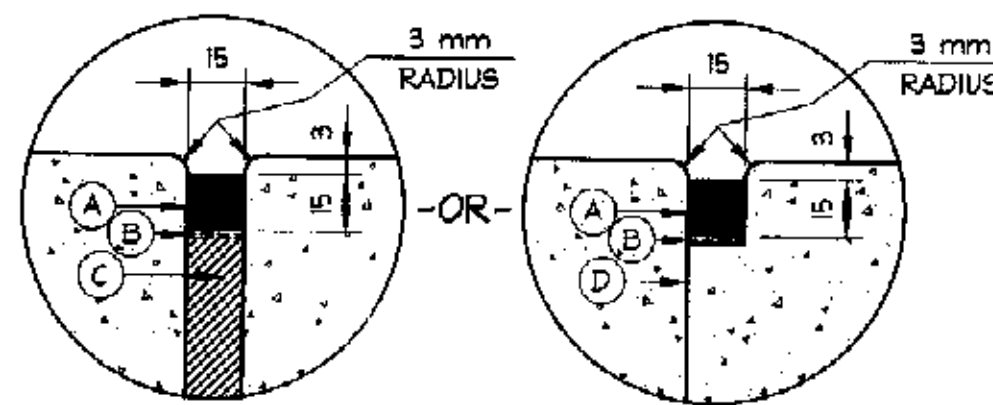
TYPICAL SLAB PREPARATION TYPE B SUSPENDED SLAB ON LOOSE FORM FILL

N.T.S.



TYPICAL PAVER PREPARATION PAVERS ON GRADE

N.T.S.

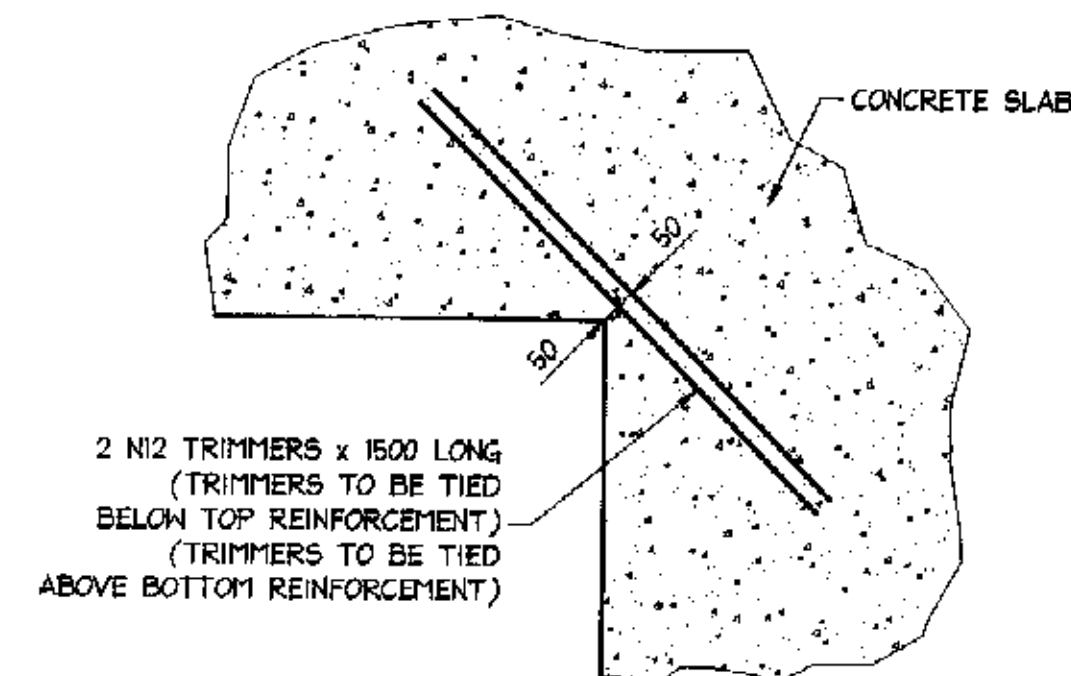


- (A) - THIOFLEX 600 POURING OR GUN GRADE SEALANT BY PARBURY TECHNOLOGIES OR APPROVED EQUIVALENT.
- (B) - POLYETHYLENE TAPE BOND BREAKER
- (C) - FLEXIBLE FOAM OR SELF EXPANDING CORK REFER DETAILS
- (D) - KEYED JOINT OR SAW CUT JOINT

NOTE:
THIOFLEX 600 POURING GRADE IS SUITABLE ONLY FOR HORIZONTAL JOINTS WITH SOUND BACKING. FOR INCLINED OR VERTICAL JOINTS THIOFLEX 600 GUN GRADE SHOULD BE USED. BOTH GRADES OF THIOFLEX 600 SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.

