CIVIC

Civic Approvals
Level 5, 41-45 Rickard Rd
Bankstown NSW
PO Box 8 Bankstown 1885
•
Development &
Certification Services

Civic Roads
1 Anzac Street, Greenacre
•
Road & Drainage
Construction & Maintenance

Civic Parks &
Building Services
242 Bransgrove Road, Panania
•
Grass Cutting, Parks and
Gardens, Bush Regeneration,
Building Maintenance
and Sign Writing

Civic Enviro-Mech Services
1 Anzac Street, Greenacre
•
Garbage Collection,
Street Cleaning, Building
Cleaning, Mechanical
Services

Professional Civic
Design Services
Level 5, 41-45 Rickard Rd,
Bankstown NSW
PO Box 8 Bankstown 1885
•
Civil Engineering
and Design

Civic Information Services
62 The Mall, Bankstown
•
Printing,
Records Management,
& Library Services

28 September 2007

General Manager
Pittwater Council
P O Box 882
MONA VALE NSW 1660

Dear Sir / Madam,

APPLICATION NUMBER ECC-8/2007
PROPOSAL Alterations and additions to existing dwelling
PROPERTY , No 86A Gladstone Street, Newport
(Lot A DP 402745)

In reference to the above development I enclose all documentation relting to the registration of the Construction Certificate together with a cheque totalling $30 00 being the applicable registration fee

If you have any enquiries, please contact Matthew Woodgate in Civic Approvals on 0408 697 949

Yours faithfully,

Matthew Woodgate
Accredited Certifier/ Principal Certyfying Authority
Building Professionals Board
0446

R# 275615

3.10.07.

LETTER

CIVIC APPROVALS

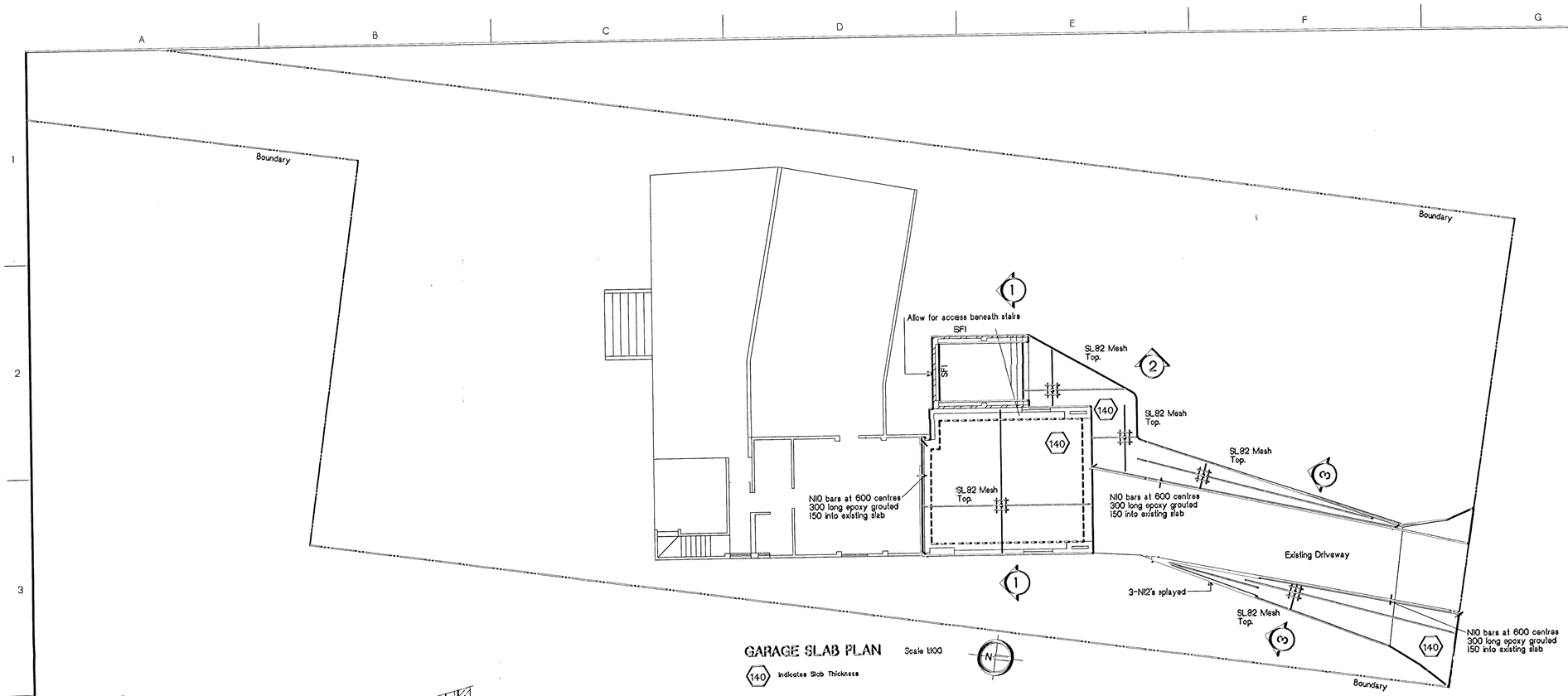
Construction Certificate

COPY

No ECC-8/2007

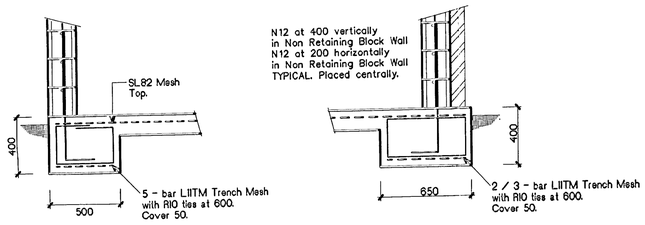
issued under sections 81A and 109C Environmental Planning and Assessment Act 1979

	APPLICATION
Applicant Name Address	 Greg Upton and Anita Upton 86A Gladstone St NEWPORT NSW 2106
Subject Land Address Lot No, DP	 No 86A Gladstone Street, Newport (Lot A DP 402745)
Description of Development Type of Work Description	 Building Work Alterations and additions to existing dwelling
Development Consent Development Consent No Date of Determination	 DA No177/07 10 July 2007
Classification of Building Building Code of Australia	 1a
Date of Receipt	2 August 2007
	DETERMINATION
Determination Date of Determination	Approved 28 September 2007
Plans and Specifications List Plan No(s) and Specifications Reference	• Architectural Plans, Drawing No 6/07, Sheets 1 to 6, prepared by Cliff Loudon, dated 25 March 2007 • Specification
Attachments	• Structural engineers details, drawing No 24598 - S-1 and S-2 , prepared by Jack Hodgson Consultants Pty Ltd
Right of Appeal	Under section 109K where the certifying authority is a council an applicant may appeal to the Land and Environment Court against the refusal to issue a construction certificate within 12 months from the date of the decision
	CERTIFICATE
Certificate **Certifying Authority** Name Signature Date of Certificate Civic Approvals PO Box 8, Bankstown NSW 1885 Ph 9707 9400 Fax 9707 9632	Work completed in accordance with documentation accompanying the application for the certificate (with such modifications verified by the certifying authority as may be shown on that documentation) will comply with the requirements of this Regulation as are referred to in section 81A (5) of the Act Matthew Woodgate 0446 Building Professionals Board ** prior to commencement of work sections 81A (2) (b) and (c) and/or 81A (4) (b) and (c) of the Environmental Planning and Assessment Act 1979 must be satisfied (see Notice of Commencement of Building or Subdivision Work and Appointment of Principal Certifying Authority)*

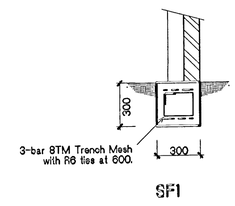


GARAGE SLAB PLAN Scale 1:100

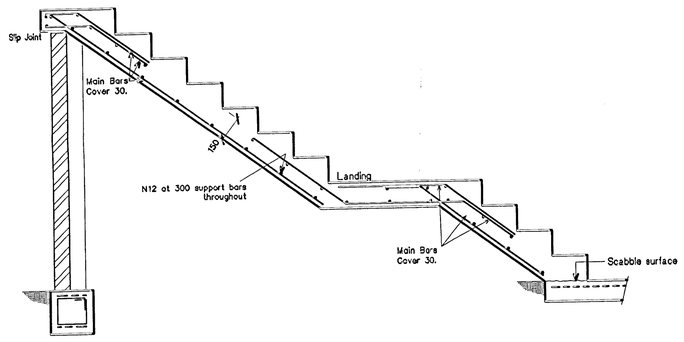
140 Indicates Slab Thickness



SECTION 1
Scale 1:20



SF1

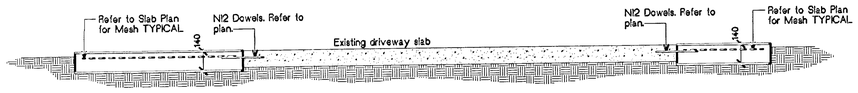


SF1

STAIR REINFORCEMENT ARRANGEMENT

STAIR REINFORCEMENT
10 or more risers : N16 at 200 Main Bars : Throat thickness 180

SECTION 2
Scale 1:20



SECTION 3
Scale 1:20

CONCRETE & BLOCK NOTES
1. All concrete work to be in accordance with AS 3600.
2. F'c Refer to table.
3. Maximum aggregate size = 20 for footings, slabs & beams.
   = 10 for block filling.
4. Slump = 80.
5. All concrete, including block filling, to be vibrated.
6. Slabs to be kept damp for at least 14 days after placing.
7. All blockwork to be in accordance with SAA Masonry Code AS 3700.
8. All cavities of block work to be thoroughly cleaned out, using knock out blocks or other suitable means, before filling with grout or concrete.
9. 200 & 300 blocks to be hollow retaining wall blocks with a characteristic strength of 20 MPa.
10. Blocks may be tited with a C IL 0.5 :S 4.5 mortar as the block laying proceeds.
11. Reinforcing Steel to comply with AS/NZS 4671:2001, and to be D500N unless noted otherwise. (where 500 = strength grade in megapascals & N = Normal ductility class).
    Steel Reinforcement to be cut & bent in accordance with AS 3600.
12. Bar Chairs to be no more than 800mm centre to centre spacings.
13. Reinforcement to be tied at every other intersection minimum.
14. Metal roofing being used as formwork (not Bondeck or similar).
    Depth of Slab must be taken from the Top of the Roof Rib.
    Specified bottom cover must be taken from the Top of the Roofing Rib or be protected by an approved curing membrane.
15. Moisture Vapour Membrane to be 200 Microns thick, U.V. Resistant and to be in accordance with AS 2870-1996.

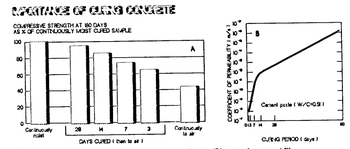
Acceptable manufacturers and processors of steel reinforcement must hold a valid certificate of approval, issued by the Australian Certification Authority for Reinforcing Steel Ltd (ACRS), or to an equivalent certification system as may be approved in writting by the specifier. Evidence of compliance withthis clause must be obtained when the contract bids are received.

TIMBER NOTES :
1. All work (including bracing, wind bracing & tie downs) shall be carried out in accordance with AS 3660.1, AS 1684.2, AS 1720.1 and the specification.
2. Refer to the Architects Drawings and the specification for all timber sizes not shown on these drawings.
3. All timber shall be free of Gum veins, pockets, knots holes or splits within 255mm of any connection.
4. Refer to specification for preservatives and finishes to timbers.
5. All bolts, nuts, washers and timber connectors shall be hot dip galvanised unless noted otherwise.
6. All F7 timber shown are nominal sizes only.

STEELWORK NOTES
1. Fabricate and erect all structural steelwork in accordance with AS 3680.1, AS 4100, AS 1554 and the Specification.
2. Do not obtain dimensions by scaling the structural elements.
3. Chip all welds free of slag.
4. All steelwork to be Hot Dipped Galvanised. Unless Otherwise Noted.
5. Unless otherwise noted use
   a) 6mm continuous fillet weld
   b) 10mm thick gusset, fin and end plates, weld all round.
   c) 16mm dia. 4.8/s bolts
6. Minimum end bearing 150mm.

