

16 166496

# Construction Certificate Determination

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

**Certificate No. 2005/620**

**Council** Pittwater

**Determination** Approved  
date of determination 4 May 2005

**Subject land**  
Address 2A Allen Avenue, Bilgola  
Lot No, DP No. Lot A DP 379490

**Applicant**  
Name Mr Y Remen  
Address 15A Ginahgulla Road, Bellevue Hill NSW 2023  
Contact No. (phone) 0411 111484

**Owner**  
Name Mr Yaron and Mrs Shauna Remen  
Address 15A Ginahgulla Road, Bellevue Hill NSW 2023  
Contact No. (phone) 0411 111484

**Description of Development**  
Type of Work Alterations & Additions to an Existing Dwelling

**Builder or Owner/Builder**  
Name Giro Construction Group Pty Ltd  
Contractor Licence No/Permit 14829C

**Value of Work**  
Building \$150,000.00

**Attachment**

1. Pittwater Council, reference no. 166376, dated 3 May 2005, for payment of Long Service Levy

**COUNCIL  
COPY**

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**Plans & Specification****approved**

List plans no(s) &amp; specifications

Reference

1. Architectural Details, reference no. WD-01 to WD-15 (inclusive) (Issue A), prepared by Arkitekton Pty Ltd, dated July 2004
2. Structural Details & Design Certification, reference no. 152-S01 to S05, prepared by R Balas Engineering Pty Ltd, dated February 2005

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# Certificate

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

**Signed****Date of endorsement  
Certificate No.**

- 4 MAY 2005  
2005/620

---

**Certifying Authority**

Name of Accredited Certifier

Tom Bowden

Accreditation No.

93

Accreditation Authority

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

Contact No.

(02) 9999 0003

Address

13/90 Mona Vale Road, Mona Vale NSW 2103

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**Development Consent**

Development Application No.

**NO601/04**

Date of Determination

**25 October 2004**

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**BCA Classification****1a**

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Pittwater Council

OFFICIAL RECEIPT

03/05/2005 Receipt No 166376

To: ARKITECKTON PTY LTD

LEVEL 1,2 WINSLOW ST  
KILLARILLI 2061

Applic	Reference	Amount
GL:Re	GLSL-Buil NO891/02-2A ALLEN AVE BIL	\$300.00

Total: \$300.00

Amounts Tendered

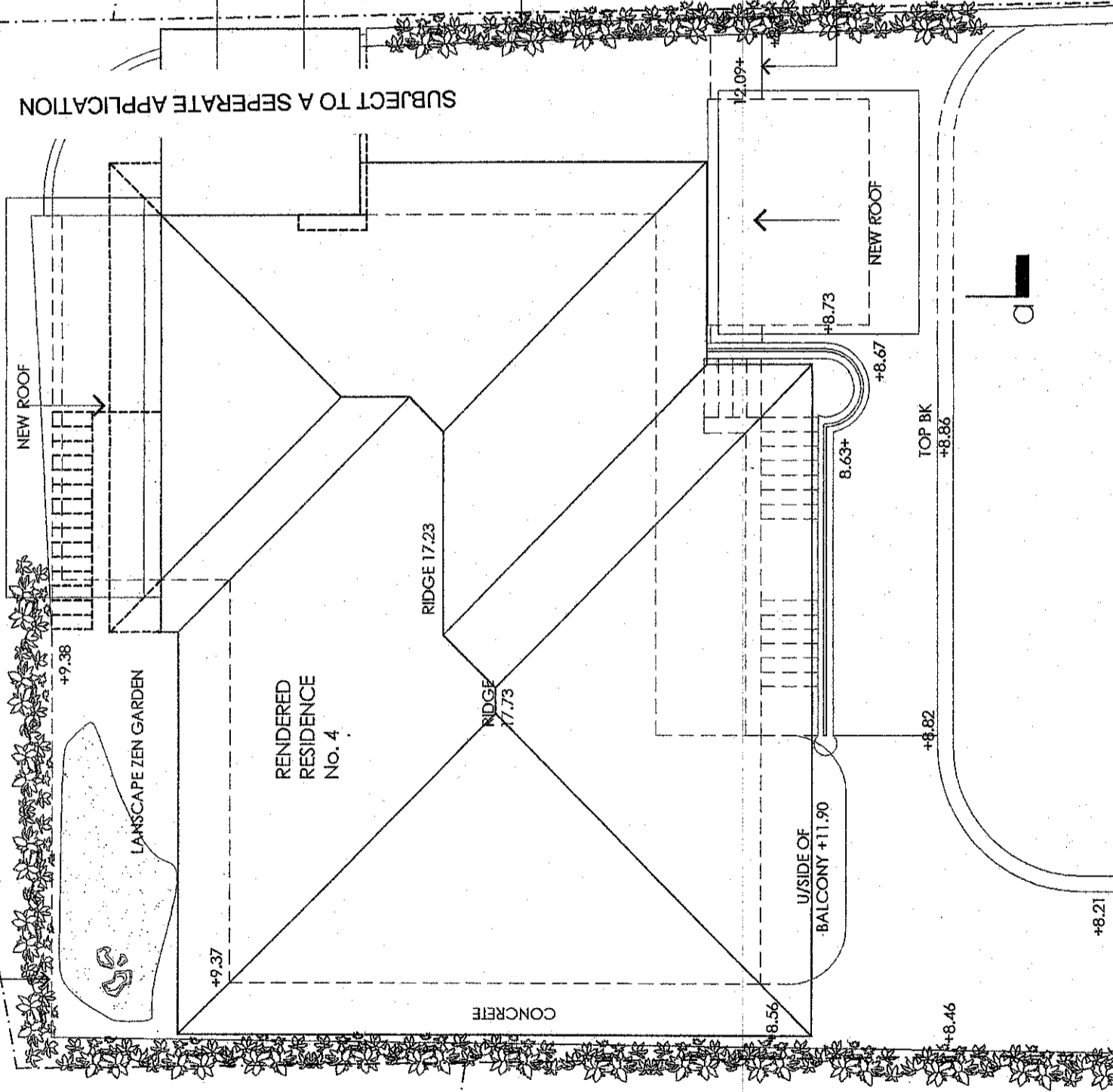
Cash	\$0.00
Cheque	\$300.00
Card	\$0.00
Money Order	\$0.00
Agency Rec	\$0.00
Total	\$300.00
Rounding	\$0.00
Change	\$0.00
Nett	\$300.00

Printed 03/05/2005 2:20:57

Cashier JTra51

INCLINED RENDERED  
RETAINING WALL

190'28" 20" 18.395



INSIGHT DEVELOPMENT  
CONSULTANTS PTY LTD

CONSENT NO. 601104 DATE 25/10/04  
CONSTRUCTION CERT. NO. 2005/620

CONSTRUCTION  
CERTIFICATE PLANS

T. Bowden - 4 MAY 2005

T. Bowden Accreditation No. 93

**WARNING**

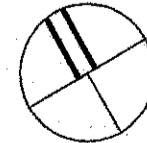
The stamping of this plan by Insight Development Consultants Pty Ltd does not relieve:

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

01 SITE PLAN & ROOF PLAN  
1:100

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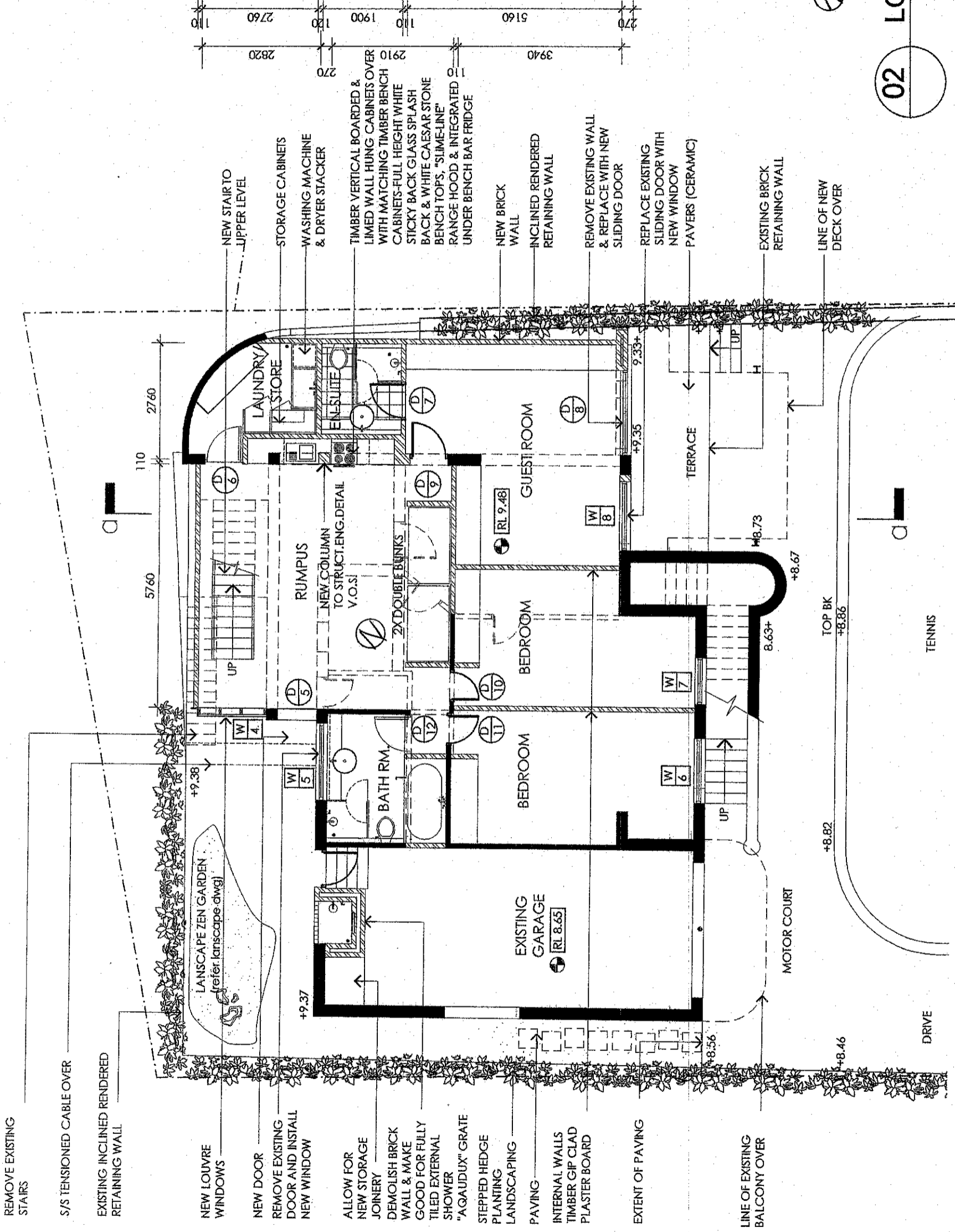


**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

**SITE PLAN & ROOF PLAN**

**arkitekton pty. ltd**  
ABN: 80 063 981 279  
2 WINSLOW STREET  
KIRRIBILLI, NSW 2061  
PHONE: 9922 1339 FAX: 9922 1449

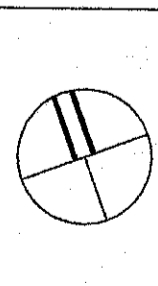
ISSUE DATE: JULY 2004  
SCALE: 1:100  
DWG No: WD-01



smokola i a r m .

02 LOWER FLOOR PLAN  
1:100

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

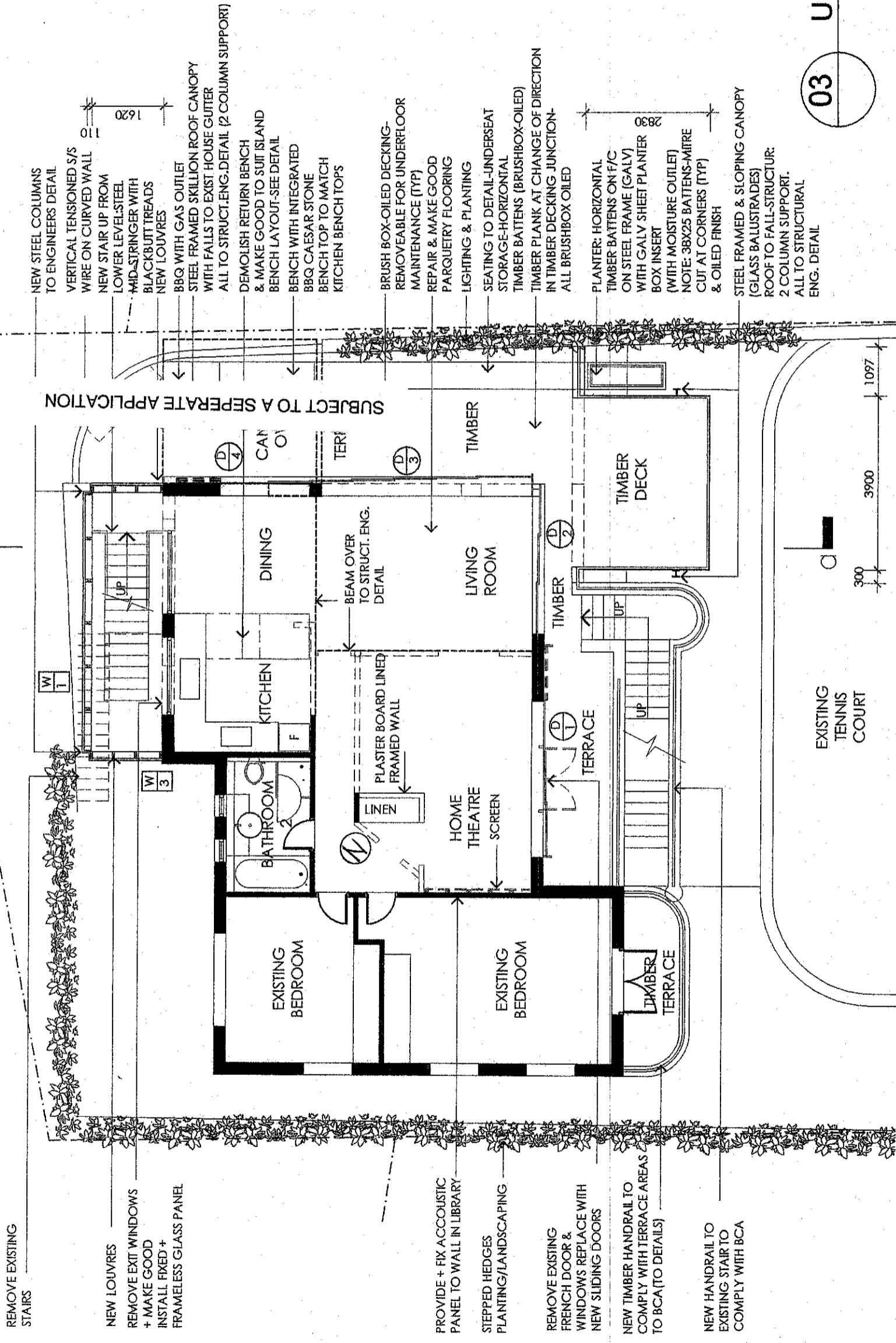
LOWER FLOOR PLAN

**arkitekton pty. ltd.**  
ABN: 80 063 981 279  
2 WINSLOW STREET  
KIRRIBILLI, NSW 2061  
PHONE: 9922 1339 FAX: 9922 1449