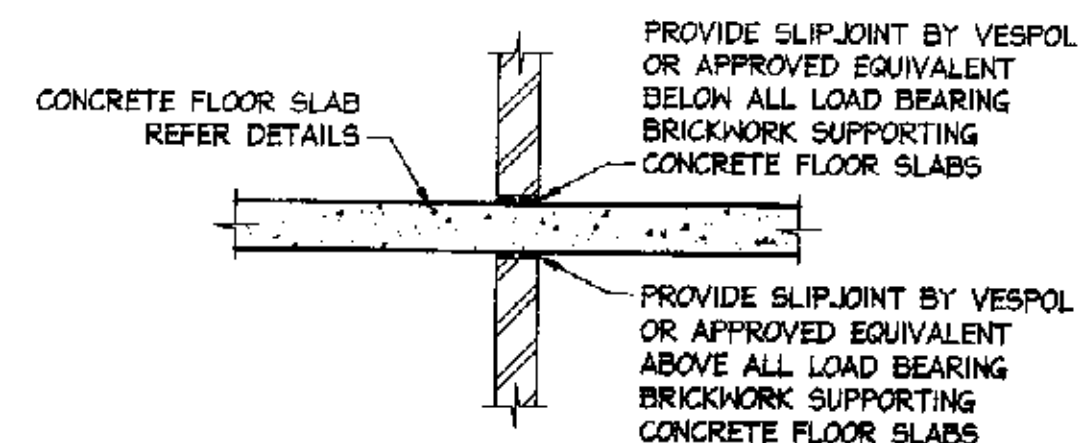
TYPICAL JOINT SEALANT DETAILS

N.T.S.



