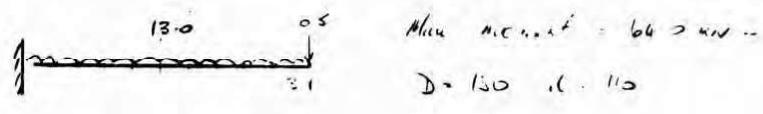


Level 3 Balcony

Maxi unit level 3.1m.

- Loadings
- slab dead load = $24 \times 0.15 = 3.6 \text{ kN/m}^2$
 - live finish = $0.27 \times 1.5 = 0.405 \text{ kN/m}^2$
 - balcony use = $4 \times 1.5 = 6 \text{ kN/m}^2$
 - landscaping = $0.2 \times 1.5 = 0.3 \text{ kN/m}^2$



Area = $6.65 = 1770 \text{ mm}^2$
 $0.9 \times 410 \times 110$

Using $Y16 @ 115 \text{ c/c}$ $f_{yk} = 206 \text{ MPa}$

$p = \frac{206}{1000 \times 110} = 0.0187 \text{ UK}$

Forming Details.

Check bearing pressures on mass concrete pier.

Pier at 20m ab.

External wall self wt + surcharge - all in

loading

caul wall = $4.2 \times 2.0 = 8.4 \text{ kN}$

Trav area level 1 =

= $1 \times 2.15 \times 2.0 = 4.3 \text{ kN}$

= $2 \times 1.0 \times 1.0 = 2.0 \text{ kN}$

= $4 \times 0.5 = 2.0 \text{ kN}$

Roof area = 2.0 kN

allow

floor load = 3.6 kN

live = 2.0 kN

roof dead = 1.0 kN

live = 0.1 kN

Total floor loading = $1.0 + 5.25(5.0) + 2.0 = 137 \text{ kN}$

Pier area = $\pi \frac{0.3^2}{4} = 0.071 \text{ m}^2$

Bearing pressure = $\frac{137}{0.071} = 1930 \text{ kPa}$

allowable bearing = 600 kPa

max area req'd = $\frac{137}{600} = 0.228 \text{ m}^2$

Diameter req'd = $\sqrt{1.14}$

Require base of pier

IAN D. CHAPMAN & ASSOCIATES

CONSULTING STRUCTURAL ENGINEERS

2nd Floor, Tower Square, 155-167 Miller Street, North Sydney, NSW 2060
Telephone: (02) 922 6322 Telex: AA71205 Fax: (02) 923 1270

IDC/1023/bn
12th January, 1987

Town Clerk,
Ryde Municipal Council,
P.O. Box 23,
RYDE NSW 2112

Attention: Mr. D. McMillan

Dear Sir,

Re: Lot 19, Shackel Avenue, Gladesville.
Building Application No. 1075/86

In reply to our letter dated 17th December, 1986 concerning the structural details of the subject residence, please find attached copies of design calculations for the cantilevered balcony of Level 3.

The following points should be made:

- (i) The slab has been redesigned. Drawing 1023/3 has been amended to suit this redesign, 3 copies of 1023/3C are attached.
- (ii) A slab band has been introduced spanning from load-bearing brickwork to the door head beam. This slab band reduces the balcony cantilever.
- (iii) The working stress of the reinforcement resisting the cantilever moment is 58.0 MPa.
- (iv) The reinforcement has been detailed to provide continuity across the slab step-down.
- (v) The laying sequence of bars and mesh is clearly shown on the sections on each of the drawings.

We trust this matter is now clarified and the drawings approved.

Yours faithfully,
Ian D. Chapman & Associates



B. A. HUTCHISON

c.c. A. J. Romeo Pty. Ltd.

Principal: I.D. CHAPMAN, Dipl. Tech. B.E. (Hons), M.I.E. Aust.
Associates: B.A. HUTCHINSON, B.E. (Civil), M.I.E. Aust., R.A. SANGSTER, Cert. Eng.

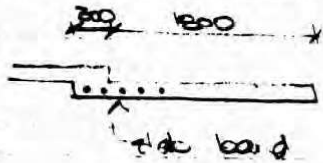
DESIGN CHECK - LEVEL 3 BALCONY

200 thick hollow slab with tiled finish

$$\therefore P_u = (1.2 \times 24 + 0.5) \times 1.5 + 4.0 \times 1.8 = 15.15$$

$$P_w = 1.2 \times 24 + 0.5 + 4.0 = 9.3$$

CASTILEVER MOMENT:



Effective width of slab
board = 1.0m

Account consider from
of slab board

$$\therefore L = 1.8 + 3.0 - 3.0 = 1.8$$

$$M_u = \frac{15.15 \times 1.8^2}{2} = 19.4 \text{ kNm/m}$$

$$d = 200 - 25 - 20 = 155$$

$$A_c \text{ provided} = 992 + 1716 \text{ at } 150$$

$$= 218 + 1333$$

$$= 1651$$

$$\text{For } f_{cu} = 230, \mu = 19.4 \text{ \& } d = 155$$

$$A_c \text{ reqd} = 570$$

\therefore OK

CASTILEVER SPAN-TO-DEPTH RATIO

$$\frac{k_1}{bd} = \frac{1651}{1000 \times 155} = 0.01065$$

$$M_{ed} = \frac{9.3 \times 1.6^2}{2} = 11.9 \text{ kNm/m}$$

$$\text{say } f_{cr} = 18 \text{ (conservative)}$$

$$\therefore T = \frac{11.9}{2 \times 155} = 96.0 \text{ kN/m}$$

$$\therefore f_s = \frac{96.0 \times 10^3}{1651} = 58$$

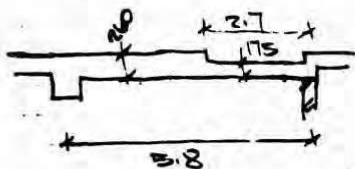
\therefore Multiplying factor is least 1.5

$$\frac{M_{ed}}{bd} = \frac{218}{1000 \times 155} = 0.00205 \quad \therefore T \cdot 1.5 \times 1.07$$

$$\therefore \text{Allowable span-depth ratio} = 2 \times 1.5 \times 1.07 = 12.8$$

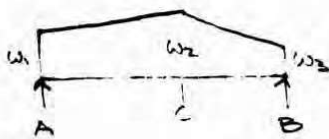
$$\text{span-depth ratio} = \frac{1.6}{0.155} = 10.3 \quad \therefore \text{OK}$$

SLAB BAND



By inspection, part at which DFMS will govern design.

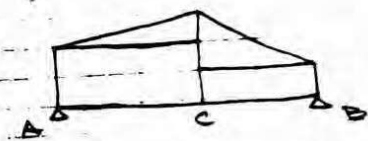
$$w_1: b = 1.9 \quad \therefore w_1 = 1.95 \times 15.15 = 29.5$$



$$w_2 = L = 1.5 + \frac{1.5}{2} = 2.25$$

$$w_2 = 29.5$$

$$w_2 = L = 1.8 \quad w_2 = 12.1$$



$$R_B = \frac{27.4 \times (27.4 + 27.4)}{2 \times 58} + 12.1 \times 27.4 \left(1 - \frac{27.4}{2 \times 58}\right) + \frac{27.4 \times 10.0 \times 2}{2} \times \frac{27.4}{58}$$

$$+ \frac{27.4 \times 27.4}{2} \left(1 - \frac{27.4}{58}\right)$$

$$= 80.5$$

$$\therefore \text{For } E \text{ to } C: w = 12.1 + 27.4 \cdot \frac{x}{27.4}$$

$$S = R_B - 12.1x - \frac{27.4}{27.4} \cdot \frac{x^2}{2}$$

$$M = 80.5x - \frac{12.1x^2}{2} - \frac{27.4}{27.4} \cdot \frac{x^3}{6}$$

$$= 80.5x - 6.1x^2 - 17x^3$$

$$\text{At } x = 27, M = 140.0 \text{ (very low)}$$

$$D = 200, d = 200 - 25 - 13 - 12 = 145$$

$$b = \frac{5800}{4} = 1450$$

$$\therefore F = 1450 \times 145^2 = 30.5$$

$$\therefore K_u = 4.59 \quad \therefore c_u = 216$$

$$A_c = 3053$$

$$7424 \text{ at } 175$$

1075/86

FINALISED

6 SHACKEL AVE

- ✓ Street lead fee.
- ✓ Extra Billing fee
- EXTRA L.S.L. FEE
- ✓ over-billed permit
- ✓ L.S.L. FEE TO PARTY.
- ✓ 74% norm.

Struct. Details
picked up
9-12-86
D. H. H. H.

File.

L19

E

BUILDING APPLICATION No. 1095/86

Local Government Act, 1919 (Ordinance 70)

THE TOWN CLERK,

Date 11/7/86

I, the undersigned, hereby make application for the approval of Council to plans and specifications lodged herewith of a building which I intend to erect and complete within 12 months from the date of approval.

Class of Building CLASS 1 (S.D. 4000) Type of Fire Resisting Construction R/A

Purpose for which the building is to be used Residence

Is Property situated in a Fire Zone? No State whether Primary or Secondary

Lot or Portion 19 Frontage 16.66 Depth 45.47 Street No. 6

Street SHACKEL AVE Locality GLADSTONE

NAME OF OWNER MR & MRS. A. MILETTA Telephone No. 736 1856

ADDRESS 5 FREEMAN PLACE CONCORD Permit No.

NAME OF BUILDER SHACKEL BUILDERS Telephone No. 736 1856

ADDRESS 6 FREEMAN PLACE CONCORD Licence No.

Number and description of existing buildings on allotment NIL

State whether this application is for a new building or alteration or additions to existing building

Are there any easements or drains passing through or over the subject property? No

State whether new or second-hand materials to be used New

Contract Price or Council's Valuation \$150,000 Floor Area: 450 m²

Type of Footings Brick on Rock Materials of outer walls Brick

Details of Bricks: Compressive Strength: 20MPa Transverse Strength Av. Transverse Strength

Material of roof Fibre Concrete Height of rooms MN-2750

Method of ventilation Natural Method of lighting

Method of drainage Sewer Is a septic tank installation proposed? No

Particulars of closet accommodation Sewer Floor Construction Concrete

Location of proposed closet Internal

If concession clauses of Ordinance 70 have been used, quote clause numbers:

Is concrete foot paving or kerbing and guttering laid in front of the property? Yes

Is concrete foot paving or kerbing and guttering damaged in front of the property? ?

Description of front fence

Description of side fence

Is a retaining wall proposed on the street alignment?

N.B. - Applicant MUST state whether owner/builder, architect or structural engineer

Number of sets of plans and specifications lodged 2

Mr & Mrs. A. MILETTA

5 FREEMAN PLACE CONCORD 913 (Signature of applicant and address)

IMPORTANT! PLEASE READ CAREFULLY PAGES 2 & 3 OF THIS DOCUMENT BEFORE ANSWERING THE QUESTIONS ON THIS APPLICATION FORM. THIS APPLICATION IS NOT ACCEPTABLE TO COUNCIL UNLESS FULLY COMPLETED, INCLUDING PAGE 3

FOR OFFICE USE ONLY

Fees paid by owner Fee Paid \$ 730.00
Building Fee 40.00 Date 12/9/86
Street Alignment Level Fee Receipt No. 24585/86
Damage Deposit 320.00 Deposited Plan No. 10340

Old Systems Title
Assessment No. 2.19768
Street No. 6 Shackel Ave
TOTAL FEE \$ 730.00
Certificate of Classification No. issued Section 317A Certificate No. issued



EXTRA BUILDING FEE \$140.00 Paid 14.08.86 RMC 27522.
STRA L.S.L. FEE \$ 330.00 - Paid.
Street Alignment 00 paid. re. 27266.

CLASSIFICATION.

The Classes of buildings.

(1) For the purposes of this Ordinance, buildings and portions of buildings are classified as follows:

- (a) Class I: Single dwelling houses.
- (b) Class II: Buildings containing two or more flats.
- (c) Class III: Residential buildings, being common places of abode for a number of unrelated persons, including —
 - (i) boarding-houses, guest-houses, hostels and lodging houses;
 - (ii) the residential portions of hotels and motels;
 - (iii) the residential portions of schools;
 - (iv) the residential portions of institutional buildings accommodating members of the staff of the institution; and
 - (v) flats not included in paragraph (b) or paragraph (d).
- (d) Class IV: Flats in buildings that elsewhere are of Class V, VI, VII, VIII or IX, being in each case the only flat in the building.
- (e) Class V: Office buildings, being buildings for professional or commercial purposes, excluding buildings of Classes VI, VII, VIII, and IX.
- (f) Class VI: Shops and other buildings for the sale of goods by retail or the supply of services direct to the public, including
 - (i) eating rooms, tea rooms, coffee rooms, cafes, restaurants and milk and soft-drink bars;
 - (ii) the non-residential portions of hotels and motels;
 - (iii) hairdresser's and barber's shops, public laundries and undertaker's establishments; and
 - (iv) markets, sale rooms, show rooms and service stations.
- (g) Class VII: Buildings that are —
 - (i) warehouses, being buildings for the storage of goods only or for the display of goods for sale by wholesale; or
 - (ii) public garages.
- (h) Class VIII: Buildings that are —
 - (i) factories, being buildings in which a handicraft or a process in or incidental to the making, assembling, altering, repairing, renovating, preparing, ornamenting, finishing, cleaning, washing or adapting of goods is carried on for trade, sale or gain —
 - (A) those used for handicraft or process not mentioned in the Second Schedule being of Class VIIIa; and
 - (B) those involving a process mentioned in the Second Schedule being of Class VIIIb.
 - (ii) laboratories —
 - (A) those involving a process not mentioned in the Second Schedule being of Class VIIIa; and
 - (B) those involving a process mentioned in the Second Schedule being of Class VIIIb.
- (i) Class IX: Buildings of a public nature, comprising —
 - (i) institutional buildings as defined in clause 1.3 being of Class IXa; and
 - (ii) schools and other assembly buildings as defined in clause 1.3 being of Class IXb, but excluding portions of such buildings that are of Class III or used as laboratories.
- (j) Class X: Outbuildings.