Element	Cover (mm)		F'c at 28 days	
	Protected	Exposed	Protected	Exposed
Piers	65		25 MPa	
Footings	50		25 MPa	
Block Filling	refer to detail		25 MPa	
Slab on Ground			32 MPa	32 MPa
- Top	30	45		
- Bottom				
Beams	50	50	40 MPa	40 MPa
Columns	30	45	40 MPa	40 MPa
Slabs	30	45	40 MPa	40 MPa
Walls	30	45	40 MPa	40 MPa

The minimum clear cover is to reinforcement ties and stirrups



Effect of curing duration on : (A) compressive strength and (B) concrete permeability

Acknowledgement : Diagram is based on fig 12 of Guide to Concrete Repair & Protection (SAA/HB84:1998)

No.	Amendment	Drawn	Date

PLAN OR DOCUMENT CERTIFICATION

I am a qualified.....CIVIL, GEOTECHNICAL & STRUCTURAL ENGINEER.....
I hold the following qualifications or licence No.....M.Eng.Sc.....
.....F.I.E.Aust.....Nper3.....Struct.Civ1.No.149788.....
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 development consent, the provisions of the Building Code of Australia, A.S.1170., A.S.1170.1, A.S.1170.2, A.S.1684., A.S.2870.1, A.S.3500., A.S.3600, A.S. 3700., A.S.4100 & A.S.1163

Jack D. Hodgson 14/9/07 Hodgson
Name Date Signature

FOOTING, SLAB AND DRIVEWAY PLAN

PROPOSED ALTERATIONS AND ADDITIONS
88A PRINCES LANE
NEWPORT

UPTON RESIDENCE

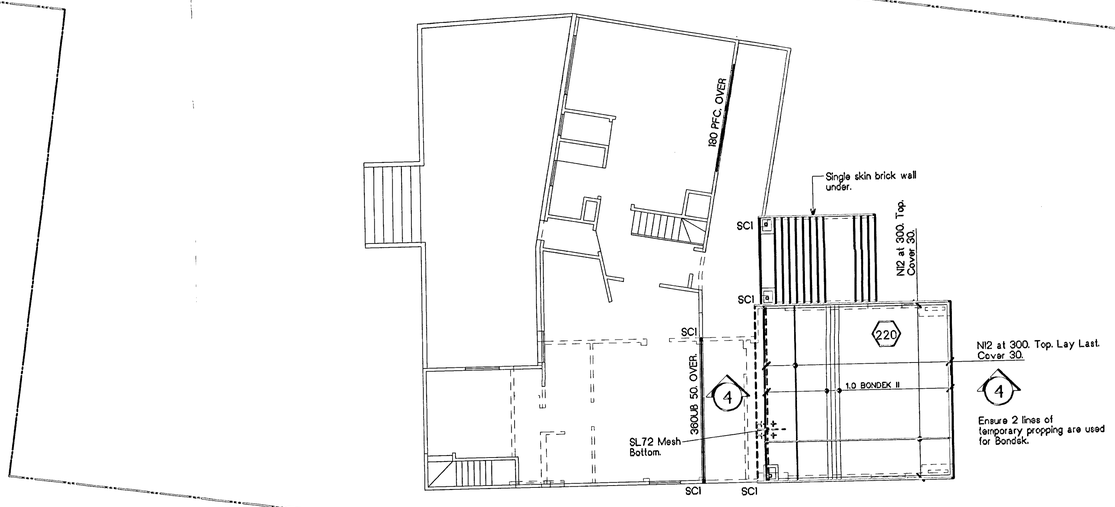
Our design and drawings are based upon and derived from information (including levels, surveys, etc) provided by the owner/architect/designer/builder. C F LOUDON AASTC 25.03.2007
Should the information provided to us be found to be deficient, unreliable, incorrect or inaccurate then our design/drawings may require modification. We take no responsibility for verifying the accuracy of the information that forms the basis of our brief and it is your obligation to verify it prior to the commencement of building operations.

The Structural Details shown on this Drawing are NOT to change under any circumstance.
NO Certificate will be issued for work NOT in accordance with the Drawing

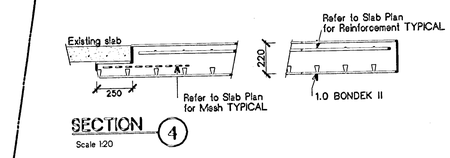
JACK HODGSON CONSULTANTS PTY. LIMITED.
Consulting Civil, Geotechnical and Structural Engineers.
87 Darley Street, MONA VALE 2103. P.O. Box 268, Post Code 1590.
Telephone (02) 9979 6733. Facsimile (02) 9979 6926.
Email:info@jackhodgson.com.au website:www.jackhodgson.com.au A.C.N. 053 405 011

Designed	Drawn	Job No.
JDH	ARC	24598-S1
Design Check	Drawing Check	Drawing No.
JDH	JDH	
Date		
14 SEPTEMBER 2007		

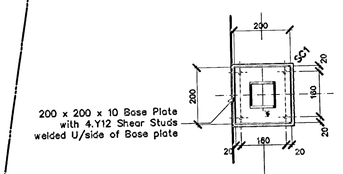
Scale 1:100 0 5m 10m 15m 20m 25m
Scale 1:20 0 1m 2m 3m 4m 5m



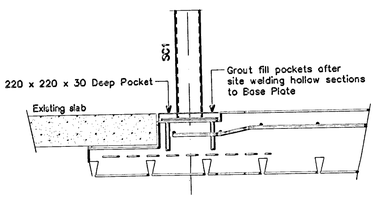
GROUND FLOOR MARKING PLAN Scale 1:100



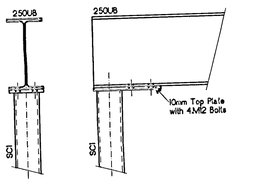
SECTION 4 Scale 1:20



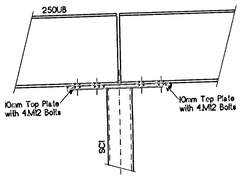
PLAN ON BASE PLATES



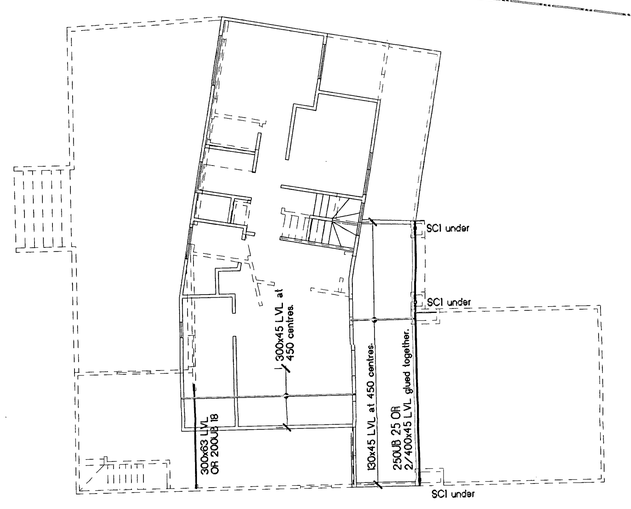
SECTION THROUGH BASE PLATES



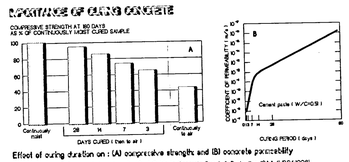
250UB TO 200PFC CONNECTION
SCALE 1:10



250UB TO 200PFC CONNECTION
SCALE 1:10



FIRST FLOOR MARKING PLAN Scale 1:100



Effect of curing duration on : (A) compressive strength and (B) concrete permeability

Acknowledgement : Diagram is based on fig 12 of Guide to Concrete Repair & Protection (SAA/HB84:1996)

No.	Amendment	Drawn	Date

PLAN OR DOCUMENT CERTIFICATION

I am a qualified.....CIVIL, GEOTECHNICAL & STRUCTURAL ENGINEER.....
I hold the following qualifications or licence No.....M.Eng.Sc.....
.....F.I.E.Aust.....Nper3.....Struct.Civil.No.149788.....
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 development consent, the provisions of the Building Code of Australia, A.S.1170, A.S.1170.1, A.S.1170.2, A.S.1684, A.S.2870.1, A.S.3500, A.S.3600, A.S. 3700, A.S.4100 & A.S.1163

Jack D. Hodgson 26/9/07 — Name / Date / Signature

GROUND AND FIRST FLOOR MARKING PLAN

PROPOSED ALTERATIONS AND ADDITIONS
88A PRINCES. LANE
NEWPORT

UPTON RESIDENCE

Our design and drawings are based upon and derived from information (including levels, surveys, etc) provided by the owner/architect/designer/builder. C F LOUDON AASTC 25.03.2007
Should the information provided to us be found to be deficient, unreliable, incorrect or inaccurate then our design/drawings may require modification. We take no responsibility for verifying the accuracy of the information that forms the basis of our brief and it is your obligation to verify it prior to the commencement of building operations.

The Structural Details shown on this Drawing are NOT to change under any circumstance.
NO Certificate will be issued for work NOT in accordance with the Drawing

JACK HODGSON CONSULTANTS PTY. LMTED.
Consulting Civil, Geotechnical, and Structural Engineers.
67 Darley Street, MONA VALE 2103. P.O. Box 388. Post Code 1590.
Telephone (02) 9979 6733. Facsimile (02) 9979 6826.
Email:info@jackhodgson.com.au web:www.jackhodgson.com.au A.C.N. 053 405 011

Designed	JDH	Drawn	ARC	Job No.	Drawing No.
Design Check	JDH	Drawing Check	JDH		24598-S2
Date	14 SEPTEMBER 2007				

Scale 1:100 0 5m 10m 15m 20m 25m
Scale 1:20 0 1m 2m 3m 4m 5m

RESIDENTIAL CONSTRUCTION SPECIFICATION

WHEN USED FOR EXTENSIONS, ADDITIONS, ETC, ANY PART THAT IS NOT APPLICABLE IS TO BE DISREGARDED

TRUELINE SPECIFICATION

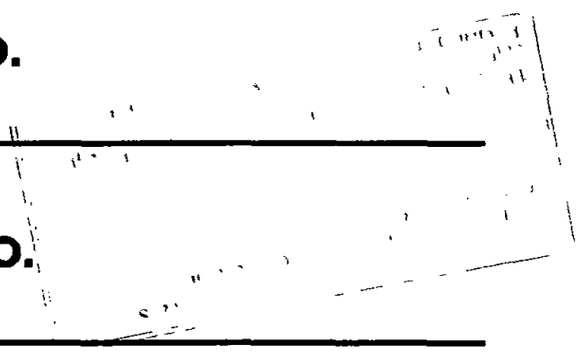
PROJECT

_____

_____

_____

DA No.



_____

CC No.

_____

DISCLAIMER

The terms and conditions set out in this specification may not be suitable for every project

The Trueline Specifications of Standards Co does not make any representation as to suitability of these specifications for any particular project

Users of these specifications must make their own assessment (or seek professional advice) as to the suitability of these specifications in relation to the particular project

As legislation and standards affecting building construction may change from time to time, users of these specifications should satisfy themselves as to suitability of these specifications at any point in time

Note If this document is to form part of a building contract, it is necessary to complete the Specification in full

Squares must be ticked and any section deemed not suitable is to be crossed out

SPECIFICATION FOR THE COMPLETION OF

ERECTION AND COMPLETION OF A

LOT NUMBER

STREET NUMBER

STREET

SUBURB/TOWN

MUNICIPALITY/SHIRE OF

FOR MR MRS Ms

Herein after called the owner

THE CONTRACTOR MUST ENSURE THE WHOLE WORKS AND SERVICES ARE PERFORMED IN ACCORDANCE WITH THIS SPECIFICATION AND DRAWINGS AND COMPLETED IN WHOLE IN A TRUE WORKMANLIKE MANNER

BUILDER

ADDRESS

LICENCE NUMBER EXPIRY DATE

BUILDERS ABN

INSURANCE DETAILS

GENERALLY

PROVIDE Means the supply and complete building in of specified materials fittings, etc

APPROVED Means approved by the owner L C APPROVED means approved by the local council

REGULATIONS AND NOTICES All State and Local Government Building Ordinances and Amendments thereto and requirements of legally Constituted Authorities and the Building Code of Australia and Australian Standards must be complied with by the builder The Builder to give all notices and obtains all permits

INSURANCE The ☐ Owner ☐ Builder must effect the insurance of all works against fire and storm The Builder shall at his own expense adequately insure against Public Risk and to insure as required under terms of the appropriate Workers Compensation and Employers Liability Acts and Home Warranty Insurance

LABOUR AND MATERIALS All labour material, fittings and plant required to construct and complete the building is to be provided by the builder Materials are to be new and of the standard specified Faulty or unsuitable material not to be used All work to be performed in a good worklike manner

SETTING OUT The Builder is to ensure the building is set out in accordance with the site plan and within the boundaries of the site

TEMPORARY TOILET ☐ Owner ☐ Builder shall provide temporary toilet accommodation for the workmen Where the Authority requires the temporary toilet to be connected to sewer mains the additional cost plus Builders margin shall be bourne by the Owner

ELECTRICITY The Builder is to make arrangements for any electrical power to be used in the erection of the works and is to pay fees and costs incurred therein Should Additional poles, wiring service risers or underground wiring etc be required by the Electricity Supply Authority this additional cost plus Builders margin shall be bourne by the Owner

WATER ☐ Owner ☐ Builder allow for connecting water to the proposed building and fittings

PLANS AND SPECIFICATIONS Any work indicated on the plan but not in the specification or vice versa and any item not shown in either plan or specification but which is obviously necessary as part of proper construction and/or specifications may not be made without written consent of the owner