ISSUE: **A**

DATE: JULY 2004  
SCALE: 1:100  
DWG No: WD-02

200  
5630  
3750  
920  
200



REMOVE EXISTING STAIRS

NEW LOUVRES  
REMOVE EXIT WINDOWS + MAKE GOOD  
INSTALL FIXED + FRAMELESS GLASS PANEL

PROVIDE + FIX ACOUSTIC PANEL TO WALL IN LIBRARY

STEPPED HEDGES PLANTING/LANDSCAPING

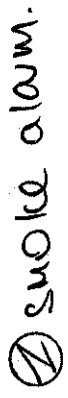
REMOVE EXISTING FRENCH DOOR & WINDOWS REPLACE WITH NEW SLIDING DOORS

NEW TIMBER HANDRAIL TO COMPLY WITH TERRACE AREAS TO BCA (TO DETAILS)

NEW HANDRAIL TO EXISTING STAIR TO COMPLY WITH BCA

NEW STEEL COLUMNS TO ENGINEERS DETAIL  
VERTICAL TENSIONED S/S WIRE ON CURVED WALL  
NEW STAIR UP FROM LOWER LEVEL STEEL  
MID-STRINGER WITH BLACKBUTT TREADS  
NEW LOUVRES  
BBQ WITH GAS OUTLET  
STEEL FRAMED SKILLION ROOF CANOPY WITH FALLS TO EXIST HOUSE GUTTER  
ALL TO STRUCT. ENG. DETAIL (2 COLUMN SUPPORT)  
DEMOLISH RETURN BENCH & MAKE GOOD TO SUIT ISLAND BENCH LAYOUT-SEE DETAIL  
BENCH WITH INTEGRATED BBQ CAESAR STONE  
BENCH TOP TO MATCH KITCHEN BENCH TOPS  
BRUSH BOX-OILED DECKING- REMOVEABLE FOR UNDERFLOOR MAINTENANCE (TYP)  
REPAIR & MAKE GOOD PARQUETRY FLOORING  
LIGHTING & PLANTING  
SEATING TO DETAIL-UNDERSEAT STORAGE-HORIZONTAL  
TIMBER BATTENS (BRUSHBOX-OILED)  
TIMBER PLANK AT CHANGE OF DIRECTION IN TIMBER DECKING JUNCTION- ALL BRUSHBOX OILED  
PLANTER: HORIZONTAL  
TIMBER BATTENS ON F/C ON STEEL FRAME (GALV) WITH GALV SHEET PLANTER BOX INSERT  
(WITH MOISTURE OUTLET)  
NOTE: 38X25 BATTENS-MITRE CUT AT CORNERS (TYP) & OILED FINISH  
STEEL FRAMED & SLOPING CANOPY (GLASS BALUSTRADES)  
ROOF TO FALL-STRUCTUR:  
2 COLUMN SUPPORT.  
ALL TO STRUCTURAL ENG. DETAIL

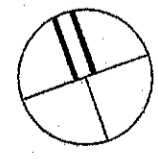
SUBJECT TO A SEPERATE APPLICATION



03

UPPER FLOOR PLAN  
1:100

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PROPOSED ALTERATIONS & ADDITIONS  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

UPPER FLOOR PLAN

arkitekton pty. ltd.

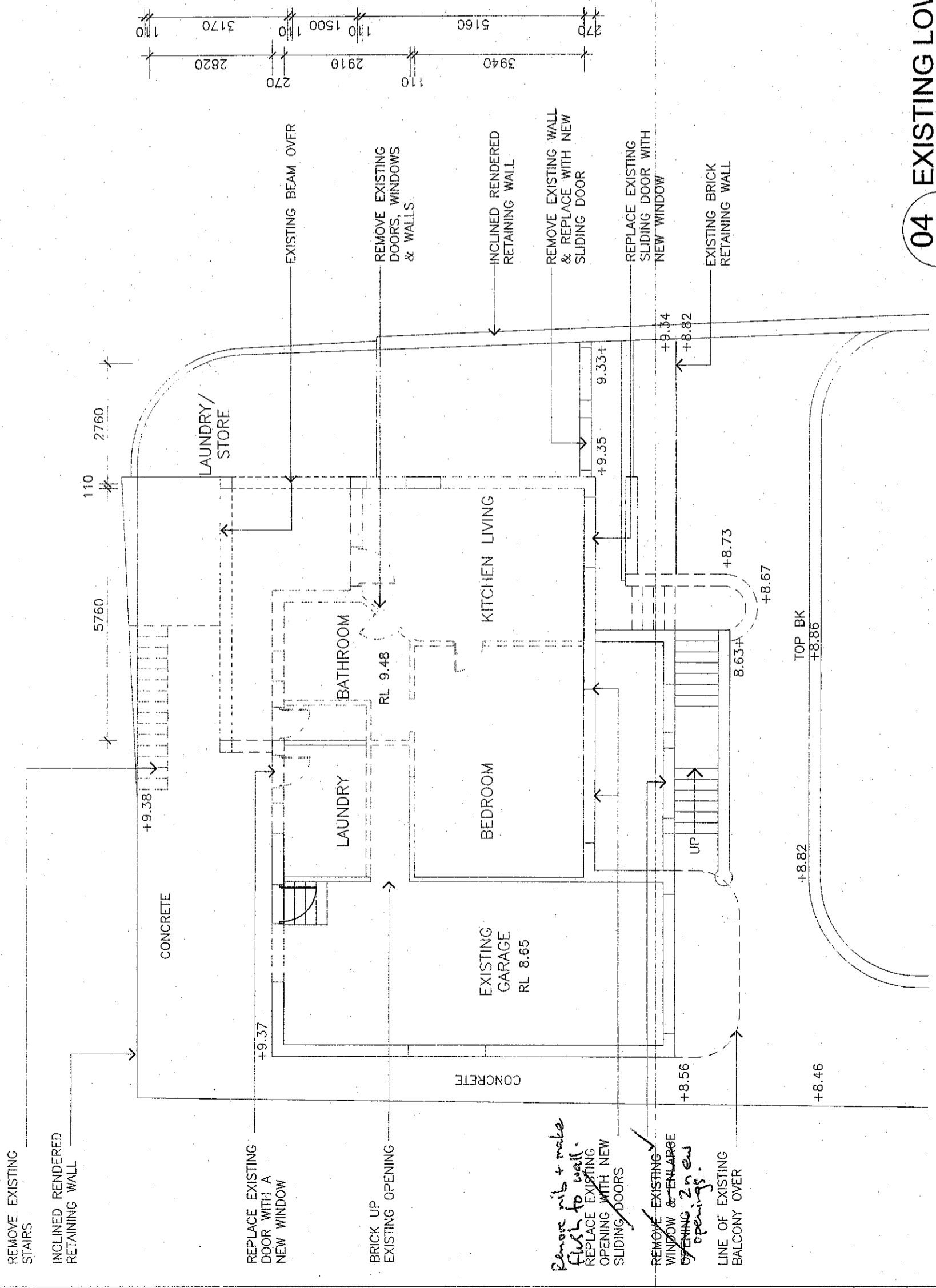
ABN: 80 063 981 279  
2 WINSLOW STREET  
KIRRIBILLI, NSW 2061  
PHONE: 9922 1339 FAX: 9922 1449

ISSUE: A

DATE: JULY 2004

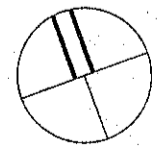
SCALE: 1:100

DWG No: WD-03



**04** EXISTING LOWER FLOOR DEMOLITION PLAN 1:100

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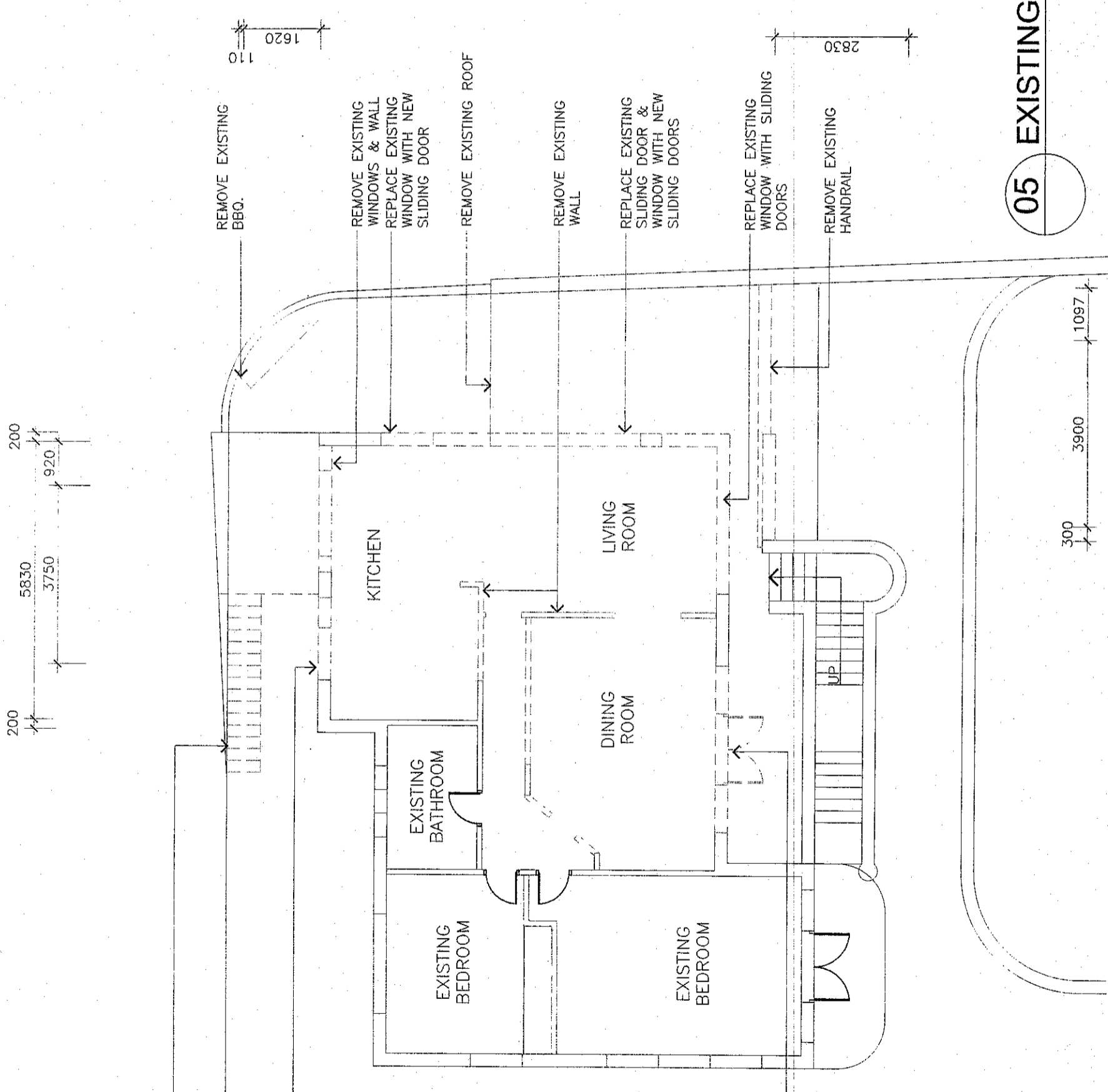
**PROPOSED ALTERATIONS & ADDITIONS**  
 4 ALLEN AVENUE  
 BILGOLA BEACH  
 FOR: Mr. Y. Remen

**EXISTING LOWER FLOOR DEMOLITION PLAN**

**arkitekton pty. ltd.**  
 ABN: 80 063 981 279  
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 KIRRIBILLI, NSW 2061  
 PHONE: 9922 1339 FAX: 9922 1449

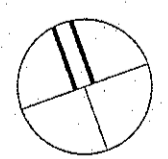
ISSUE: **A**

DATE: JULY 2004  
 SCALE: 1:100  
 DWG No: WD-04



**05 EXISTING UPPER FLOOR DEMOLITION PLAN**  
 1:100

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**PROPOSED ALTERATIONS & ADDITIONS**  
 4 ALLEN AVENUE  
 BILGOLA BEACH  
 FOR: Mr. Y. Remen

**EXISTING UPPER FLOOR DEMOLITION PLAN**

**arkitekton pty. ltd.**  
 ABN: 80 063 981 279  
 2 WINSLOW STREET  
 KIRRIBILLI, NSW 2061  
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ISSUE: **A**

DATE: JULY 2004  
 SCALE: 1:100  
 DWG No: WD-05



SUBJECT TO A SEPERATE APPLICATION

NEW ROOF OVER  
& DECK TO STRUCT.  
ENG. DETAILS

RL 15.78

RL 15.33

RL 14.39

REMOVE EXISTING  
WINDOW & SLIDING  
DOOR

UPPER LEVEL  
RL 12.15

REMOVE EXISTING  
ROOF  
NEW GLASS LOUVRES  
POSITION OF SLIDING  
DOORS WHEN OPEN  
EXISTING RENDERED BRICK WORK  
TO BE MADE GOOD + PAINTED

UPPER LEVEL  
RL 12.15

STEEL COLUMN TO BE  
FIXED TO SANDSTONE  
UPSTAND (BASE)

LOWER LEVEL  
RL 9.48

TERMITE PROTECTION TO BE IN ACCORDANCE WITH  
AS 3660.1

### NORTH EAST ELEVATION

NEW ROOF OVER  
NEW DECK

REMOVE EXISTING  
ROOF

RL 15.78

RL 15.33

RL 14.39

NEW LOUVRES

NEW DECK TO STRUCT. ENG. DETAILS

UPPER LEVEL  
RL 12.15

REMOVE EXISTING  
STAIRS

NEW SOLID CORE DOOR

UPPER LEVEL  
RL 9.48

NEW HANDRAIL TO EXISTING STAIR  
50mm diam HARDWOOD 38x6x10 FLATBAR BALUSTRADE  
WITH INFILL STAINLESS STEEL TENSION WIRE

GARAGE  
RL 8.65

### SOUTH WEST ELEVATION

**06** ELEVATIONS  
1:100

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PROPOSED ALTERATIONS & ADDITIONS

4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

ELEVATIONS

arkitekton pty. ltd.