Classes VIIIa and VIIIb.

(2) Unless the contrary intention appears, Class VIIIa and Class VIIIb are separate classifications.

Classes IXa and IXb.

(3) Unless the contrary intention appears, Class IXa and Class IXb are separate classifications.

Principles of classification.

(4) For the purposes of this clause the classification of a building or portion of a building is determined by the purpose for which it is designed, constructed, or adapted to be used.

Multiple classification.

(5) Where portions of a building each have different purposes, each such portion shall, subject to clause 6.7, be separately classified in accordance with this clause.

Doubtful classification.

Council to determine.

6.2. (1) Where there is any doubt or dispute as to the classification of a building or portion of a building, the building or portion shall be classified in such one of the classes mentioned in clause 6.1 as the Council considers appropriate and the decision of the Council shall be deemed to be an approval for the purposes of any appeal pursuant to the provisions of the Act.

TABLE 17.2.

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED EXCEPT IN A FIRE ZONE.

Rise in storeys	Class of building									
	II	III	V	VI	VII	VIIIa	VIIIb	IXa	IXb	
6 or more	Type 1									
5	Type 1		Type 2		Type 1					
4	Type 2		Type 2		Type 2					
3	Type 3		Type 2		Type 3		Type 3			
2	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 2	Type 3	Type 3
1	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3

TABLE 18.2.

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED IN A PRIMARY FIRE ZONE.

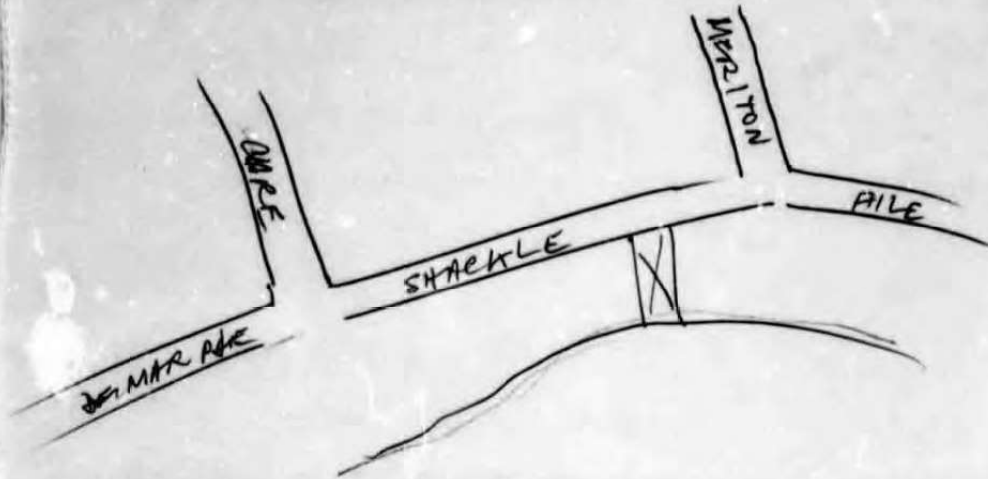
Rise in storeys	Type of construction
3 or more	Type 1
2	Type 2
1	Type 3

TABLE 18.3.

TYPE OF FIRE-RESISTING CONSTRUCTION REQUIRED IN A SECONDARY FIRE ZONE.

Rise in storeys	Class of building									
	II	III	V	VI	VII	VIIIa	VIIIb	IXa	IXb	
6 or more	Type 1									
3	Type 1		Type 2		Type 2		Type 2			
2	Type 2	Type 2	Type 3	Type 3	Type 3	Type 3	Type 3	Type 2	Type 2	Type 2
1	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3	Type 3

Applicant MUST draw a location plan hereunder, showing the exact position of the subject allotment in the street, nearest intersections, and details and measurements from some permanent point so that identification can be made.



NOFILE

1 PLAN TO TP 17/9/86

1 copy → ME 29/7/88 ←

MA 10/10/86

12/12 Amended Laundry Location.

(Date)

(Building Surveyor/Inspector)

B. — REPORT AND RECOMMENDATION OF TOWN PLANNER.

(Date)

(Town Planner)

RESOLUTION OF COUNCIL:

Date

Minute No.

(paste "cut out" from business paper here)

RYDE MUNICIPAL COUNCIL.
(Form 2 - Ordinance 70)

B34

REPORT TO: Town Clerk
(for submission to Council)

The property and building as listed hereunder has been inspected by me on 12th December, 1988 in accordance with the provisions of Clause 3.3. (2) of Ordinance No. 70 and I certify that such building has been erected in accordance with Ordinance No. 70 and without material deviation from the approved plans and specifications.

Is a Certificate of Classification required? YES/NO
Has it been issued? YES/NO

To be signed by a proper servant. [Signature]

Position (Senior Building Surveyor
Building Surveyor
Asst. Building Surveyor ✓

Building Approval No. 1075/86
Lot/Street No. 19 (6)
Street or Road: Shackel Ave Suburb: Gladesville
Name & Address of Owner: A. Mileta New at
5 Freeman Pl 6 Shackel Ave
Concord Gladesville.
Name & Address of Builder: OWNER.
Class of Building: I
Type of Construction: —

MUNICIPALITY OF RYDE

B72

BUILDING APPLICATION NO. 1075/86

Asses. No. 2.19768 Lot No. 19 Street: SHACKEL AVE
Owned by: Mrs + Mr A. MILETTA of 5 Freeman Place Concord

I undertake to restore, at the conclusion of building operations on this site, to the satisfaction of the Council's Engineer, all damage to the concrete footpaths and kerbing and guttering in front of, or adjacent to the above property, incurred during building operations.

I undertake to cover the footway, kerbing and guttering with suitable crossing before any materials are carted across.

I undertake to push the pipes under the road and footway where applicable.

Signed: [Signature]
Owner/Builder/Architect/Structural Engineer

OFFICE USE ONLY
REPORT AND CERTIFICATE BY BUILDING SURVEYOR

~~Date road and footway inspected prior to building~~

REPORT
~~Precautions taken by Builder to prevent damage to path and kerbing and guttering~~

~~Class of Road~~ _____ ~~Class of Footpath~~ _____

Estimated cost of repairing paving, kerbing and guttering
TOTAL CHARGED \$ NIL

State area to be restored _____

DATE OF FINAL INSPECTION: 12/12/88

I HEREBY CERTIFY THAT A. Miletta of 5 Freeman Pl Concord is entitled to a refund of three hundred twenty dollars

cents.
DATE: 13/12/88

Signed: L. Brown
For the PRINCIPAL BUILDING SURVEYOR

FEES:

Building Fee: 410.00

Street Levels: _____

Damage Deposit: 320.00

TOTAL FEE: \$ 730.00

Deposit: 320.00

Less Charges: NIL

\$ 320.00

Office Memo: _____

Receipt No/s. 2458516

DATE: 12/9/86

17th December, 1986.

Mr. & Mrs. A. Miletta
5 Freeman Place
CONCORD, N.S.W. 2137

Dear Sir and Madam,

Shackel Avenue, Gladesville, Lot 19 (6).
Building Application No. 1075/86.
Class 1 Building.

I refer to an examination of the structural details by Council's Consulting Engineer and advise that it will be necessary for the Engineer to clarify and/or justify the following matters and submit amended plans for consideration:

1. Strength and deflection of cantilever balcony on Level 3.
2. The laying sequence of bars and mesh.

Yours faithfully,

K.R. BROWN
TOWN CLERK

808 0496, Mr. G. T. White/ES.

BUILDING	REVIEW
19	87

17th December, 1986.

Messrs. Ian D. Chapman Pty. Ltd.
Structural Engineers
Tower Square
155-167 Miller Street
NORTH SYDNEY. N.S.W. 2060

Dear Sirs,

Shackel Avenue, Gladesville, Lot 19 (6).
Building Application No. 1075/86.
Class I Building.

I refer to an examination of the structural details by Council's Consulting Engineer and advise that it will be necessary for you to clarify and/or justify the following matters and submit amended plans for consideration:

1. Strength and deflection of cantilever balcony on Level 3.
2. The laying sequence of bars and mesh.

Yours faithfully,

K.R.
K.R. BROWN
TOWN CLERK

808 0496, Mr. G. T. White/ES. P 19-1-87 *ja*

REPORT TO THE TOWN PLANNER:

Shackle Avenue (G), Gladstone
Building Application N° 1075/86.

The Building Department has referred the abovementioned application to this department because it is affected by a foreshore scenic protection area, being a line 15m from the mean-high-water-mark. The proposed development does not encroach upon this line, and as a consequence, there are no Town Planning objections to the proposal. The Building Department has also advised that a slipway is to be part of the proposal, however, no plans have been submitted in regard to this matter.

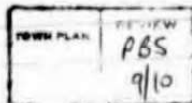
Recommendation: That the Principal Building Surveyor be advised that the Town Planning Department has no objection to the proposal indicated on the submitted plans. However, any development proposal for slipways, retaining walls, boat sheds or the like which are to be located within 15m of the Mean High Water Mark are to be referred to this department for consideration.



No objection to building approval.

John Ste
9/10

PS
8/11 October, 1986



MUNICIPALITY OF RYDE

MEMO FROM PRINCIPAL BUILDING SURVEYOR:

TO THE TOWN CLERK:
For Attention:

C.T.P.

SUBJECT: Proposed CLASS I - DWELLING
 Address 6 SHACKLE AVENUE, GRADSHILL
 Lot No. 19
 B.A. 1075/86
 Owner A-MILE TTA
 Applicant OWNER

Would you please report on attached copy of plan received on 12/9/86

DATE: 17/9/86

RECEIVED
 17 SEP 1986

[Signature]
 PRINCIPAL BUILDING SURVEYOR

FILING DEPARTMENT:

Are there any Development Applications for this proposed building or land use, or are there any previous papers or files in connection with any prior use of the land? Please attach for the information of the Town Planner.

TOWN PLAN REVIEW
 RB
 17/9

MEMO FROM: T.P.

TO THE TOWN CLERK:
For Attention:

PBS

C.C.C. Zoning _____ Map No. _____
 Local Scheme Zone _____ Map No. _____
 DATE: _____

N.B.: THE 40-DAY EXPIRY DATE IS _____ 19____.

YOUR REPORT MUST BE RECEIVED IN THE BUILDING DEPARTMENT ON OR BEFORE _____ 19____ IN ORDER THAT THE APPLICATION CAN BE PROCESSED THROUGH COUNCIL BEFORE THE EXPIRY DATE.

PLEASE ATTACH 2 COPIES OF STANDARD CONDITIONS APPLYING TO THIS APPLICATION.

MUNICIPALITY OF RYDE

MEMO FROM PRINCIPAL BUILDING SURVEYOR:


TO THE TOWN CLERK:
For Attention:

ME

SUBJECT: Proposed CLASS I - DWELLING
Address 6 SHACKEL AVE GLADEVILLE
Lot No. 19
B.A. 1075/86
Owner A MILETTA
Applicant OWNER

Would you please report on attached copy
of plan received on 12-9-86

DATE: 29-9-86

 RES.
PRINCIPAL BUILDING SURVEYOR

FILING DEPARTMENT:

Are there any Development Applications for this proposed building or land use, or are there any previous papers or files in connection with any prior use of the land? Please attach for the information of the Town Planner.

MEMO FROM: _____

TO THE TOWN CLERK:
For Attention: _____

C.C.C. Zoning _____

Map No. _____

Local Scheme Zone _____

Map No. _____

DATE: _____

N.B.: THE 40-DAY EXPIRY DATE IS 22-10- 19 86.

YOUR REPORT MUST BE RECEIVED IN THE BUILDING DEPARTMENT ON OR BEFORE 13-10-1986 IN ORDER THAT THE APPLICATION CAN BE PROCESSED THROUGH COUNCIL BEFORE THE EXPIRY DATE.