PLANS OF THE JOB A legible copy of the plans and specifications bearing the approval of the Municipal Authority concerned must be maintained by the Builder at all times

RESPONSIBILTIES It is the responsibility of the Builder/end user to verify plans and Specifications as to their accuracy and suitability

VARIATIONS Any variations to specifications are to be added in the addenda at the back of the specification

SITE SIGN ☐ Owner ☐ Builder to supply site sign showing Lot No name of Builder and Licensee and full License No and any other detail that may be required by the Local Authorities

EXCAVATOR

SITE ☐ Owner ☐ Builder to clear the site of all stumps roots etc grubbed to a minimum distance of 3m outside the building line or to the boundaries of the allotment whichever is the less or to Local Authority regulations Any depressions within the area covered by the building are to be filled

TRENCHES All footings for walls, piers etc to be excavated to a minimum depth of 500mm or to a depth necessary to secure solid bottoms and even bearings throughout bottoms to be level and stepped as necessary At completion of foundations walls etc all excavations are to be filled well rammed to ground level and surplus soil spread

ROCK OR SHALE Excavation in rock or shale and removal from the site by ☐ Owner ☐ Builder at additional cost

ACCESS ☐ Owner ☐ Builder to provide all weather access to site

CONCRETOR

CONCRETE IS TO CONSIST OF
4 parts 20mm gauge blue metal or other approved aggregate 2 parts clean sharp sand 1 part fresh cement, a sufficiency of water, all well mixed mechanically and placed in position immediately after mixing The slump of the concrete is not to exceed 100mm Ready mixed concrete to have a minimum compressive strength of 20Mpa tested in accordance with code AS 3600 Concrete Structures After pouring the concrete is to be maintained in accordance with the standard before being built on all subject to engineering specifications NOTE It is necessary to complete Specification in full

FOUNDATIONS

REINFORCED CONCRETE FOUNDATIONS
Provide reinforced concrete footings to AS 2870 and to Local Council's requirements or engineers design if applicable

PIER AND BEAM FOOTINGS
Piers shall be solid concrete as designed by structural engineers taken to uniform bearing approved by supervising engineer Beams shall be reinforced concrete having even bearing on piers as designed by structural engineer

CONCRETE FLOORS Provide suspended concrete floors if shown on drawings L C approved metal formwork may be used to manufacturers recommendations, solid filling may be used for laundry/garage adjoining building top of slab to be not less than 50mm below antcap/dampcourse level and have a continuous support on a minimum of 75mm on at least two opposite sides

TABLE FOR SUSPENDED CONCRETE SLABS

Guide Only Engineering details may be required and are to take precedence All measurements in mm Y = Structural Grade Deformed Bar Int = Internal Ext = External

Clear Span Between Supports	20 MPa Slab Thickness		REINFORCEMENT Bars to AS 4671							
			Fabric to AS 4671		Main Bars Size	Main Bars Spacing		Tie Bars Size	Tie Bars Spacing	
Up to	Int	Ext	Int	Ext	*	Int	Ext	*	Int	Ext
2000	100	100	F72	F82	Y12	280	220	Y12	400	400
2500	100	110	F82	F102	Y12	220	240	Y12	400	400
3000	110	130	F92	F81	Y12	160	100	Y12	400	300
3500	130	150	F102	F81	Y12	140	100	Y12	300	280
4000	150	180	F81	F918	Y12	100	90	Y12	280	240
4500	170	-	F81	-	Y12	100	-	Y12	260	-

This table to apply to single spans, simply supported one way non-wall bearing slabs Main bar reinforcements to be set 20mm from bottom and edges of slab and run from support to support Minimum 50mm bearing of reinforcement over supports with tie bars on top edge of slab and to have 30mm cover to reinforcement if exposed to weather The main bars shall be laid in direction of shorter span For fabric reinforcements with different bar spacing closer bars are the main bars For the purpose of shrinkage control add top layer of F72 mesh for spans to 3m and F82 mesh for spans tp 3 9m Durability requirements in above ground exterior concrete to be 40MPA to 1km from coastline and 32MPA 1 km to 50km from coastline Provide slip joints between concrete and supporting walls All wall bearing or larger slabs must be designed by a structural engineer

☐ SLAB ON GROUND Provide 100mm minimum thick concrete slab reinforced with F72 (AS 4671) set 30mm from top of concrete on a foundation of a minimum of 50mm of sand with a 200 uni polythene membrane between lapped 150mm and turned up Maintain a minimum of 100mm bearing surface all round

PATHS ☐ Builder ☐ Owner to provide paths of concrete as previously specified, from front entry step and as shown on plans car tracks to be 100mm thick and paths 75mm thick Finished thickness including provision of two parts metal screening to one part cement dusted over surface and trowelled all in one operation or, alternatively rendered while concrete is green Paving to be laid with bituminous felt jointing strips not more than 1 2m apart and to full thickness of concrete and rendering to be V' jointed over same Excavate for and lay paths to even grade true to line and curve

PEST CONTROL The underslab area shall be treated against termite infestation in accordance with AS 3660 unless relevant authority regulations prohibit any such treatment The perimeter is to be treated in accordance with AS 3660 All treatments are to be carried out by licensed contractor, with owner to be supplied with applicable certificates A durable notice is to located in a prominent position showing method date type of barrier and life expectancy and any other detail that may be required by Local Authorities

BRICKLAYER

BRICKLAYER General AS3700 AS1619 AS2350

☐ CLAY BRICKS To be sound hard of well burnt clay and shale and comply with AS 1617

☐ CONCRETE BLOCKS OR BRICKS To comply with AS 4455

☐ Stonework ☐ Texture Bricks ☐ Face Bricks ☐ Concrete Blocks or Bricks ☐ Calcium Silicate Bricks to be used for Dwarf Walls Common bricks may be used for all other work

SAND To be clean sharp and free from all impurities

MORTAR and JOINING AS 3700

CEMENT MORTAR To be one part fresh cement to three parts sand

LIME MORTAR To be one part lime to 3 parts sand Lime to be well slaked before use

COMPO MORTAR To be one part cement one part lime and 6 parts sand All bricks to be well wetted before use This is not to apply to texture bricks Footing courses to be grouted solid with cement mortar All brickwork to be properly bonded, laid on full bed and all perpends filled All piers are to be built solid and each course grouted as work proceeds Carry up all work true and plumb to even gauge and in level courses the full height and thickness required The face brickwork above damp course level to be finished with neatly ironed or raked joints Beds and joints to be kept to a reasonable thickness Finish all other exposed brickwork with neat struck joints

BUILD THE FOLLOWING IN CEMENT MORTAR All brickwork to underside of floor bearers level All 110mm thick brickwork All copings steps brick balustrade walls sills piers wing walls retaining walls Brick Fences on alignment and/or brickwork under timber fencing also concrete blocks or bricks

BUILD IN COMPO MORTAR All other brickwork including concrete masonry

VENEER WALLS To be 110mm Brickwork built in Compo Mortar on foundation walls as previously specified Internal faces to be a minimum 25mm from timber frames Build in 3mm galvanised wall ties opposite each alternate stud four courses above level of bottom plate then every fourth course and spaced not more than 460mm horizontally and 610 vertically Ties to be left open for attachment to studs A cavity space of between 25mm and 50mm must be maintained throughout Cavities and weep holes to be clean and clear at a damp course level All mortar droppings to be caught on paper or other material and removed before internal linings are fixed Mortar joints on inside faces of walls to be flush with brickwork

SPECIAL WALLS (If shown on plan) Walling not of timber, Veneer-on-Timber or Masonry to be constructed as per Structural Engineers Details and Certificate

SILLS To be brick on edge unless stated otherwise

SLEEPER PIERS Provide brick, solid filled concrete masonry units or concrete to a minimum of 200 x 200mm up to 1 3m high spaced not more than 1 8 centres If pier exceeds 1 3m increase by 50mm all round All piers to have concrete pads under as per table below

SUPPORTED AREA (m^2)	WIDTH OF SQUARE PAD (mm)	DIAMETER OF CIRCULAR PAD (mm)	THICKNESS (mm)
10	400	500	200
20	500	600	200
40	600	750	250

ENGAGED PIERS To be minimum of 200 x 90 mm spaced at not more than 1 8m centres to support floor bearers, and at similar centres to stiffen walls supporting concrete slabs Ties to brick wall every 4th course with approved ties

ACCESS Adequate access in the external foundation wall must be provided under all floors – AS 366O

VENTILATION Sub floor to be ventilated and cross ventilated by means of evenly distributed openings in the external walls having an unobstructed area of not less than 2100mm per square m of external wall and not less than 200mm in depth in every part Vents to be immediately below bearers and similarly provide vents under verandah floors and suspended floor slabs Sufficient cross ventilation to be provided through all still air Room ventilation above floor must be provided in accordance with Good Building Practice Appropriate special provision to be made where a gas appliance is installed Ventilation may be varied by Local Council

CORBAL COURSES Concrete floors to be supported by corbal courses as required

DAMP COURSE Provide a continuous run of L C approved dampcourse material to full width of wall thickness on all brickwork at level not higher than bottom of floor bearers and engaged piers Damp course material is to be run in long lengths lapped minimum 100m at joints and full width at all intersections To walls surrounding concrete and/or solid floors an additional run of dampcourse is to be laid, one full course above floor level and stepped down to meet lower dampcourse

ANT CAPS AS 3600 To all brickwork and piers at the level of underside of floorbearers ant capping of 0 5mm gauge Zincalume or other approved metal is to be set projecting 38mm beyond the internal faces of all brickwork and turned down at a 45 degree angle, lapped 13m, sealed and/ or crimped at all joints and corners so as to provide a continuous and effective barrier against termites throughout the length of the material

VERMIN PROOFING 13mm mesh galvanised bird wire to be built into brickwork and taken across cavity and secured to bottom plate

FLASHINGS L C approved dampcourse material to be built in under all window sills 25mm at back of wood sill and 50mm at each end of same Flashing to be bent down across cavity and built 25mm into veneer wall L C approved dampcourse material to be built in over all exposed window and external door openings, also as required in all wet areas to L C satisfaction

WEEP HOLES Perpend joints are to be left open in extended brick walls spaced approx 600mm immediately over flashings of all exposed openings and to brick retaining walls fender walls etc as required

STEPS As shown on plan in bricks to match other exposed brickwork To be built in solid work or where side walls are provided on consolidated filing Treads are to be brick on edge, or precast concrete units with a minimum of 255mm and maximum of 396mm width and a maximum of 190mm and minimum of 115mm rises

ARCH BARS AS 1170 AS 3700 Brickwork over openings to be supported on Ingal" specific made arch bars or equivalent galvanised to AS 1650, and have minimum bearing of 150mm each end

Spans to 1100mm = one 85mm flat bar
Spans from 1100mm to 1800mm = one 100mm x 100mm Lintel
Spans from 1800mm to 3 0m = one 150mm x 100mm Lintel
For spans over 3 0m refer to structural engineer

☐ FIREPLACE AND CHIMNEY Reinforced concrete or bricks in cement mortar footings 100mm wider all round than construction to be provided Build 100m brick walls and/or corbel courses to support hearth Non combustible material to be used for upper surface of hearth with a minimum thickness of 155mm and shall extend not less than 300mm beyond the front of the fireplace opening and not less than 150mm beyond each side of the opening Local council may vary this requirement Upper surfaces of hearth not to slope away from grate Provide fireplace and chimney in position as shown and to the dimensions on plan Mild steel bars or angles of suitable sizes and with a 110mm bearing at each end to support work over openings Up to the level of 300mm above the underside of the arch or lintel the back and sides of the fireplace to be constructed in two separate sections of solid masonry minimum 190mm thick not including cavity Concrete masonry not permitted in construction of inner section balance of walling to be minimum 90mm thick Flue to be rendered minimum 12mm thick Mix 1 cement, 2 lime 10 sand or L C approval material Chimney stack is to be not less than the height of the main roof ridge and is to be built in compo mortar The flue is to be 220 x 220mm or one-tenth of the area of the fireplace opening whichever is the greater gathered over to break daylight and pargetted to the full height A 6mm Zincalume tray, in one piece holed for the flue is to be set at level of one course above roof covering on the low side of the roof The

internal edges are to be shaped to form a quadrant gutter 25mm wide, sealed at corners The tray is to project a minimum of 25mm beyond the external faces of brickwork turned up and/or down as required Where the tray is turned up a clearance of at least 6mm is to be maintained between the brickwork and the tray Provide weep holes by leaving open vertical joints in brickwork above tray Rake joints in brickwork ready to receive flashing to be provided by plumber A loose brick must be left in the back of the chimney stack This brick must not be set until after that tray has been cleared of all mortar droppings

FOUNDATION DOOR Provide access door where applicable approximately 600mm wide and fitted with appropriate hinges and lock