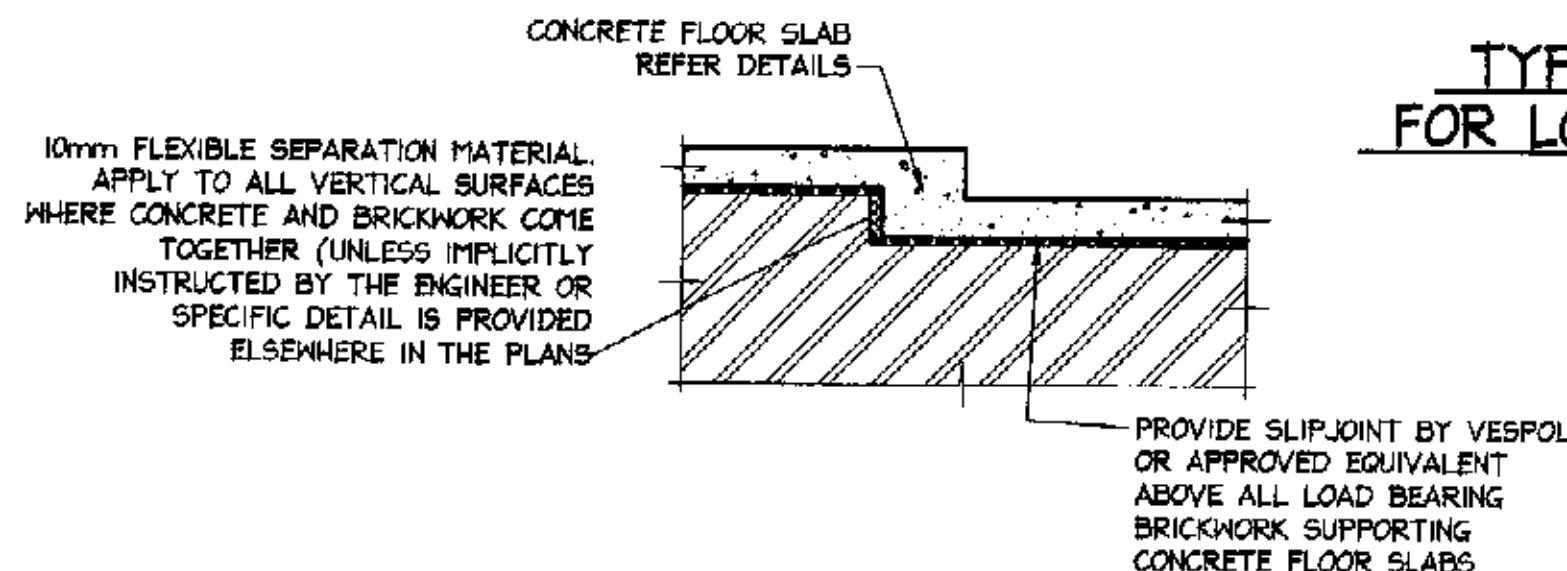
TYPICAL TRIMMER DETAIL

SCALE = 1 : 20



TYPICAL SLIP JOINT DETAIL FOR LOAD BEARING BRICK WALLS

SCALE = 1 : 20



TYPICAL VERTICAL SHRINKAGE CONTROL JOINT DETAIL FOR LOAD BEARING BRICK WALLS

SCALE = 1 : 20

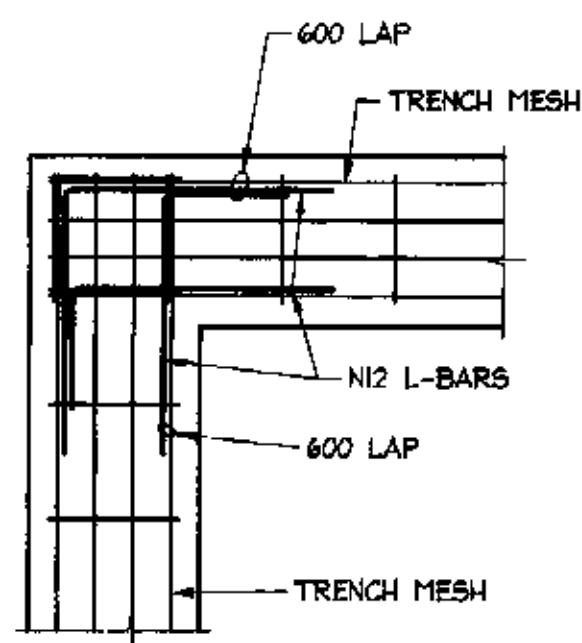
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NOTES:

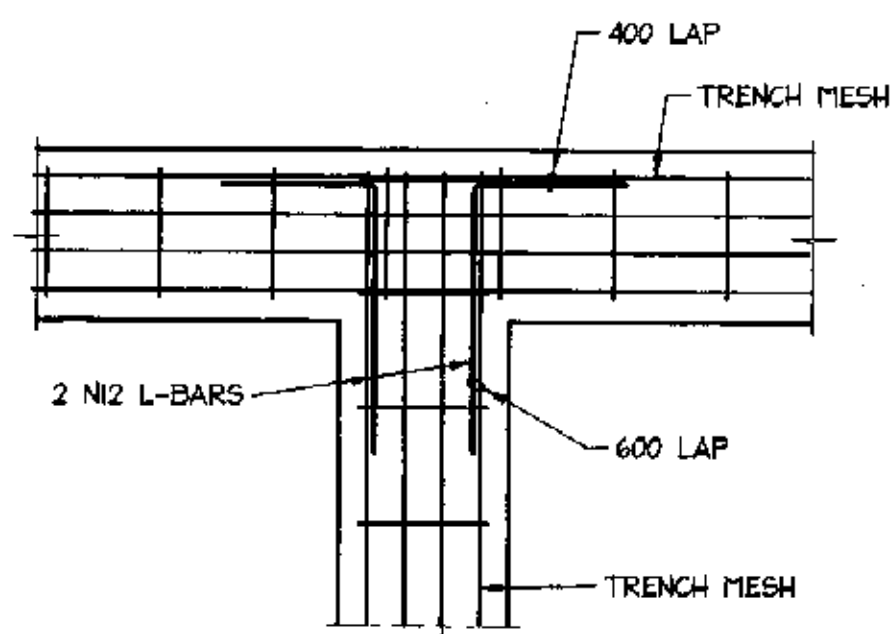
- ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
- FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

A2

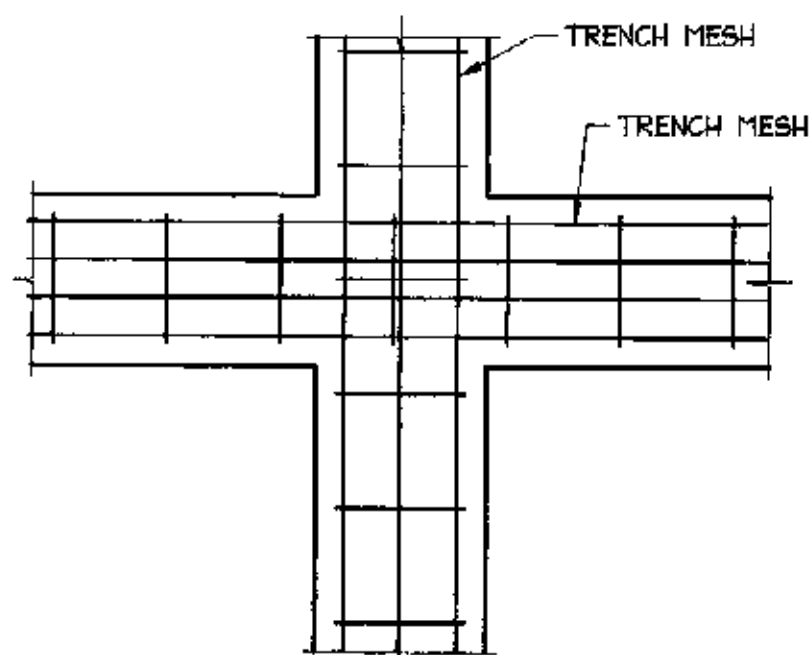
																				TO DRAWING NUMBER: 501.											
				DOCUMENT CERTIFICATION				I am a qualified Structural/Civil Engineer. I hold the following qualifications: BE(Civil), CPENG, MIEAust., NPER. Institute of Engineers Membership No. 788184 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.								Project: PROPOSED ALTERATIONS at: 8A Noval Street Newport for: Gaunt Family				Drawing Title: MISCELLANEOUS SLAB AND FOOTING DETAILS SHEET 1				Date: April 2005		Design: L.M. B.S.		Drawn: Paul R Bruce O'REAM.		Checked:	
Date: APR 05				Lucas Molloy (Director Northern Beaches Consulting Engineers)				A.C.N. 078 121 616 A.B.N. 24 078 121 616 Suite 207, 30 FISHER ROAD DEE WHY N.S.W. 2099 Ph: (02) 9884 7000 Fax: (02) 9884 7444 e-mail: nb@nbconsulting.com.au								The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.				Job No: 041156		Drawing No: S13		Rev: -							
Date:				Rev:				Amendment:																							