PLEASE ATTACH 2 COPIES OF STANDARD CONDITIONS APPLYING TO THIS APPLICATION.

BUILDERS LICENSING ACT, 1971
(Section 13G)

OWNER-BUILDER'S PERMIT

MR. A. MILETTA,
5 FREEMAN PLACE,
CONCORD, N.S.W., 2137.

PERMIT 293059

is hereby authorized to carry out on the land hereunder described the building work so described.

6 SHACKEL AVE., LOT 19 D.P. 103 40 GLADESVILLE.

Land on which
building work may
be carried out:

Building work
authorized:

TO ERECT A NEW DWELLING COMPRISING, ENTRY, 4 BEDROOMS, ENSUITE, W.I.,
ROBE, BATHROOM/SPA, 2 SEPARATE W.C., LAUNDRY/SHOWER/W.C., INTERNAL STAIRS,
KITCHEN, DINING ROOM, FIREPLACE, LIVING ROOM, FAMILY ROOM, RUMPUS ROOM,
SUNROOM, STUDY ROOM, PLANTER BOXES, 2 BALCONIES, TERRACE, STORE ROOM,
DRIVEWAY, DOUBLE GARAGE, PLANT ROOM, CELLAR, CONSTRUCTED IN FULL BRICK.

Granted this 13TH

day of

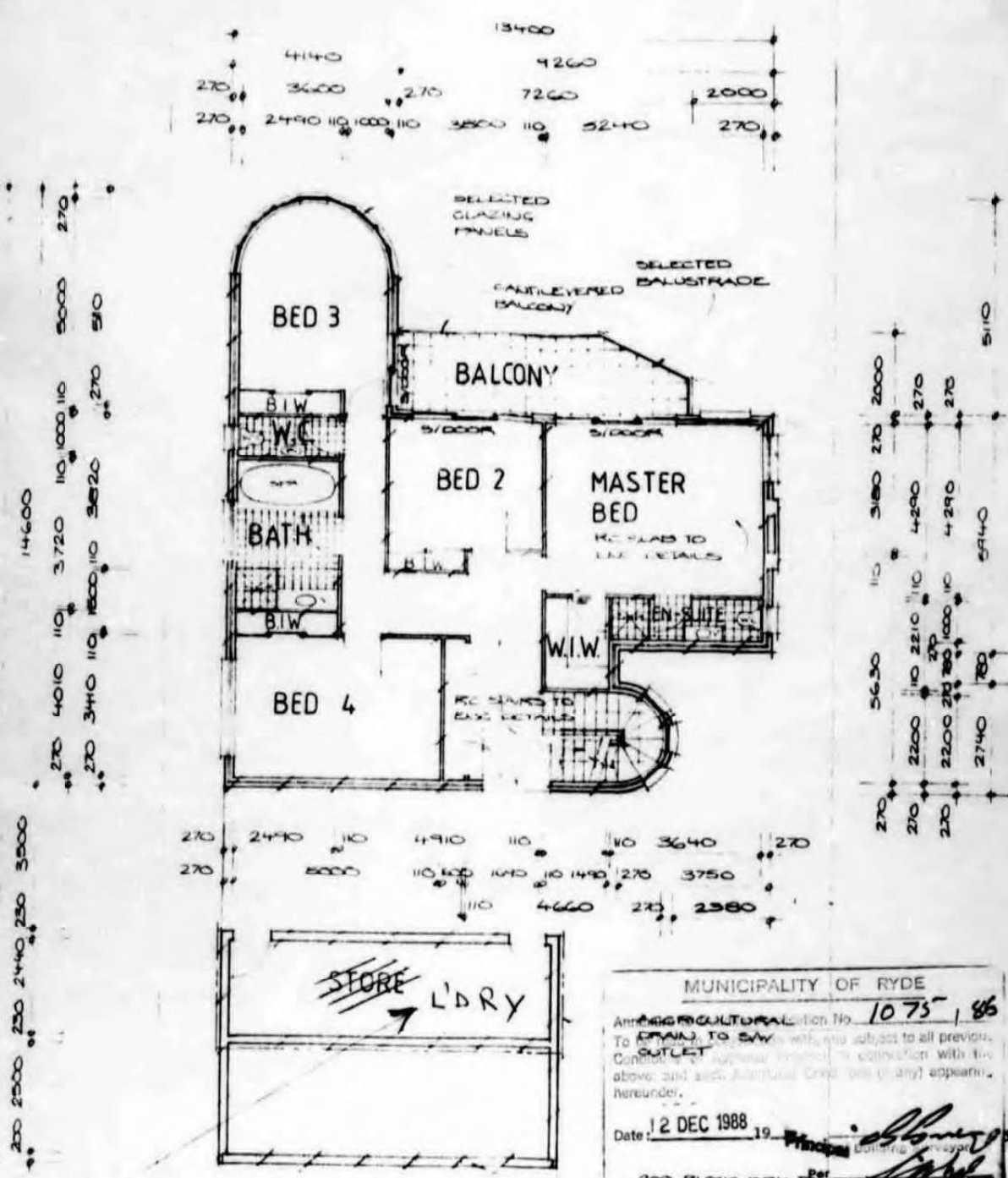
OCTOBER 1986



CHAIRMAN
BUILDERS LICENSING BOARD

Form 23





APPLICATION
 N 1075/86
 M. A. + M. E.
 Milella
 6 SHACKEL AVE
 GLADESVILLE

MUNICIPALITY OF RYDE
 Agricultural Application No. 1075/86
 To be read in conjunction with and subject to all previous conditions of approval. In connection with the above, and such Additional Conditions (if any) appearing hereunder,
 Date: 12 DEC 1988
 Principal Building Inspector

RECEIVED
 12 DEC 1988
 BUILDINGS

230 7930 230
 8390
 1520
 X ◀

job. PROPOSED RESIDENCE
 AT LOT 19 SHACKEL AVE.
 GLADESVILLE

A.J. ROM
 SUITE 7/2

Ian D. Chapman Pty. Ltd.

CONSULTING STRUCTURAL ENGINEERS
2nd Floor, Tower Square, 155-167 Miller Street, North Sydney NSW 2060
Telephone: (02) 922 6322 Telex: AA71205

RECEIVED

12 NOV 1986

BUILDING DEPT.

TRANSFER OF INFORMATION/DOCUMENTS

TO RYDE MUNICIPAL COUNCIL
CIVIC CENTRE
DEVLIN ST
TOP RYDE

ATTENTION MR D. McMILLAN

PROJECT NEW RESIDENCE
LOT 19 SHACKEL AVE
GLADESVILLE
PROJECT No. 1023

DATE 10.11.86

INITIATOR B. HUTCHKIN

2 COPIES EACH OF REVISED
STRUCTURAL DRAWING NOS 1023/1A, 2A, 3A & 4A
& ACCOMPANYING CALCULATIONS

Issued By B. Hutchkin

Copy

MILETA RESERVOIR, CLAREVILLE

DESIGN CHECKS

PIERS UNDER LEVEL 2

At each end of beam over pump area.

loads: $u = 0.0$ throughout.

40
Cable
brackets

loads $2 \times 1, 150 \text{ slabs} \therefore p = 2.5 \text{ kPa}$

Backwork, $SH = 0.4 \therefore w = 0.4 \times 0.1$

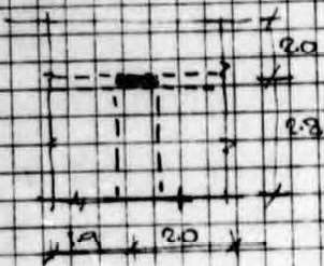
$= 12.2 \text{ kN/m}$

load 2 slab, $t = 150, p = 2.6$

$15 = 4.2$

$250 = 0.0$

Radially Pier:



$$= P = 20 \times 4.8 \times 3.9 \times 3$$

$$+ 3.6 \times 4.8 \times 3.9 \times 2$$

$$+ 12.44 \times (2.8 + 2.9)$$

$$+ 3.6 \times 0.0 \times 2.9$$

$$+ 4.2 \times 2.8 \times 1.9$$

$$+ 0.0 \times 4.8 \times 0.0$$

$$= 400.5 \text{ kN}$$

$$\text{Pier area} = 20 \times 10 \times 2.8 = 112 \text{ m}^2$$

$$P_c = 3.02 \text{ kPa}$$

if $p = 3.02 \text{ kPa}$

$$P = 3.02 \times 112 = 338.24$$

is that there weight = 338.24 = 1000

$$338.24 \times 1.2 = 405.89 \text{ kN}$$

$$C = 20, \text{ Number} = 111.6$$

$$\therefore F_m = 8.8$$

$$\text{Safety factor} = \frac{1.025}{.146} = 12.8$$

$$\therefore K_a = .766$$

$$\therefore \text{Allowable comp. stress} = .766 \times 2 \times 8.8 = 135$$

\therefore N.B.G.

\therefore Increase pier size:

(a) lengthen pier to $600 = \frac{2103}{12.8} = 164$

(b) Increase pier ~~size~~ to double ~~area~~

$$\therefore t = \frac{2}{3}(220 + 110) = 227$$

$$\therefore S = 819$$

$$\therefore K_a = .912$$

$$A_g = (.22 + 110) \times 819 = 2006 \text{ m}^2$$

$$\therefore P = 8.8 \times .912 \times 2 \times 2006 \times 10^3 = 322$$

\therefore still not ok

combine (a) & (b)

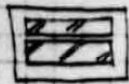


$$L = 570 \times \frac{4005}{322} = 724$$



Use 70 (3% design, typical)

FOUNDATIONS TO ISOLATED PIERS



$F = 110$
 $\frac{1.0}{1.3}$

$$P = 400.5 \text{ kN}$$

$$\text{Allowable} = 600 \text{ kPa}$$

$$\therefore \text{Req'd Area} = \frac{400.5}{600} = 0.668$$

$$A = 0.67 \quad b = 1.0 \quad h = 1.3$$

$$\therefore (1.0 + 2a)(1.3 - 2a) = 0.67$$

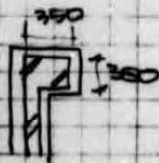
$$\therefore 4a^2 + 2.2a - 0.28 = 0$$

$$4a^2 + 2.2a - 0.28 = 0$$

$$\therefore a^2 + 0.55a - 0.07 = 0$$

$$a = 0.14$$

1.0 x 1.3 unreinforced pad.



$$P = 220.5$$

$$A = 0.4 \text{ m}^2$$

$$\therefore 1.0 \text{ eq. } a = 0.15$$

$\therefore 1.0 \times 1.3$ unreinforced pad.

LEVEL 3 BALCONY

Continuous over door head beam

$$D=150 \quad u=4.0 \text{ (for 400 purpose)}$$

$$\therefore p=15 \times 26 + 40 \times 1.5 = 12.6$$

$$\text{Max } L=3.2$$

$$\therefore M = \frac{12.6 \times 3.2^2}{2} = 64.5$$

$$D=150 \quad \therefore d=120$$

$$f_{yk}=350 \quad A_s=2050$$

$$\therefore \text{Extra } A_s = 2050 - 1740 = 1740$$

$$\therefore 12 \text{ at } 115$$

Duplicate??