STEEL WORKER

Provide steel work in accordance with Engineers details or as shown on plan If wrought iron is shown on plan, provide same

METAL FRAMING

METAL FRAMING Provide and erect framing to A S 3623 or engineers detail as shown on plan in accordance with manufacturers recommendations and instructions Damp proofing (flashing) to be provided between concrete floors and bottom plate and any adjoining masonry walls etc in accordance with AS 2904 If this section is applicable any section in this specification which duplicates any of this work is to be disregarded

CARPENTER

GENERALLY Timber shall comply with AS1720 AS 1684 and be part of the class specified reasonably straight grained and free from those defects which might effect its durability and/or strength Scantlings to be in long lengths accurately cut and fitted well spiked and securely fixed For the exercise of this specification (unless specifically stated otherwise) hardwood is to be of a stress grade and not less than F8 and softwood not less than F5 Timber shall be graded to appropriate AS grading specification Mechanical grading to AS1748, visual grading will require evidence that they comply with the required stress grade Allowable tolerances as to size is permitted only as outlined by the appropriate AS Timber is **NOT** to be weakened by any method such as cutting, planing chipping etc Where size of timber is restricted owing to lack of space, a higher grade or laminated timber may be substituted if warranted, all only as approved by Local Council

FLOOR FRAMING All floors shown on plan as timber are to be framed at level shown with suitable timber as laid down in AS1684 Bearers to be laid true and level Packing not permitted Provide 100 x 50mm or 125 x 75mm bearers, set on edge as already specified at max 1 8m centres Provide 100 x 50mm joists set on edge at a maximum 450mm centres and fix bearers by double nailing at each crossing Underside of joists to be checked out as necessary over bearers to enable tops of joists to be finished true and level Unsupported spans exceeding 2 7m to have 50 x 50 herringbone strutting or solid blocking spaced at maximum of 1 8m centres No span to exceed 4 8m (Timber walls must have double joists under)

WOOD PRESERVATIVE All hardwood plated bearers and joists (if timber construction) in ground floor are to treated with one coat of pest resisting and wood preserving oil (Specification No AS1604) or approved chemical treatment before fixing on all faces and ends, except tops of joists

WALLS To be framed with ☐ Hardwood ☐ Oregon ☐ Pine

WALL PLATES (and Bottom) For 100mm studs – 100 x 50mm for 75mm studs – 75 x 50mm Plates may be checked approx 10mm to provide uniform thickness where studs occur Where plates are machined to a uniform thickness checking may be omitted

STUDS AS 1684 (not more than 3m long) Wall, external and internal

MAXIMUM 3M LONG	UPPER STOREY	LOWER STOREY
At 450mm centres	100 x 38mm or 75 x 50mm	N/A
Each side of openings up to 1 8m wide	100 x 50mm or 75 x 50mm	N/A
Other openings up to 3 6m	100 x 75mm or 75 x 75mm	N/A
Over 3 6m	100 x 100mm	N/A

Three studs are to be provided at each wall angle and intersection well blocked and securely fastened together Two studs may be accepted in brick veneer construction With corner windows, the angle studs are to be cut away

to suit frame 100 x 100mm or 75 x 75mm posts ate to be framed in corner mullions of windows or galvanised pipe may be used

TIMBER ROOF TRUSSES To be properly fabricated to manufacturers certified detail or Engineers detail and fixed in strict accordance with their drawings or instructions Bottom chord to be clear of internal walls with a minimum clearance of 13mm at the point of maximum deflection after loading Self adjusting fasteners to be used to fix truss chord to top plate

HEADS Where supporting Roof Trusses at 900mm centres (To be checked into studs)

	FOR TILED ROOF CONSTRUCTION			FOR SHEET ROOF CONSTRUCTION (Metal of Fibre Cement)		
SPAN	6000mm	7500mm	9000mm	6000mm	7500mm	9000mm
Up to 1200	125x50 or 150x38	150x50 or 175x38	150x50 or 175x38	100x50	125x50 or 100x75	125x50 or 100x75
1500	175x150 or 150x75	175x50 or 150x75	200x50 or 175x75	125x50 or 100x100	150x50 or 125x75	150x50 or 125x75
1800	200x50 or 175x75	225x50 or 200x75	225x50 or 200x75	150x50	175x50 or 150x75	175 x50 or 150x75
2100	225x50 or 200x75	250x50 or 225x75	250x75	175x50 or 150x75	200x50 or 175x75	200x50 or 175x75
2400	250x50	250x75	300x50	200x50 or 175x75	225x50 or 200x75	250x50 or 200x75
2700	300x50	300x50	300x75	225x50 or 200x75	250x50 or225x75	300x50 or 225x75
3000	300x75			250 x 50 or 225x75	300x50 or 250x75	300x75 or 250x75

HEADS Where supporting conventional roof construction (To be checked into studs)

SPAN	FOR TILED ROOF CONSTRUCTION	FOR SHEET ROOF CONSTRUCTION (Metal or fibre cement)
1 2m	75x75mm or 100x38mm	50x75mm
1 5m	125x50mm or 100x100mm	100x38mm
1 8m	175x50mm or 150x75mm	125x50mm or 100x100mm
2 1m	200x50mm or 175x75mm	150x50mm or 125x100mm
2 4m	225x50mm or 200x75mm	175x50mm or 150x75mm
2 7m	250x50mm or 225x75mm	200x50mm or 175x75mm
3 0m	250x75mm or 300x50mm	225x50mm or 200x75mm

Timber grading Hardwood AS 2082 Oregon or Pine AS 4785 Where depth exceeds 150mm timber is to be seasoned having a maximum moisture content of 18%

BRACING AS 1684 As appropriate for wind velocity for buildings type "A and or B to be evenly distributed throughout For wind speeds exceeding AS1684 frame and bracing to be designed by Structural Engineer

NOGGING (BRIDGING) To be fixed between studs at 1 35m maximum height, where wall cladding is joined 38mm thick Where not joined 25mm thick and finished not more than 7mm behind the face of the frame Skirting blocks of the same section as bottom plates and not less than 225mm long to be spiked to plates Skirting blocks not required if wall linings extend below the top of the bottom plate and skirtings are less than 75mm high

ROOFS To be framed with ☐ Hardwood ☐ Oregon ☐ Pine Length of rafters to longest ridge is to be gauged to suit full tile courses

CEILING JOISTS To be of dimensions 100 x 38mm Hardwood 100 x 50mm Oregon at maximum 450mm centres Fix trimmers to ceiling joists where required at 450mm centres Where two lengths of joists are used they are to be lapped and well spiked over partition walls All to be dogged to hangers Ceiling joists where practicable are to be at right angles to ridge

HANGERS To be provided so that the unsupported length of ceiling joists does not exceed 2 1m double nailed to each ceiling joists and secured to side of rafters wherever practicable Where the length of hanger exceeds 4 8m the hanger is to be supported by a beam as for Strutting Beams and the size of hanger is to be governed by the new span **(Roof not to be strutted off hangers or beam supporting hanger)**

STRUTS Strutting from ceiling joists or hangers over room not permitted Struts must be seated on or directly above walls Size to be 75 x 75mm up to a length of 2 1m centres under purlins Where strutting beams are required, they are to be packed up from the walls and be 13mm above level of ceiling joists also must not be used as hangers for ceiling joist, or to support hangers

COLLAR TIES Up to 4 2m span – 75 x 50mm Hardwood or 100 x 50 mm pine Over 4 2m span – 100 x 50mm Hardwood or 125 x 50mm pine Fixed to alternate pair of rafters

GUTTERS AND VALLEY BOARDS 19mm thick and width of gutter

MANHOLE Trim as required between ceiling joists for manhole 600 x 400mm line the opening and provide suitable cover

HOT WATER TANK Provide hot water storage tank (AS 3498)

PORCH ROOF To be constructed when shown on plan Post D A R pipe or wrought iron securely fixed top and bottom 75 x 50mm Top Plates – D A R if exposed 75 x 50mm Rafters spaced at maximum of 450mm centres A fall of at least 13mm in 300mm must be maintained towards outer edge Roof to be covered as per drawing Fix 25mm facia all round

GABLES (If shown on drawing) Form and project plates, purlins, ridges etc Supply and fit 159 x 19mm barge boards with fillet at top scribed up to tiling or capped with asbestos cement to allow for verge tiles to be pointed with mortar or formed metal fascia to manufacturers specifications Cover gable faces with siding as shown on drawing Line soffits as for eaves

EAVES Project rafters at eaves to give soffit as shown on plan and fix facia all round out of 25mm timber or other approved product

☐ Line underside of rafters with 4 5mm fibre cement cover joints and provide quadrant moulding against wall,

☐ Form flat soffit with 4 5mm cement let into a full 7mm groove at back of facia and secured at wall to 50 x 25mm battens nailed to framing and supported at all joints and intermediately with 38 x 38mm sprokets at maximum of 450mm centres Cover joints with approved strips and provide quadrant moulding against wall

☐ SHEET FLOORING To be fixed in strict accordance with manufacturers recommendations and AS 1859 AS 1860

☐ FLOORING, TIMBER Must not be fixed until roofing complete and building weatherproof Timber must be seasoned to a moisture content between 10% and 15% Flooring is to be tightly cramped every board nailed at each bearing with nails, punched below the surface, thoroughly cleaned and flushed off at completion Floor must be T & G with a finished thickness not less than 19mm Flooring exceeding 43mm face wide to be double nailed at all bearing points

TIMBER FLOOR SANDING Floor to be sanded to even surface

☐ TIMBER DECKING To be ☐ Hardwood ☐ Treated pine ☐ Other To be securely fixed to joists using corrosion proof fasteners

☐ COMPRESSED FIBRE CEMENT Not less than 18mm for joists spacing 600mm or 15mm for joists spacing 450mm All installed as per manufacturers instructions

FLOOR FRAMING ☐

BEARERS	(Over 2 or more spans)		
At 1 8m centres set on edge	Non load bearing & sheet roofing	100x75mm	125x75mm
	Supporting tile roof or trusses	125x75mm	125x75mm
JOISTS			
Ground and upper floors	Up to 1 8m	100x50mm	150x50mm
At 450mm centres	1 8 to 2 4m	125x50mm	175x50 mm
	2 4 to 3 0m	150x50mm	200x50mm
	3 0 to 3 6m	175x50mm	250x50mm
	3 6 to 4 2m	225x50mm	275x50mm
	4 2 to 4 8m	250x50mm	300x50mm

An engineers certificate is required as to size and adequacy for spans over 4 0m
Unsupported spans exceeding 2 7m to have 38x38mm herringbone strutting or solid blocking 1 8m centres as per AS 1684 1992

PITCHED ROOF	SPACING	HARDWOOD	OREGON OR PINE
RAFTERS Tile roofing	At 450mm centres	100x38mm	100x50mm
	Up to 600mm centres	100x38mm	100x50mm
Corrugated Fibre Cement Roofing	At 600mm centres	100x38mm	100x50mm
Corrugated metal roofing	At 900mm centres	100x38mm	100x50mm
BATTENS Tiled roofing		38x25mm	38x25mm
Rafters at 450mm centres	Spaced to suit full tiles	38x38mm	38x38mm
Rafters at 600mm centres	Spaced to suit full tiles	38x38mm	38x38mm
Corrugated Fibre Cement Roofing		75x32mm	75x38mm
Corrugated Metal Roofing	900 mm centres	75x32mm	75x38mm
RIDGES and HIPS all roofs		150x25mm	150x25mm
VALLEYS all roofs		150x38mm	150x38mm
PURLINS tile roofs	2 1m centres	100x75mm	100x75mm
Metal or Fibre cement roofs	2 1m centres	100x75mm	100x75mm
STRUTS maximum 2 1m	2 1m centres	100x50mm	75x75mm
COLLAR TIES to 4 2m	every alternate pair of rafters	75x50mm	100x50mm
Over 4 2m	every alternate pair of rafters	75x50mm	125x50mm
STRUTTING BEAMS spaced at 2 4m as required	span to 2 0m	100x50mm	125x75mm
Not to be used as hangers for ceiling joists	2 0m to 2 4m	150x50mm	150x75mm
	2 4m to 3 0m	175x50mm	175x75mm
	3 0m to 3 6m	200x50mm	200x75mm
GUTTER and VALLEY BOARDS	min thickness	20mm	
CEILING JOISTS	450mm centres	100x38mm	100x50mm
	600mm centres	100x38mm	100x50mm
HANGERS	2 1 centres		
	2 1m to 3 0m	175x38mm	200x38mm
	3 0m to 3 6m	200x38mm	225x38mm
	3 6m to 4 2m	225x38mm	250x38mm
	4 2m to 4 8m	250x38mm	275x38mm
WIND BRACING A S 1684 as appropriate for Wind velocity for buildings type A and B to be Evenly distributed throughout			
FLAT ROOF	SPANS	HARDWOOD	OREGON or PINE
RAFTERS	Up to 2 4m	125x50mm	150x50mm
	2 4 to 3 0m	150x50mm	150x50mm
	3 0 to 3 6m	175x50mm	175x50mm
	3 6 to 4 2m	200x50mm	225x50mm
	4 2 to4 8m	225x50mm	250x50mm
	4 8 to 5 4m	275x50mm	275x50mm
	5 4 to 6 0m	300x50mm	300x50mm
BATTENS		75x38mm	75x38mm
RIDGE BEAMS TO OPEN SPANS	up to 3 0m	200x100mm	225x100mm
Fall of roof to be not less than50mm in 3 0m span and to be herringbone strutted or solid blocked full depth of joists Where span exceeds 2 7m for subsidiary roofs fall is to be not less than 13mm per 300mm of span Roof to be sarked and ventilated	3 0 to 3 6m	225x100mm	250x100mm
	3 6 to 4 2m	250x100mm	275x100mm
	4 2 to 4 8m	275x100mm	300x100mm
VERANDAH BEAMS	up to 2 1m	150X50MM	150X75MM
	2 1 to 3 0m	200X75MM	200X75MM
VERANDAH POSTS		100X100MM	100X100MM