ABN: 80 063 981 279  
2 WINSLOW STREET  
KIRRIBILLI, NSW 2061  
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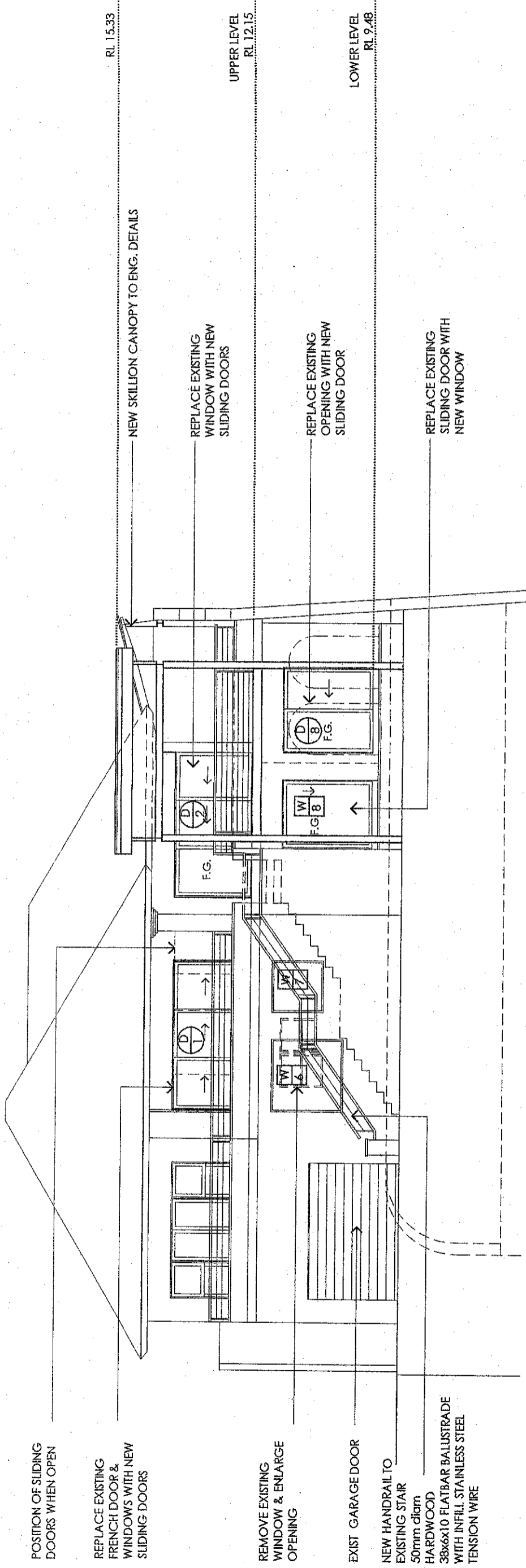
ISSUE:

**A**

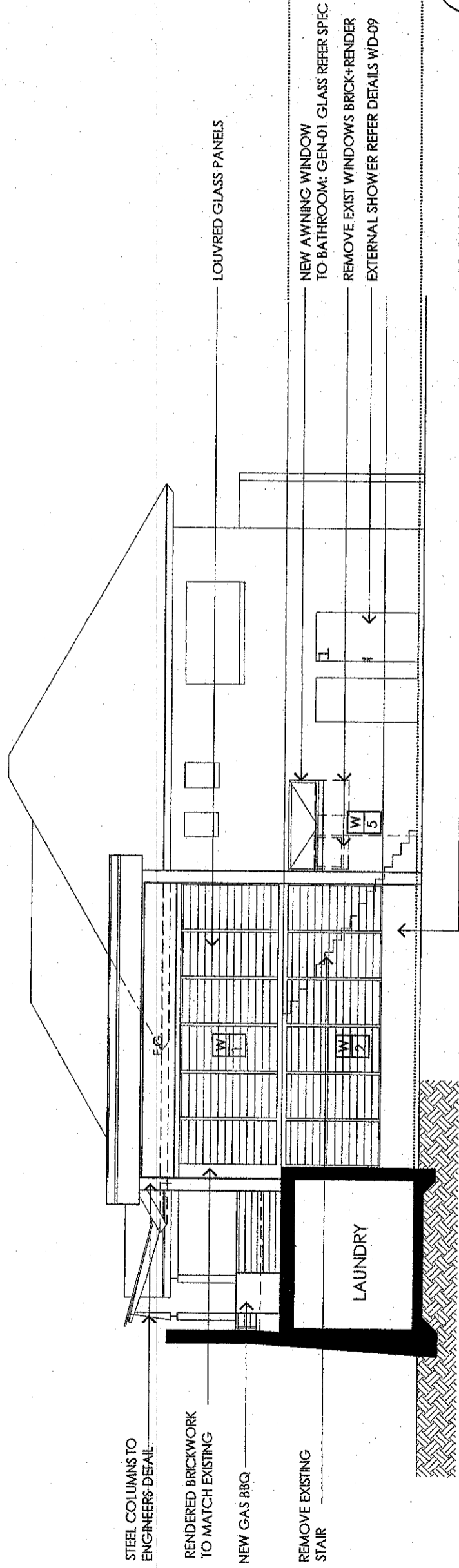
DATE: JULY 2004

SCALE: 1:100

DWG No: WD-06



**SOUTH EAST ELEVATION**



**NORTH WEST ELEVATION**

**07**

**ELEVATIONS**  
1:100

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

**ELEVATIONS**

**arkitekton pty. ltd.**  
ABN: 80 063 981 279  
2 WINSLOW STREET  
KIRRIBILLI, NSW 2061  
PHONE: 9922 1339 FAX: 9922 1449

ISSUE: **A**

DATE: JULY 2004  
SCALE: 1:100  
DWG No: WD-07

GUTTER TO  
ENGINEERS DETAIL  
NEW ROOF

RL 19.74

REMOVE  
EXISTING ROOF

NEW STAIR

EXISTING ROOF LINE  
GUTTER TO  
ENGINEERS DETAIL

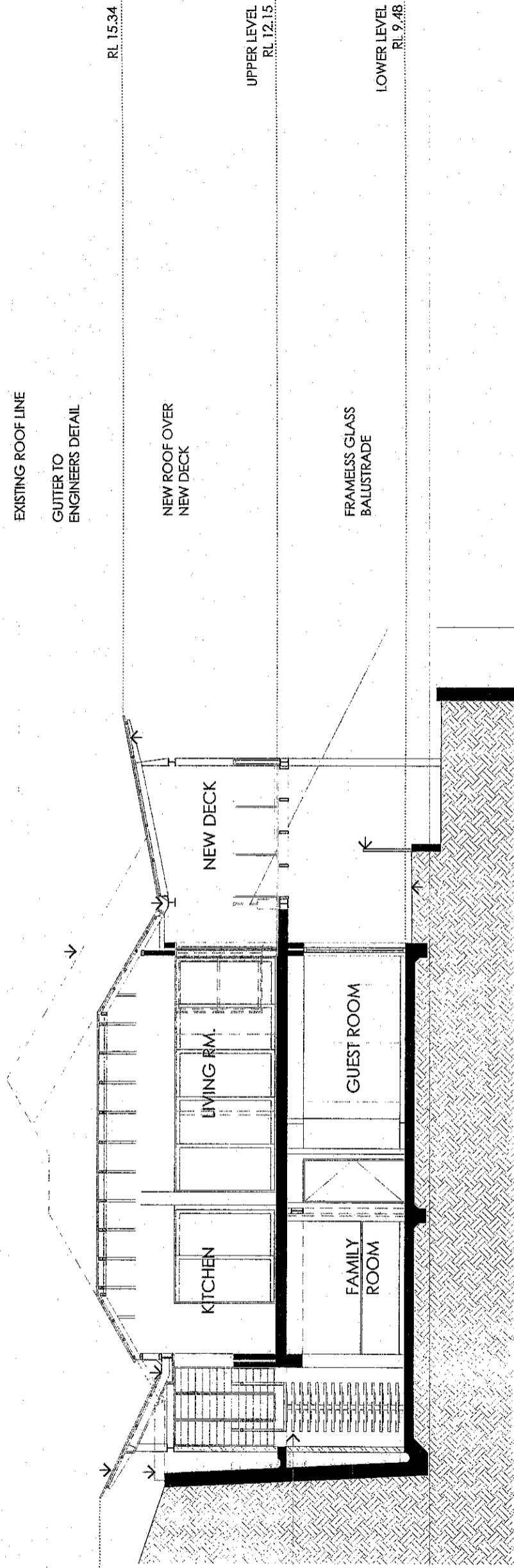
RL 15.34

NEW ROOF OVER  
NEW DECK

UPPER LEVEL  
RL 12.15

FRAMELESS GLASS  
BALUSTRADE

LOWER LEVEL  
RL 9.48



CERAMIC TILE ON  
TERRACE REFER SPEC.

08

SECTION a-a  
1:100

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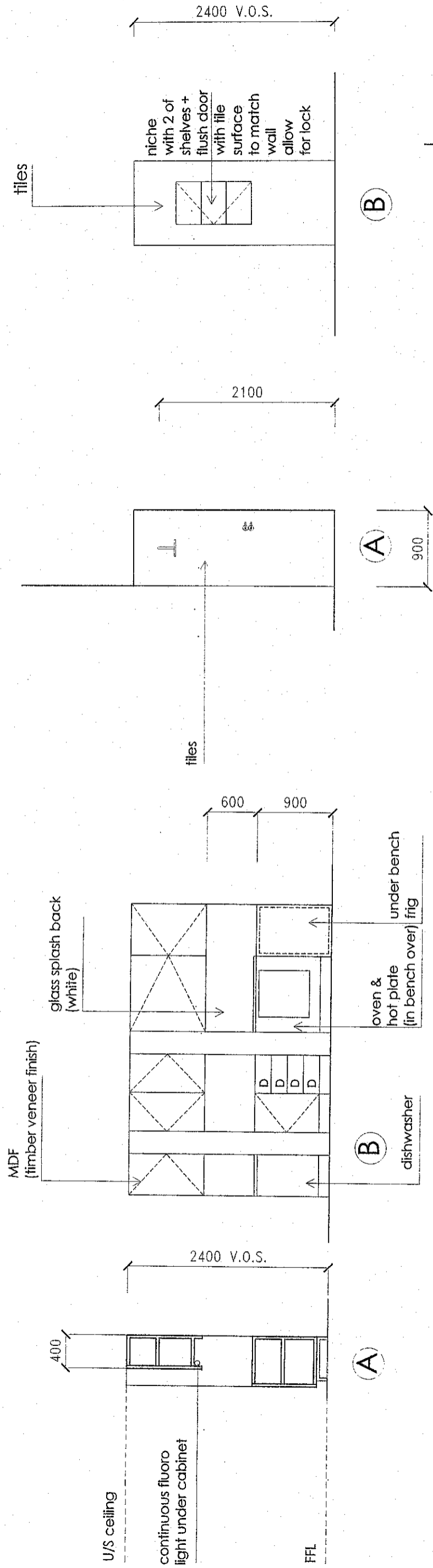
PROPOSED ALTERATIONS & ADDITIONS  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

SECTION a-a

arkitekton pty. ltd.  
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2 WINSLOW STREET  
KIRIBILLI, NSW 2061  
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ISSUE:  
A

DATE: JULY 2004  
SCALE: 1:100  
DWG No: WD-08



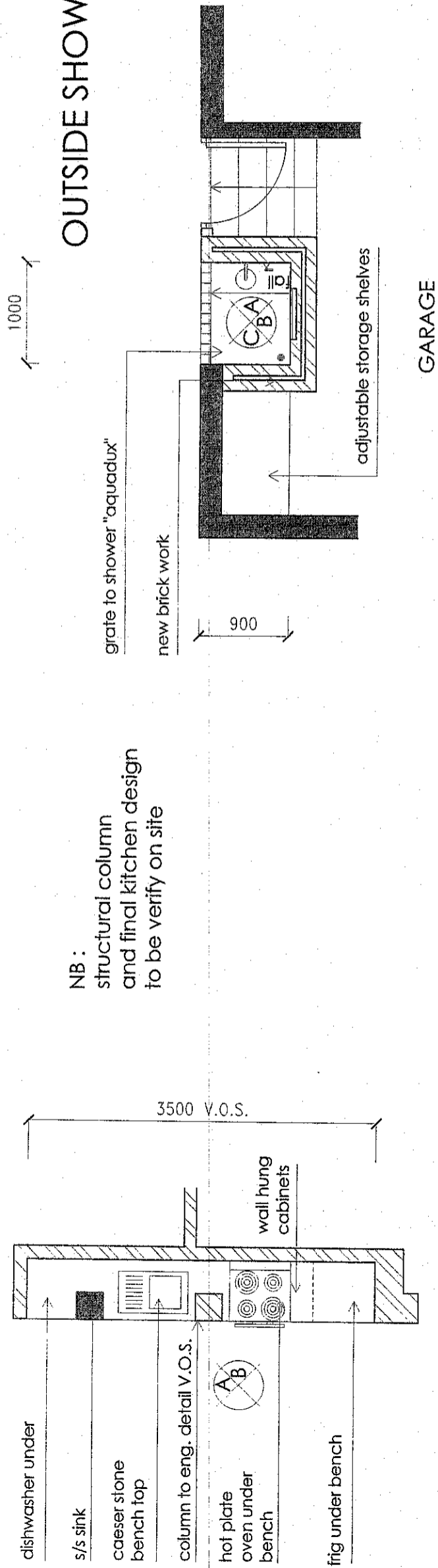
(B)

(A)

(B)

(A)

OUTSIDE SHOWER



NB : structural column and final kitchen design to be verify on site

(C)

GARAGE

09 RUMPUS KITCHEN DETAILS + OUTSIDE SHOWER 1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
 4 ALLEN AVENUE  
 BILGOLA BEACH  
 FOR : Mr. Y. Remen

**RUMPUS KITCHEN + OUTSIDE SHOWER DETAILS**

**arkitekton pty.ltd**  
 ABN : 80 063 981 279  
 2 Winslow St  
 Kirribilli NSW 2061  
 PHONE:9922 1339 FAX:9922 1449

ISSUE :

**A**

DATE : JAN 2005

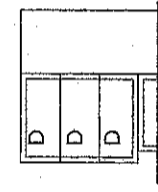
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DWG No : WD-09