For 12 at 150 extra

No

$$\Sigma A_s = 1230 + 218 = 1451$$

$$f_{yk}=350$$

$$\therefore M=36$$

$$\therefore \frac{12.6 \times L^2}{2} = 36$$

$$\therefore L=2.4$$

is up to 2.4m is OK

Continuous through bedroom, a closet

2.4m, 1.2m, 1.2m, 2.4m

Per at the end:

$$P_w = .18 \times 24 \times 2.0 = 8.6$$

loaded areas: level 3, $A = \frac{P_w}{2} \times \left(\frac{44}{2} + 17 \right)$

$$= 9.99$$

level 4, $A = \frac{P_w}{2} \times \left(\frac{56}{2} + 22 \right)$

$$= 13.5 \approx 14$$

Subtotal

$$\Sigma A = 23.47$$

$$\Sigma P = 13.5 \text{ kN}$$

1/10 of area

$$h = 2400 - 450 - 600 = 1350$$

$$\therefore \text{effective height} = .75 \times 2.4$$
$$= 1.8$$

$$\text{Effective } t = 146.7$$

$$\therefore S = 17.27$$

$$K_a = .812$$

$$F_w = 8.8$$

$$\therefore F_a = .812 \times 2 \times 8.8 = 14.3$$

$$\therefore \text{Fixed area} = \frac{14.3 \times 10^3}{2} = 71.5 \times 10^3$$

$$\therefore \text{Length of } \dots = \frac{71.5 \times 10^3}{2 \times 110} = 322$$

\therefore OK

OK

LEVEL 4 BALCONY

Carillovers over door head beam or side walls

For TIG at 1st entry to FE1

$$A_s = 202 + 1323 = 1525$$

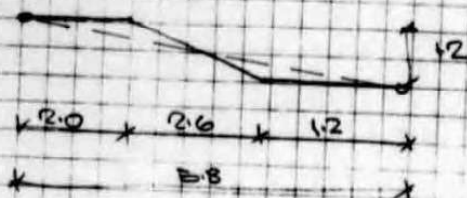
$$d_{ny} = 300 \quad \therefore M_s = 58$$

$$\therefore \frac{12.6 L^2}{2} = 58$$

$$\therefore L = 3.03$$

This is only enclosed adjacent to side wall of lounge room, by which point the slab is working in the other direction

Door head beam:



Par. new

Average loaded

$$\text{width} = 2.8 + \frac{5.8}{2}$$

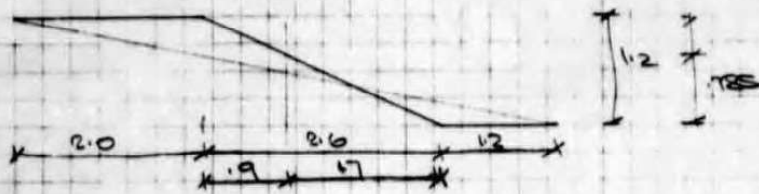
$$= 5.7$$

$$\therefore W = 5.7 \times 12.6$$

$$= 71.8$$

$$\text{Effective } L = \sqrt{5.8^2 + 1.2^2} = 5.92$$

$$\therefore M = \frac{71.8 \times 5.92^2}{8} = 34.19$$



$$\text{Max Torque: } L = \sqrt{1.85^2 + 1.7^2} = 1.87$$

$$P = 1.87 \times 71.8 = 134.4$$

$$e = \frac{71.8}{2}$$

$$\therefore T = 52.8 \text{ kN.m}$$

$$V_u = \frac{71.8 \times 5.92}{2} = 212.5$$

$$\therefore M_u = 34.9 \quad T_u = 52.8 \quad V_u = 212.5$$

$$D = 230 \quad \therefore d = 200 \quad b = 270$$

$$\therefore V_c = 212.5 + \frac{1.6 \times 52.8}{27} = 225.4$$

$$T_c = \frac{52.8 \sqrt{1 + \frac{2.88}{27}}}{27} = 144.8$$

$$\therefore V_c = 459.7$$

$$\therefore F = 1.8^2 \times 270 = 172.8$$

$$\therefore K_u = 2.66 \quad \therefore \alpha_u = 240$$

$$\therefore A_s = \frac{459.7}{34.9 \times 1.8} = 1690$$

$$\therefore 3422 \text{ bottom}$$

$$\text{say } 3720 \text{ top}$$

$$\therefore \frac{T_u}{b d} = \frac{930}{200 \times 170} = 1.0731$$

$$V_c = 172.5$$

$$\therefore V_1 = 825.4 - 102.5 = 422.9$$

\therefore T12 ties at 145

Use T12 ties at 150 as no allowance has been made for critical section being 1 m from support.

$$x_1 = 270 - 100 = 170$$

$$y_1 = 800 - 100 = 700$$

$$\therefore \frac{M_u}{b} = \frac{144.8}{.9 \times .4 \times .17 \times .8 \times .4} = 721$$

\therefore T12 at 150 OK.

BUILDING DEPARTMENT
INFORMATION FOR RECEIPT OF FEES, ETC.

TO CASHIER:

Please accept the amount of \$ 140.00 from A. Miletta
of 5 Freeman Place Concord
in payment for extra Building fee.

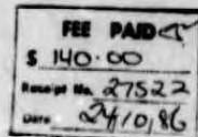
BUILDING APPLICATION NO.: 1075/86.
STREET: Shackel Ave.
LOT NO.: 19.
STREET NO.: 6.
ASSESSMENT NO.: 2-19 768.

SIGNED: [Signature]DATE: 2/10/86TO PRINCIPAL BUILDING SURVEYOR:

FEE PAID: \$ _____

DATE: _____

RECEIPT NO.: _____



BUILDING DEPARTMENT
INFORMATION FOR RECEIPT OF FEES, ETC.

TO CASHIER:

Please accept the amount of \$ 22.00 from MR MILETTA
of FREEMAN R CONCORD
in payment for STREET LEVEL FEE

BUILDING APPLICATION NO.: 1075/86
STREET: SHACKEL AVE
LOT NO.: 19
STREET NO.: 6
ASSESSMENT NO.: 2-19768

SIGNED: *A. Long Jr*
DATE: 20-10-86

TO PRINCIPAL BUILDING SURVEYOR:

FEE PAID: \$ _____
DATE: _____
RECEIPT NO.: _____

FEE PAID ✓
\$ 22.00
Receipt No. 27266
Date 20/10/86

D. Chapman Pty. Ltd.

10/7/86

CONSULTING STRUCTURAL ENGINEERS

2nd Floor, Tower Square, 155-167 Miller Street, North Sydney NSW 2060
Telephone: (02) 922 6322 Telex: AA71205

TRANSFER OF INFORMATION/DOCUMENTS

PROJECT LOT 19 SHACKEL
GLADESVILLE

TO A.S. ROMEO PTY LTD

PROJECT No. 1023

DATE 13.1.87

ATTENTION

INITIATOR B. HUTCHISON

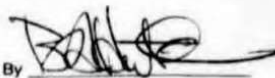
INSPECTION REPORT

LEVEL 2 SLAB VARIATIONS TO APPROVED
DRAWINGS ARE CONSIDERED
~~SATISFACTORY~~ APPROVED
FOR CONSTRUCTION

PART LEVEL 3 SLAB APPROVED FOR
CONSTRUCTION.

Copy to:

Issued By



D. Chapman Pty. Ltd.

CONSULTING STRUCTURAL ENGINEERS
2nd Floor, Tower Square, 155-167 Miller Street, North Sydney NSW 2060
Telephone: (02) 922 6322
Telex: AA71205

TRANSFER OF INFORMATION/DOCUMENTS

PROJECT LOT 19 SHACKEL
GLADESVILLE

TO A.J. ROMEO PTY LTD

PROJECT No. 1023

DATE 12.12.86

ATTENTION

INITIATOR B. HUTCHISON

INSPECTION REPORT

FOOTINGS HAVE BEEN INSPECTED
& ARE APPROVED FOR CONSTRUCTION.

Copy to:

Issued By

BALLO

Ian D. Chapman Pty. Ltd.

CONSULTING STRUCTURAL ENGINEERS

2nd Floor, Tower Square, 155-167 Miller Street, North Sydney NSW 2060
Telephone: (02) 922 6322 Telex: AA71205

TRANSFER OF INFORMATION/DOCUMENTS

PROJECT ~~MILETA~~ ~~REF.~~

TO BUILDING DEPT.
~~RIVER~~ MUNICIPAL COUNCIL
DEVLW ST
TOP RTDB

PROJECT No. 1023

DATE 26.11.86

ATTENTION ~~DOUG~~ ~~MILLAN~~

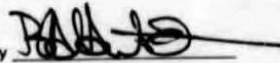
INITIATOR ~~B. HITCHKINSON~~

2 COPIES EACH OF REVISED
DRAWING NOS 1023/1B, 2A, 2B & 4B
+ SUPPORTING CALCS.

SUPERCEDES

Copy to:

Issued By



Ian D. Chapman Pty. Ltd.

CONSULTING STRUCTURAL ENGINEERS

2nd Floor, Tower Square, 155-167 Miller Street, North Sydney NSW 2060
Telephone: (02) 922 6322 Telex: AA71205

TRANSFER OF INFORMATION/DOCUMENTS

TO ~~Engineer~~ Building Dept
Ryde Municipal Council,
Devlin St,
Top Ryde.

ATTENTION Doug McMillan.

PROJECT Miletta Residence,
Gladesville.

PROJECT No. 1023

DATE 2/12/86

INITIATOR B Hutchinson.

Please find enclosed two (2) copies of the following
drawings - 1023/3B
- 146

Copy to:

Issued By _____

Level of Footway

Check deflection of slab

max cantilever span = 2.4m

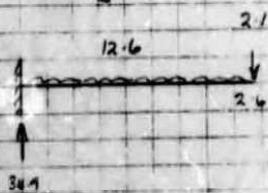
load - concrete slab = $24 \times 0.15 = 3.6 \text{ kN/m}$

laboratory = 0.8 kN/m

edge load = $24 \times 0.17 = 4.08 \text{ kN/m}$

live = allow 4.0 kN/m

Cantilever loading



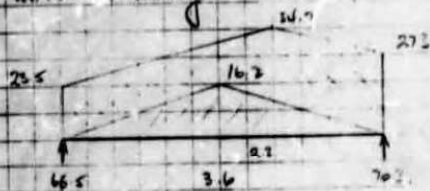
$\Delta_{max} = 48 \rightarrow 11.2 \text{ mm}$

beam width, span = 3.6m

slab load = dead = $18 \times 3.6 = 65 \text{ kN/m} = 1.5$

live = $18 \times 2.0 = 36 \text{ kN/m} = 1.8$

Beam ultimate loading



Max moment = 68.1 kNm

Class D-120 (C-120)

Area = $\frac{621 \times 10^4}{0.7 \times 410 \times 0.9 \times 120} = 1710 \text{ mm}^2$

Using S12 A5 (120) 1623 mm²
 F21 A5 (120) 1623 mm²

Check deflection criteria

$$\text{allowable span / depth ratio} = 20$$

$$h = 36 \text{ mm} \quad \text{depth} = \frac{36}{20} = 180 \text{ mm}$$

Use standard I-beam $D = 250$ $t = 220$

$$A_{\text{area}} = 1710 = \frac{160}{220} \cdot 933 \Rightarrow \text{ST16}$$

$$p_{\text{max}} = 0.0178 \quad \text{Load} = \frac{1000}{0.0178 \cdot 220} = 230$$

Check shear requirements

$$V_u = 63.9 \text{ kN} \quad p = \frac{1000}{300 \cdot 220} = 0.015$$

$$V_u = \frac{63.9}{300 \cdot 220}$$

$$V_c = 1.0$$

$$= 0.97$$

$$V_c' = 0.85 \cdot 1.0 = 0.85$$

$$V_u' = 300 \cdot 220 (0.97 - 0.85) = 8.0 \text{ kN}$$

Clave $s = 100$ mm

$$A_{\text{S min}} = 0.35 = \frac{300 \cdot 100}{230} = 457 \text{ mm}^2$$

Try R12 bar at 100 mm c/c

$$V_{\text{RS}} = 0.85 \left(230 = 160 + \frac{300}{100} \right) = 65.6 \text{ kN} \quad \text{OK}$$

Use $D = 250$ $R = 300$

ST16 beam R12 at 100

Check deflection

Cantilever action - assume 15 mm + joint

Obtain I_e for section

$$p = \frac{120}{100 \cdot 220} = 0.015 \quad p_{\text{min}} = 0.015$$

$$M_e = \frac{0.6 \sqrt{25}}{75} = \frac{1000 \cdot 150^3}{15} = 11.6 \cdot 10^6$$

$$I_e = \left(\frac{116}{80} \right)^2 (281 - 115) + 115 = 117 \cdot 10^6 \text{ mm}^4$$

$$\epsilon = 2000^{15} \cdot 0.043 \sqrt{25} = 25.2 \cdot 10^2$$

$$\Rightarrow S_{\text{max}} = 147 \text{ mm} \quad S_{\text{min}} = 78 \text{ mm}$$

Simple beam section -

dituan I_e per section

$$p = 0.018 \quad p_n = 0.153$$

$$\Rightarrow I_{er} = 794 \cdot 10^6 \text{ mm}^4 / \text{m}$$

$$M_e = \frac{0.6 \sqrt{25}}{125} = \frac{350 \cdot 250^3}{5} = 11.2 \cdot 10^6$$

$$I_e = \left(\frac{113}{47} \right)^2 (450 - 794 \cdot 0.35) + 794 = 271 \cdot 10^6$$

$$S = 68 \text{ mm} = \frac{L}{4.0} \quad S_{\text{min}} = 46 \text{ mm} = \frac{L}{7.8}$$

Jah. deflection = 23.5 mm

Lu. deflection = 12.4 mm

Lu. laje

Check for 175 slab.

