

PITTWATER COUNCIL

CONSTRUCTION CERTIFICATE APPLICATION

2nd Floor, Unit 11, No 5 Vuko Place, Warriewood
 PO Box 882, MONA VALE NSW 2103
 DX 9018, MONA VALE
 Facsimile: (02) 9970 7150
 Telephone: (02) 9970 7222



7/11/03

Office Use Only:

C/C NO: CC0535723
 FILE AND PART NO: _____
 PROPERTY NO: _____
 OFFICER: _____
 TARGET DATE: _____
 APPROVAL NO: _____
 POST OUT or PICK UP



LODGEMENT

- All information required by the schedule and checklist are to accompany this application.
- Incomplete applications will not be accepted.
- Fees are to be paid at the time of lodgement.
- To minimise delays it is suggested that you lodge this application between the hours of 10.00am and 4.30pm weekdays.

THIS APPLICATION RELATES TO: (please tick)

BUILDING WORK ✓

SUBDIVISION WORK

AN EXISTING DEVELOPMENT CONSENT FOR THIS SITE

Consent No NO 503/03 Date 31-July 03

A CONCURRENT DEVELOPMENT APPLICATION

Application No _____ Date _____

SITE DETAILS: (please print)

House No 60 Street/Road Attunga Rd Suburb Newport
 Postcode 2106 Lot 1 Section _____ Deposited Plan 849561

Description of Proposal

Deck Extension, living room extension
Changes to Roof

VALUE OF DEVELOPMENT: \$ 47,370-

(4273-12)

Nominated Building Classification: Class(es).....

282. PA10. 30/10/03. Rec. 127948.



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CONSTRUCTION MATERIALS/DETAILS: (please print) (must by law be accurate)

Construction materials

External walls _____ Roof _____

Floor _____ Wall frames _____

Details

Current use of the land/building(s) _____

Site area _____ m²

Floor area - existing _____ m²

- proposed _____ m²

Total _____ m²

Number of Storeys _____

Number of dwellings to be demolished _____

Number of dwellings proposed _____

YOUR USE	STAFF USE
E SECTIONS A cut through view of the building and site. Minimum scale 1:100	
	<p>The outline of the existing and/or proposed building showing all dimensions including roof pitch.</p> <p>All sections labelled and cross related back to where they occur on the floor plan and site plan (including driveways and their proposed gradients).</p> <p>Existing and proposed RL's to AHD, for the building (ceiling and floor level) and the site showing proposed excavation or filling (if any).</p> <p>Construction details for wall, floor, window, door, ceiling, roof frame, type of footings and size</p> <p>Provisions made for Fire Safety and Fire Resistance.</p>
F LONG SECTIONS A length ways cut through view of the site, the building or driveway. Minimum Scale 1:100	
	<p>Details of driveways, vehicle crossing profiles and transitions.</p> <p>Maximum driveway grade 1:4; maximum emergency pedestrian access grade 1:8.</p>
G FLOOR PLAN An aerial view of the room layout on all levels, or storeys. Minimum scale 1:100	
	<p>North point shown.</p> <p>Room dimensions and use shown.</p> <p>The location and dimension of all windows, doors and walls (including wall thickness).</p> <p>Provisions made for Fire Safety and Fire Resistance</p>
H BUILDING SPECIFICATION Details of construction.	
	<p>Two copies, detailing method of construction, fire ratings, type of materials, dimensions and length.</p> <p>Whether the material will be new or second hand. Give particulars of second hand materials.</p> <p>Details of drainage, effluent disposal, water supply, ventilation arrangements etc.</p>
<p>Note: Where the proposal involves an alternative solution to the Building Code of Australia requirements, the application must be accompanied by details of the performance standard intended to be met and the details/assessment used to establish compliance with the performance standard.</p>	
I FIRE SAFETY PROVISIONS Class 2-9 buildings only	
	<p>Details of the fire safety measures to be implemented.</p>
	<p>Where the proposal involves alterations or additions to an existing building, details of the existing fire safety measures.</p>
J DETAILED ENGINEERING DRAWINGS Detailed plans which have been certified by a qualified consultant for the following where relevant	
	<p>Earthworks, erosion control measures, elevations of retaining walls, etc.</p>
	<p>Roadworks, road pavement details.</p>
	<p>Stormwater drainage (including stormwater management details).</p>
	<p>Water supply, effluent disposal.</p>
	<p>Landscape construction works.</p>
<p>Note: Where the works involve an amendment or modification to previously approved plans, the alteration is to be appropriately highlighted on the submitted engineering plans.</p>	

Checked by:

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

Development Application for Mr Murray McGain
Name of Applicant
Address of site 60 Attunga Road, Newport, NSW

Declaration made by Structural or Civil Engineer in relation to the incorporation of the Geotechnical issues into the project design
Lucas Molloy on behalf of NBC Consulting Engineers
(Name) (Name of company)
on this the 5th Nov 2003
(Date)

I 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 organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least \$2Milion. 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: Report to Mr Murray McGain on Geotechnical Hazardous Risk Assessment at 60 Attunga Road, Newport, NSW Ref: 17835 subpt
Report Date: 25 July 2003
Author: D J Bliss

Structural Documents list:

Drawings by Northern Roads Consulting Engineers Pty
Job No. 031005 Drawing Nos. 301, 302, 303, 304 and 305
dated Oct 2003

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 when as at least 100 years unless otherwise stated and justified.

Lucas Molloy
(Name)

[Signature]
(Signature)

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

I prepare and/or technically verified the abovementioned Geotechnical Report as per Form 1 dated 25/7/03 and now certify that I have viewed the above listed structural documents prepared for the same development. I am 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. 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 when as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove foreseeable risk.

Signature [Signature]
Name Daniel Bliss
Chartered Professional Status MIEAust CPEng
Membership No 969445



DIRECTORS

Stewart McGeady Rick Wray Lucas Molloy

CERTIFICATE OF EXISTING STRUCTURAL ADEQUACY

DATE 20th Oct 2003
SITE 60 Attunga Rd Newport
ENGINEER Lucas Molloy
OWNER Mr & Mrs McGain
JOB No 031005

Lucas Molloy of NB Consulting Engineers P/L carried out a site inspection at the above residential premises on the 30th Sept 2003. The purpose of the visit was to inspect and comment on the capacity of the existing structure to support the proposed alterations and additions as detailed in the architectural plans prepared by de soyers Ma'one Architects pty ltd dated 03/07/03.

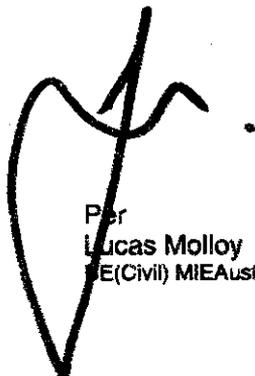
The assessment consisted of a walk over style (visual only) inspection of the building.

In summary, the dwelling is considered sound and provides an adequate structure for the proposed works, provided that the engineering plans are complied with, that these works are carried out in a sound building manner and that all structural works are certified during construction by the engineer. However, it is possible that some movement (and related cracking) may occur as the building adjusts to the new load distribution but this is not expected to adversely affect the buildings overall structural integrity. It is recommended that any painting to the finished building be carried out at least 6months after the construction of the structural elements and linings (gyprock/cladding/tiling etc).

Note: This certification does not cover any defects to the structure, which were not accessible at the time of the inspection. If in the event defects are uncovered during construction or become apparent after construction is completed the engineer should inspect the areas of concern and prepare a specification for remedial works.