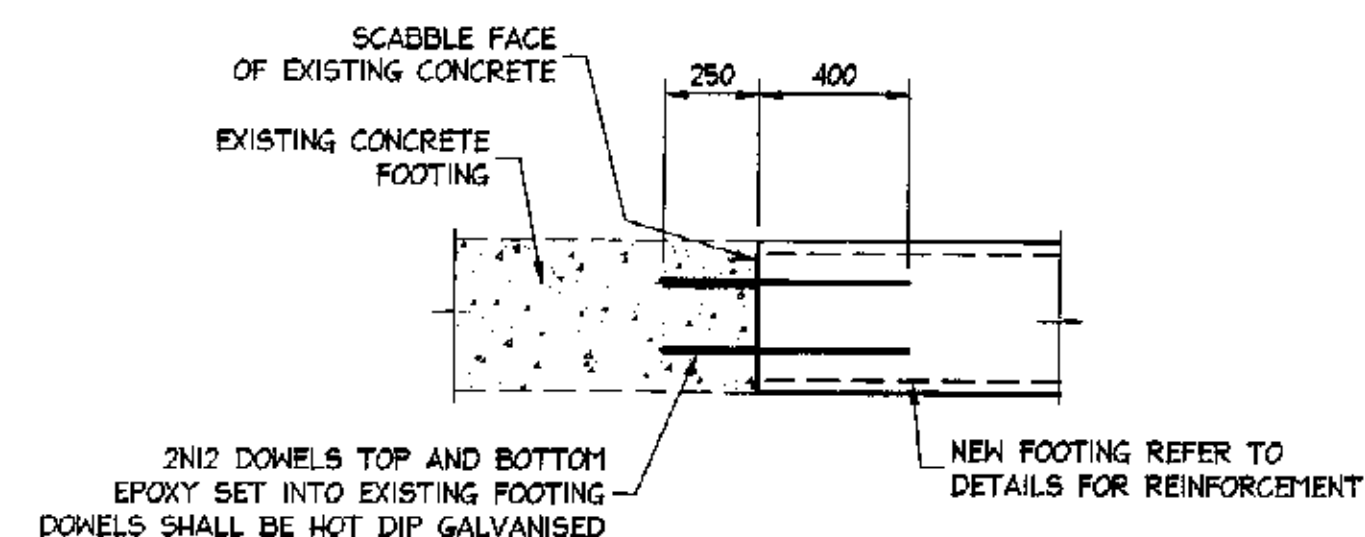
PLAN
FOOTING CORNER
SCALE = 1 : 20



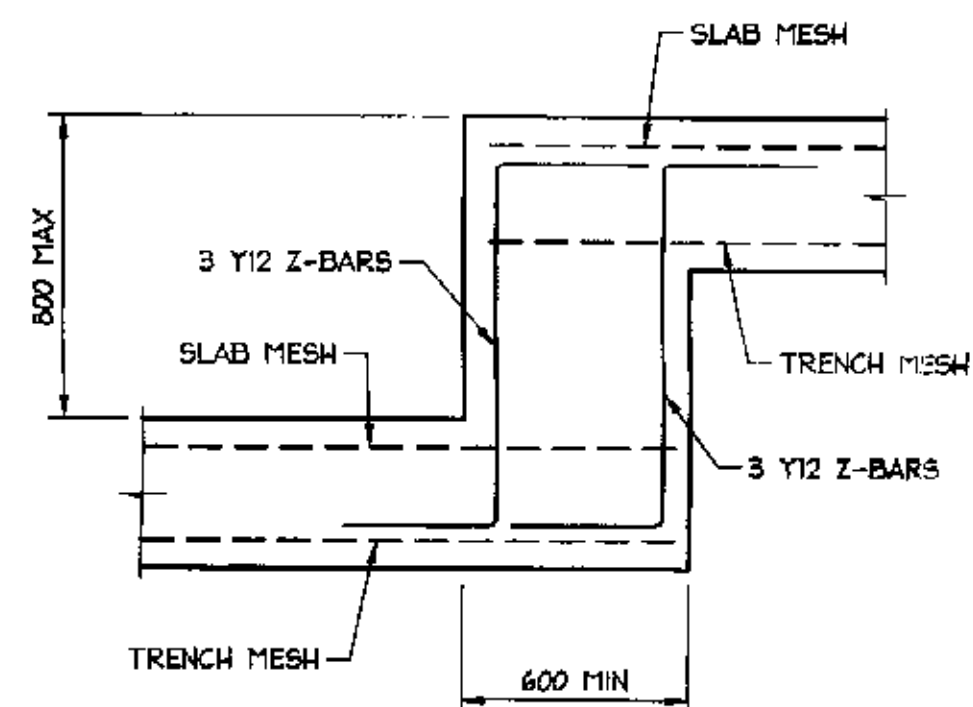
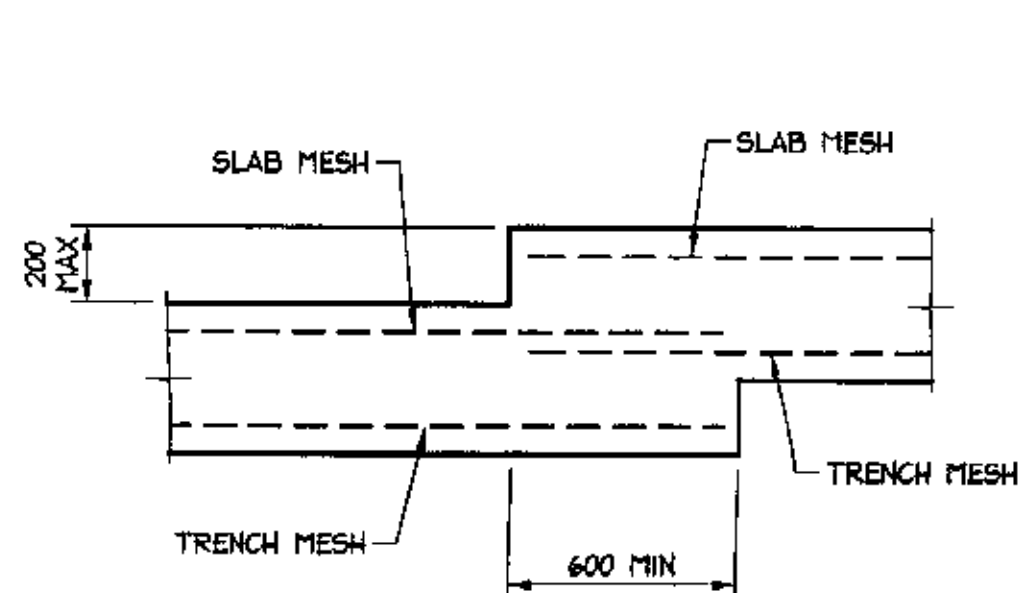
PLAN
FOOTING 'T' JUNCTION
SCALE = 1 : 20



PLAN
FOOTING 'X' JUNCTION
SCALE = 1 : 20



EXISTING TO NEW FOOTING DETAIL
SCALE = 1 : 20



TYPICAL STEP FOOTING DETAILS
SCALE = 1 : 20

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2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

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Date: **APR 05**
Lucas Molloy
(Director Northern Beaches Consulting Engineers)

I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
BE(Civil), CPENG, MIEAust., MPEER.
Institute of Engineers Membership No. 788184
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NORTHERN BEACHES
Consulting Engineers P/L
ACN 078 121 616 ABN 24 078 121 616
Suite 207, 301 FISHER ROAD
DEE WHY NSW 2099
Ph: (02) 9884 7000 Fax: (02) 9884 7444
e-mail: nb@nbce.com.au

Project:

PROPOSED ALTERATIONS
at: 8A Noval Street
Newport
for: Gaunt Family

Drawing Title:

MISCELLANEOUS
SLAB AND FOOTING
DETAILS SHEET 2

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Date:

April 2005

Job No:

041156

Design:

L.M.
B.S.

Drawn:

Paul R Bruce
CME Aust.