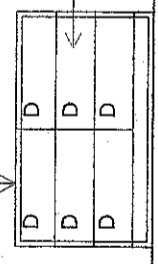
1000

1550

caesar stone top & sides 40mm to match existing corners mitre joined



mdf and face to drawers to match existing

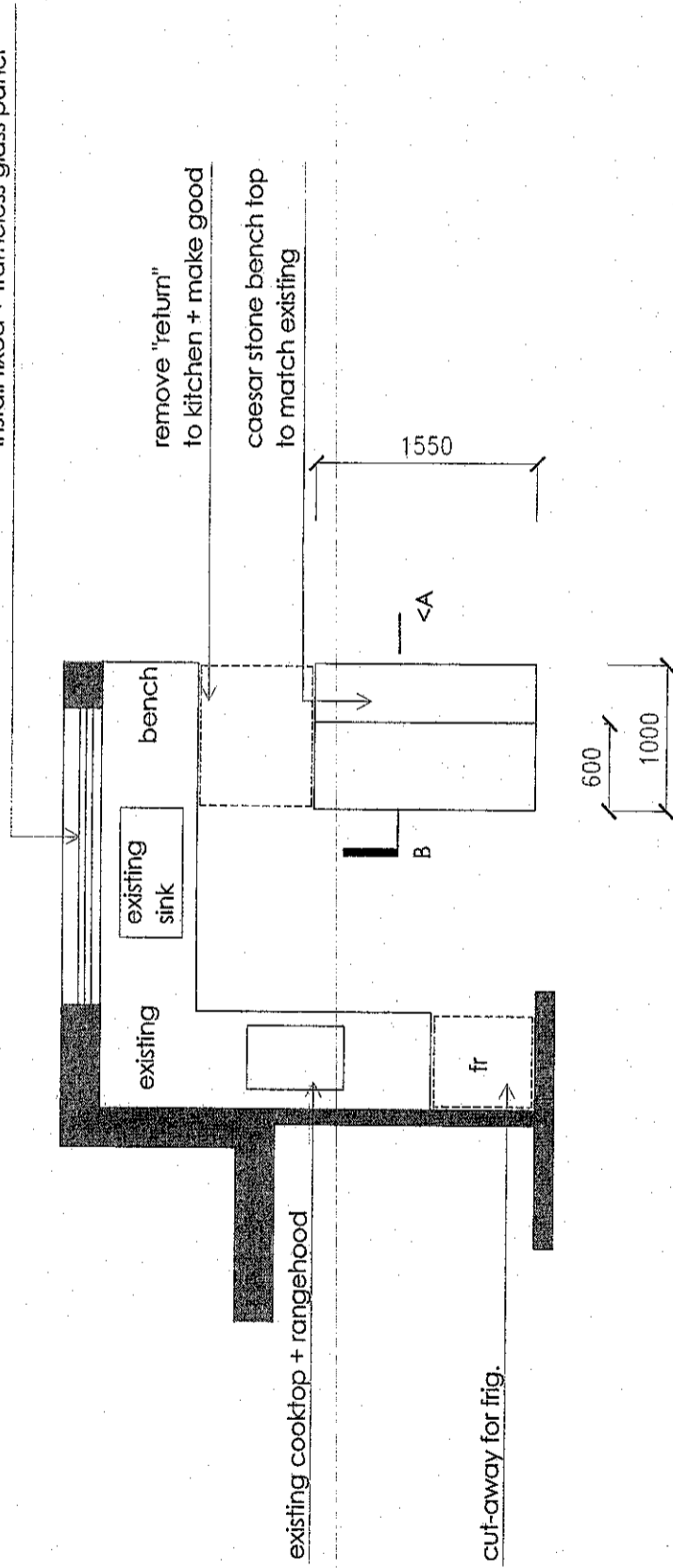


900

remove existing window + make good install fixed + frameless glass panel

remove "return" to kitchen + make good

caesar stone bench top to match existing



10

# KITCHEN FLOOR PLAN

# KITCHEN DETAILS

1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR : Mr. Y. Remen

KITCHEN DETAILS

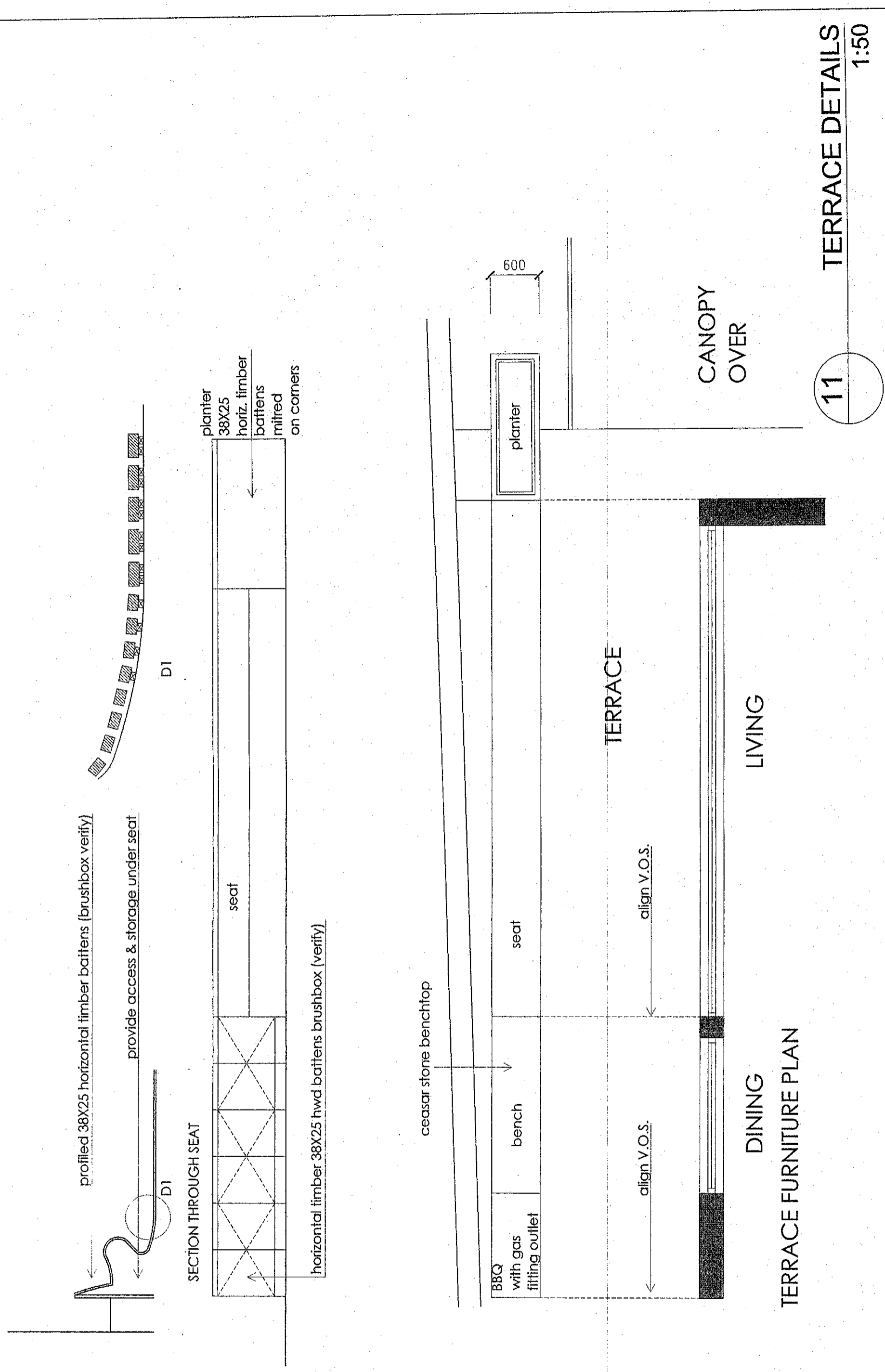
**arkitekton pty.ltd**  
ABN : 80 063 981 279  
2 Winslow St  
Kirribilli NSW 2061  
PHONE:9922 1339 FAX:9922 1449

ISSUE : **A**

DATE : JAN 2005

SCALE : 1:50

DWG No : WD-10



11

TERRACE DETAILS  
1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR: Mr. Y. Remen

**TERRACE DETAILS**

**arkitekton pty.ltd**  
ABN : 80 063 981 279  
2 Winslow St  
Kirribilli NSW 2061  
PHONE:9922 1339 FAX:9922 1449

ISSUE : **A**

DATE : JAN 2005  
SCALE : 1:50  
DWG No : WD-11

U/S ceiling

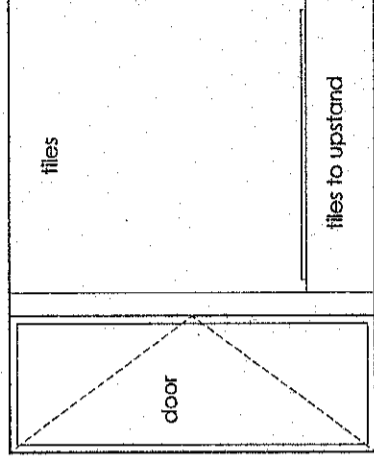
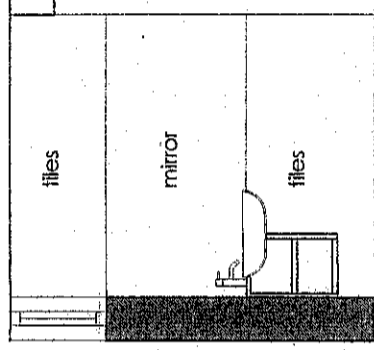
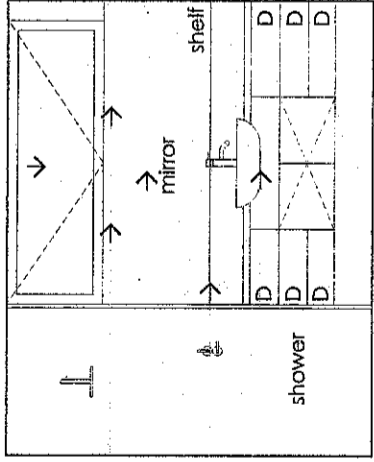
EXISTING WINDOW TO BE REMOVED & WALL BRICKED UP MIRROR (C'BD BEYOND)

GLASS SHELF

SEMI RECESSED BASIN

FFL

NEW WINDOW



2400 V.O.S.

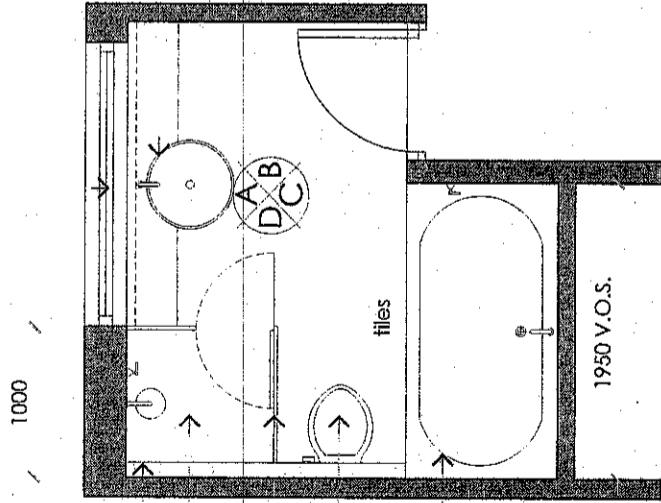
450

(A)

(B)

(C)

NEW WINDOW



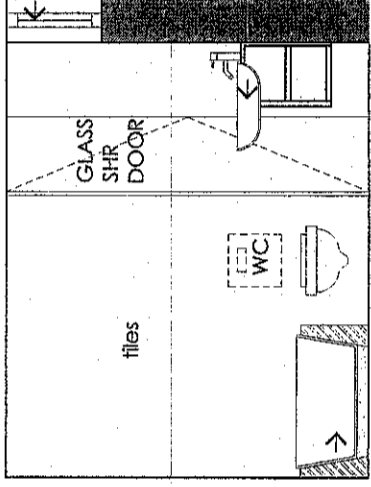
100 WIDE S/S LINEAR FL. WASTE

SHOWER

GLASS SHOWER SCREEN

WC

STONE PLINTH



NEW WINDOW

VANITY BASIN REFER SPEC.

VANITY BASIN 1850

BATH

(D)

1000

1000

**12 BATHROOM 1 DETAILS**  
1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR : Mr. Y. Remen

**BATHROOM 1 DETAILS**

**arkitekton pty.ltd**  
ABN : 80 063 981 279  
2 Winslow St  
Kirribilli NSW 2061  
PHONE: 9922 1339 FAX: 9922 1449

ISSUE :

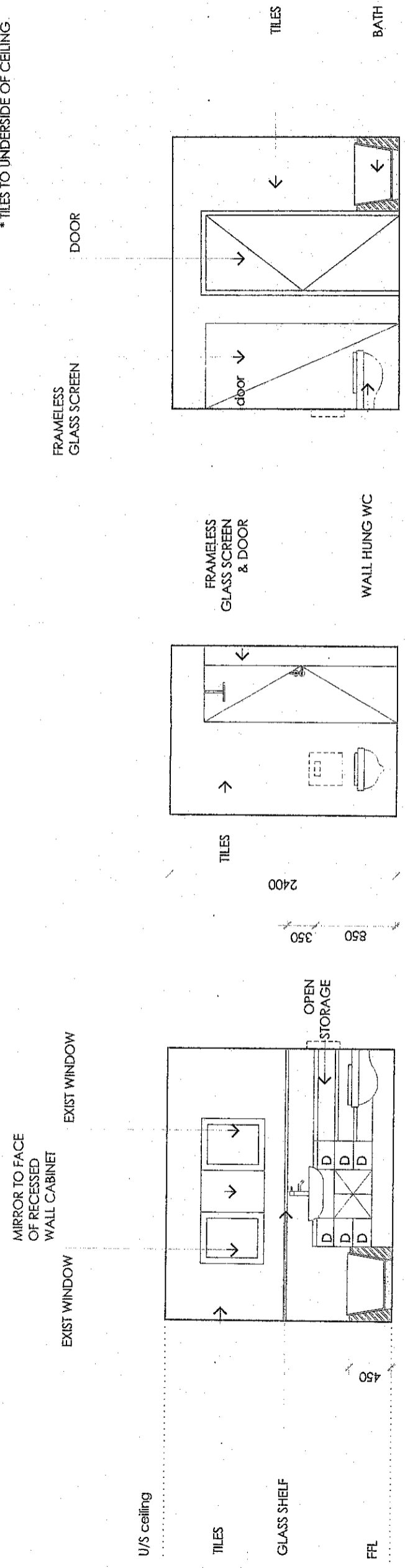
SCALE : 1:50

DWG No : WD-12

DATE : JAN 2005

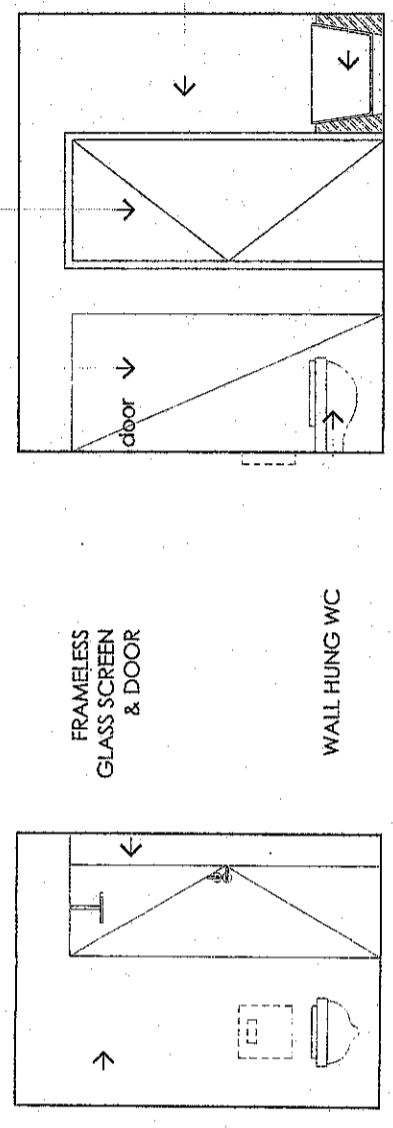
**A**

NB:  
 \* JOINERY TO BE IN TIMBER VENEER  
 SPECIES TO BE VERIFIED  
 \* TILES TO UNDERSIDE OF CEILING

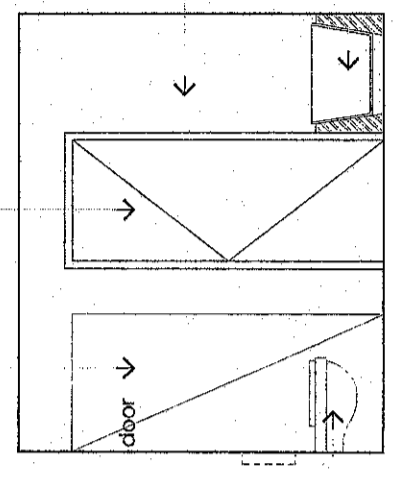


**A**

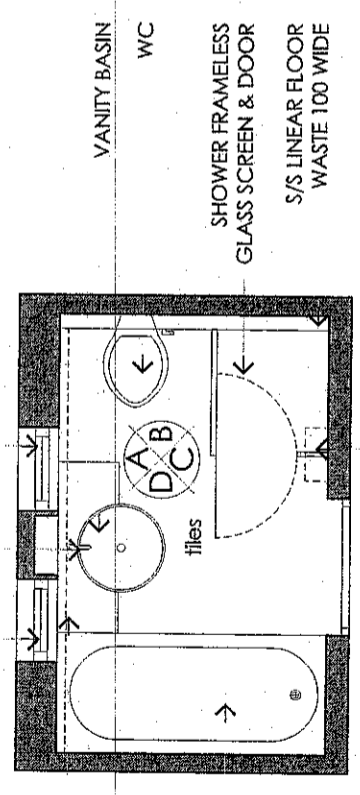
EQ EQ



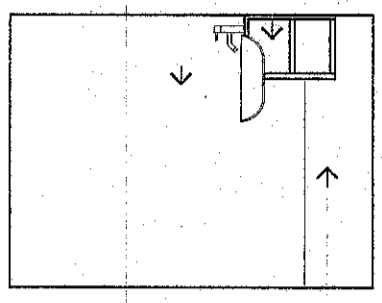
**B**



**C**



**FLOOR PLAN**



**D**

**13 BATHROOM 2 DETAILS**  
 1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
 4 ALLEN AVENUE  
 BILGOLA BEACH  
 FOR : Mr. Y. Remen