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
E(Civil) MIEAust



DIRECTORS

Stewart McGeady Rick Wray Lucas Molloy

CERTIFICATE OF EXISTING STORMWATER ADEQUACY

DATE 17th Oct 2003
SITE 60 Attunga Rd Newport
ENGINEER Lucas Molloy
OWNER Mr & Mrs McGain
JOB No 031005

Lucas Molloy of NB Consulting Engineers P/L carried out a site inspection at the above residential premises on the 30th Sep 03. The purpose of the visit was to inspect and comment on the capacity of the existing stormwater infrastructure to service the proposed alterations and additions.

It is our opinion that the existing system is adequate to convey the expected stormwater flows provided the following comments are adhered to:

The existing pipes are cleared of all foreign matter to allow the free flow of storm waters.
Any broken sections of pipes are repaired/replaced.

Note: This certification does not cover any defects to the system, which were not accessible at the time of the inspection. If in the event defects are uncovered during construction or become apparent after construction is completed the engineer should inspect the areas of concern and prepare a specification for remedial works.

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(Civil) MIEAust

ADDITIONAL SPECIFICATIONS TO ACHIEVE LEVEL 1 CONSTRUCTION AS DEFINED BY AS 3959-1999 Construction of buildings in bushfire-prone areas.

Relating to proposed additions and alterations to 60 Attunga Road, Newport

The following specification is to be read in conjunction with the architectural drawings prepared by de Soyres Malone Architects Pty Ltd and approved by Pittwater Council.

This specification details the additional construction measures required to satisfy the Level 1 standard set out in AS 3959-1999. This specification relates to the new portion of the works.

1. FLOORING SYSTEMS

The underside of all bearers is to be kept at least 600mm clear of the ground.

2. SUPPORTING POSTS, COLUMNS, STUMPS, PIERS & POLES

The supporting posts are to be of non-combustible construction (steel) or timber mounted on galvanised metal shoes with a clearance of not less than 75mm above the adjacent ground or paving level.

3. EXTERNAL WALLS

The wall framing shall include either:

Breather type sarking complying with AS/NZS 4200.1 and with a flammability index of not more than 5 (see AS 1530.2) installed immediately behind the external cladding; or

an insulation material conforming to the appropriate Australian Standard for that material. R1.5 batts by CSR Bradford or Insulation Solutions can meet this specification.

4. WINDOWS

All openable windows, including louvres are to be screened with corrosion resistant steel, bronze or aluminium mesh with a maximum aperture size of 1.8mm in such a way that the entire opening remains screened when the window is open.

5. EXTERNAL DOORS

External doors, including sliding doors, are to be fitted with tight fitting door screens with corrosion resistant steel, bronze or aluminium mesh with a maximum aperture size of 1.8mm and weather strips or draught excluders to prevent the build-up of burning debris beneath the door.

6. VENTS & WEEPHOLES

Vents and weepholes are to be protected with spark guards made from corrosion resistant steel, bronze or aluminium mesh with a maximum aperture size of 1.8mm

7. ROOFS

The roof/wall junction is to be sealed by the fascia and eaves lining.

All gaps under the corrugations or ribs of the roofing material where it meets the fascia or wall line shall be sealed or protected -

by fully sarking the roof with a sarking complying with AS1530.2 and having a flammability index of not more than 5. Insulation Solutions "Sisalation" meets this requirement; or-

by providing corrosion resistant steel or bronze mesh, with a maximum aperture of 1.8mm, profiled metal sheet, neoprene seal, compressed mineral wool or similar material.

Rib caps and ridge capping shall be sealed as described above or pre-formed cappings shall be used.

ADDITIONAL SPECIFICATIONS TO ACHIEVE LEVEL 1 CONSTRUCTION AS DEFINED BY AS 3959-1999 *Construction of buildings in bushfire-prone areas.*

Because the roof is fully sealed, the roof space is to be ventilated through the eaves with vents complying with section 6 to guard against condensation.

8. ROOFLIGHTS

The rooflights are to be glazed in accordance with AS 1288 and AS 4285.

9. EAVES

The eaves are to be enclosed with a soffit lining and a fascia.

10. FASCIA

No special requirements.

11. GUTTERS & DOWNPIPES

Any materials or devices used to stop leaves collecting in the gutters shall have a flammability index of not greater than 5 when tested in accordance with AS 1530.2.

12. VERANDAHS & DECKS

The decking timbers shall be fixed with a clearance of not less than 5 mm between boards, or be tongue and grooved boarding.

The external perimeter beneath the decking shall not be enclosed, nor access to the space impeded.

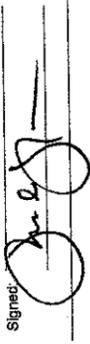
Deck supports shall be as described in section 2.

Decking timbers may not connect to the remainder of the building unless measures are taken to prevent the spread of fire into the rest of the building.

13. SERVICE PIPES (WATER & GAS)

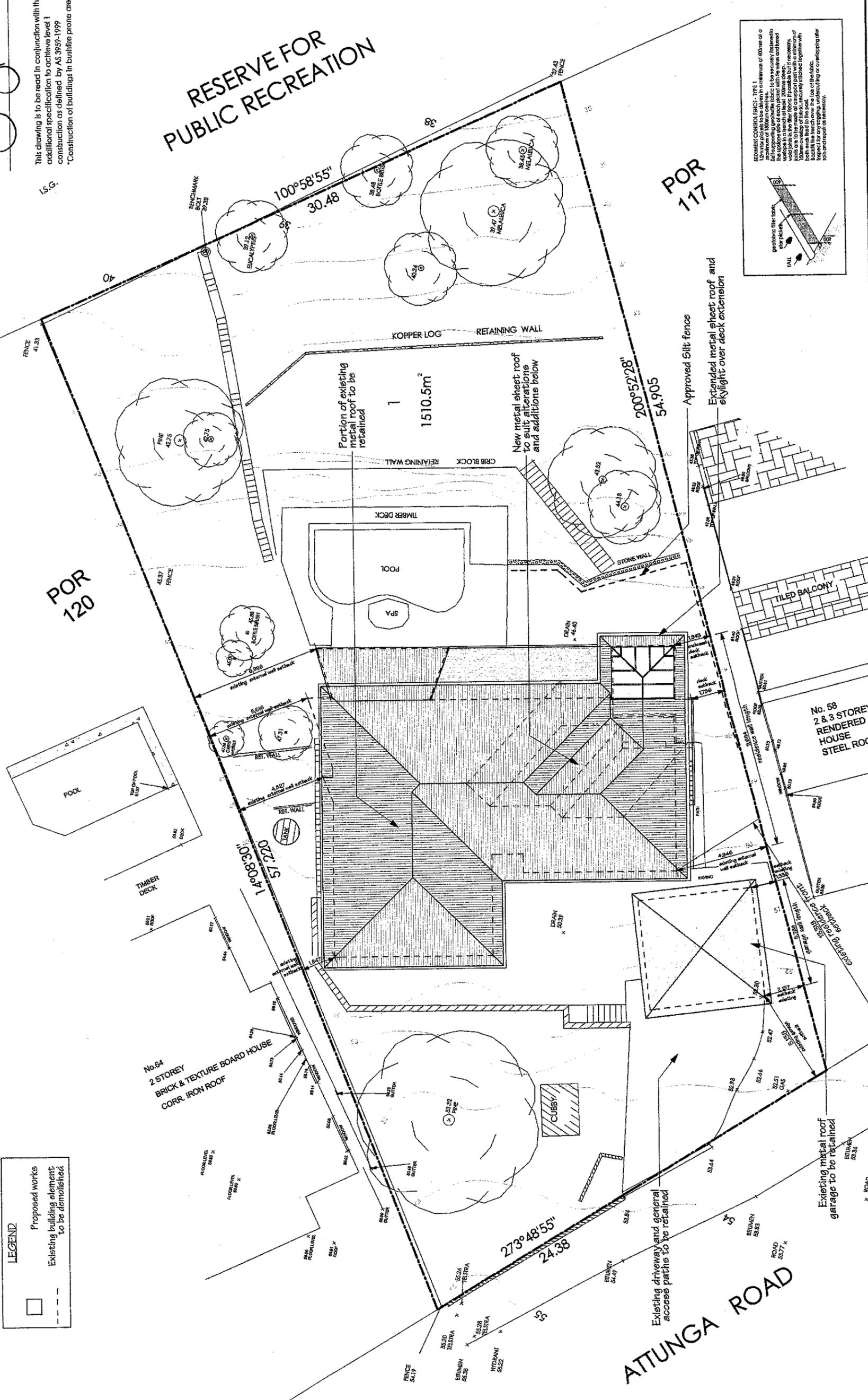
All exposed piping for water and gas supplies shall be metal. Pipes of other materials shall be buried at least 300mm below the finished ground level.