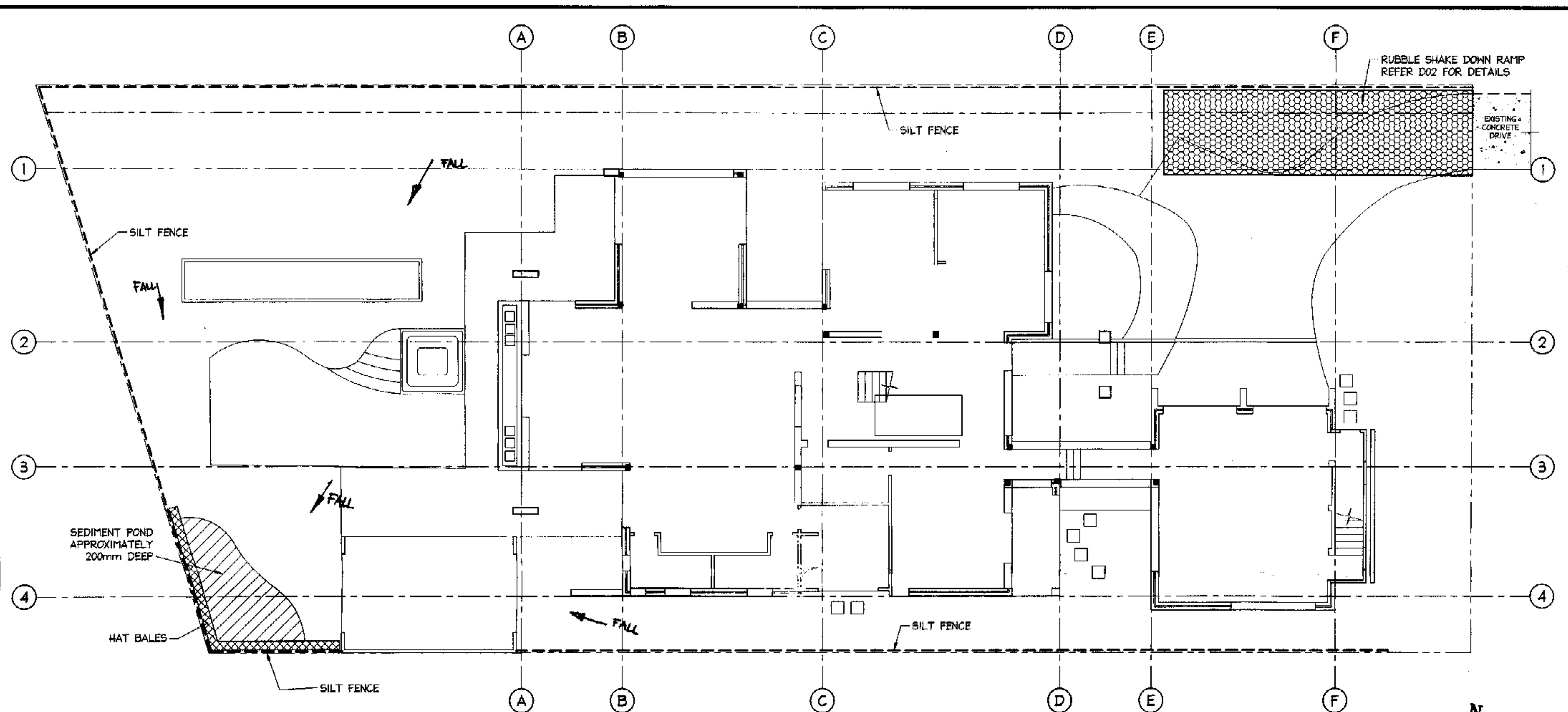
Drawing No:

S14

Checked:

Rev:

-



SEDIMENT AND EROSION CONTROL PLAN
SCALE = 1 : 100

WARNING
The stamping of this plan by Insight Development Consultants Pty Ltd does not relieve:

- The applicant's responsibility to obtain approval from Sydney Water or other utilities.
- The Structural Engineer of their responsibility to ensure the structural adequacy of this project.
- The Applicant, Structural Engineer or other Professional of their responsibility to ensure that all stamped details are consistent with the issued Construction Certificate/Building Details.