Obtain I_e per section

$$p = \frac{1800}{1000 \cdot 145} = 0.0127 \quad p_n = 0.102$$

$$\Rightarrow I_{er} = 172 \cdot 10^6$$

$$M_e = \frac{0.6 \sqrt{25}}{75} = \frac{1000 \cdot 175^3}{15} = 13.8 \cdot 10^6$$

$$I_e = \left(\frac{158}{32} \right)^2 (447 - 172) + 172 = 402 \cdot 10^6$$

Controlled deflection = $\frac{10.7 \cdot 117}{205} = 8.4 \text{ mm}$ max

Lu. 4.5 mm Lu. 6.6

Calculate deflection = 11.1 mm

Additional moment = $\frac{2.81 \times 36}{6} = 1.7162$

31

⇒ gradient $\omega = 1.08 \text{ rad/m}$

⇒ additional deflection = 0.3 mm

Total additional deflections

0.26 mm

Door Head Beam Level 4

Beam span length = 6.0m - 6.7 clear

Use 1.0m wide upright beam, D = 250

- loading
- beam self wt = $24 \times 0.1 \times 1.0 \times 1.5 = 3.6 \text{ kN/m}$
 - door frame beam = $24 \times 0.27 \times 0.2 \times 1.5 = 6.1 \text{ kN/m}$
 - floor slab = $24 \times 3.0 \times 0.15 \times 1.5 = 16.2 \text{ kN/m}$
 - floor trim = $2.0 \times 1.0 \times 1.9 = 10.8 \text{ kN/m}$
 - balcony slab = $24 \times 3.5 \times 0.15 \times 1.5 = 18.9 \text{ kN/m}$
 - live = $4.0 \times 1.5 = 6.0 \text{ kN/m}$
 - balcony apron = $24 \times 0.15 \times 0.2 \times 1.5 = 1.7 \text{ kN/m}$
 - balcony balustrade = $0.2 \times 1.5 \times 0.5 = 0.5 \text{ kN/m}$

How
 $E_q = 75 \text{ kN}$
 85.9 kN
 5.4 kN
 11.0



$M_{max} = 317 \text{ kNm}$ (1.220)

$A_{req} = \frac{317}{0.8 \times 410 \times 220} = 4.890$ deeper section req'd

Try 400 deep $A_{req} = \frac{317}{0.8 \times 410 \times 220} = 2.613 \Rightarrow 6Y24$

Check shear

$V_u = 198 \text{ kN}$

$p = \frac{2700}{1000 \times 370} = 0.007$

$V_c = \frac{198 \times 0.1}{1000 \times 370} = 0.052$

If $V_c > p$ use 20 bar/m over 7m

$V_c = 0.7$

Then use 20 bar/m

with $F_y = 420$

Use D = 400 B = 1000

6Y24 beam. No tie

Level 3 Cantilever Support

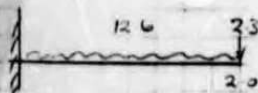
5/

Max cantilever overhang = 2.0m

Loading dead load slab = $20 \times 0.15 = 1.5 \times 5.4 \text{ kN/m}$

$g^{1.50}$ = $25.5 \times 0.02 \times 2.0 \times 1.5 = 1.5 \text{ kN/m}$

live load slab = $4.0 \times 1.8 = 7.2 \text{ kN/m}$



Max M = 29.8 kNm

d = 110mm

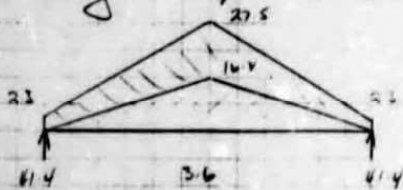
$$A_{st} = \frac{29.8 \times 10^6}{0.8 \times 410 \times 110} = 806 \text{ mm}^2/\text{m}$$

Using Y12 @ 150 @ FAY $A_s = 1050 \text{ OK}$

Check deflection $E_{steel} = 65 \times 10^3 \text{ N/mm}^2$ $E_{con} = 27 \times 10^3 \text{ N/mm}^2$

Beam Support

Beam loading - as per level 4



Max M = 48.4 kNm

Using D = 150 $\phi = 120$

$$A_{st} = \frac{48.4}{0.8 \times 410 \times 120} = 1230$$

Using S16 @ FAY $A_s = 1318 \text{ OK}$

Check deflection

$$p = 0 \text{ at } x = 0 \text{ and } x = 3.6 \text{ m}$$

$$I_2 = \left(\frac{11.6}{20.5}\right)^2 (281 - 92) = 71 = 102 = 10^2$$

$$S_{ot} = 147 \text{ mm}^3 \quad S_{ic} = 78 \text{ mm}^3$$

Total cantilever deflection (what len.)

(17)

$\cdot 21.4 \dots$

$522 = 10.5 \dots$

Design of Beam

Provide beam across balcony edge

Span length = 1.8m

loading - reaction from each 4. in. = 66.5 kN

Wall load = $4.5 \times 3.22 \times 1.1 \times 1.5 = 23.7 \text{ kN}$

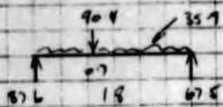
Thrust load = $24 \times 3.0 = 72 \text{ kN}$

self wt = $(1.25 \times 2.0 + 1.2 \times 0.2) \times 1.8 = 4.5 \text{ kN}$

beam self wt = $24 \times 0.42 \times 0.27 \times 1.5 = 4.4 \text{ kN}$

Max moment = 52.5 kNm

Use $D = 600$ $L = 570$



$A_{SA} = \frac{52.5}{0.8 \times 1.1 \times 1.5} = 290 \dots$

July 24/20 $A_S = 670 \dots$ OK $p = 0.0076$

$V_u = 67.1 \text{ kN}$

$V_u = \frac{67.1}{570 \times 100} = 0.39$

$V_c = 0.52$

$f_{V_c} = 0.44$

Use minimum stirrups

$\rho_{st} = 0.75 = \frac{300}{250} = 200 \dots$

Use R10 at 200

$D = 600$ $L = 300$

10/28/86
SPECIFICATION NOTES

A. Revision	DESCRIPTION	DATE	CHK. BY
1	As shown	10/11/86	
2	As shown	10/11/86	
3	As shown	10/11/86	
4	As shown	10/11/86	
5	As shown	10/11/86	

AMENDMENTS

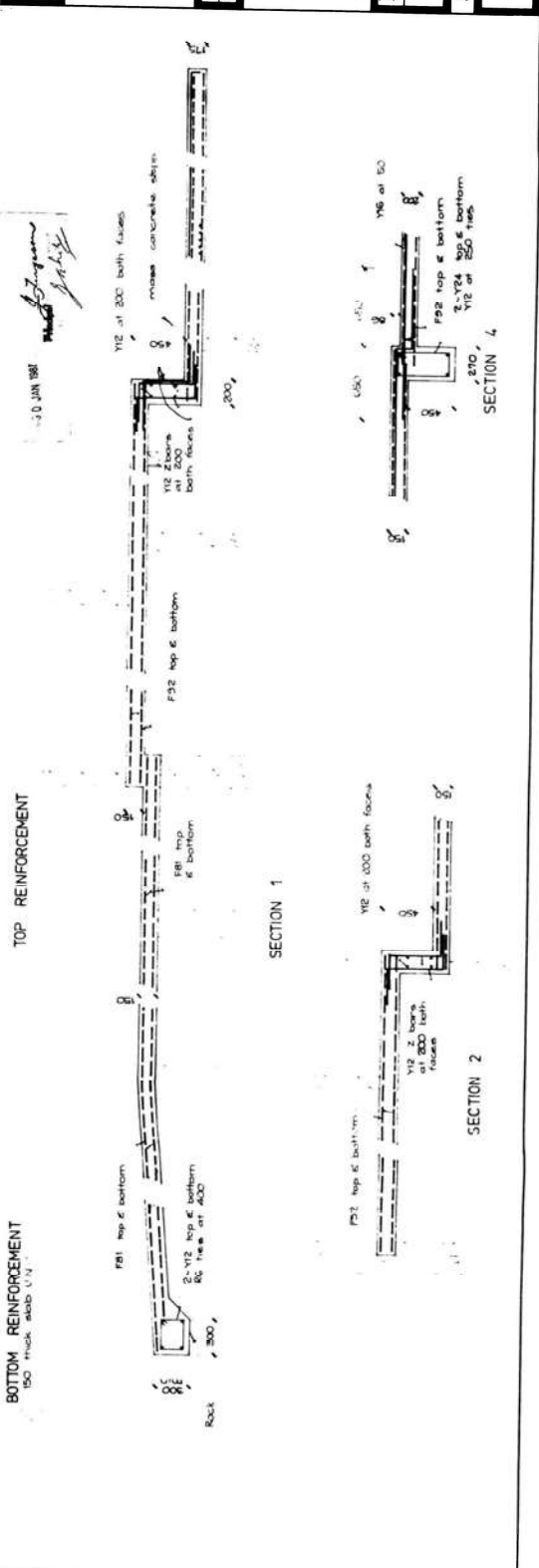
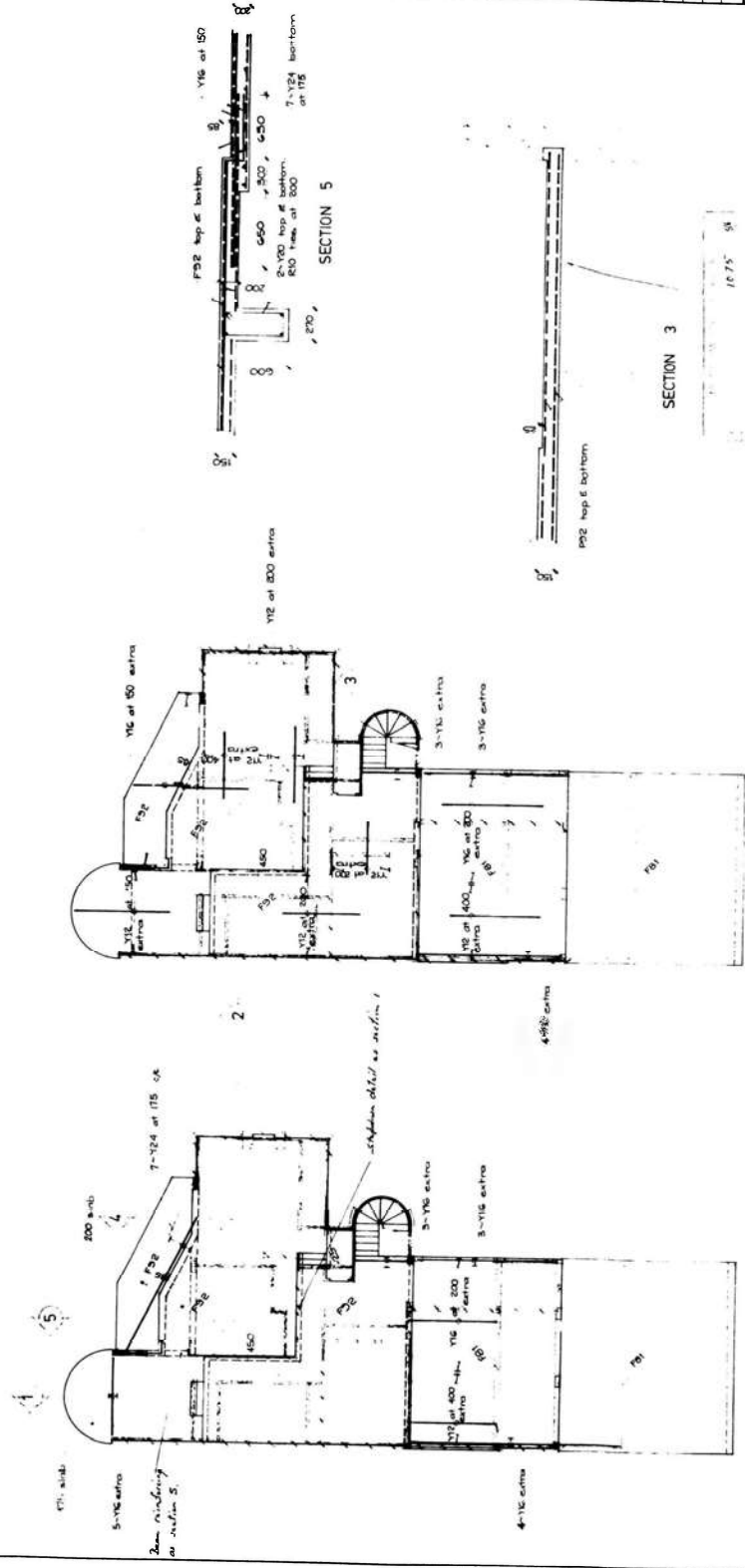
DESCRIPTION DATE CHK. BY

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE.
GLADESVILLE FOR
MR & MRS A. MILETTA

Location & Project
Scale 1/8" = 1'-0"
Date OCT 86
Drawn by MF
Checked by

LEVEL 03 PLAN DETAILS

Drawing Title
Drawing No. 1023/3
REVISIONS



10/25/86

SPECIFICATION NOTES

NO.	DESCRIPTION	DATE	BY
B	Section 1, 4, 5 amended	06/11/86	
A	Section 5 & 6 removed	10/11/86	
A	Section 5 & 6 removed	10/11/86	