PLAN CERTIFICATION
 I hold the following qualification: Chartered Architect.
 Further I am appropriately qualified to certify this component of the project.
 I hereby state that these plans or details comply with the conditions of the development consent, the provisions of the Building Code of Australia and/or relevant Australian industry standards.
 James de Soyres
 Date: 24 OCT 2003

Signed: 

This drawing is to be read in conjunction with the additional specification to achieve level 1 construction as defined by AS 3959-1999.
 Construction of buildings in bushfire prone areas.

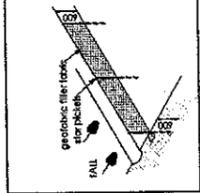
RESERVE FOR PUBLIC RECREATION



LEGEND

-  Proposed works
-  Existing building element to be demolished

SEMI-CONTROLLED TYPE 1
 This drawing is to be read in conjunction with the additional specification to achieve level 1 construction as defined by AS 3959-1999.
 Construction of buildings in bushfire prone areas.



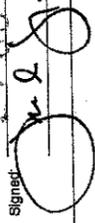
Scale: 1:200
 Project No: 0218
 Drawing No: **CC-01**

24 OCT 2003 Site plan
CONSTRUCTION CERTIFICATE

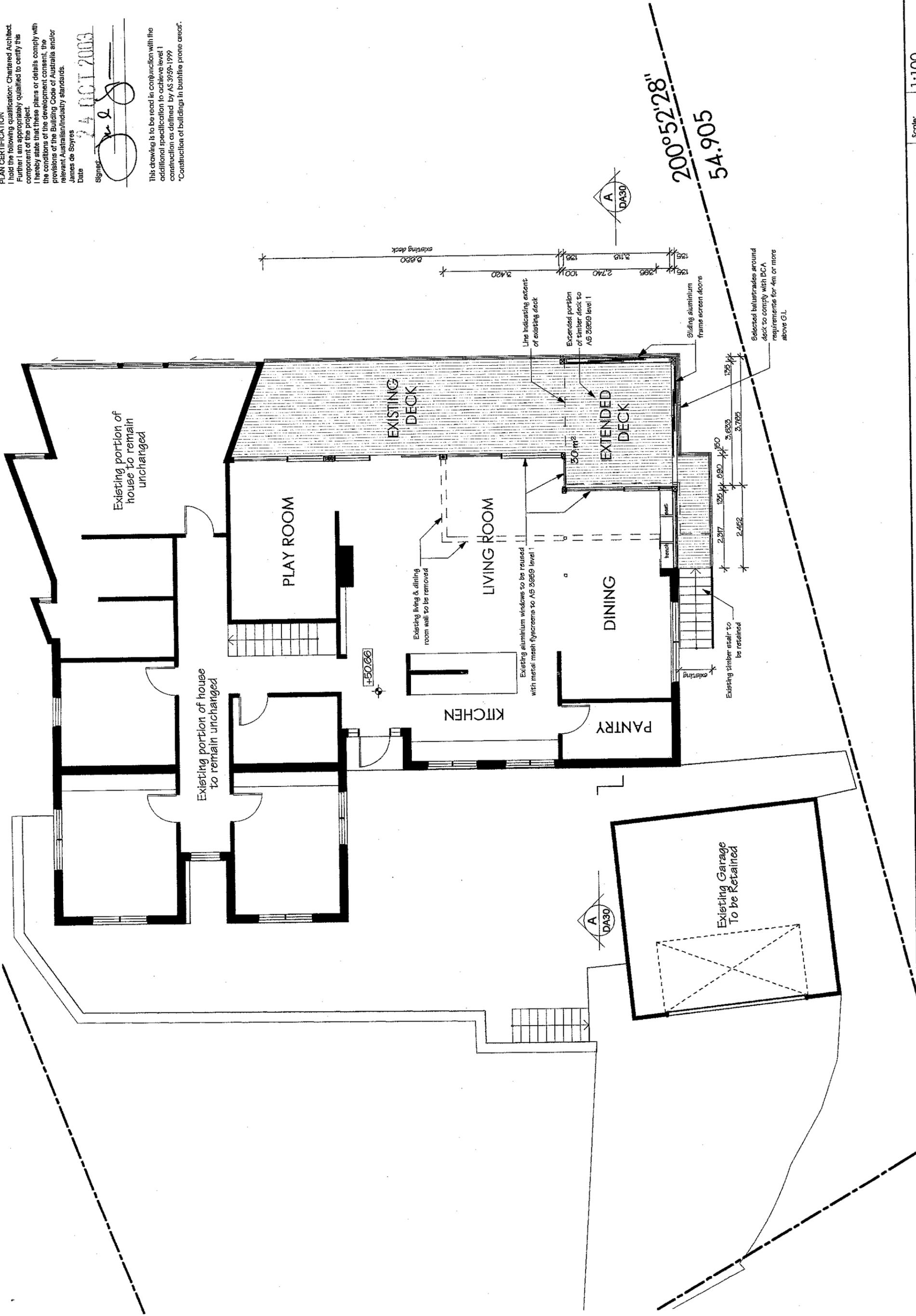
Proposed living room extension
 at 60 Attunga Road, Newport, NSW 2106
 for Mr & Mrs M McGain

de Soyres PO Box 657, Newport Beach, New South Wales 2106
 M a i d o n e 5 Heron Cove Marina, Queens Parade West, Newport
 info@desoyresmalone.com
 Telephone: (02) 9979 1823 Facsimile (02) 9979 5263
 Architects Pty Ltd

PLAN CERTIFICATION
 I hold the following qualification: Chartered Architect.
 Further I am appropriately qualified to certify this
 component of the project.
 I hereby state that these plans or details comply with
 the conditions of the development consent, the
 provisions of the Building Code of Australia and/or
 relevant Australian/Industry standards.

James de Soyres
 Date: 24 OCT 2003
 Signed: 

This drawing is to be read in conjunction with the
 additional specification to achieve level 1
 construction as defined by AS 3099-1999
 "Construction of buildings in bushfire prone areas".



de Soyres PO Box 657, Newport Beach, New South Wales 2106
 Malone 5 Heron Cove Marina, Queens Parade West, Newport
 info@desoyresmalone.com
 Telephone: (02) 9979 1823 Facsimile (02) 9979 5263
 Architects Pty Ltd

Proposed living room extension
 at 60 Attunga Road, Newport, NSW 2106
 for Mr & Mrs M. McGain