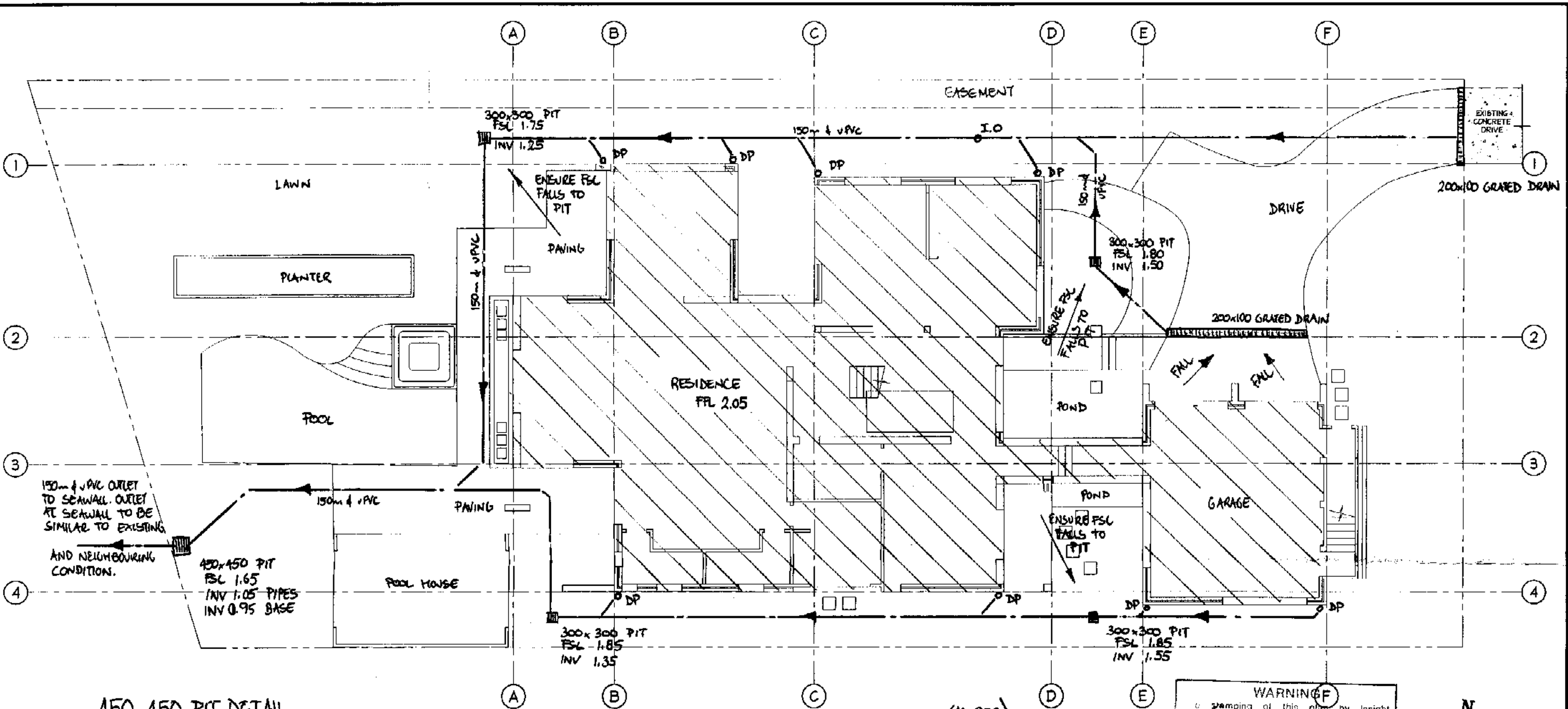
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- NOTES:**
1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
 2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: D01.