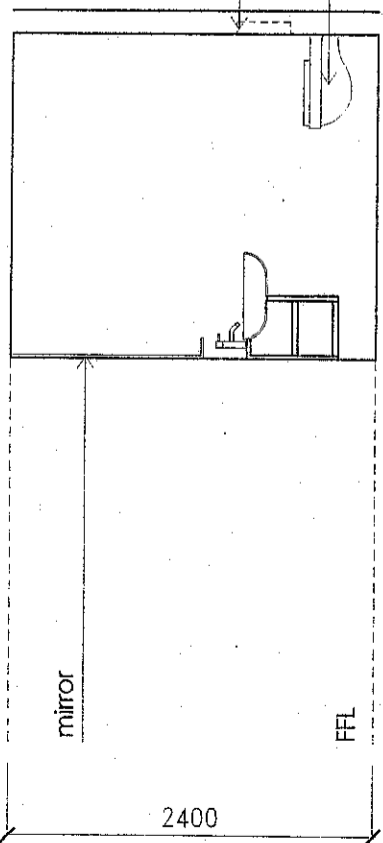
**arkitekton pty.ltd**  
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 PHONE: 9922 1339 FAX: 9922 1449

ISSUE : **A**

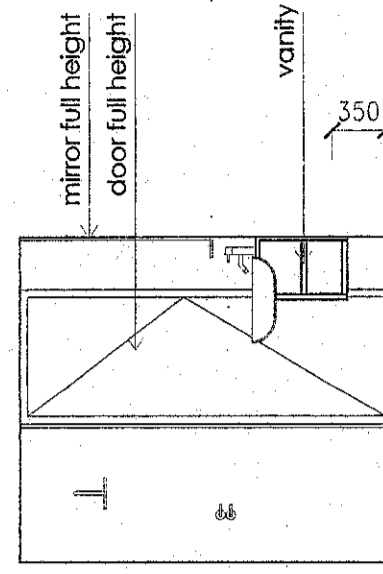
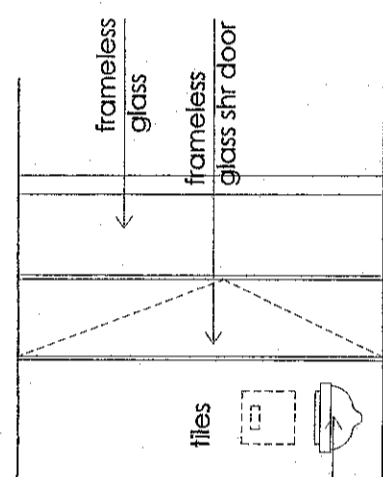
DATE : JAN 2005  
 SCALE :  
 DWG No : WD-13



U/S ceiling



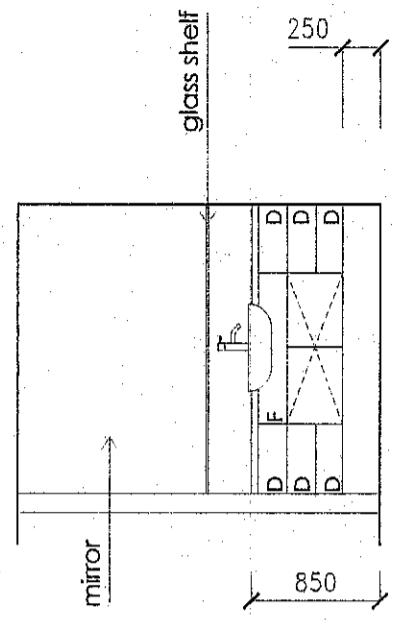
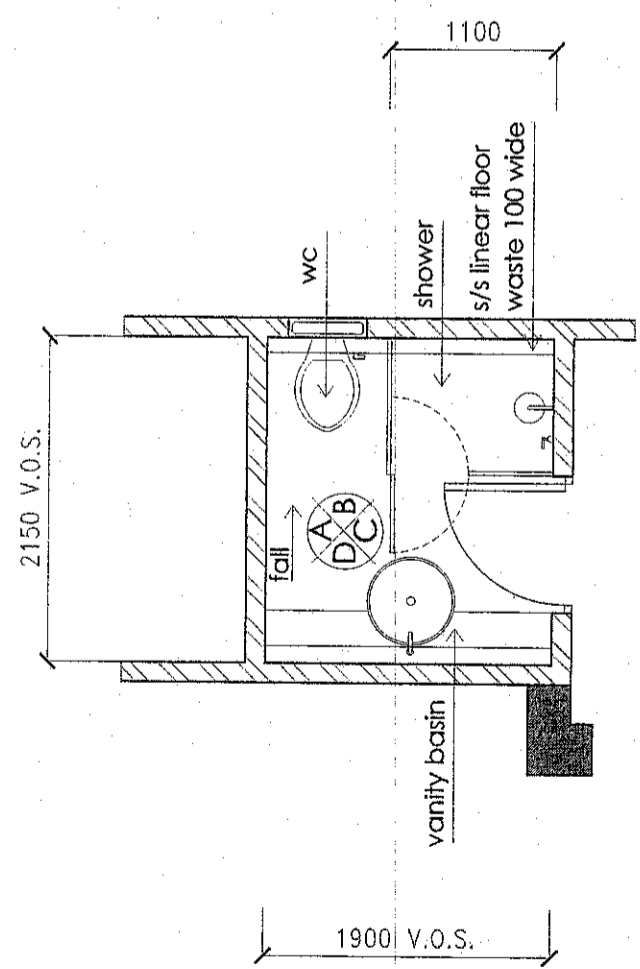
concealed water cistern refer spec  
 wall hung wc refer spec



(A)

(B)

(C)



(D)

14

ENSUITE DETAILS  
1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
 4 ALLEN AVENUE  
 BILGOLA BEACH  
 FOR: Mr. Y. Remen

ENSUITE DETAILS

**arkitekton pty.ltd**  
 ABN : 80 063 981 279  
 2 Winslow St  
 Kirribilli NSW 2061  
 PHONE:9922 1339 FAX:9922 1449

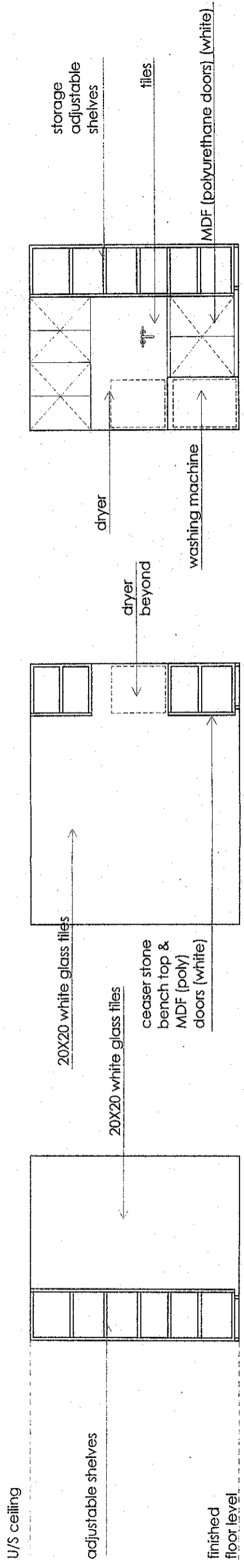
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DATE : JAN 2005

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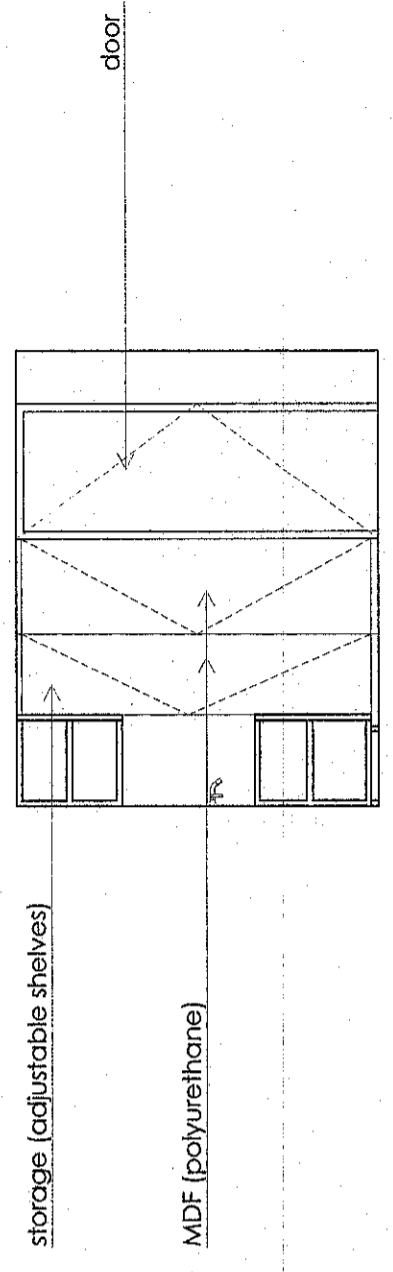
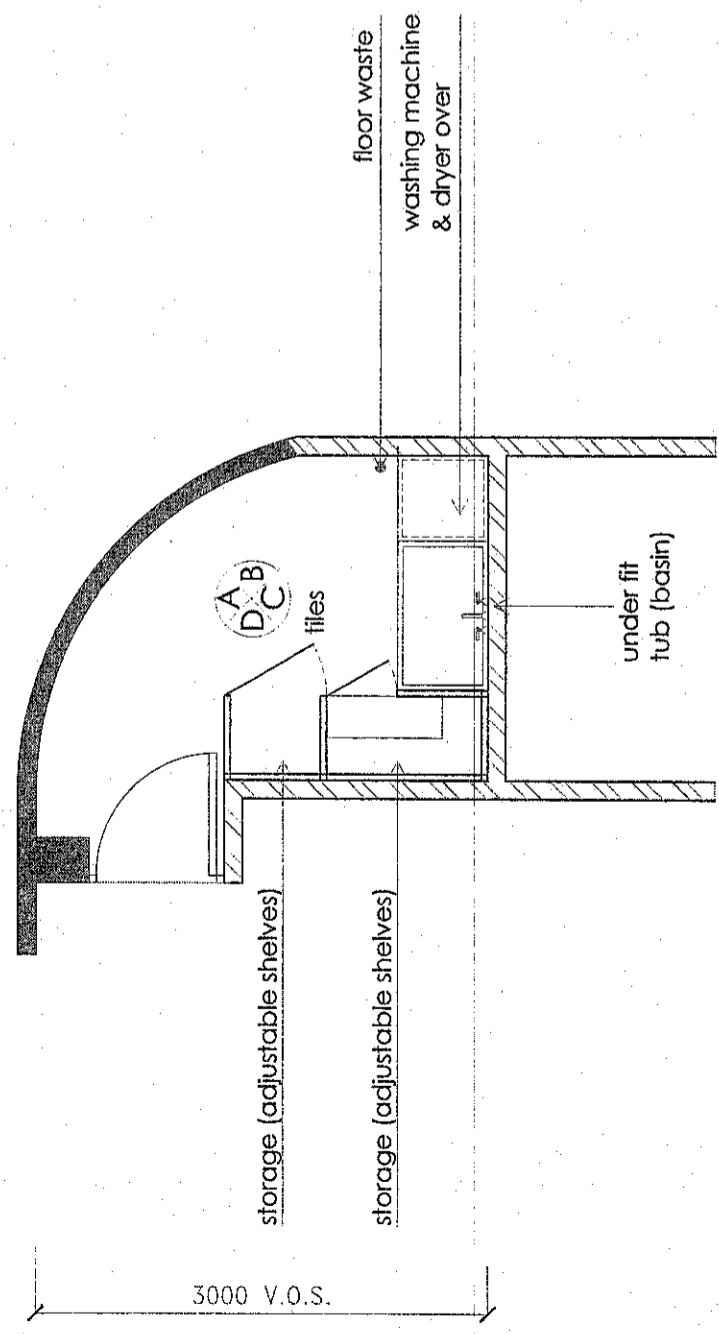
DWG No : WD-14



(C)

(B)

(A)



(D)

LAUNDRY FLOOR PLAN  
1:50

15

LAUNDRY DETAILS  
1:50

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**PROPOSED ALTERATIONS & ADDITIONS**  
4 ALLEN AVENUE  
BILGOLA BEACH  
FOR : Mr. Y. Remen

LAUNDRY DETAILS

**arkitekton pty.ltd**  
ABN : 80 063 981 279  
2 Winslow St  
Kirribilli NSW 2061  
PHONE:9922 1339 FAX:9922 1449

ISSUE : **A**

DATE : JAN 2005  
SCALE : 1:50  
DWG No : WD-15

## CONSTRUCTION NOTES

### GENERAL

- G1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANT'S DRAWINGS AND INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G2. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.
- G3. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
- G4. WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT S.A.A. CODES INCLUDING ALL AMENDMENTS AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- G5. THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE ENGINEER BUT IS NOT AN AUTHORISATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT BEFORE THE WORK COMMENCES.
- G6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
- G6. ALL LEVELS ARE EXPRESSED IN METRES.
- G7. THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:

INTERNAL AREAS = 1.50KPa  
EXTERNAL AREAS = 3.00KPa

- G8. ALL NON LOAD BEARING WALLS SHALL BE KEPT CLEAR OF THE UNDERSIDE OF SLABS AND BEAMS BY 20mm UNLESS OTHERWISE SHOWN.

### FOOTINGS

- F1. FOOTINGS ARE TO BE FOUNDED IN ORIGINAL UNDISTURBED GROUND HAVING A SAFE BEARING CAPACITY OF 150KPa ON SAND OR 600KPa ON ROCK. BEFORE ANY CONCRETE IS PLACED THE SAFE BEARING CAPACITY SHALL BE VERIFIED BY A QUALIFIED ENGINEER.

### STRUCTURAL TIMBER

- T1. TIMBER FRAMING CONSTRUCTION IS TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS 1684, NATIONAL TIMBER FRAMING CODE AND AS 1720.1 TIMBER FRAMING STRUCTURE DESIGN METHODS.

### BRICKWORK

- B1. ALL WORKMANSHIP & MATERIALS TO COMPLY WITH AS3700 S.A.A. MASONRY CODE.
- B2. MORTAR SHALL BE 1 CEMENT 5 SAND PLUS WATER THICKENER.