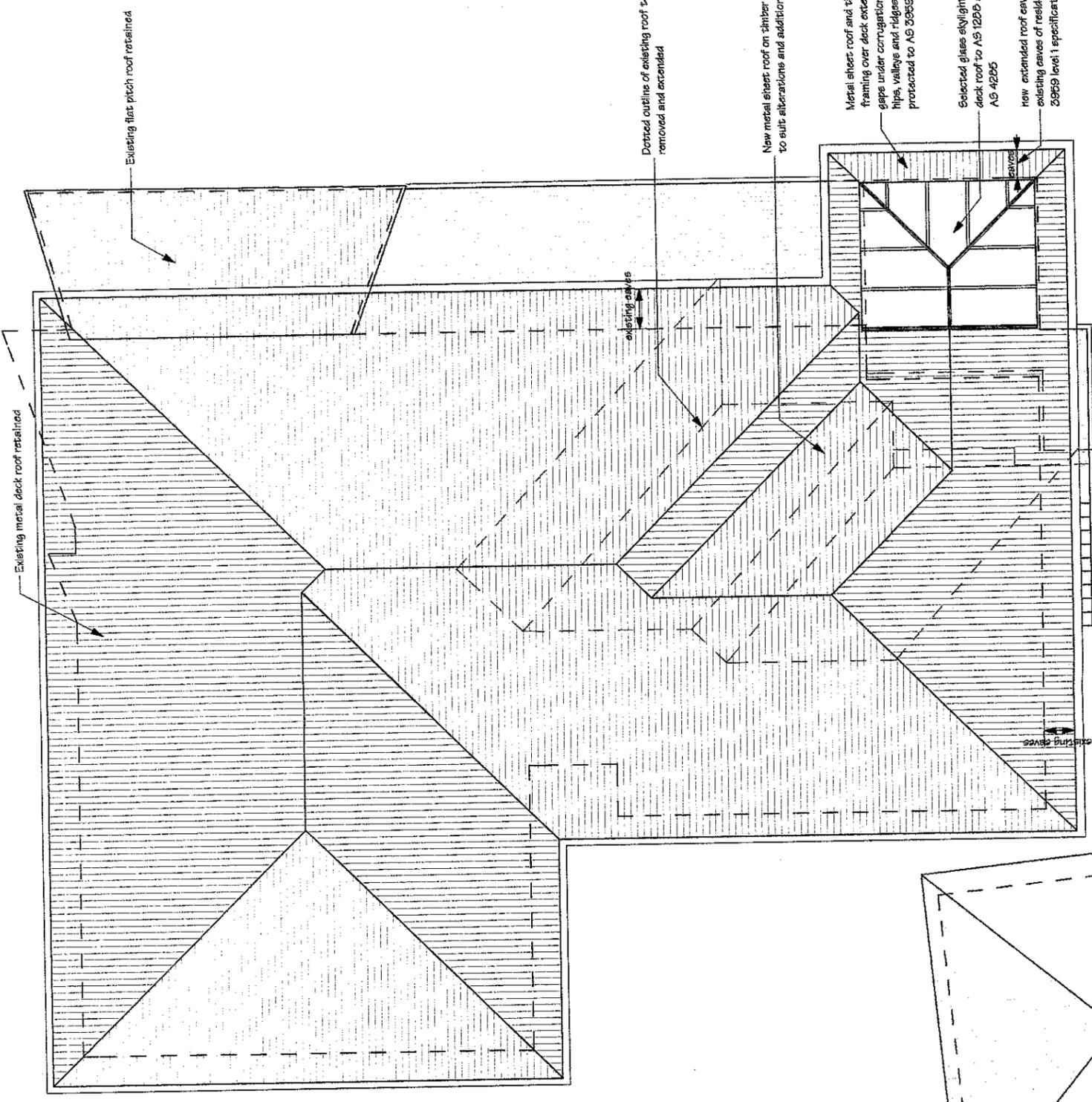
24 OCT 2003 Upper Floor Plan
 Scale: 1:100
 Project No: 0218
 Drawing No: CC-12
 CONSTRUCTION CERTIFICATE

PLAN CERTIFICATION
 I hold the following qualification: Chartered Architect.
 Further, I am appropriately qualified to certify this
 component of the project.
 I hereby state that these plans or details comply with
 the conditions of the development consent, the
 provisions of the Building Code of Australia and/or
 relevant Australian industry standards.

James de Soyres
 Date

24 OCT 2003
 Signed: 

This drawing is to be read in conjunction with the
 additional specification to achieve level 1
 construction as defined by AS 3959-1999
 "Construction of buildings in bushfire prone areas".



Scale: 1:100
 Project No: 0218
 Drawing No: **CC-13**

24 OCT 2003
 Roof Plan
 CONSTRUCTION CERTIFICATE

Proposed living room extension
 at 60 Attunga Road, Newport, NSW 2106
 for Mr & Mrs M McGain



de Soyres PO Box 657, Newport Beach, New South Wales 2106
 M a i l o n e 5 Heron Cove Marina, Queens Parade West, Newport
 info@desoyresmalone.com

PLAN CERTIFICATION
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 provisions of the Building Code of Australia and/or
 relevant Australian industry standards.
 James de Soyres
 Date 24 OCT 2003
 Signed: *[Signature]*

This drawing is to be read in conjunction with the
 additional specification to achieve level 1
 construction as defined by AS 3959-1999
 "Construction of buildings in bushfire prone areas".

EXISTING RIDGE RL +56.34

New metal sheet roof on timber roof framing above ground floor alterations, corrugations and at hips, valleys and ridges to be protected to AS 3959 level 1

Selected glass skylight to extended roof over deck to AS 1288 and AS 4285

New metal sheet roof on timber roof framing over deck external

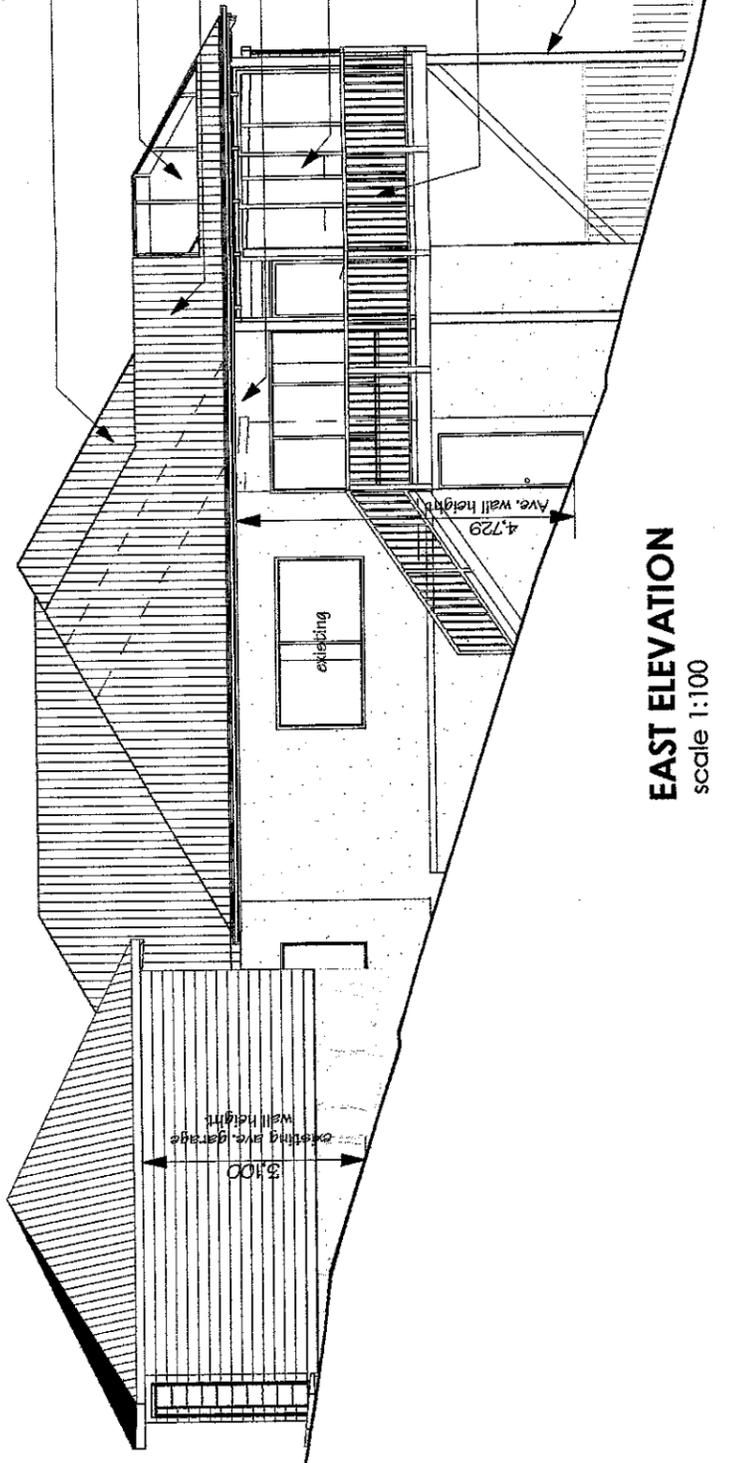
Selected cladding to new external wall with earking and insulation to AS 3959 level 1 requirements

New selected aluminium frame sliding doors

GROUND FLOOR FFL +50.66 (existing)

Selected balustrades around extended deck to comply with BCA requirements for 4m or more above G.L.