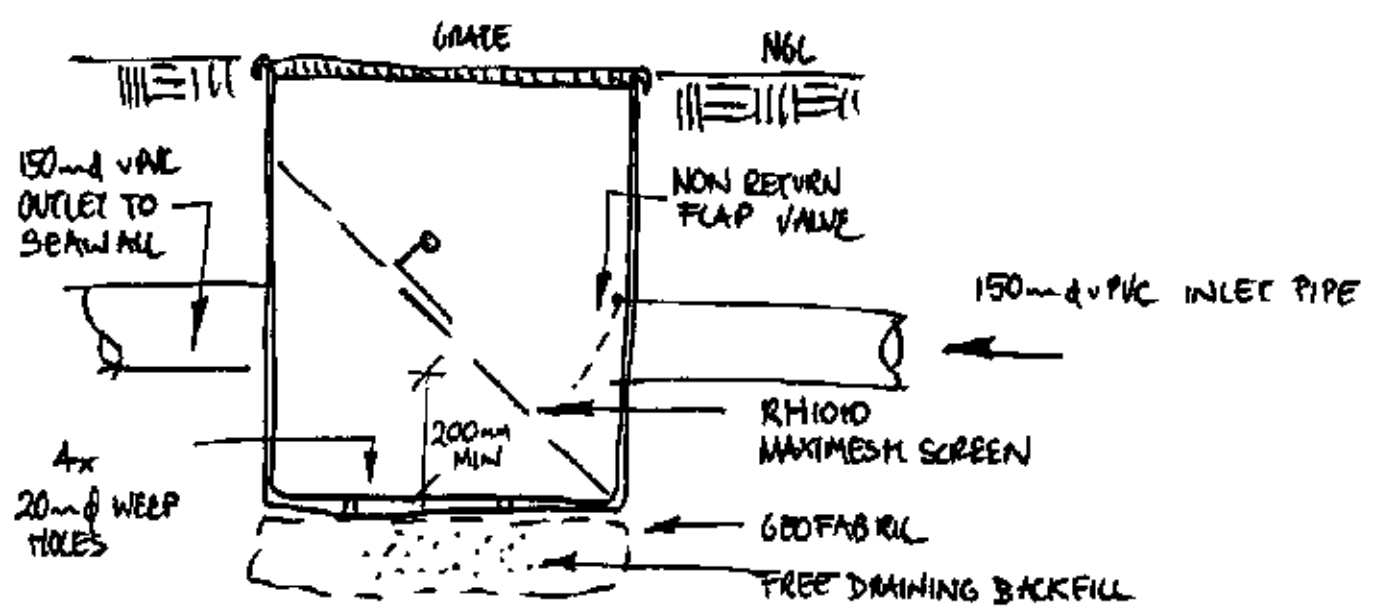
04N156

A2

DOCUMENT CERTIFICATION Date: <i>17/05/00</i> Lucas Molloy (Director Northern Beaches Consulting Engineers)			I am a qualified Structural/Civil Engineer. I hold the following qualifications: BE(Civil), CPENG, MIEAust., NPFR, Institute of Engineers Membership No. 788184 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian Industry Standards.	 NORTHERN BEACHES Consulting Engineers P/L A.C.N. 079 121 610 A.B.N. 24 079 121 610 Suite 207, 30 FISHER ROAD DEE WHY N.S.W. 2089 Ph: (02) 9884 7000 Fax: (02) 9884 7444 e-mail: nb@nbconsulting.com.au	Project: PROPOSED ALTERATIONS at: 8A Noval Street Newport for: Gaunt Family	Drawing Title: SEDIMENT AND EROSION CONTROL PLAN The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.	Date: April 2000 Job No: 04N156	Design: L.F. Drawing No: D01	Checked: Paul R Bruce (Chief) Rev: -
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450x450 PIT DETAIL NTS.



STORMWATER DRAINAGE PLAN (AS PER BCA 5.1.2)

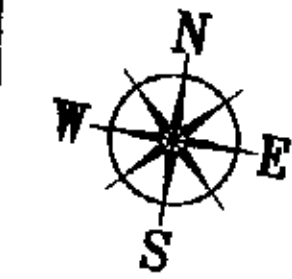
SCALE = 1 : 100

STORMWATER NOTES:

- ALL PIPES TO BE 90mm Ø UNLESS NOTED OTHERWISE.
- ALL PIPES TO BE UPVC TO AS 1254-1973 UNLESS NOTED OTHERWISE.
- ALL PIPES TO BE LAYED AT 1% MINIMUM GRADE UNLESS NOTED OTHERWISE.
- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS. (NO COMPACTION REQUIRED BELOW LANDSCAPING) COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAFTING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- ALL DOWN PIPES TO BE 90mm Ø UNLESS NOTED OTHERWISE.
- DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
- PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- ALL PITS TO BE CAST INSITU OR, IF PRECAST, APPROVED BY ENGINEER. CAST INSITU PITS TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH 1 NO.2 TOP TIE UNLESS NOTED OTHERWISE. CAST INSITU PITS GREATER THAN 1000 DEEP TO BE MINIMUM 900x600 AND TO HAVE 150mm THICK CONCRETE WALLS AND BASE. WALLS TO BE REINFORCED WITH NO.2 AT 300 EACH WAY UNLESS NOTED OTHERWISE.

- ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP WORKS AS PER COUNCIL STANDARDS.
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
- ALL LEVELS SHOWN ARE TO AND
- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO UPVC.
- ALL WORKS TO BE IN ACCORDANCE WITH AS 3600-1990 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- 40mm Ø x 3000 LONG TAIL OUT SUBSOIL LINE TO BE PROVIDED ON THE UPSTREAM SIDE OF ALL PITS. SUBSOIL LINE TO BE COVERED WITH GEOTEXTILE FILTER SOCK FOR THE FULL LENGTH AND END COVERED.

WARNING
Stamping of this plan by Insight Development Consultants Pty Ltd does not relieve the applicant's responsibility to obtain approval from Sydney Water or other utilities.
The Structural Engineer of their responsibility to ensure the structural adequacy of the design.
The applicant shall retain all Engineers or other professionals responsible for the design and construction of the works shown on this plan.



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- FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.

DOCUMENT CERTIFICATION		
Date:	Rev:	Amendment:
I am a qualified Structural/Civil Engineer. I hold the following qualifications: BE(Civil), CPENG, MIE Aust., NPER. Institute of Engineers Membership No. 766164 I hereby state that this drawing is in compliance with the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards. Date: MAY 05 Lucas Malloy (Director Northern Beaches Consulting Engineers)		

NORTHERN BEACHES Consulting Engineers P/L
A.C.N. 078 121 818 A.B.N. 34 078 121 818
SUITE 207, 30 FISHER ROAD
DEE WHY N.S.W. 2099
Ph: (02) 9684 7000 Fax: (02) 9684 7444
e-mail: nbe@nbeconsulting.com.au

Project: **PROPOSED ALTERATIONS at: 8A Noval Street Newport for: Gaunt Family**

Drawing Title:	
STORMWATER DRAINAGE PLAN	
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Date:	May 2005	Drawn:	L.M.	Checked:	
Job No:	041156	Drawing No:	D03	Rev:	-