JOINER

DOORS AND WINDOWS GENERALLY All timber sizes are nominal and tolerances only as provided by the appropriate Australian Standards listed here For door frames and jamb linings – doors and windows – AS1288 Frames to be properly fitted and joined together with linings moudings and trimmings properly mitered or scribed All defects and marks filled and ready for painting with approved primer or a priming oil including a wood preservative

JAMB LININGS Lining to be a minimum of 38mm thick solid rebated to all door openings Where return plaster reveals occur linings are to be 75 x 50mm rebated Linings to openings not having doors or to have swing doors are to be 25mm thick timber securely fixed

DOORS AS 2689 Fit accurately to door frames hang front and rear doors with three 100mm steel butts and other doors unless otherwise specified with two 88mm steel butts Height of doors to be 2040mm
To front entry a 2 040m x 820mm x 40mm door with selected lock and furniture To rear entry fit 2 040m x 820mm x 40mm door with selected lock and furniture Internal doors to be 2 040m x 820mm x 35mm flush panel with selected lock and furniture Double doors to be 2 040m x 820mm x 40mm rebated together with mortise lock and furniture Fit sliding doors and tracks where shown on plans Laundry door to be 2 040m x 820mm x40mm with lock and furniture Any variations to door sizes must be shown on plan as a separate item Door sets to AS 2689 may be used as an alternative and are to be fitted in accordance with the standard

GARAGE DOORS to be ☐ Tilt ☐ Roll ☐ Other

SECURITY SCREEN DOORS AS 5039 AS 5040 Where indicated on plan are to be supplied and fitted in accordance with the standard

☐ AUTOMATIC GARAGE DOOR OPENER ☐ Owner ☐ Builder

WINDOWS AS 2146 AS 2147 ☐ Casement ☐ Hopper ☐ Double Hung To be approved stock construction out of solid rebated material Head and stiles are to be out of material having and end section of not less than 5000m square mullions and transoms not less than 6250m square rebate in all cases are to be of such depth as to ensure complete weather proofing Sills minimum 75mm thick sunk weathered and throated tallow wood or other species of hardwood Window units and combination window wall units may have sills not less than 50mm thick

SASHES Sashes are to be manufactured from sash stock material not less than 38mm thick Where glass weight of 3mm or heavier is indicated for use (see under Glazier) 44mm sash and stock material should be used unless a mechanical sash adjuster is provided, then 35mm material can be used All units to be supplied with furniture

☐ ALUMINIUM FRAMED AS 2047 AS 2048 as shown on plans Type and manufacturer as selected fitted with all furniture and fixed in accordance with the particular manufacturers recommendations Heads and sills to be flashed Frames and sashes must be fitted in conformity with good building practice

ARCHITRAVES Provide architraves of standard section to all door window and other openings internally

SKIRTINGS Provide skirtings of standard section

STORM MOULDS Fix to all window frames and outside doors where appropriate

KITCHEN CUPBOARDS Provide properly constructed floor and wall cupboards in position and to dimensions indicated on plan Floor cupboards to have raised floors with toe space under front face Cover bench tops with materials as selected Doors to be accurately fitted and hung and finished with selected catches and handles All cupboards are to be securely fixed in position and neatly finished at wall and floor intersections

BUILT IN CUIPBOARDS Frame up and fix cupboard/s in position and to dimensions shown on plan Provide doors and door furniture as selected

BATHS Under exposed edges of bath provide a properly constructed frame ready to receive covering specified elsewhere Or build brick-on-edge walls in classification M4 mortar and leave ready to receive tiles as specified under 'Tile layer Make provision for the area under bath to be properly drained and ventilated

BATH AND SHOWER RECESS If bath and shower recess are to be lined with laminate or waterproof material a timber frame is to be constructed If tiling is called for refer to tile layer" in this specification

FENCER

FENCING By ☐Owner ☐Builder

TYPE	SITUATION
☐ Brick as detailed	☐ Front
☐ Colourbond as per manufacturers specification	☐ Sides
☐Timber as detailed	☐ Rear
☐ Other/	☐ Other

DRAINER

NOTE Drainpipes must not be taken through the footings of the buildings All seepage and soakage water is to be effectively dealt with and diverted clear of the building Trenches for drains must not be within 600mm of footings of buildings where running parallel to same

☐ SEWERED AREAS A drainage system from pedestal pan and from wastes of all fittings to be provided and connected to the sewer main and all to be in accordance with the Rules and Requirements of the appropriate Authority Yard gully at rear of building to be provided Allow for mm drainage CERTIFICATE OF COMPLIANCE IS TO BE PRODUCED AT COMPLETION OF WORK

☐ UNSEWERAGED AREAS A drainage system to be provided from all fittings and from grease-trap in accordance with the requirements of the Local Authority concerned Drains must be excavated to provide even falls throughout and with a minimum cover of 300mm Lay 100mm socketed stoneware pipes or approved PVC pipe to take soilwater from wastes of washtubs bath shower washbasin and grease trap All drains are to be laid so that water is discharged or adequately absorbed joint all pipes as required by Local Council concerned The Builder is to ascertain and allow for the Council s requirements in this regard An approved grease trap with lid is to be provided and placed in position shown to take water from the sink Top of trap to be slightly above the finished ground, or nearby paving level All drainage work from fittings to the drainage line outside the building to be performed in accordance with the Rules and Requirements of the Water Supply and Sewerage Authority for sewered areas A Certificate of Compliance to be produced in respect of this work by the builder Allow for Drainage

☐ A SEPTIC TANK ☐ A HOLDING TANK ☐ OTHER of approved design and capacity is to be installed in accordance with the manufacturers specifications and also with the requirements of the Local Authority concerned If any rock encountered during installation of tank to be chargeable extra

ROOF WATER DRAINS ☐ To be connected to existing ☐ Roof water drains to be allowed for and laid Drains to be approved PVC pipe laid to an even and regular fall so as to have a minimum cover of 100mm Connect drainage lines to downpipes with suitable bend and discharge as required by Local Council concerned Allow for mm drainage

PLUMBER

RAINWATER PRODUCTS AS 2179 AS 3500

GUTTERS ☐ Zincalume ☐ Colourbond ☐ Other to be provided for all eaves set in position with sufficient fall to downpipes All joints and angles joined using brackets and sealant as per manufacturers recommendations

DOWNPIPES ☐ Zincalume ☐ Colourbond ☐ Other in positions to allow free flow of water from all gutters and connected to stormwater drainage fixed to wall surface using appropriate fittings

☐ Gutters and down pipes to be affixed in accordance with manufacturers recommendations

VALLEYS To be 6mm thickness Zincalume 450mm wide and fixed to valley boards with edges beaded, well lapped and sealed at joints

FLASHING AS 1804 AS 2904 Flash around chimneystacks exhaust flues and wherever else required with approved lead or specific made flashings Stepped or wall flashings to be taken through full width of brick wall, turned up internally and dressed down to overlap roof flashing

SANITARY PLUMBER (All areas) Provide connections to laundry tubs, kitchen sink, vanities, basins, bath, toilets and floor waste all in accordance with the requirements of water and sewerage authority

WATER SERVICE AS 3500 Provide an approved pipe from authorities main to boundary, install water meter and connect to one garden hose cock yard gully kitchen bathrooms, laundry toilets and hot water service Internal piping to be ☐ copper ☐ other all properly secured and finished with necessary flanges cover plates etc Provide for fixing of toilets, vanities, baths, showers kitchen sink dishwasher and laundry tubs as shown on plan

FLOOR WASTES Provide drainers grates to all floors as required

WASTE WATER RECYCLING Where required by the appropriate authority wastewater recycling systems of an approved design are to be installed in accordance with the plans

HOT WATER SERVICE AS3500 Install and connect hot water tank as selected to all points Piping to be lagged as required

☐ GAS SERVICE The whole of the work to be carried out as per requirements of the Local Supply Authority The Plumber is to be responsible for the gas service from fence alignment including fixing of the meter and cover for same

ROOFER

GENERALLY AS2050, AS2049, AS1684

TILE ROOFING Provide all roofs with first quality roofing tiles Tiles may not be used on roofs having a slope less than 1 4 5 Where pitch of rafters is less than 1 2 75 terra cotta Marseilles pattern 1 3 7 Swiss pattern, 1 3 3 concrete tiles are used the roof shall be sarked with double faced aluminum foil covered reinforced fabric as per AS 4200 Between 1 3 7 and 1 4 5 slope perimeter of roof shall be provided with an anti-ponding board or device to ensure that all water will be discharged into eaves gutter, a clear space must be provided between edge of the device and the lowest side of the first batten so as to allow a free flow of water into the gutter
Where one section of the roof discharges into a lower section, the discharge is to be widely distributed and the roof is to be fully sarked Elsewhere where a spreader is used the roof shall be sarked from the point of discharge to eave with a minimum width of 1800mm approved sarking
Cover ridges and hips with all capping starters and apex caps necessary and bed all capping and verge tiles on lime mortar and point with coloured cement mortar

☐ TERRA COTTA TILES To be glazed and manufactured in accordance with AS 2049 To be fixed to timber battens with approved fasteners every alternate tile all fixed in accordance with AS 2050

☐ CONCRETE TILES To conform to AS 2050 and to be produced by manufacturers who provide a comprehensive guarantee, and fixed in accordance with AS 2050 Tiles are have an end lap of not less than 75mm Where fixing holes are provided every alternate tile in each course is to be fixed to battens with approved fastener Where holes are provided for nailing, every tile in each third course is to be fixed with galvanised flat head nails at least 19mm into tile batten

☐ CORRUGATED FIBRE CEMENT ROOFING To conform to AS 1562 and fixed in accordance with AS 1562 Minimum pitch of roof is to be 1 8 for large corrugations and 1 11 where rafter length can be covered with a single sheet Where pitch of roof is less than 1 6 in the case of large corrugations and 1 4 5 in the case of small corrugations end laps shall be at least 225mm and sealed Sheets to be fixed with non corrosive hex head self drilling screws fitted with neoprene ceiling washers to each run of battens with side and end laps or other approved method in accordance with manufacturers instructions All necessary accessories are to be provided and the roof to be adequately bird proofed

☐ CORRUGATED STEEL ROOF AS 1562 ☐ Zincalume ☐ Colourbond all sheets branded according to thickness All necessary accessories to be provided and the roof is to be adequately birdproofed Sheets to be fixed with 45mm non corrosive hex head self drilling screws fitted with neoprene ceiling washers to every alternate corrugation at ends and every fourth corrugation immediately All hips and ridges are to be covered with screws and washers Where pitch of roof is less than 1 4 5 minimum a material having effective vapour barrier and thermal insulation qualities is to be fixed to the underside of ceiling joists where a level ceiling surface is to be provided Where the ceiling is to follow the pitch of the rafters, irrespective of the pitch of the roof the vapour/thermal barrier is to be fixed to the underside of the rafters Lead flashing not to be used with Zincalume steel

☐ METAL DECK Metal deck roof with or without self locking ribs may be used provided it is fixed in strict accordance with manufacturers instructions (minimum slope 1 60)

☐ SARKING To comply with AS 4200 for pliable sarking and AS 3999 for reflective foil

ELECTRICIAN

To provide all labour and materials necessary for the proper installation of electricity service in accordance with the appropriate S A A rules and the requirements of the Local Supply Authority Arrange with Supply Authority for connection from mains to meter boards All work to be in accordance with the AS Wiring Rules AS 3006 as amended, and the Insurance Council of Australia Provide light points in positions shown on plan or to be determined Approved switch for each point is to be mounted in positions to be indicated Provided power points of flush type with 10amp switches in positions as shown on plan or to be determined

METER BOX Provide box to enclose meters in accordance with the Requirements of the Authority concerned

SMOKE ALARMS Self contained smoke alarms are to be installed in suitable locations on or near ceiling in any storey Between each area containing bedrooms and the remainder of the building where bedrooms are served by a hallway, in that hallway or in each bedroom and the alarms are to be connected to the consumer mains power and have a standby power supply