New timber column to support extended deck above. To Eng's details on galvanized steel shoe with min 75mm clearance above G.L. to AS 3959 level 1



EAST ELEVATION

scale 1:100

+56.34 EXISTING RIDGE RL

Existing garage, to be retained

Selected glass skylight to extended roof over deck to AS 1288 and AS 4285

Selected cladding to external wall with earking and insulation to AS 3959 level 1 requirements

New selected aluminium frame sliding doors

+50.66 Ground Floor FFL (existing)

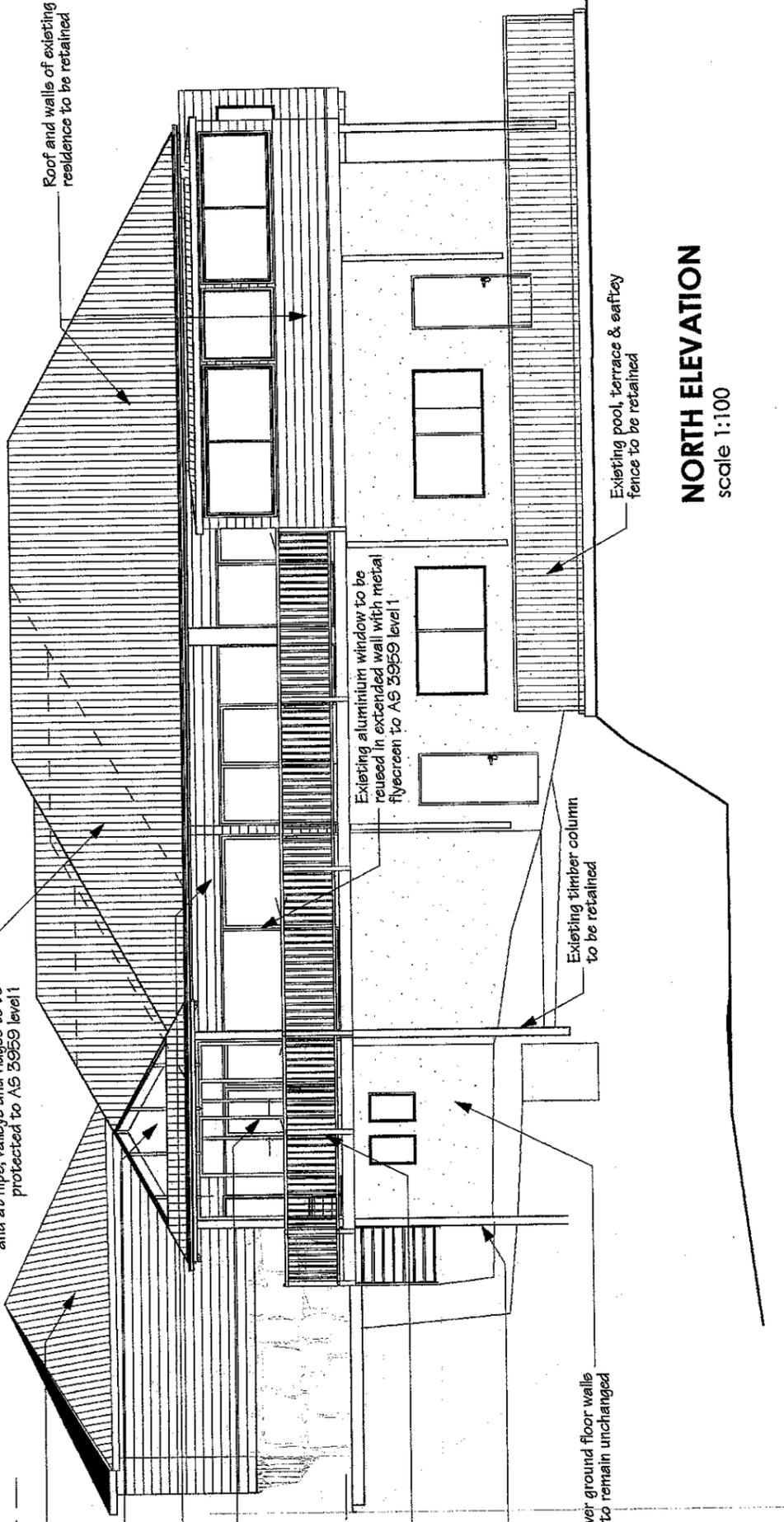
Selected balustrades around extended deck to comply with BCA requirements for 4m or more above G.L.

New timber column to support extended deck above. To Eng's details on galvanized steel shoe with min 75mm clearance above G.L. to AS 3959 level 1

Existing lower ground floor walls and windows to remain unchanged

New metal sheet roof on timber roof framing above ground floor alterations, corrugations and at hips, valleys and ridges to be protected to AS 3959 level 1

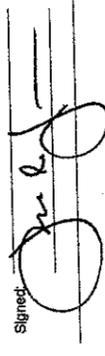
Roof and walls of existing residence to be retained