### BLOCK WORK

- BL1. ALL CONCRETE BLOCKS TO COMPLY WITH AS3700 MASONRY CODE.
- BL2. BLOCKS SHALL BE STRENGTH GRADE MIN 15MPa. ALL BLOCKS SHALL HAVE SHALLOW GROOVES FOR REINFT. PROVIDE CLEANOUT HOLES IN BASE OF THE WALLS.
- BL3. MORTAR SHALL BE 1 CEMENT : 0.25 LIME : 3 SAND. NO ADMIXTURES SHALL BE USED WITHOUT WRITTEN APPROVAL OF THE ENGINEER. DO NOT USE BYCOL. A WATER THICKENER (CARBOXY METHYL CELLULOSE) MAY BE USED.
- BL4. REMOVE ALL MORTAR DAGS BEFORE FILLING CORES WITH GROUT.
- BL5. FILL ALL CORES WITH GROUT STRENGTH 20MPa, AGGREGATE 10mm MAX. SIZE (NOT MORE THAN 30% BY VOLUME OF GROUT), SLUMP 230 ±30.
- BL6. VIBRATE OR ROD ALL CORES.
- BL7. PROVIDE VERTICAL CONTROL JOINTS AT 9m MAX. CENTRES.
- BL8. COVER TO REINFORCEMENT TO BE 50mm.

### CONCRETE

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- C2. CONCRETE QUALITY:

ELEMENT	SLUMP	MAX. AGG.	CEMENT TYPE	ADMIX	CONC. GRADE	EXPOSURE CLASSIF'N	COVER U.N.O.
PAD FOOTING	80	20	GP	NIL	20MPa	A1	50
CONCRETE PIERS	80	20	GP	NIL	20MPa	A1	50
SLAB ON GROUND	80	20	GP	NIL	25MPa	A1	30 TOP
STRIP FOOTINGS	80	20	GP	NIL	20MPa	A1	50
SUSPENDED SLABS-EXTERNAL	80	20	GP	NIL	32MPa	A1	40 TOP 40 BOT.
SUSPENDED SLABS-INTERNAL	80	20	GP	NIL	32MPa	A1	25 TOP 20 BOT.
SUSPENDED BEAMS	80	20	GP	NIL	32MPa	A1	35 TO MAIN REINF. AND SIDES
COLUMNS	80	20	GP	NIL	32MPa	A1	40 TO MAIN REINF.

- C3. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

- C4. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.

- C5. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

- C6. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE ENGINEER.

- C7. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN THE TRUE PROJECTION.

- C8. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE ENGINEER.

- C9. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.

- C10. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.

- C11. REINFORCEMENT SYMBOLS:

"S" STRUCTURAL GRADE DEFORMED BAR TO AS 1302

"Y" HOT ROLLED DEFORMED BAR TO AS 1302 GRADE 410

"R" STRUCTURAL GRADE PLAIN ROUND BAR TO AS 1302

"F" HARD DRAWN STEEL WIRE REINFORCING FABRIC TO AS 1304

"W" HARD DRAWN STEEL WIRE REINFORCING WIRE TO AS 1303

"N" PLAIN AND DEFORMED BAR GRADE D500N

"RF" PLAIN AND DEFORMED WIRE MESH GRADE D500L

THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NOMINAL BAR DIAMETER IN MILLIMETRES.

C12. CAMBER UNLESS NOTED OTHERWISE ON DRAWINGS. SLABS SHALL BE GIVEN A POSITIVE UPWARD CAMBER AT MIDSPAN OF 3mm PER 1000mm SPAN. METHOD OF CAMBERING IS TO BE AGREED WITH THE ENGINEER. BEAMS SHALL BE CAMBERED AS SHOWN ON DRAWINGS (NEGATIVE CAMBER IS NOT ALLOWED).

C13. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS3610.

C14. DURABLE CONCRETE DENOTED <D>. THE CONTRACTOR IS TO TAKE SPECIAL PRECAUTIONS TO IMPROVE THE LONG TERM PERFORMANCE OF THESE FACES OF CONCRETE. IN PARTICULAR NO METAL INSERTS, METAL BAR CHAIRS OR METAL FORM SPACERS OF ANY KIND ARE TO BE PLACED IN THE COVER ZONES WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER. OBSERVE NO NEGATIVE TOLERANCE REQUIREMENT ON COVER. TAKE SPECIAL CARE TO AVOID SCRAP TIE WIRE OR OTHER MATERIAL BEING PRESENT.

C15. CALCIUM CHLORIDE IS NOT PERMITTED TO BE USED.

### STRUCTURAL STEELWORK

- S1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100.
- S2. WELDING SHALL BE PERFORMED BY AN EXPERIENCED OPERATOR IN ACCORDANCE WITH AS 1554.
- S3. BOLTS NOT DESIGNATED SHALL BE GRADE 8.8/S BOLTS TO AS 1252. TIGHTENED TO A SNUG TIGHT FIT. BOLTS DESIGNATED "HS" SHALL BE HIGH STRENGTH STEEL BOLTS TO AS 1252. TIGHTENED TO A SNUG TIGHT FIT. BOLTS DESIGNATED "HSTB" SHALL BE HIGH STRENGTH STEEL BOLTS TO AS 1252 FULLY TENSIONED IN ACCORDANCE WITH AS 1511.
- S4. THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.
- S5. CONCRETE ENCASED STEEL WORK SHALL BE WRAPPED WITH RF41 FABRIC, UNLESS OTHERWISE SHOWN.
- S6. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NOMINAL THICKNESS PLATES AND CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN.
- S7. CAMBER TO BE AS NOTED ON THE DRAWINGS.
- S8. BEFORE FABRICATION IS COMMENCED THE CONTRACTOR SHALL SUBMIT COPIES OF THE SHOP DRAWINGS TO THE ENGINEER FOR REVIEW. REVIEW DOES NOT INCLUDE CHECKING OF DIMENSIONS.
- S9. UNLESS OTHERWISE SPECIFIED ALL STEELWORK SHALL BE PAINTED ONE SHOP COAT OF APPROVED ZINC RICH PRIMER. MEMBERS ENCASED IN CONCRETE, FIRE SPRAYED OR "HSTF" BOLTED CONNECTIONS MUST BE PAINTED.
- S10. EXCEPT WHERE OTHERWISE SHOWN WELDS TO BE 6mm CONTINUOUS FILLET LAID DOWN WITH AN APPROVED COVERED ELECTRODE. BOLTS SHALL BE M20 8.8/S MIN.2 BOLTS PER EACH CONNECTION.
- S11. ALL CLEATS AND GUSSETS SHALL BE 10mm THICK TYPICAL U.N.O.

### WARNING

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

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

Raphael mob: 0418 477 073

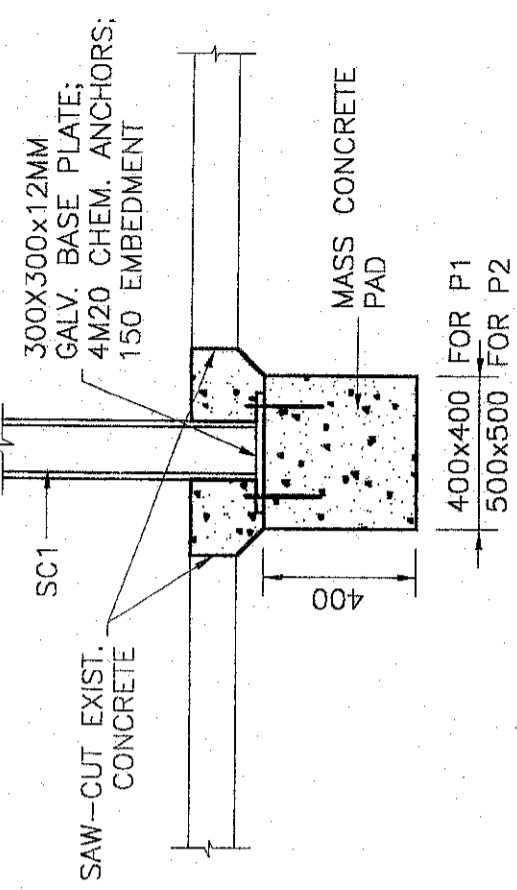
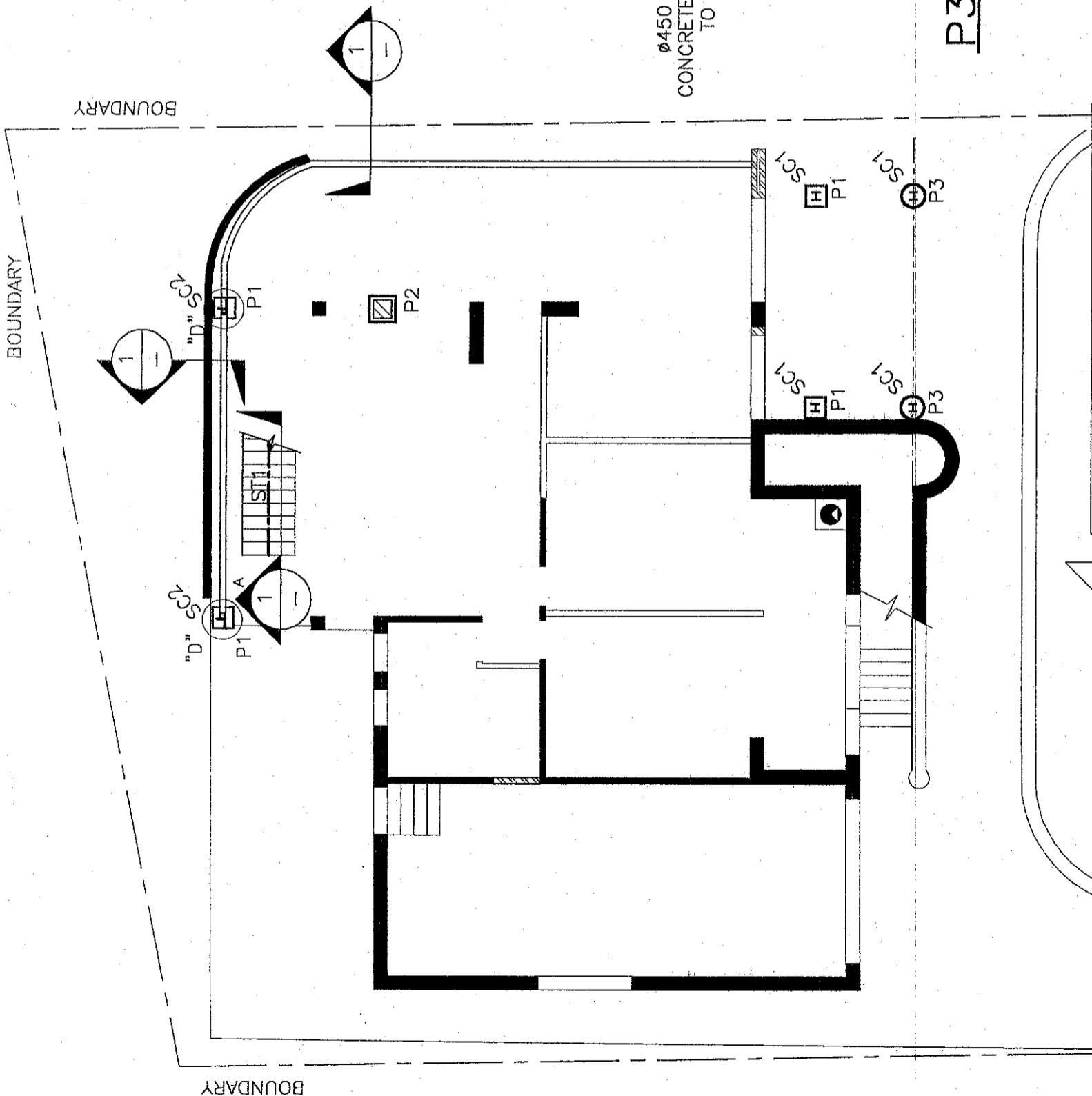
**R. Balas Engineering P/L**  
CONSULTING ENGINEERS & PROJECT MANAGERS

43/44 CADETT ROAD, WILLOWBUSH NSW 2022  
TEL: (02) 9390 7733 FAX: (02) 9390 7311 MOB: 0418 477 073

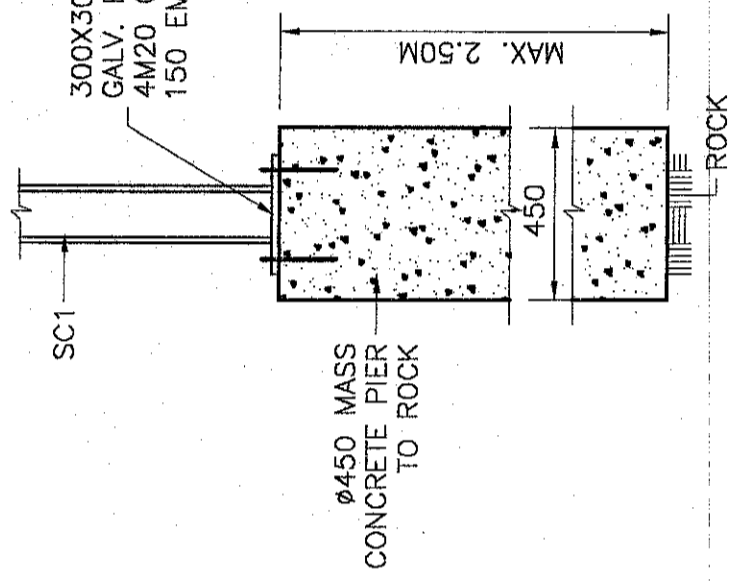
**GOOPOPPY**  
PROJECT ADDITIONS AND ALTERATIONS  
AT 4 ALLEN AVENUE, BILGOLA BEACH

### CONSTRUCTION NOTES

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DRAWN:	O.K.	APPROVED:		152-S01
DATE:	02/2005	DATE:	02/2005	



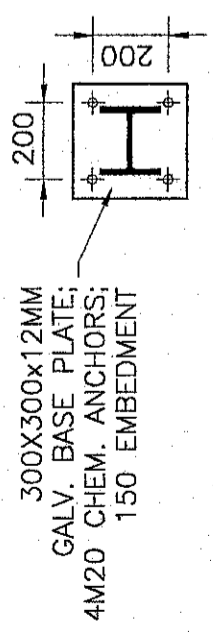
**TYP. P1&P2 PAD FOOTINGS**



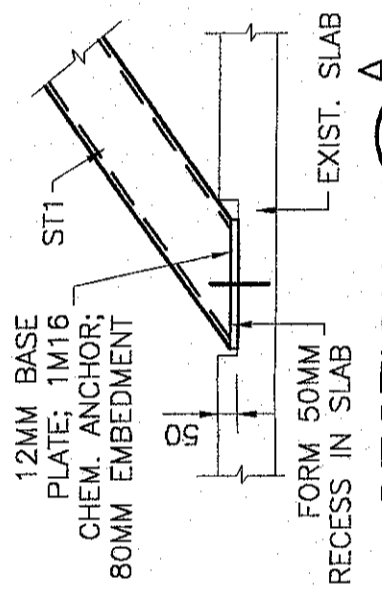
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**SECTION 1**

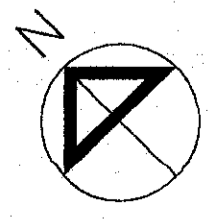
**FOOTING PLAN**



**TYP. SC1  
BASE DETAIL**



**SECTION 1  
STAIR BASE DETAIL**



**R. Balas Engineering P/L**  
 CONSULTING ENGINEERS, PROJECT MANAGERS  
 ACN 003 182 492  
 43 AVOCA STREET RANDWICK NSW 2031  
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PROJECT:  
 PROPOSED ADDITIONS AND ALTERATIONS  
 AT 4 ALLEN AVENUE, BILGOLA BEACH