CEILING AND WALL FIXER

CEILING ☐ FIBROUS PLASTER ☐ GYPSUM PLASTER BOARD

FIBROUS PLASTER To be manufactured and fixed in accordance with AS 2589, DR 99462 Normal thickness of 10mm and sheets to be as large as practicable, well dried before fixing Use galvanised clouts to affix to battens of 38 x 25mm timber spaced at 400mm centres nailed to ceiling joists Use double battens at all joints running parallel to the battens not more than 225mm apart Punch all clouts into plaster and stop Scrim from above and set joints flush

GYPSUM PLASTER BOARDS AS 2588 To be manufactured and fixed in accordance with AS 2588 Nominal thickness of 10mm fixed with galvanised clouts or screws (specific made) and adhesive direct to ceiling joists at maximum 450mm centres or 13mm thick at 600mm centres clout head to be sunk and stopped with special cement Jointing and fixing must be strictly to manufacturers recommendations

CORNICES Provide cornices to above ceilings neatly mitered (scrimmed and set) at all angles in full wall lengths where possible

FIBRE CEMENT Provide to laundry, porch and attached W C Ceilings Sheets of balanced pattern fixed to properly nogged and even surfaced solid backing

WALLS ☐ FIBROUS PLASTER ☐ GYPSUM PLASTER BOARD Provide to walls of lounge dining bedrooms hall kitchen bathroom Provide all necessary vents and set flush with wall surface

FIBROUS PLASTER Use full length sheets where practicable All vertical joints must be backed with double studs and reinforced with sisal and/or plaster All joints to be left flush with surface Provide 38 x 38 x 5mm galvanised iron strip to full length of internal angles Fix sheets to wall framing at edges and intermediately with galvanised clouts punch below surfaces and stopped Neatly set all angles Internal angles Internal angles from skirting to picture rail 19mm quad can be fixed

GYPSUM PLASTER BOARD Provide with full length sheets horizontally or staggered end joints to ceiling heights in accordance with manufacturers instructions Fix with galvanised clouts or screws (specific made) and adhesive at 225mm centres to studs Punch heads of clouts below surface and finish as for ceiling Internal angles from floor to ceiling to be set Jointing and fixing must to manufacturers recommendations

☐ WET AREAS All walls to wet areas approved water resistant sheets shall be used All internal wet areas to be completely waterproofed by a licensed applicator using propriety system designed for wet areas (BCA-F1 7) or as amended

PLASTERER ☐ Cement Render ☐ Float and Set all internal brick walls to be cement rendered to a minimum thickness of 13mm in accordance with A S metric code

WATERPROOFER

BATHROOMS TOILETS AND LAUNDRIES All internal wet areas to be completely waterproofed by a licensed applicator using a proprietary accredited product designed for wet areas Membrane should be waterproof not water resistant Area to be waterproofed should be clear of all obstructions and thoroughly cleaned prior to application of product System must include upstands angles a turn should be provided at door thresholds Membranes should be dressed into floor waste outlets For concrete floors full shower base should be sealed Where sheet flooring is in use the whole area should be waterproofed Metal or other approved shower trays may be used in lieu of waterproof membranes to shower areas All shower trays to be installed to manufacturers instructions

BALCONIES Balcony areas over internal habitable rooms to be treated under same guidelines as internal wet areas Accredited products should be used and applied by licensed waterproofing contractor and the manufacturers instructions be explicitly followed
Certificate showing type of membrane installation date name and license no of approved installer to be supplied on completion

TILELAYER

FLOORS Provide □bathroom and shower recess □separate W C with floor tiles as selected

WALLS Provide wall tiles to - bathroom 1 4m or shower recess 1 8m or
To enclose bath and hobs above kitchen sink and hot plate of stove and W C Finish at top and salient angles with glazed edge tiles Provide vents to under bath Fix recess fittings (If printed heights are not crossed out they are to apply) Where other types of lining are used refer to Internal wall linings

PAINTER

GENERALLY All paints, stains, varnishes and water colours to be properly mixed be of approved brands and brought to job in unopened containers Material used for priming is to be recommended by the manufacturers of the paints to be used All finishing colours are to be chosen by owner Do all necessary stopping after priming has been applied Rub down all surfaces to a reasonably smooth finish prior to the application of each successive coat of paint

EXTERNALLY Prime BEFORE fixing All dressed surfaces of all door and window frames, all external woodwork including underside and end of sills are to be primed before fixing

WOODWORK After priming all exposed woodwork to be given one coat of undercoat and one finishing coat of approved paint

IRONWORK Eaves, gutters downpipes and service pipes and all wrought iron etc to be cleaned and given one coat of approved primer and one good coat of oil paint or a paint recommended for metal work

FIBRE CEMENT Clean and prepare all external fibre cement surfaces for colouring then give two coats of approved paint

INTERNALLY

WOODWORK all exposed woodwork to be prepared and given one undercoat and finished with two coats of approved paint or wood stain to manufacturers recommendation

FIBROUS PLASTER AND FIBRE CEMENT To be prepared and given two coats of approved paint

GYPSUM PLASTER BOARD To be prepared and given two coats of approved paint

CEMENT RENDER to be given one coat sealer and two coats approved paint

GLAZIER

ALL WINDOW SASHES AND LIGHTS TO BE GLAZED All glass is to be back puttied well sprigged into primed or oiled rebates and weather puttied Glass is to be free of defects and of the weights and sizes set out below AS1288 to apply

MAXIMUM SIZE OF SHEETS	GLASS THICKNESS (mm)
560 x 560mm or 760 x 460mm	2
700 x 700mm or 1000 x 500mm	2
760 x 760mm or 1250 x 600mm	3
900 x 900mm or 1500 x 700mm	3
1170 x 1170mm or 1500 x 970mm	4

Clean all glass on completion

VARIOUS TRADES

BRICK VENEER TIMBER SHRINKAGE GAPS _____ In two-storey construction where timber with a low shrinkage is used in each floor framing 20mm clear space shall be provided to the underside of first floor windowsills Where unseasoned hardwood is used in each floor framing the above clearance shall be increased by 50% In concrete slab-on- ground two storey construction window sills on first floor require a space of 10mm the brick veneer shall be kept 10mm below roof frame In two storey construction where timber with a low shrinkage is used in each floor framing the Brick Veneer shall be kept 20mm clear below roof framing on the first floor Where brick gables are to be provided roof framing shall be kept to a minimum of 20mm clear for two storey Where unseasoned hardwood is used in floor framing the clearances above shall be increased by 50% For slab-on-ground two storey construction a clear space of 10mm shall be provided in the first floor

EXTERNAL CLADDING

☐ WEATHERBOARDS Weatherboards with profiles as specified by Australian Standards are to be selected with a maximum moisture content of 15% in long lengths securely fixed with corrosion proof fasteners lapped a minimum 16mm and fitted with necessary angle moulds Boards exceeding 100mm in width to be double fixed at all bearing points All cladding to be prime coated all round prior to fixing Where vertical boarding is used it is to be fixed at not more than 600 mm centres and approved sarking is to be placed immediately behind the boarding and fixed to the framing

☐ FIBRE CEMENT ☐ OTHER EXTERNAL SHEET All fixed as shown on plan and in strict accordance with manufactures specifications

ENCLOSURE OF BATHS _____A bath shall not be enclosed unless it has a flange especially made for that purpose and complies with the following conditions

1 There shall be free air space all around between the bath and the enclosure
2 The floor of the bathroom shall extend throughout the enclosure That portion of the floor within the enclosure shall be not less than 12mm higher than the main portion of the bathroom floor shall be graded to a suitable floor grating and further provided with an outlet pipe through the riser to the main portion of the bathroom floor
3 All holes made in walls or the floor shall be properly closed and outlet pipes shall have suitable vermin proof gratings
4 The risers shall be of enameled iron, terra cotta, concrete bricks or composition slabs covered with glazed tiles or other approved impervious material In a timber framed structure the risers may consist of wooden membranes not less than 75mm x 50mm rendered vermin and moisture proof by a covering of asbestos cement sheeting or other approved impervious material applied both internally and externally except in the case of a riser which may be left unlined internally if so approved
5 Where the floor of the bathroom extends into the enclosure two ventilators at least 150mm x 75mm fixed in approved positions shall be furnished to ventilate the enclosed space and such ventilators shall be made of metal, terra cotta stoneware, concrete or other approved material and shall be rendered vermin-proof
6 Where the bath abuts against a wall or walls the finishing material of the wall shall overlap the upstaged of the bath and the joint shall be made watertight

BUSHFIRE PRONE AREAS Where a building is to be erected in a FIRE PRONE AREA AS 3959 is to be followed

CONCRETE MASONRY WALLS

GENERALLY AS 3700 – The masonry contractor shall supply all labour materials and equipment necessary to complete the concrete masonry walls of this project in accordance with the plans and specifications This work shall be properly co-ordinated with that of other trades All applicable local laws ordinances and codes shall be fully complied with All materials workmanship and construction practices shall be of a standard not less than shown on plans or specified hereunder

CARE OF MASONRY UNITS Masonry units shall be stacked so as to be clear of the ground and in wet weather covered with waterproof sheeting or otherwise kept dry At the end of each days work the top of the wall shall be protected from becoming excessively wet The masonry units shall not be dampened prior to laying and shall be laid in a dry state

PROPERTY SPECIFICATIONS Mortar shall comply with AS 3700 in all respects, as it applies to property specifications Locally available plasticizers may be used when approved and where tests show the mortar meets the requirements of these specifications

MORTAR PROPORTIONS Above damp proof course level 1 1 6 (cement lime and sand)

INTERSECTING BEARING WALLS Intersecting block bearing walls should not be tied together in masonry bond except at corners Instead one wall should terminate at the face of the other wall and with a control joint at that point For tying non-bearing block walls to other walls approved non-corrosive ties to be placed across joint between the two walls The ties are to be placed in alternate courses When one wall is constructed first the ties are to be placed in the wall and allowed to project to be built into the mortar joint of the second wall Where the two walls meet the vertical joint is to be raked out to a depth of 15mm if it is exposed to view in the finished building and approved filler inserted into the recess

CONTROL JOINTS Control joints shall be located where shown and as detailed on the plans Control joints shall form a continuous vertical break from top to bottom of wall or from bond beam Provision shall be made for adequate lateral stability (detail on plans) Joint shall be filled with mortar, raked back 15mm and pointed up with a

non-hardening plastic filler Plastic filler shall be tooled to match jointing No reinforcing shall be used across a control joint

FOOTINGS The size and proportion of footings shall be based on an assessment of the load to be carried the bearing capacity of the foundation material and any other factors which may affect the stability and carrying capacity of the footing All to the approval and or design of a supervising structural engineer

STANDARD FOOTINGS For general construction the footings as specified on page 3 may be used if no unusual ground conditions exist

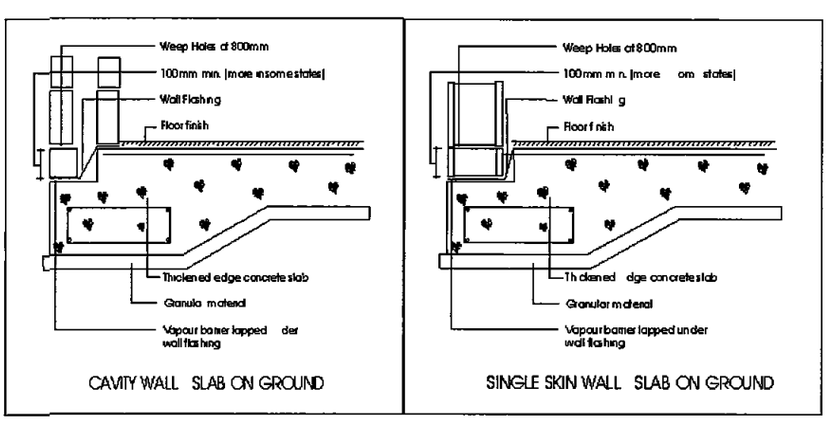
JOINT REINFORCEMENT Joint reinforcement shall be used at all window and similar openings in the first two bed joints under the sill except that it may be omitted when bond beam is provided in this position The reinforcement shall extend at least 500mm beyond the reveals or to the end of the wall, whichever distance is lesser Joint reinforcement used generally to control cracking throughout a wall shall be laid in the bed joints with vertical spacings not exceeding 600mm except that it may be omitted within 600mm of a structural diaphragm or bond beam

BRACING DURING CONSTRUCTION Masonry walls constructed in locations where they may be exposed to winds during erection shall not be built higher than ten times their thickness unless adequately braced or until provision is made for the prompt installation of permanent bracing Back filling shall not be placed against foundation walls until they have been braced to withstand horizontal pressure or as required by supervising structural engineer

DECORATIVE SCREEN WALLS Screen walls used for decorative purposes shall carry no vertical loads other than their own weight They shall be adequately anchored to suitable horizontal or vertical structural members in order to resist wind and any other lateral loads