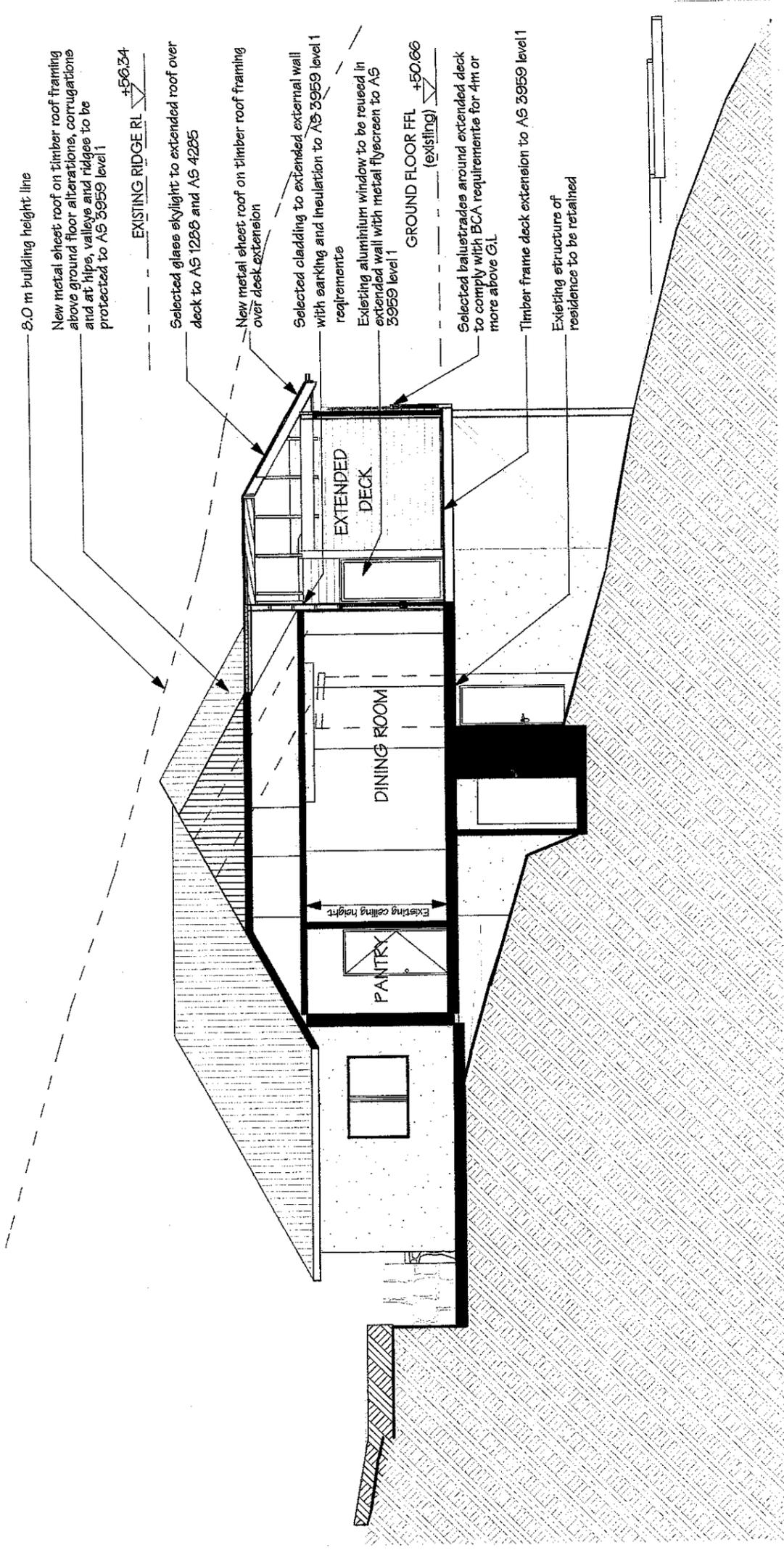
NORTH ELEVATION

scale 1:100

PLAN CERTIFICATION
 I hold the following qualification: Chartered Architect.
 Further I am appropriately qualified to certify this
 component of the project.
 I hereby state that these plans or details comply with
 the conditions of the development consent, the
 provisions of the Building Code of Australia and/or
 relevant Australian industry standards.
 James de Soyres
 Date 24 OCT 2003

Signed: 

This drawing is to be read in conjunction with the
 additional specification to achieve level 1
 construction as defined by AS 3959-1999
 "Construction of buildings in bushfire prone areas".



GENERAL NOTES:

- 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.
- F5. The Engineer is to be contacted at that time for approval or review.
- F6. Footings to be cast in approved material having an allowable capacity as follows:

- Soil 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. Scarpe weathered surface to remove cleaved sandstone under footings.

Refer adjacent for assumed Design bearing strata.

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, and a min. cement content of 280 kg/cubic metre. No water shall be added to the mix prior to or during placement of concrete.
- 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.

A3

DOCUMENT CERTIFICATION

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

Date: **oct'03**
 Lucas Malloy
 (Northern Beaches Consulting Engineers)

ADDITIONS TO

**60 ATTUNGA RD
 NEWPORT**

FOR MR M. MCGAIN

GENERAL NOTES AND DRAWING SCHEDULE

The copyright of this drawing remains with Northern Beaches Consulting Engineers P/L.

- B8. 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 'Ecolipse' 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 is 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
 Deforms 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 rod and fabric reinforcement. Reinforcement shall be tied at alternate intersections.

FORMWORK

- FA1. Formwork must be cleaned of all debris prior to casting of concrete.
- FA2. Minimum stripping times for form work shall be as recommended in AS 1504 or as directed by the engineer.
- FA3. 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.
- FA4. 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.

- BL1. Concrete blocks shall have a minimum compressive strength of 15 MPa and conform to AS 1500.
- BL2. Where cores of hollow blocks are to be filled, properly compacted 20MPa concrete with 10 mm aggregate and 250 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.

BLOCKWORK

- 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 1538-1988.
- S5. Welded and seamless steel hollow sections shall comply with AS 1163. Grade 350.
- S6. Bolt Designation:
 4.65 - Commercial bolts Grade 4.6, snug tightened.
 8.85 - 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.
- S7. Unless noted otherwise, all bolts will be 8.85. Unless shown otherwise, minimum connection shall be 2"1/16 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. Grinding of anchor bolt sleeves and base plates shall be completed by the contractor using High Strength, Non-Sinkin grout.
- S12. Fabrication and erection tolerances for Structural Steelwork shall be in accordance with AS 4100.
- S13. Purlin bolts shall be M12 - 4.65 galvanized.
- S14. Steel work shall have one of the following grades of corrosion protection:-
 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.
 b. Preparation Blast clean to a minimum standard Class 2.5 in accordance with AS 1627 Part 4.
 Primer 2-pack epoxy phosphate at dif: 75 microns (Dulux Durepon P14).
 Barrier Coat 2-pack epoxy micaceous iron oxide, dif: 100 microns
 Finish Coat 2-pack epoxy high gloss acrylic to dif: 75 microns (e.g. Dulux Acrathane 1 F) in an approved colour.
 c. Hot dipped galvanized to AS 4680.
 Where galvanized coating is broken on site make good with two coats of zinc rich epoxy primer equivalent to Dulux Zinc anode 202 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.

STEEL

- 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.

DRAWING SCHEDULE:

- S01 - GENERAL NOTES AND DRAWING SCHEDULE
- S02 - DECK FOUNDATION, FLOOR & ROOF FRAMING PLANS
- S03 - DECK FRAMING DETAILS
- S04 - SITE PLAN
- S05 - RET. WALL & TYP. THE DOWN DETAILS

We have viewed this drawing and endorse that recommendations given in our Report No. **1785** Subject of (date) **25/7/03** have been adopted in principle, except for modifications noted or underlined in red which should be adopted.

Signed *[Signature]* Date **24/10/03**

For Jeffery and Katauskas Pty Ltd
 39 Buffalo Road, Gladstone, 2111
 Telephone : 7809 7322

- T1. All workmanship and materials to be in accordance with AS 1684 and AS 1720. All soft wood to be minimum Grade F14 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.o.
- 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. Battens for T & G to be Kiln Dried to 12 %.
- T7. 38mm minimum deep treated pine or as recommended by supplier. Flooring to be installed no sooner than 28 days after slab pour.
- T8. Hot dip galvanized nails/clouets/screws to be used with all timber connections.
- T9. Continuous nailing must not be used for any timber connections.