AMENDMENTS

PROPOSED RESIDENCE
 LOT 19 SHACKEL AVE.
 GLADESVILLE FOR
 MR & MRS A MILETTA

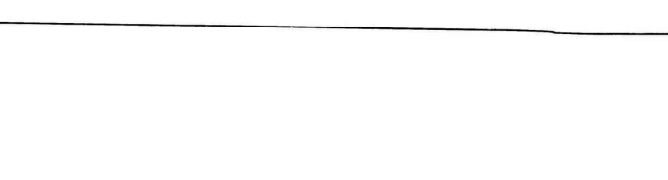
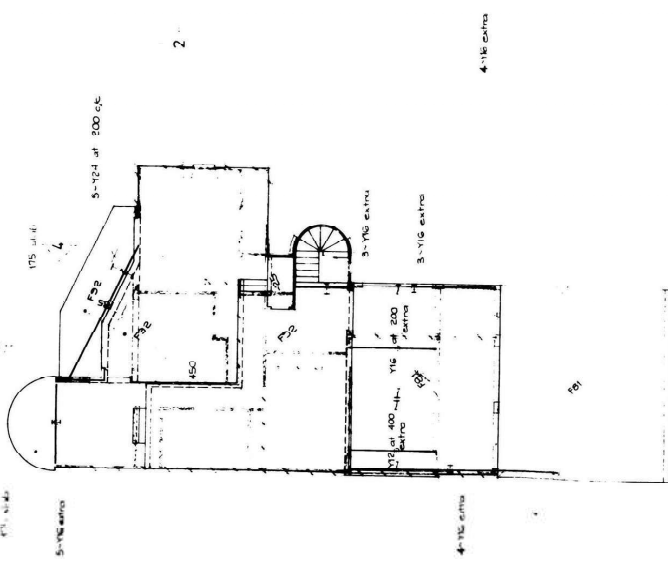
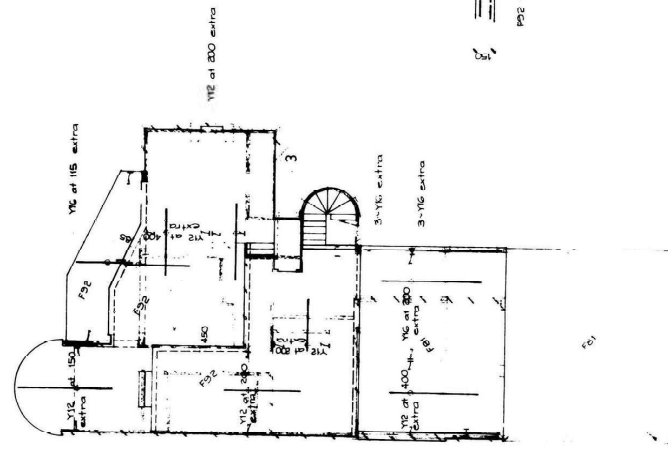
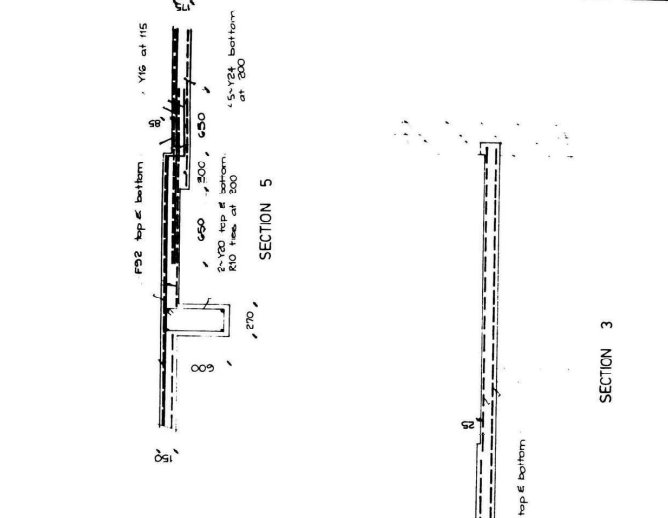
Location & Project
 Scale 1/8" = 1'-0" Drawn by M.F.
 Date OCT 86 Checked by
 LEVEL 03 PLAN DETAILS

10/25/86
 RECEIVED
 OCT 27 1986
 CIVIL ENGINEER

Drawing Title

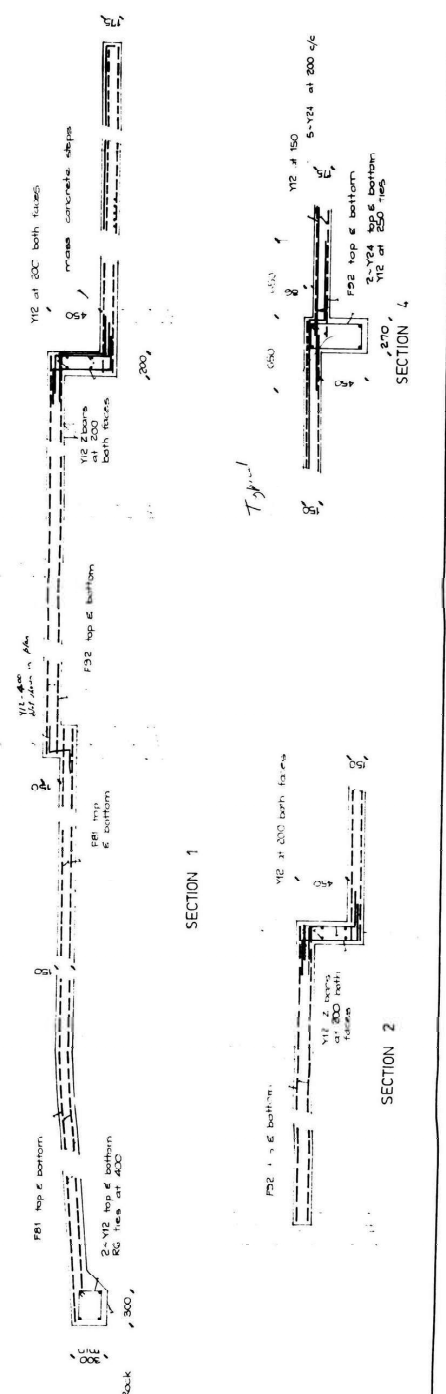
Drng. No. 1023/3 B

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 J. R. M. MICROSYSTEMS, Inc. Ltd.
 10200 N. 100th Street, Suite 100, Kent, WA 98042
 206-835-3333



TOP REINFORCEMENT

BOTTOM REINFORCEMENT



10.5.66

SPECIFICATION NOTES

DESCRIPTION	Date	Chk'd by
B. Section 1, 4, 5 amended	26.11.86	
A. Sections 3 & 4 reviewed	10.11.86	
1. Section 1, 2, 3, 4, 5 reviewed	10.11.86	

AMENDMENTS

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE
GLADESVILLE FOR
MR & MRS A MILETTA

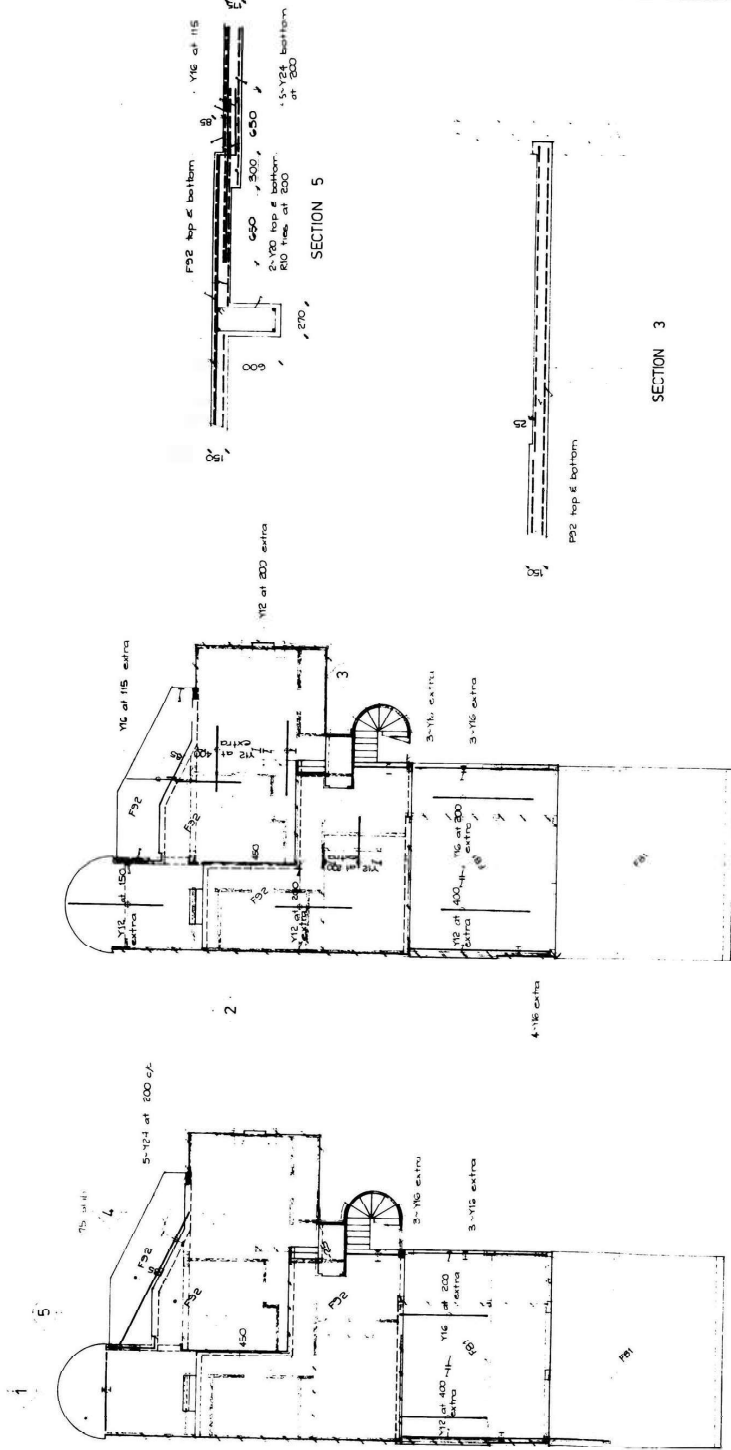
Location & Project
Scale: 1:100, 1:20
Drawn by: MF
Date: OCT 86
Checked by:

LEVEL 03 PLAN DETAILS

Drawing Title
Dwg. No. 1023/3 B



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TOP REINFORCEMENT
150 mm thick slab (U.N.)



BOTTOM REINFORCEMENT
150 mm thick slab (U.N.)

SECTION 3

SECTION 1

SECTION 2

SECTION 4

SECTION 5



MM MICROSYSTEMS (02) 682 6111

10/25/86

PROPOSED NEW RESIDENCE

DESIGN

A.J. ROMEO. DESIGN & CONSTRUCTION

ADDRESS

**4/20 NELSON STREET,
FAIRFIELD.**

CLIENT

MR & MRS A. MILETTA

ADDRESS

**LOT 19 DP 103 40
SHACKEL AVE,
GLADESVILLE.**

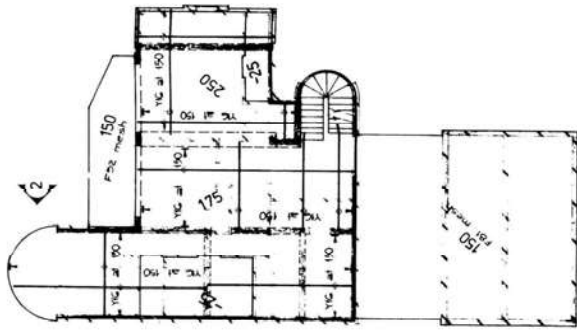


10/25/86

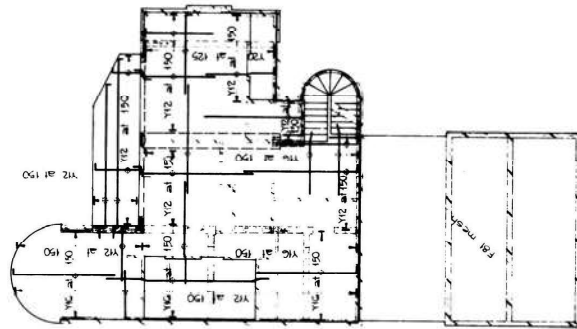
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MM MICROSYSTEMS (02) 682 6111

10/23/86

SPECIFICATION NOTES

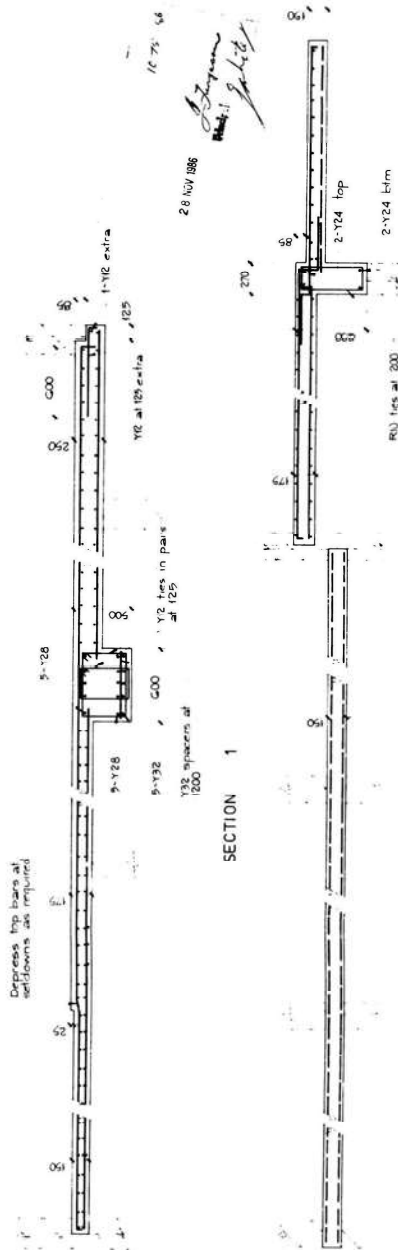


PLAN - BOTTOM REINFORCEMENT



PLAN - TOP REINFORCEMENT

Bars in this direction to be laid first if used in one



SECTION 1

SECTION 2

DESCRIPTION	DATE	CHK'D BY

AMENDMENTS

PROPOSED RESIDENCE AT LOT 19 SHACKEL AVE. GLADESVILLE FOR MR. & MRS. A. MILETTA

Location & Project
Scale: 1/8" = 1'-00" 20
Date: OCT 86
Drawn by: C.K.H.
Checked by:

LEVEL 02 - PLAN & DETAILS

Drawing Title
Dwg. No. 1023/2

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MICROSYSTEMS, INC. 10000
10000
10000

SPECIFICATION NOTES

- GENERAL NOTES**
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS OF THE NATIONAL BUILDING CODE OF THE PHILIPPINES, LATEST EDITION AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION, LATEST EDITION.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE ENGINEER.
 4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
 5. ALL UTILITIES SHALL BE PROTECTED AND MARKED PRIOR TO CONSTRUCTION.
- FOUNDATION AND FOOTING**
1. FOUNDATIONS SHALL BE CAST IN PLACE CONCRETE ON ROCK OR PIERCE AND BORED PILES.
 2. ALL REINFORCING BARS SHALL BE EPOXY COATED STEEL BARS.
 3. THE MINIMUM COVER SHALL BE 50 MM FOR ALL REINFORCING BARS.
 4. ALL JOINTS SHALL BE REINFORCED AND PROTECTED AGAINST WATER PENETRATION.
 5. ALL FOUNDATIONS SHALL BE PROTECTED AGAINST TERMITES AND OTHER PESTS.
- CONCRETE**
1. ALL CONCRETE SHALL BE CAST IN PLACE AND VIBRATED TO THE REQUIRED DENSITY.
 2. THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 28 MPa AT 28 DAYS.
 3. ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.
 4. ALL CONCRETE SHALL BE PROTECTED AGAINST CHLORIDE ION PENETRATION.
- REINFORCING BARS**
1. ALL REINFORCING BARS SHALL BE EPOXY COATED STEEL BARS.
 2. THE MINIMUM COVER SHALL BE 50 MM FOR ALL REINFORCING BARS.
 3. ALL JOINTS SHALL BE REINFORCED AND PROTECTED AGAINST WATER PENETRATION.
 4. ALL REINFORCING BARS SHALL BE PROTECTED AGAINST CORROSION.

REVISION	DESCRIPTION	DATE	BY
1	FOOTING DETAILS AMENDED TO 11G	10/11/86	
2	ALTERATIONS TO FOOTING DETAILS	10/11/86	

PROPOSED RESIDENCE
 LOT 19 - SHACKEL AVE.
 GLADESVILLE FOR
 MR & MRS. A. MILETTA

Location & Project

Scale 1:100 1:20 Drawn By MF
 Date OCT 86 Checked By

FOOTING & LEVEL 01 DETAILS

Drawn By

Drng. No. 1023/1

10/25/86

CONCRETE WORK

1. ALL CONCRETE SHALL BE CAST IN PLACE AND VIBRATED TO THE REQUIRED DENSITY.

2. THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 28 MPa AT 28 DAYS.

3. ALL CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.

4. ALL CONCRETE SHALL BE PROTECTED AGAINST CHLORIDE ION PENETRATION.

ITEM	UNIT	QUANTITY	REMARKS
ALL	sqm	10.50	FOOTING AREA
	kg	150.00	REINFORCING BARS
	m ³	1.50	CONCRETE

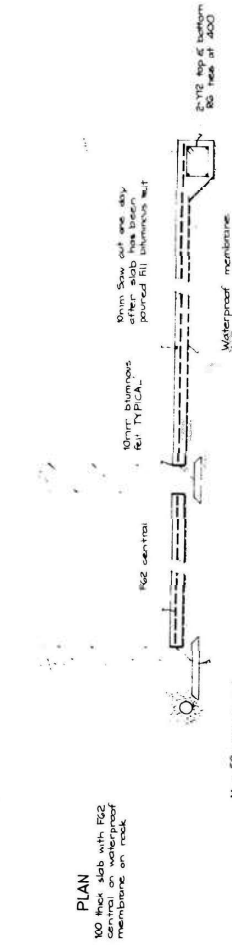
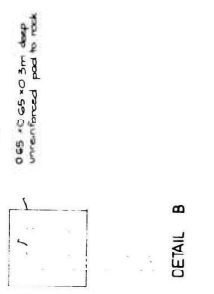
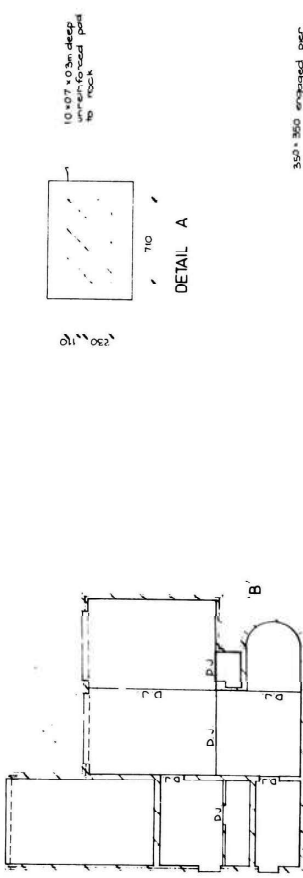
FOOTING & LEVEL 01 DETAILS

1. ALL REINFORCING BARS SHALL BE EPOXY COATED STEEL BARS.

2. THE MINIMUM COVER SHALL BE 50 MM FOR ALL REINFORCING BARS.

3. ALL JOINTS SHALL BE REINFORCED AND PROTECTED AGAINST WATER PENETRATION.

4. ALL REINFORCING BARS SHALL BE PROTECTED AGAINST CORROSION.



PLAN

100mm concrete leveling slab on 20mm blinding on 100mm concrete base on rock.

SECTION 1

Max 50mm concrete leveling slab on all foundations.

100mm concrete base

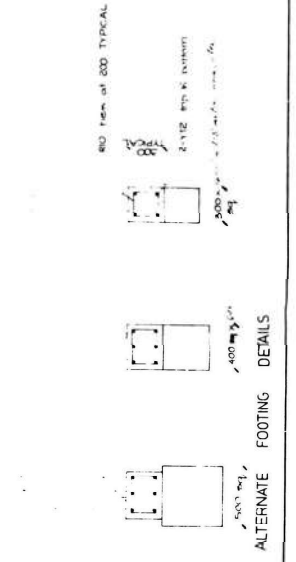
2x12 top & bottom R22 rebar @ 200

Waterproof membrane

50mm concrete leveling slab

20mm blinding

R22 concrete



ALTERNATE FOOTING DETAILS

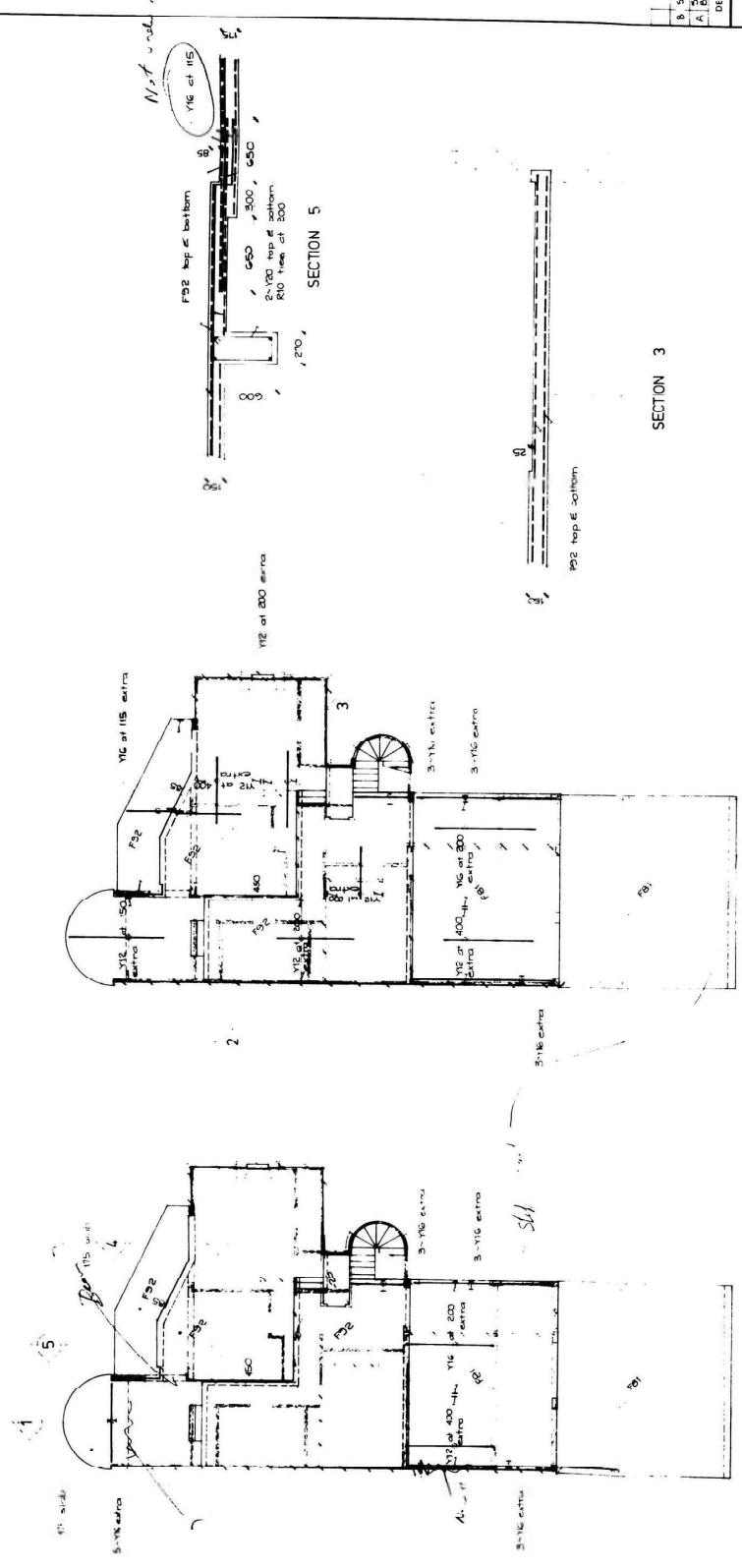
1. ALTERNATE FOOTING DETAIL 1

2. ALTERNATE FOOTING DETAIL 2

3. ALTERNATE FOOTING DETAIL 3

10/25/86

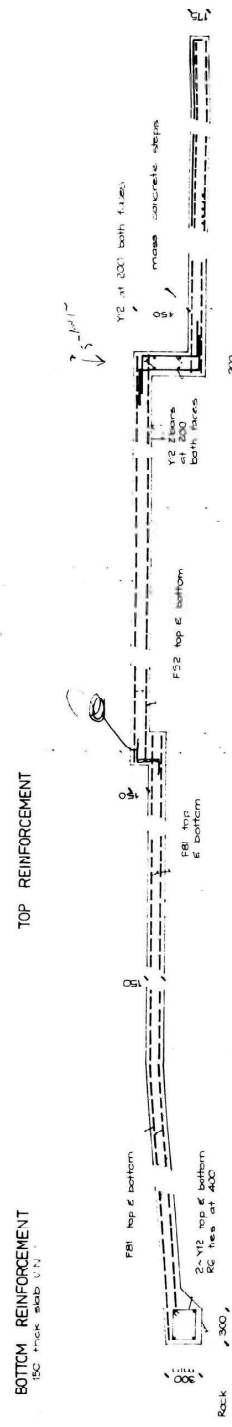
SPECIFICATION NOTES



BOTTOM REINFORCEMENT
150 thick slab O.N.T.