WEATHER PROOFING All single leaf masonry walls exposed to the weather or below ground shall be adequately weather- proofed or water proofed using an approved product specifically designed for the purpose and applied in accordance with the manufacturers specifications

VAPOUR BARRIER To be pigmented polythene sheet not less than 0 2mm thick taped and sealed at all joints



The concrete block supplement is to take precedence over the specification if it conflicts in any way and all other parts of the specification are to be adhered to

COMPLETION

The building is to be completed in every trade Sashes and doors to be eased, locks oiled and all plant, surplus building materials and rubbish removed from the site Gutters and drains are to be cleared and the building generally to be left clean and fit for occupation The Builder is to furnish the Owner with -

1 Notification of Completion
2 Certificate of Compliance re plumbing & drainage
3 All keys for all doors

It is the responsibility of the Builder to arrange any inspections necessary by council water board or Lending Authorities

WORK BY OWNER

WORK BY OWNER Work to be performed and completed by the owner thereby releasing the builder from any responsibility and/or expense from any such work_____

_____

_____

_____

_____

_____

_____Signed by Owner

SCHEDULE OF ALLOWANCES

The builder is to allow the prime cost amounts set out in this schedule All amounts are retail prices, and do not include the cost or cartage freight, fixing or fitting, all of which is to be done and paid for by the builder as part of his contract

☐ Bath _____$_____

☐ Vanity unit_____$_____

☐ Wash basin_____$_____

☐ Towel rail_____$_____

☐ Soap holders_____$_____

☐Bathroom mirrors_____$_____

☐ Shower screen_____$_____

☐ Exhaust fan 200mm ☐ Bathroom ☐Kitchen_____$_____

☐Exhaust hood over hot plates_____$_____

☐Kitchen cupboards including sink_____$_____

☐Stove/wall oven/hotplates ☐ Electric ☐Gas_____$_____

☐Set of washtubs complete ☐Single ☐Double_____$_____

☐WC suites_____$_____

☐Taps and fittings_____$_____

☐ Seat _____$_____

☐ Door furniture latchsets lock etc_____$_____

☐Entry door_____$_____

☐Security Door_____$_____

☐Wall and floor tiles_____$_____

☐Garage door _____$_____

☐Hot water ☐Electric ☐Gas_____$_____

☐Ceiling Fans_____$_____

☐Insulation_____$_____

☐Light fittings_____$_____

☐Dishwasher_____$_____

☐Hot water unit_____$_____

☐Water tanks_____$_____

☐Water Pumps_____$_____

☐_____$_____

☐_____$_____

☐_____$_____

☐_____$_____

☐_____$_____

☐_____$_____

ADDENDA

THIS IS THE SPECIFICATION REFERRED TO IN THE CONTRACT BETWEEN OWNER AND BUILDER AS SHOWN BELOW

Signed Owner Signed Witness

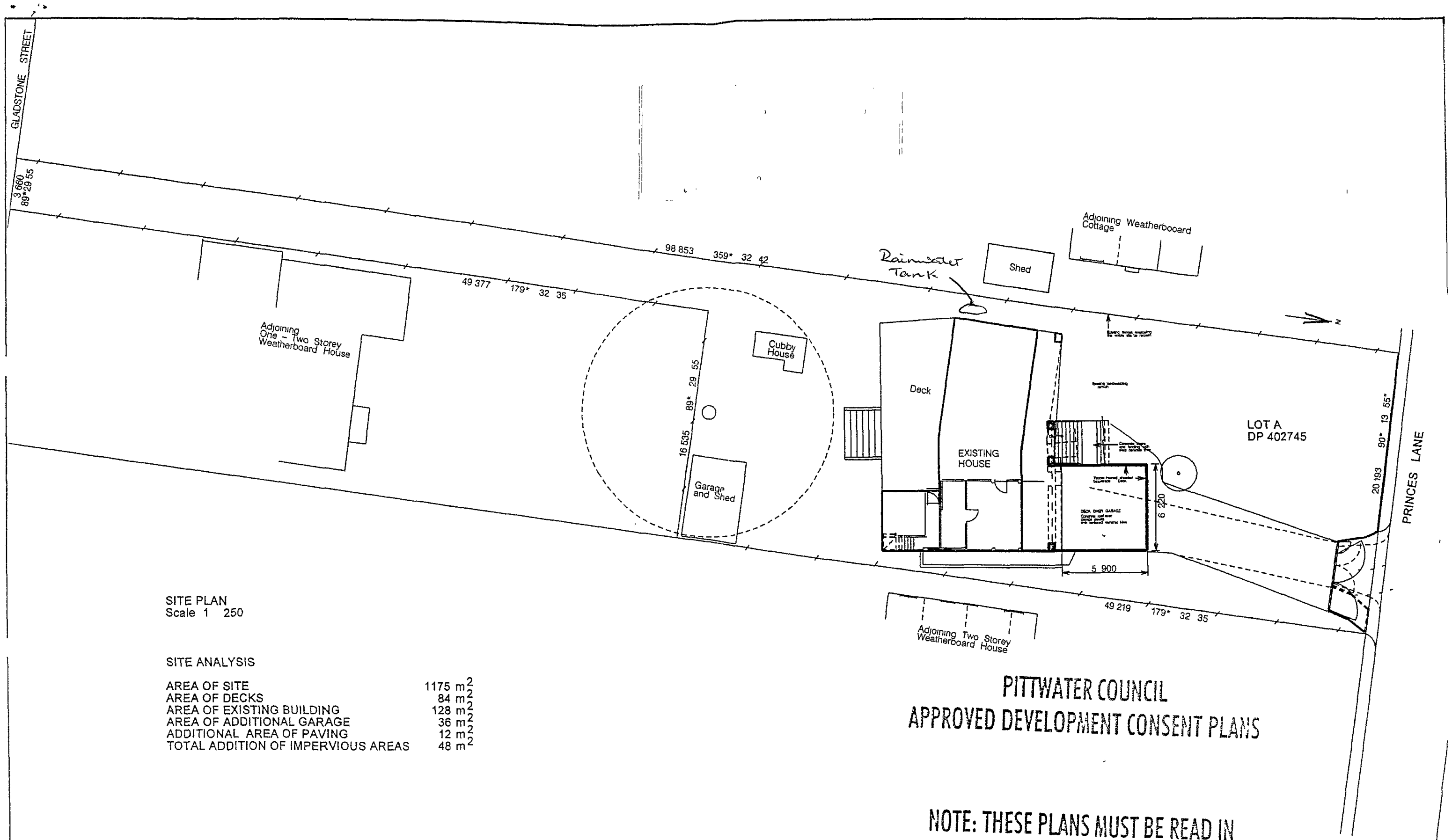
Date

Signed Builder Signed Witness

Date

Printed by
TRUELINE PRINTING and GRAPHICS
www truelineprinting com

And distributed by
TRUELIINE PRINTING and GRAPHICS
182A COOPER ROAD, YAGOONA 2199
Ph (02) 97084170



SITE PLAN
Scale 1 250

SITE ANALYSIS

AREA OF SITE	1175 m^2
AREA OF DECKS	84 m^2
AREA OF EXISTING BUILDING	128 m^2
AREA OF ADDITIONAL GARAGE	36 m^2
ADDITIONAL AREA OF PAVING	12 m^2
TOTAL ADDITION OF IMPERVIOUS AREAS	48 m^2

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

NOTE:
NEW WORK SUBRECT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN BY
C F LOUDON AASTC
2 / 724 BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 1
DATE 25 / 03 / 2007
SCALE 1 250

Boundary

N

UNEXCAVATED AREA

UP

Concrete stairs and landing with tiled c. ramic tiles

Alum framed highlights

DN

GARAGE Extension

6 000

6 220

New stud wall

SMOKE DETECTOR

EXISTING BASEMENT AREA

New reinforced concrete floor on solid ground

Tilt-a-door garage doors

DP connected to existing S/W drains

110mm thick brick walls cement rendered

c 1 250 | 110 | 4 775 | 225 | 900

A

A

Boundary

PRINCES LANE

Alter existing fence to suit new width of gates

Existing driveway widened to suit new gates

Widen entrance gates and fit new metal gates with auto opening gear

ADJOINING TWO STOREY HOUSE

Boundary

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

NOTE
NEW WORK SUBRECT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

LOWER GROUND FLOOR PLAN

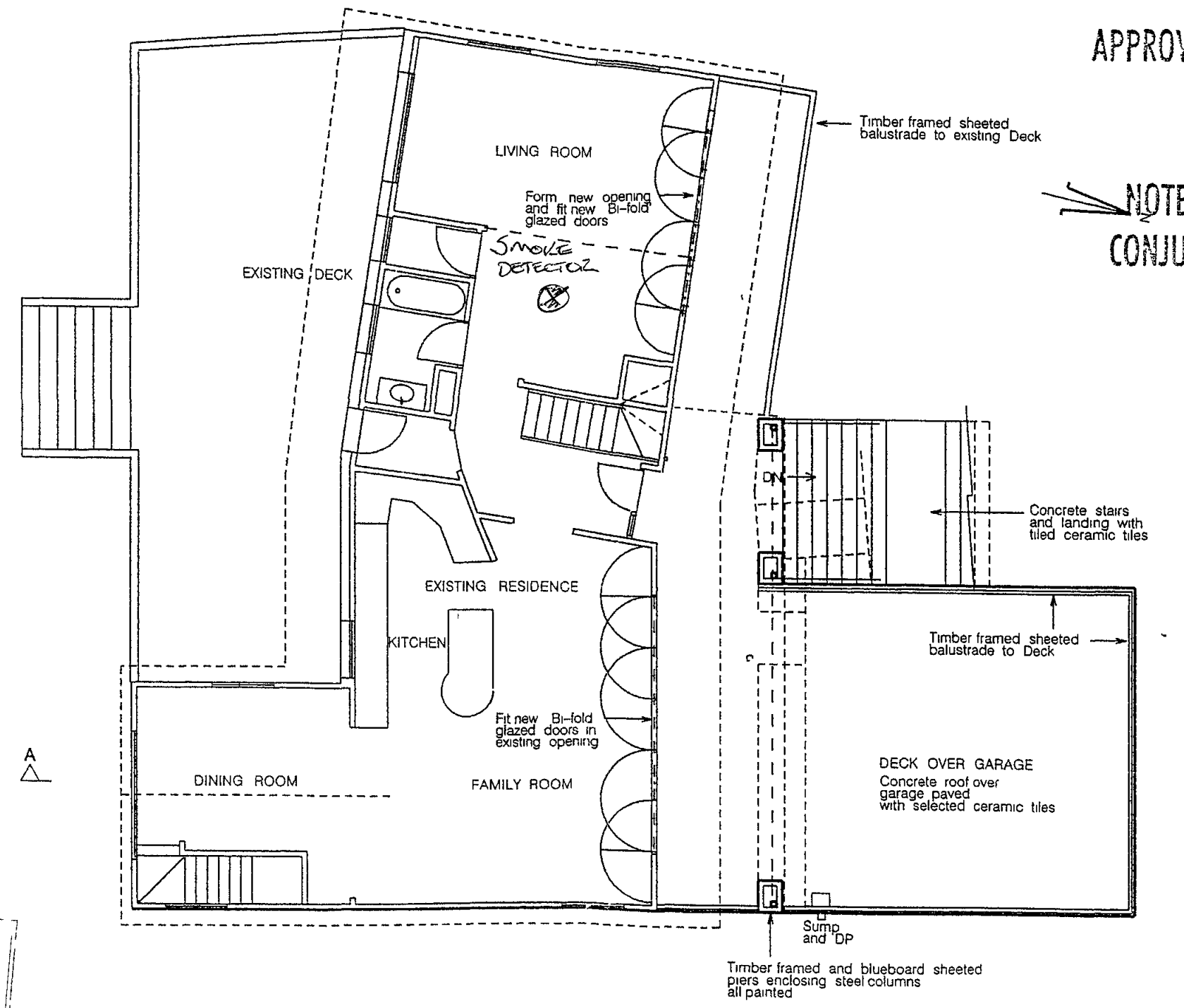
PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN BY
C F LOUDON AASTC
2 / 72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 2
DATE 25 / 03 / 2007
SCALE 1 100