COMPACTED FILL

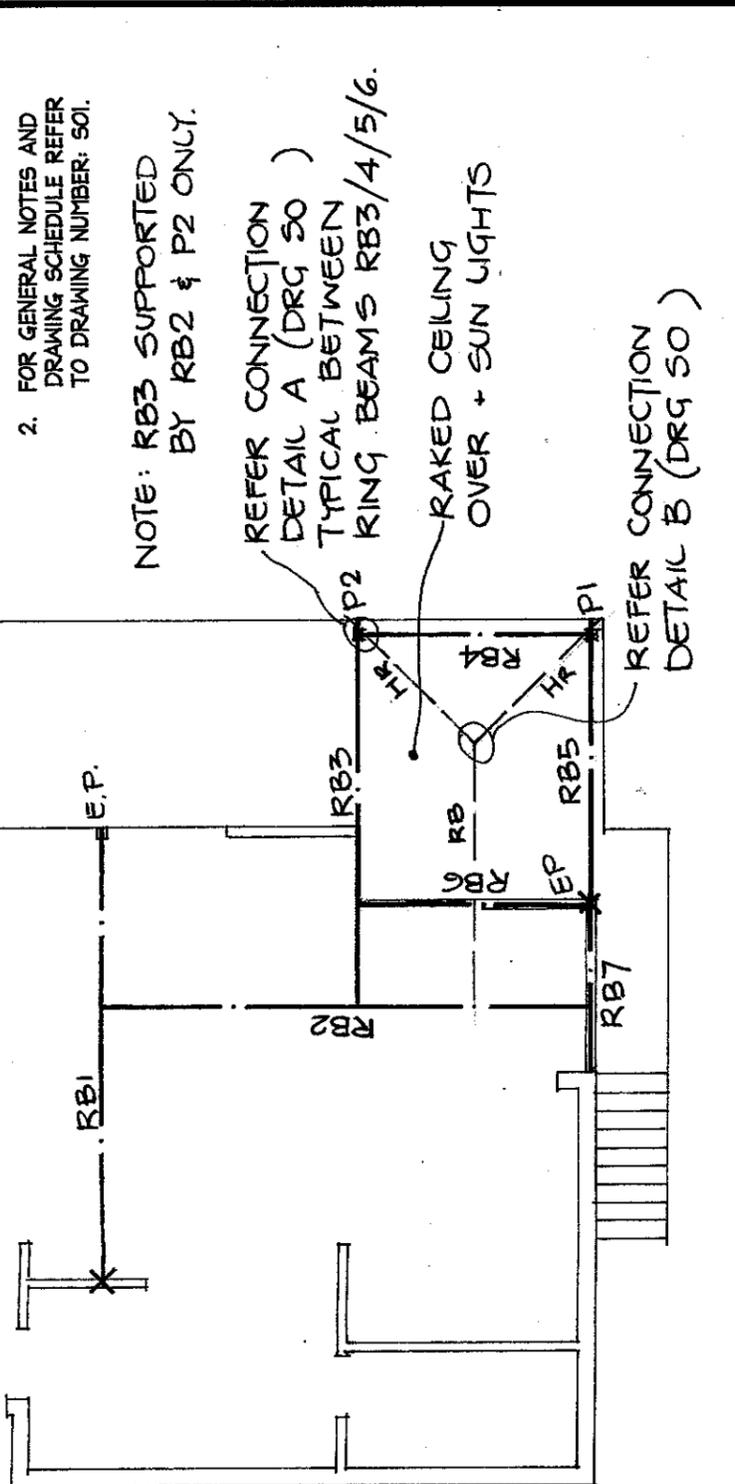
- CF1. Only to be used with approval Engineer & to be certified by a geotechnical Engineer.
- CF2. Clear organic material and topsoil under proposed slabs/footings.
- CF3. Filling shall be granular material compacted in not more than 200 mm layers to a minimum dry density ratio (AS 1289/E4.2 1982) of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

INSPECTIONS BY ENGINEER

- 24 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION
- 1. Bearing strata of all footings prior to concrete pour.
- 2. Any reinforcement prior to concrete pour.
- 3. Timber and Steel framing prior to cladding or lining.
- 4. Steel lintels after installation.

Checked:	Drawn:	UFC
Date:	Design:	L.M.
Rev:	Amendment:	
Job No:	Drawing No:	S01
031005		

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.



ROOF FRAMING PLAN
 1:100

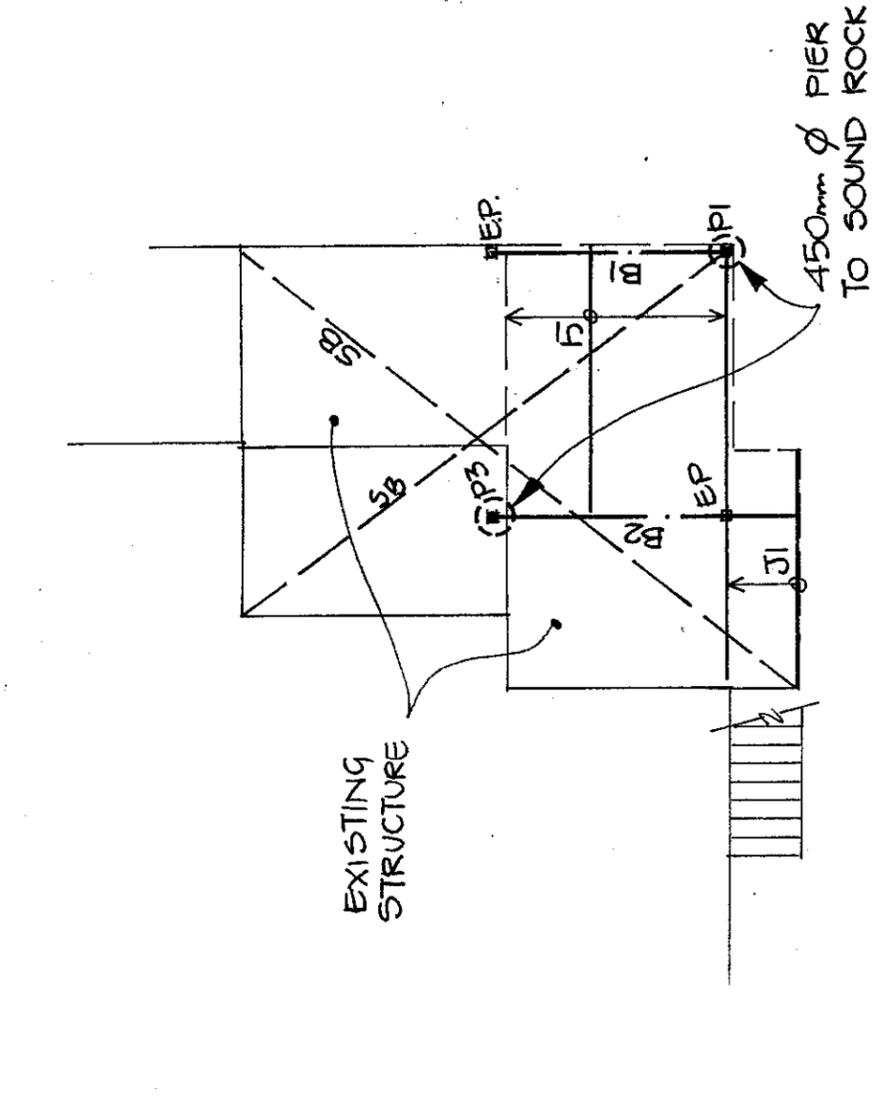
- P2 — 135x135 SEASONED HWD POST SPICED TO EXISTING POST (SEE DETAIL C DRG 50)
- EP — EXISTING POST
- RB1/RB2 — 400x63 LVL OR 200UB 29 STRUTTING HANGING BEAM
- RB3 — RB6 — 300x63 LVL OR 150 PFC STRUTTING HANGING BEAM
- RB7 — 150 PFC LINTEL
- RB/HR/HR — 250x50 F7 OR 200x63 HISPAN LVL.

We have viewed this drawing and endorse that recommendations given in our Report No. 12805 Subpt of (date) 25/7/03 have been adopted in principle, except for modifications noted or underlined in red which should be adopted.