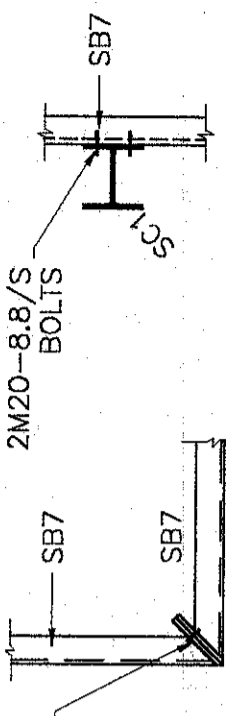
FOOTING PLAN			
SCALE: 1:100; 1:20	CHECKED:	R.D.	DRAWING No:
DRAWN: O.K.	APPROVED:		152-S02
DATE: 12/2004	DATE:	12/2004	

MEMBER SCHEDULE		
MARK	SIZE	REMARKS
SB1,SB2	250UB31	200MM BEARING ONE END
SB3	200UB25	200MM END BEARING
SB4	200x75 CHANNEL	
SB5	200x75 CHANNEL	10MM END PLATES BOTH ENDS GALVANISED
SB6	90x4 SHS	GALVANISED
SB7,SB8,SB9,SB10	200x75 CHANNEL	GALVANISED
SC1	150UC30	GALVANISED
SC2	150x10EA+90x4 SHS	STITCH WELD TO ANGLE; GALV.
SC3	100X5 SHS	GALVANISED
SC4	75x4 SHS	GALVANISED
RB1,RB4,RB5	200UB22	GALVANISED
RB2,RB3	200X75 CHANNEL	GALVANISED
ST1	200x100x4 RHS	STRINGER
TB1,TB2	200x63 HYPAN BEAM	

NOTE:  
 ALL EXPOSED STEEL MEMBERS TO BE DOUBLE HOT DIPPED GALVANISED 600g/m<sup>2</sup>  
 ALL EXPOSED TIMBER TO BE TREATED PINE

LINTEL SCHEDULE-SL1		
SPAN	LINTEL SIZE	END BEARING
UP TO 1.0M	100x10 FLAT BAR	110MM
UP TO 1.8M	100x100x10EA	150MM
UP TO 3.3M MARKED L1	150x100x8 GALINTEL	150MM; MIN. 5 BRCK COURSES ABOVE LINTEL

NEW 350X350 PIER  
 150x50 TIMBER PLATE; FIX TO CONCRETE WITH 1M16@600 CHEM. ANCHORS; 100MM EMBEDMENT  
 150x50 F8 JOISTS AT 400MM C/C

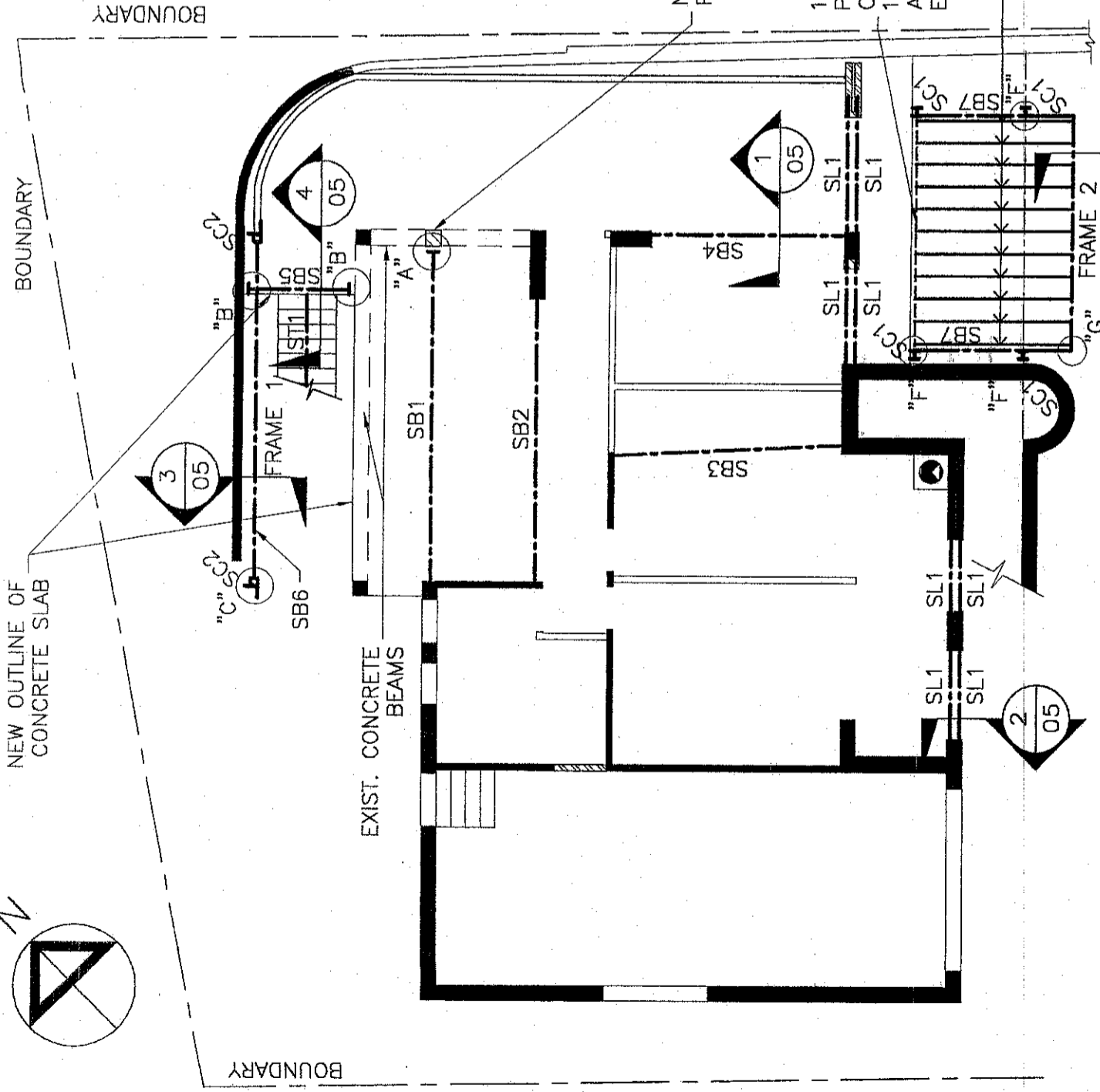


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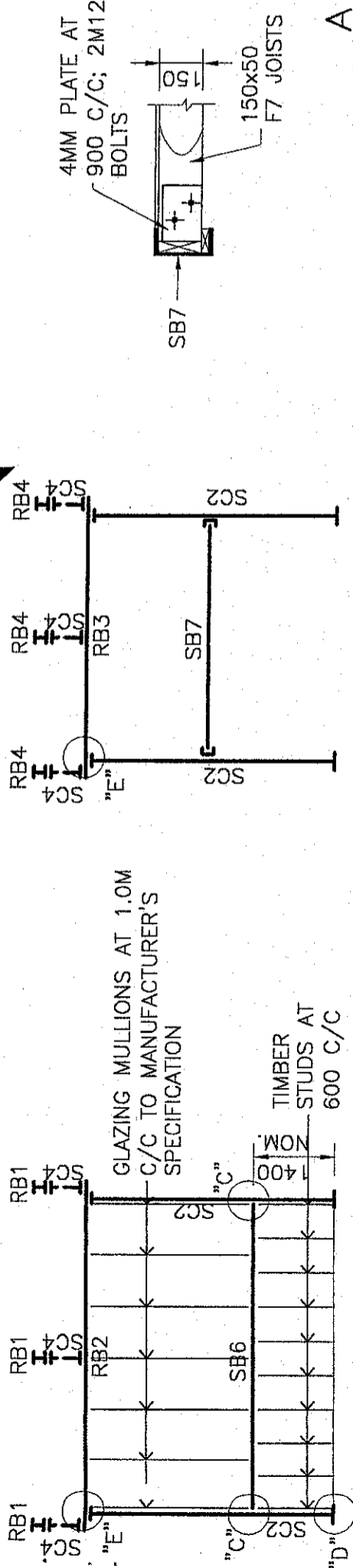
PROJECT:  
 PROPOSED ADDITIONS AND ALTERATIONS  
 AT 4 ALLEN AVENUE, BILGOLA BEACH

FIRST FLOOR FRAMING PLAN

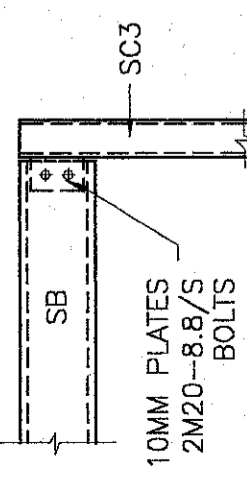
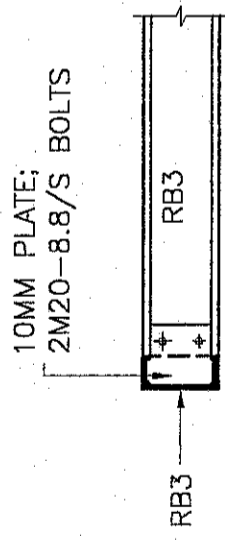
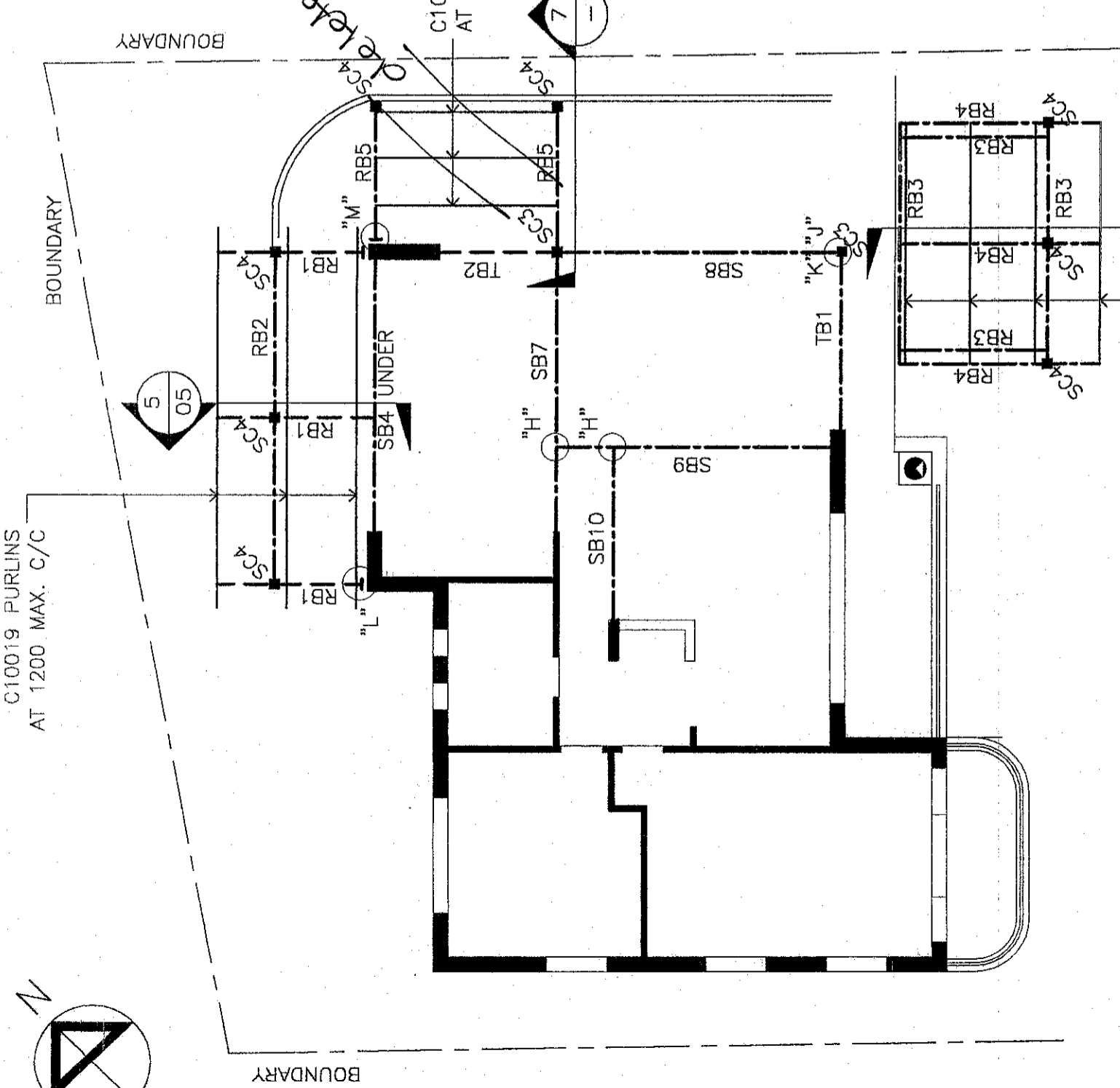
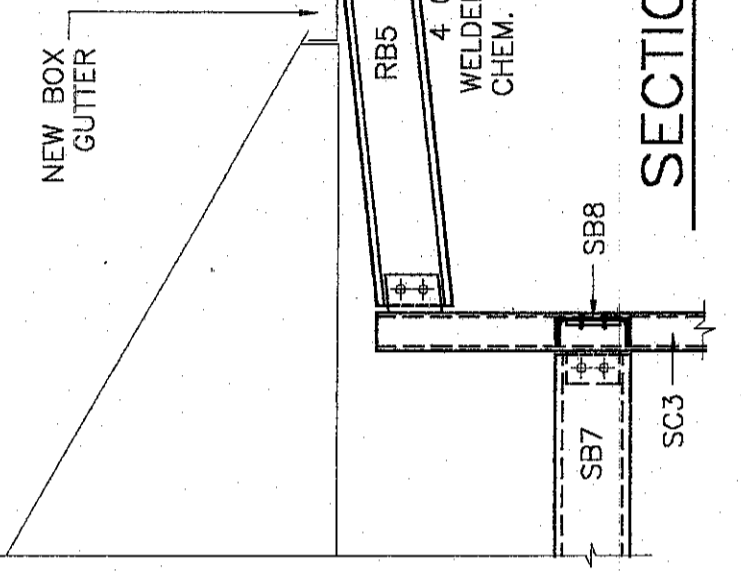
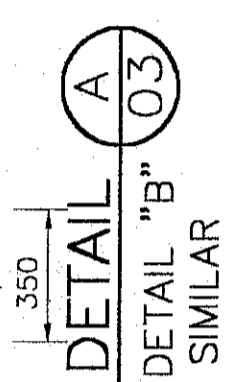
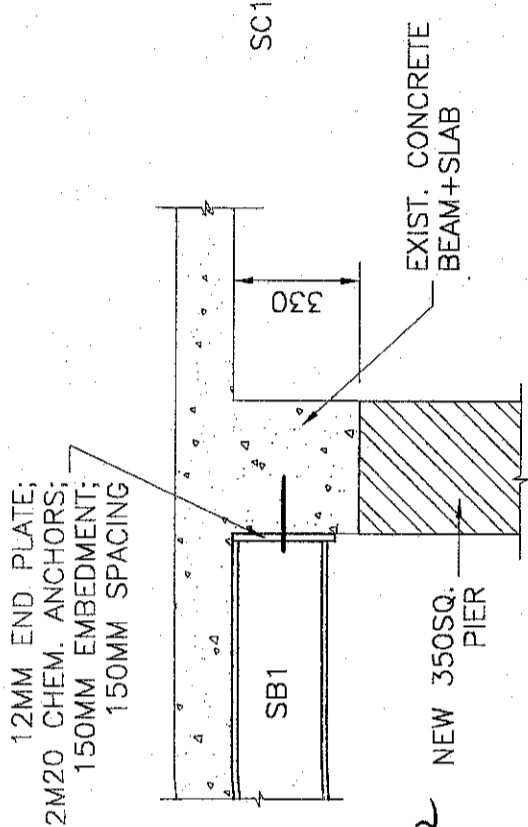
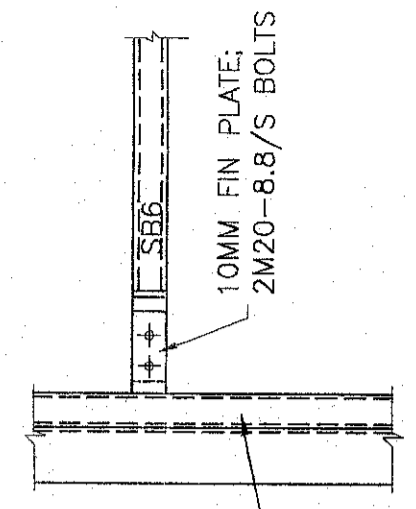
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DRAWN: O.K.	APPROVED:	
DATE: 12/2004	DATE: 12/2004	