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT



GROUND FLOOR PLAN

NOTE
NEW WORK SUBRECT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

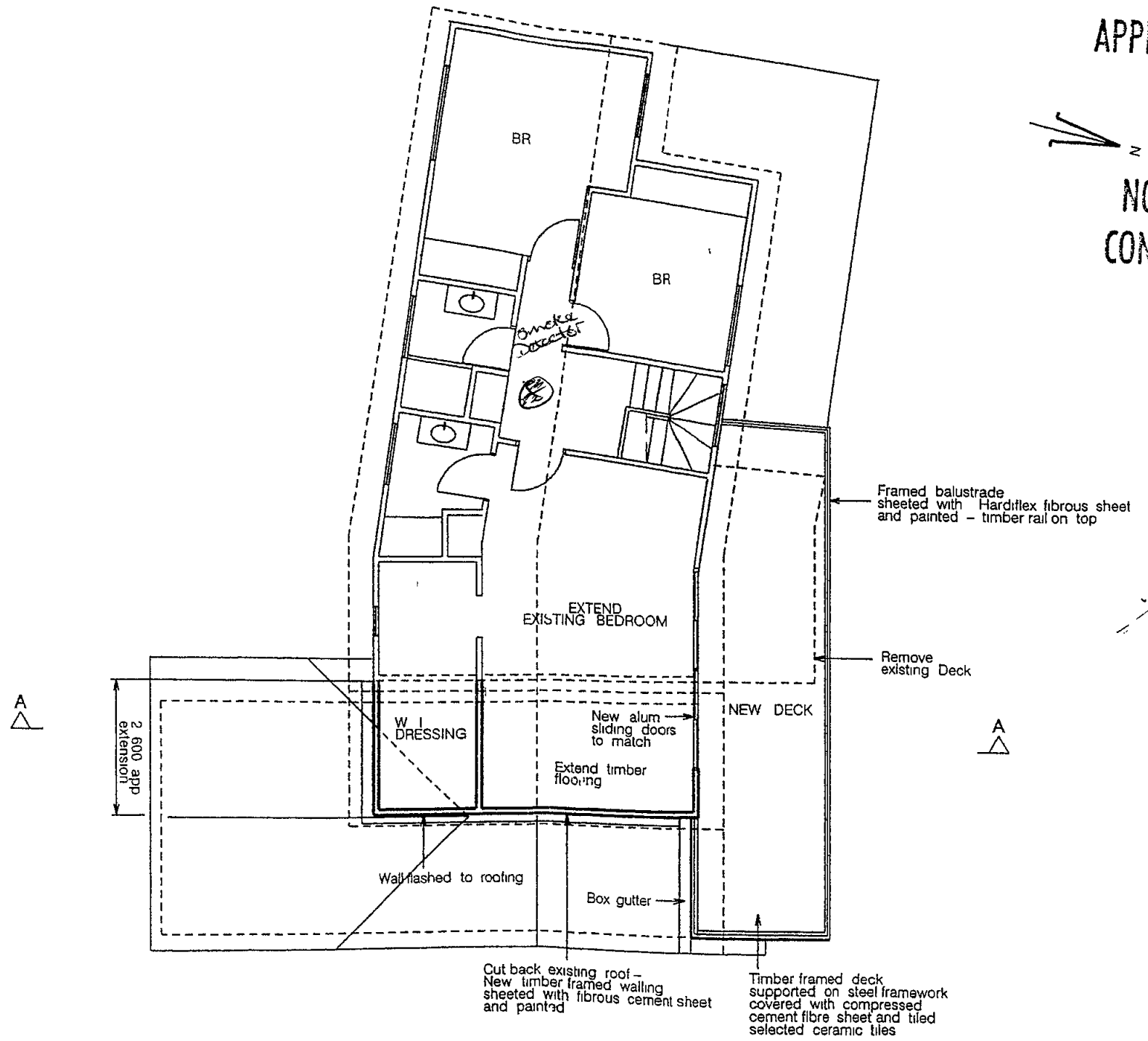
PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN
C F LOUDON AASTC
2 / 72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 3
DATE 25 / 03 / 2007
SCALE 1 100

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT



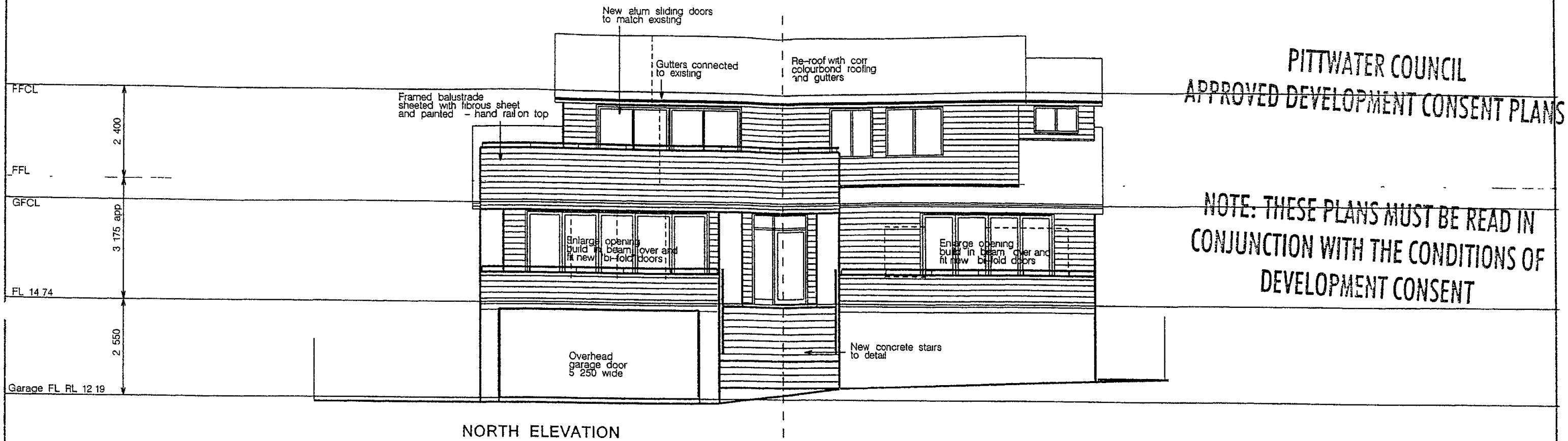
FIRST FLOOR PLAN

NOTE
NEW WORK SUBRECT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

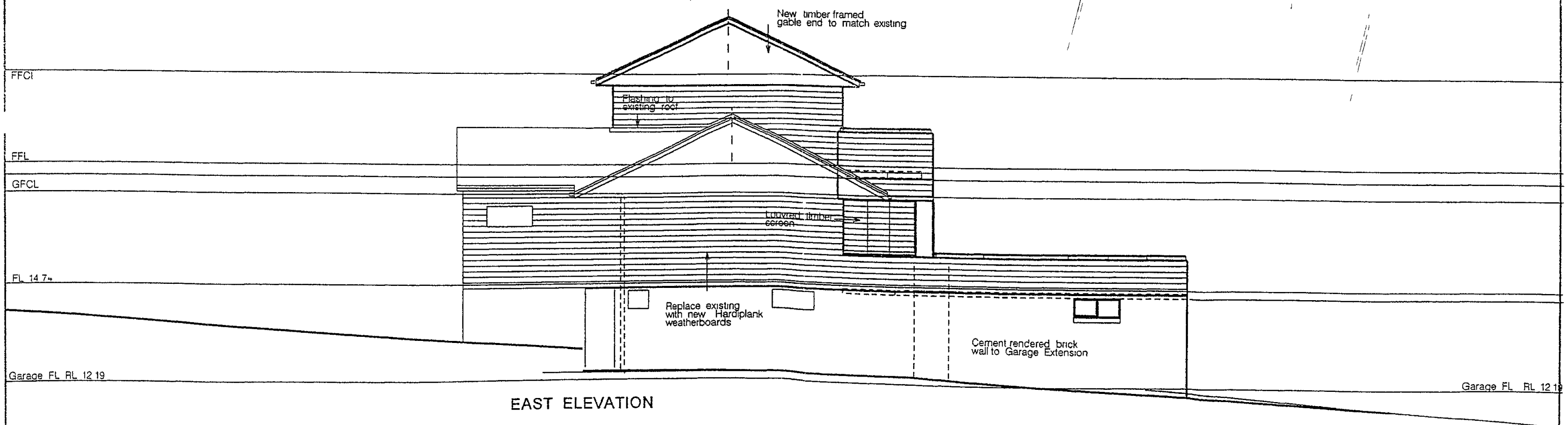
PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN
C F LOUDON AASTC
2 / 72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 4
DATE 25 / 03 / 2007
SCALE 1 100



NORTH ELEVATION



EAST ELEVATION

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

NOTE
NEW WORK SUBRECT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

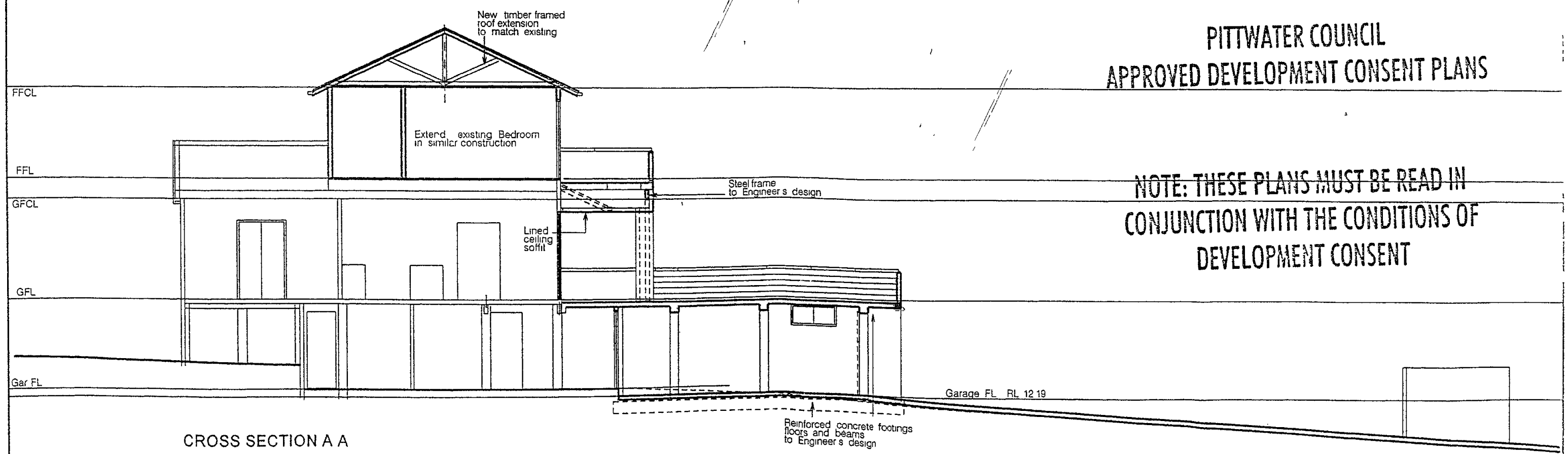
PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN BY
C F LOUDON AASTC
2 / 72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 5
DATE 25 / 03 / 2007
SCALE 1 100

WEST ELEVATION

SOUTH ELEVATION



CROSS SECTION A A

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN CONJUNCTION WITH THE CONDITIONS OF DEVELOPMENT CONSENT

NOTE
NEW WORK SUBRFCT TO EXISTING DIMENSIONS AND CONDITIONS
NEW WORK SHOWN COLOURED

PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN BY
C F LOUDON AASTC
2 / 72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 6
DATE 25 / 03 / 2007
SCALE 1 100

Boundary

Boundary

Shed

Boundary

N

ADDITIONAL SHADOW
CAST JUNE 22 at 9am

EXISTING
DECK

EXISTING
2 STOREY
HOUSE

ADDITIONAL SHADOW
CAST JUNE 22 at Noon

ADDITIONAL SHADOW
CAST JUNE 22 at 9am

DN

Timber framed sheeted
balustrade to Deck

Garage
and Shed

FIRST FLOOR
EXTENSION

GARAGE
EXTENSION

Azimuth 9am 43°

Azimuth Noon 0°

Azimuth 3pm 43°

Altitude 9am & 3pm 16°

Altitude Noon 33°

CRITERIA USED IN DETERMINING THE EXTENT OF SHADOW
CAST ON 22nd JUNE AT 9am Noon and 3pm

	Attitude	Azim th	
9 00am	16°	43°	(Blue)
Noon	33°	00°	(Black)
3 00pm	16°	43°	(G een)

PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN
CONJUNCTION WITH THE CONDITIONS OF
DEVELOPMENT CONSENT

ADDITIONAL SHADOW
CAST JUNE 22 at 3pm

Boundary

ADDITIONAL SHADOW
CAST JUNE 22 at 3pm

Adjoining Two Storey
Weatherboard House

SHADOW DIAGRAM
SHOWING ADDITIONAL SHADOWS CAST
JUNE 22 at 9am, Noon & 3pm

PART SITE PLAN
SITE PLAN SHOWING ADDITIONAL SHADOW CAST
22nd JUNE
Scale 1 100

PROPOSED ALTERATIONS TO EXISTING RESIDENCE
86A PRINCES LANE NEWPORT NSW 2106
FOR MR G UPTON

DRAWN BY
C F LOUDON AASTC
2 /72A BURNS BAY ROAD LANE COVE 2066
Phone 02 9427 6195

DRAWING No 6 / 07 / 7
DATE 25 / 03 / 2007
SCALE 1 100