Signed *[Signature]* Date 24/9/03

For Jeffery and Katauskas Pty Ltd
 39 Buffalo Road, Gladesville, 2111
 Telephone : 809 7322

Date:	Rev:	Amendment:	Design:	Drawn:	Checked:
OCT '03			L.M.	LFC	
Job No:	031005				
Rev:	502				



FOUNDATION/FLOOR FRAMING PLAN
 1:100

- J1 — 200x50 F17 KD OR 250x50 F7 H3JOISTS @ 450cts
- B1/B2 — 2x300x50 F17 KD BEAMS
- P1/P3 135x135 SEASONED HWD POST CONTINUOUS TO ROOF FRAMING (P1 ONLY)
- E.P. — EXISTING POST
- SB — FULLY TENSIONED STRAP BRACING

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

001'03
 Lucas Molloy
 (Northern Beaches Consulting Engineers)

ADDITIONS TO FOUNDATION, FLOOR & ROOF FRAMING PLANS

FOR: MR. M. MCGAIN

60 ATTUNGA RD NEWPORT

Project: ADDITIONS TO FOUNDATION, FLOOR & ROOF FRAMING PLANS

Drawing Title: DECK

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. 2099
 Ph: (02) 9984 7000 Fax: (02) 9984 7444
 e-mail: nb@nbconsulting.com.au

DOCUMENT CERTIFICATION

Date: 001'03
 Lucas Molloy
 (Northern Beaches Consulting Engineers)

NORTHERN BEACHES Consulting Engineers P/L
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Project: ADDITIONS TO FOUNDATION, FLOOR & ROOF FRAMING PLANS

FOR: MR. M. MCGAIN

60 ATTUNGA RD NEWPORT

Signed: *[Signature]* **Date:** 24/9/03

For: Jeffery and Katauskas Pty Ltd
 39 Buffalo Road, Gladesville, 2111
 Telephone : 809 7322

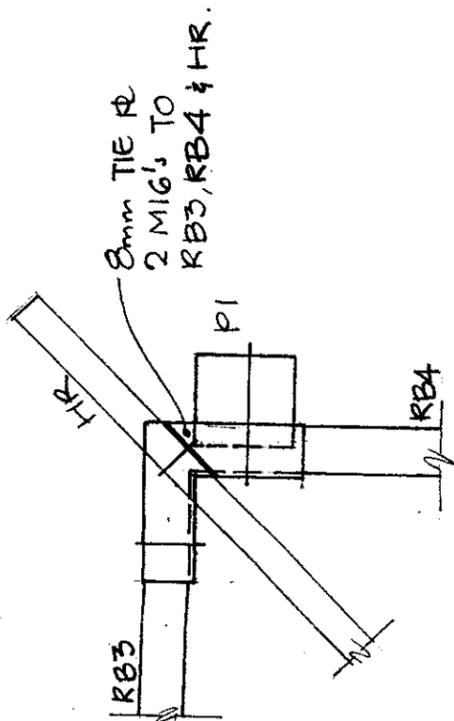
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OCT '03			L.M.	LFC	
Job No:	031005				
Rev:	502				

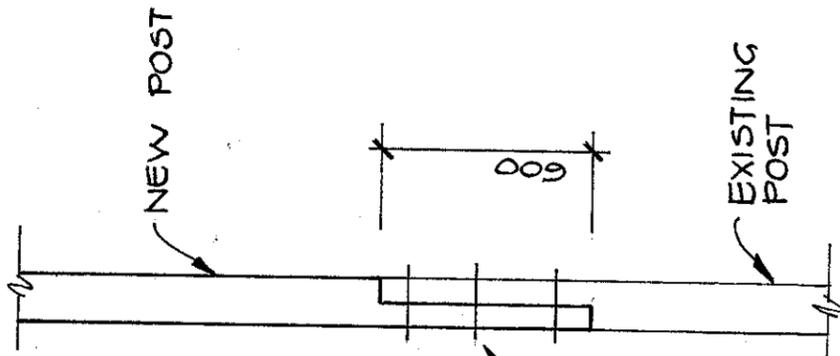
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NOTES:

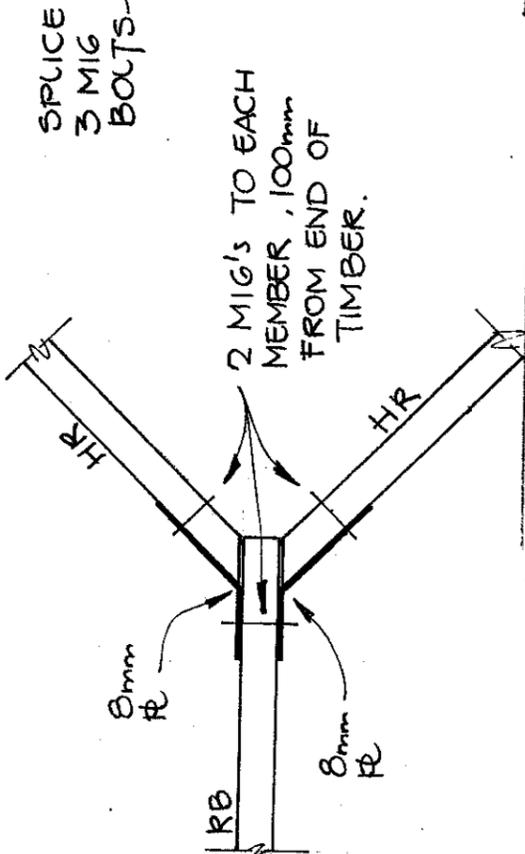
1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK.
2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: SO1.



DETAIL A (PLAN)
1:10



DETAIL C
1:10



DETAIL
1:10

We have viewed this drawing and endorse that recommendations given in our Report No. 1785/03 of (date) 25/7/03 have been adopted in principle, except for modifications noted or underlined in red which should be adopted.

Signed *[Signature]* Date 24/10/03
For Jeffery and Katauskas Pty Ltd
39 Buffalo Road, Gladesville, 2111
Telephone: 800 7322

Project: ADDITIONS TO FRAMING DETAILS
Drawing Title: DECK-
60 ATTUNGA RD NEWPORT
FOR: MR. M. MCGAIN

Project: ADDITIONS TO FRAMING DETAILS
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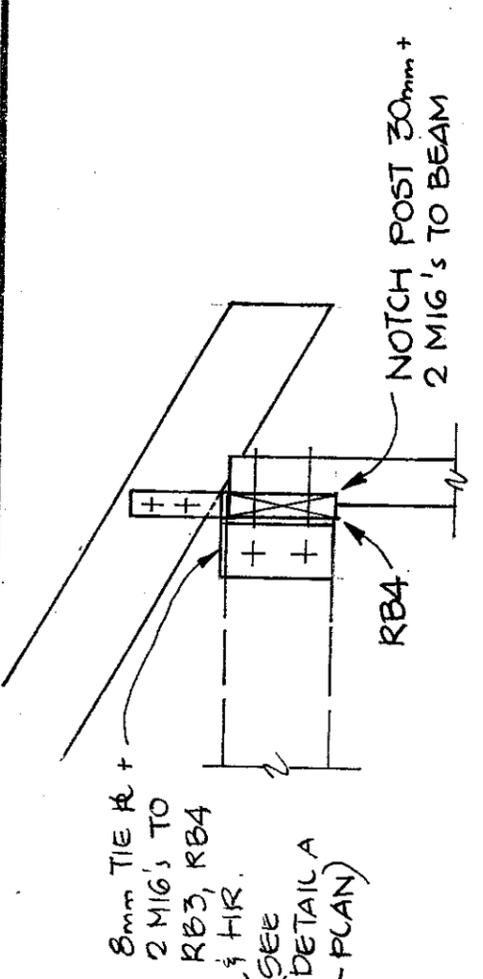
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e-mail: nb@nbconsulting.com.au



I am a qualified Structural/Civil Engineer.
I hold the following qualifications:
B.E. (Civil), NIEAust,
Institute of Engineers Membership No. 788184
I hereby state that this drawing is in compliance with the conditions of the development consent, the provisions of the Building Code of Australia and/or relevant Australian/Industry Standards.

DOCUMENT CERTIFICATION
Date: Oct '03
Lucas Malloy
(Northern Beaches Consulting Engineers)

AB1



DETAIL A (SECTION)
1:20