UPPER FLOOR FRAMING PLAN



FRAME 1 ELEVATION SECTION 3/03  
 FRAME 2 ELEVATION SECTION 3/03



DETAIL J  
TYP. STEEL BEAM TO COLUMN CONNECTION

DETAIL H  
TYP. STEEL BEAM TO BEAM CONNECTION

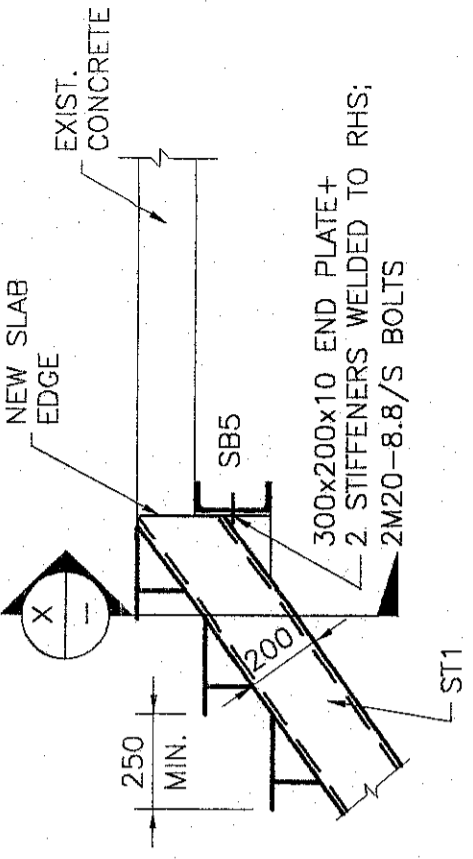
DETAIL K  
TYP. STEEL COLUMN TO TIMBER BEAM CONNECTION

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ACN 003 182 492

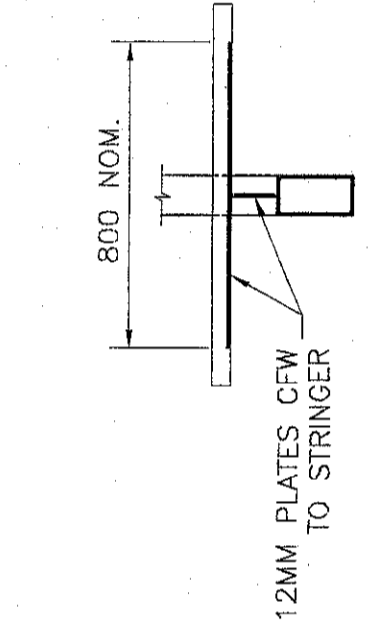
43 AVOCA STREET RANDWICK NSW 2031  
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PROJECT:  
PROPOSED ADDITIONS AND ALTERATIONS  
AT 4 ALLEN AVENUE, BILGOLA BEACH

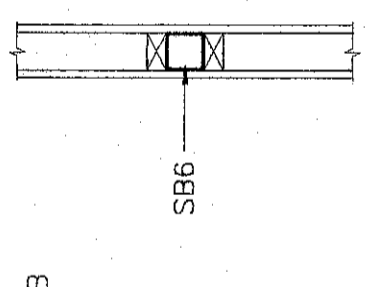
ROOF FRAMING PLAN			
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DRAWN: O.K.	APPROVED:		152-S04
DATE: 12/2004	DATE:	12/2004	



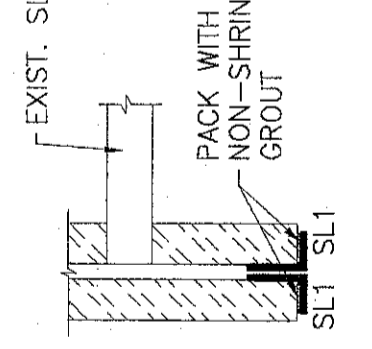
SECTION 1/03



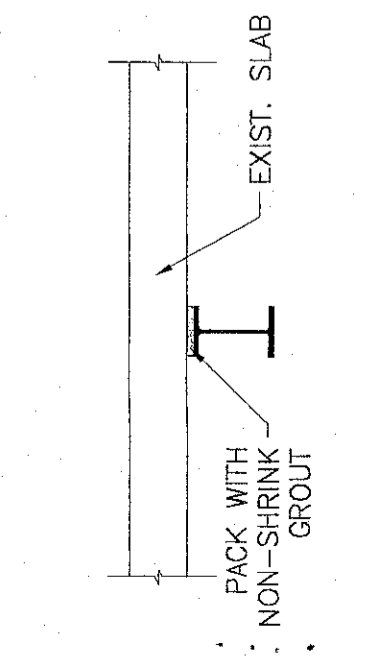
VIEW X



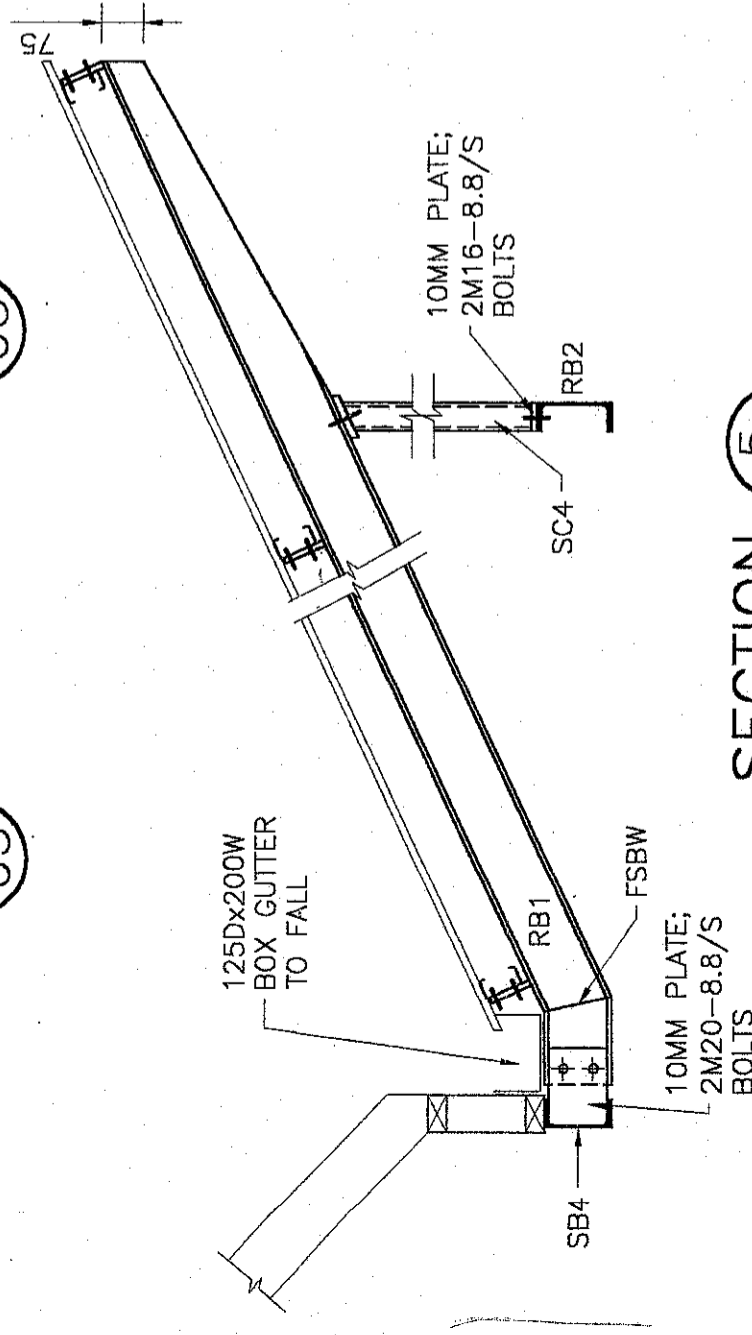
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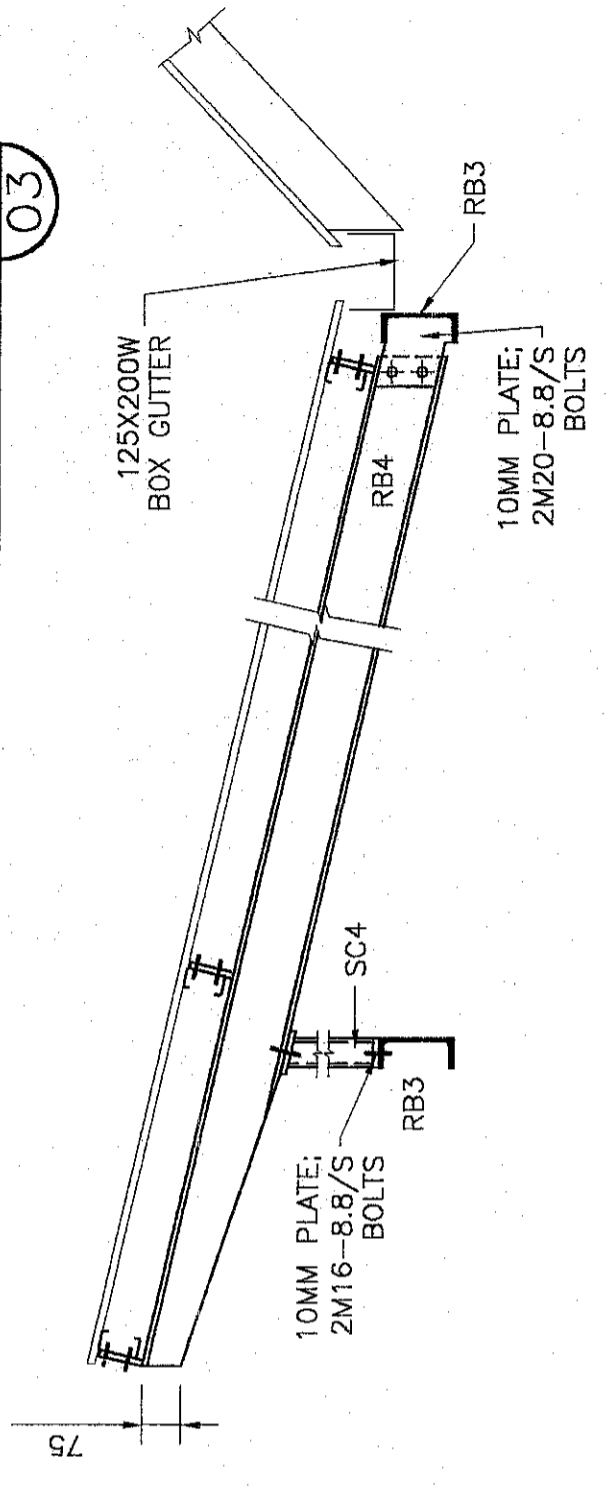
SECTION 3/03



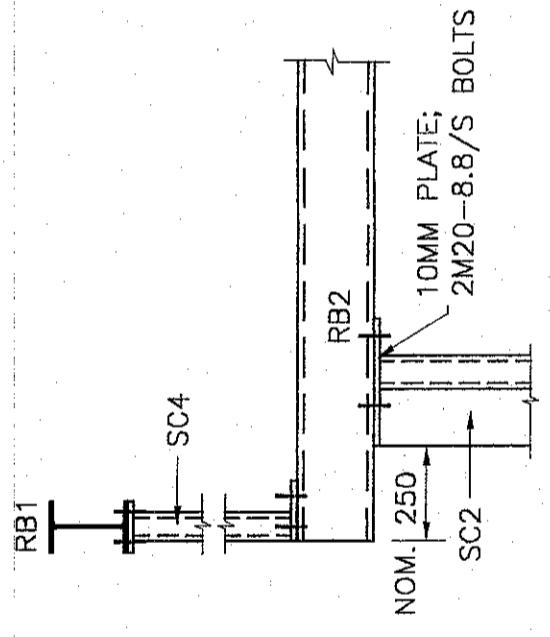
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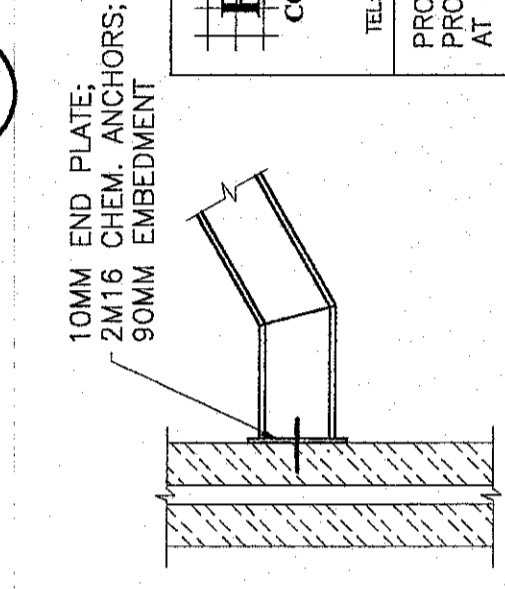
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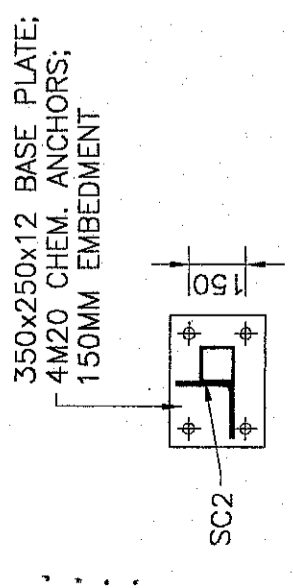
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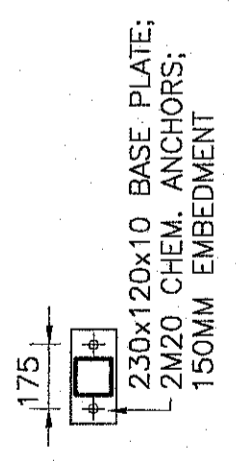
DETAIL E/03



DETAIL L/04



DETAIL D/03  
TYP. SC2  
BASE DETAIL



TYP. SC3  
BASE DETAIL

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PROJECT:  
 PROPOSED ADDITIONS AND ALTERATIONS  
 AT 4 ALLEN AVENUE, BILGOLA BEACH

DETAILS-SHEET 1			
SCALE: 1:20	CHECKED: R.D.	DRAWING No: 152-S05	
DRAWN: O.K.	APPROVED:	DATE: 12/2004	