TOP REINFORCEMENT

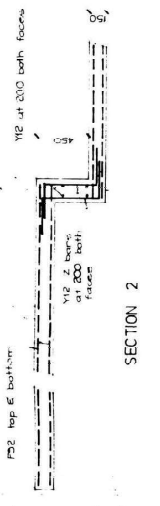
SECTION 3



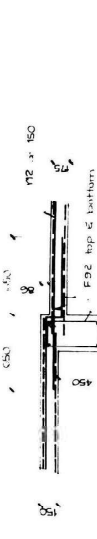
SECTION 1



SECTION 4



SECTION 2



SECTION 5

DESCRIPTION	DATE	BY
B. Section 1, 4, 2, 5 amended	2011/06	
A. Section 5 & 6 reviewed	10/11/86	GNJ
1. Revision also reviewed	10/11/86	GNJ

AMENDMENTS

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE.
GLADESVILLE FOR
MR & MRS A MILETTA

Location & Project
Scale 1/100 1/20
Date OCT 86
Drawn by MF
Checked by

LEVEL 03 PLAN DETAILS

Drawing Title

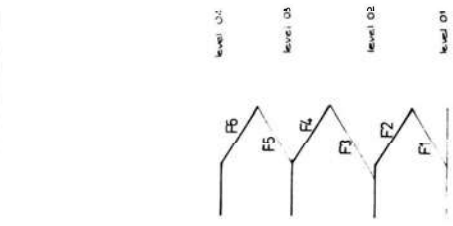
Drng. No. 1023/3 B

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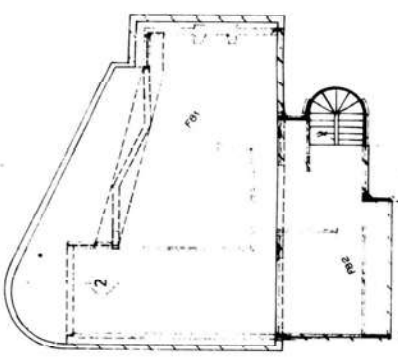
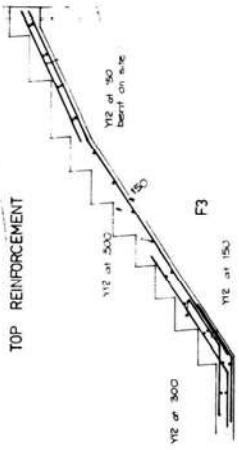
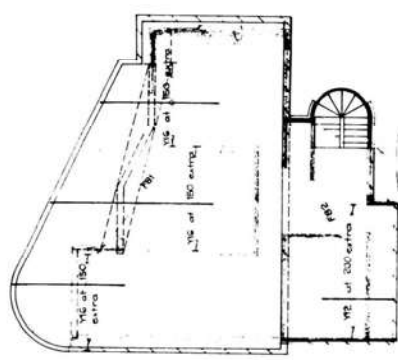
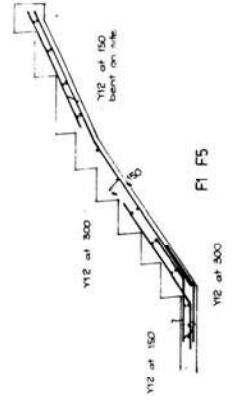
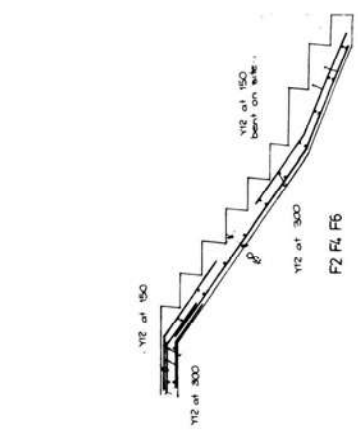
1023/3 B
10/25/86
GNJ

1023/4B

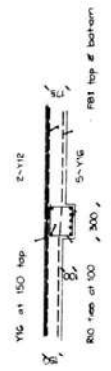
SPECIFICATION NOTES



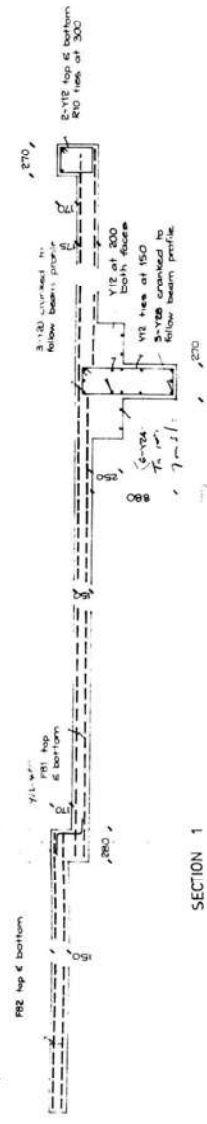
STAIR MARKING ELEVATION



SECTION 2



SECTION 1



AMENDMENTS	
DESCRIPTION	Date
B Section 2 applied beam provided (2011 B6)	10/11/86
A Section 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	10/11/86

Location & Project
Scale 1/100
Date OCT 86
Drawn by MF
Checked by

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE.
GLADESVILLE FOR
MR & MRS A. MILETTA

LEVEL 04 & STAIR DETAILS

Drg. No. 1023/4 B

1023

SPECIFICATION NOTES

DESCRIPTION	Date	By
Section 1, 4, 5 amended	10-11-86	
Section 3, 4, 5 reinforced	10-11-86	
Finality note revised	10-11-86	

AMENDMENTS

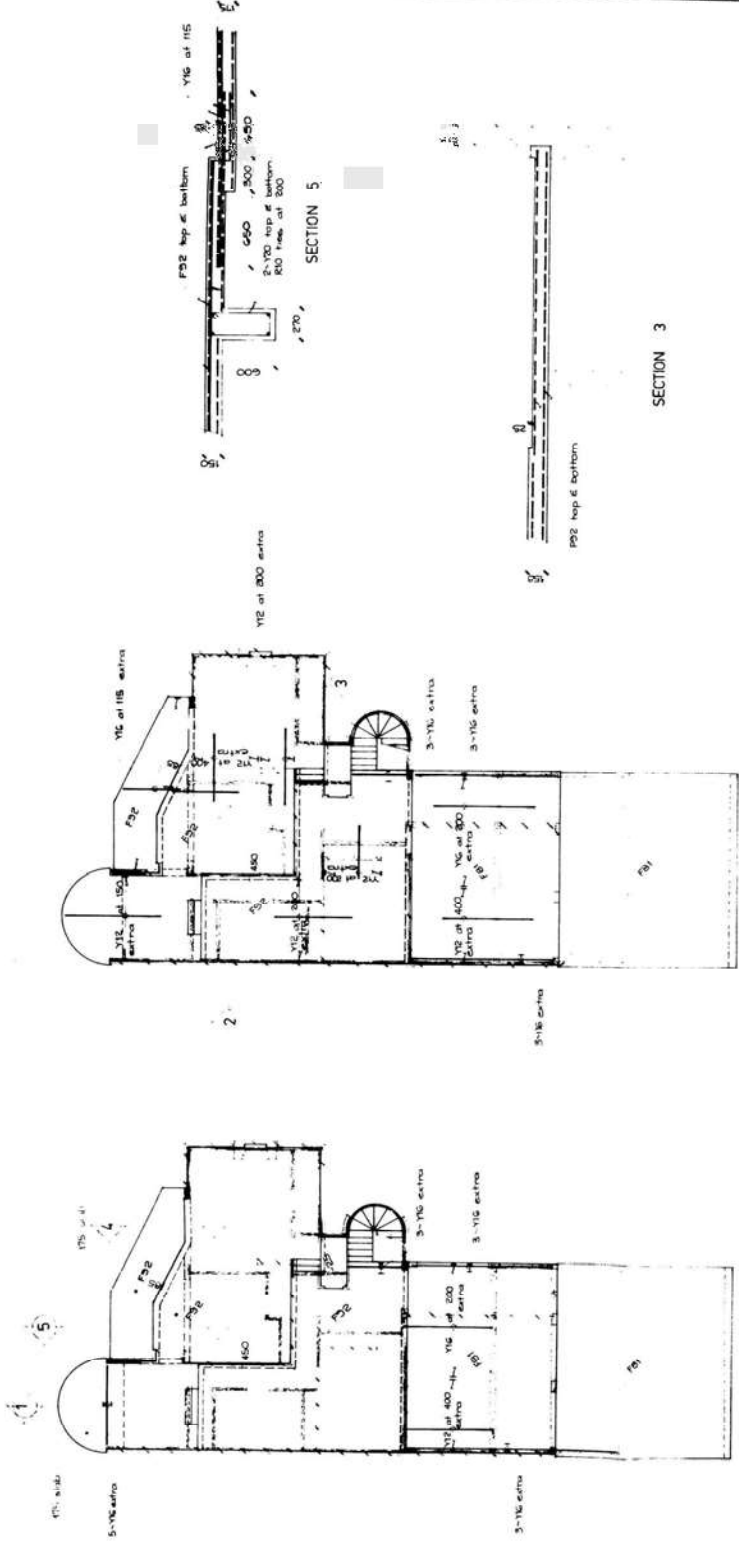
PROPOSED RESIDENCE
LOT 19 SHACKEL AVE.
GLADESVILLE FOR
MR & MRS A. MILETTA

Location & Project
Scale 1/100 1/20
Date OCT 85
Drawn by MF
Checked by

LEVEL 03 PLAN DETAILS

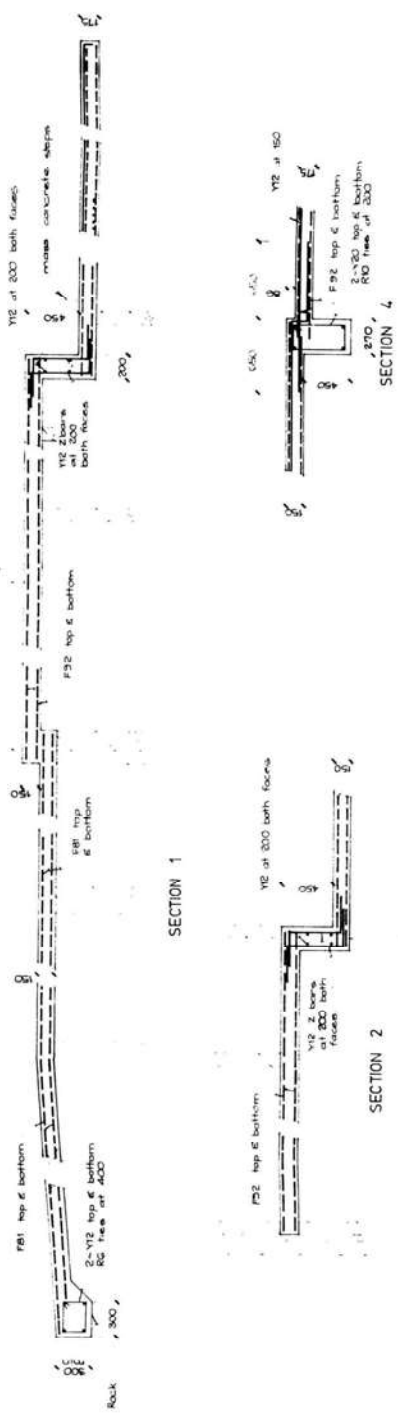
Drawing Title
Drg. No. 1023/3 B

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BOTTOM REINFORCEMENT
150 thick slab U.N.C.

TOP REINFORCEMENT



A1

A2

A3

A4

A5

A6

A7

A8

A9

A10

A11

A12

A13

A14

A15

A16

A17

A18

A19

A20

A21

A22

A23

A24

A25

A26

A27

A28

A29

A30

A31

A32

A33

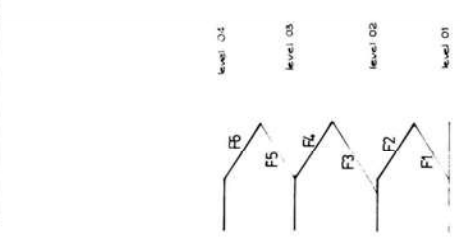
A34

A35

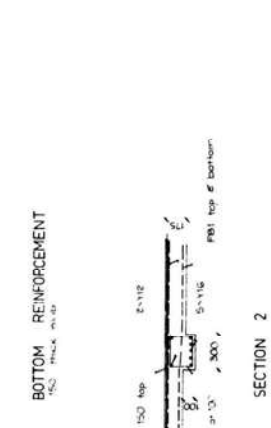
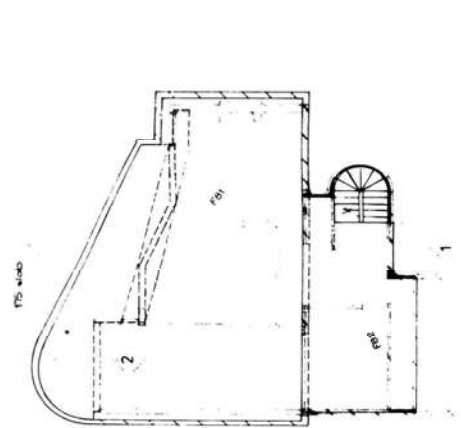
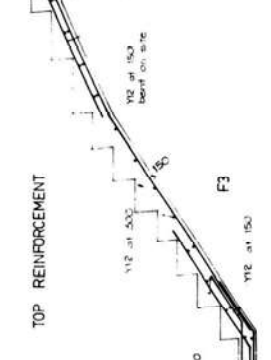
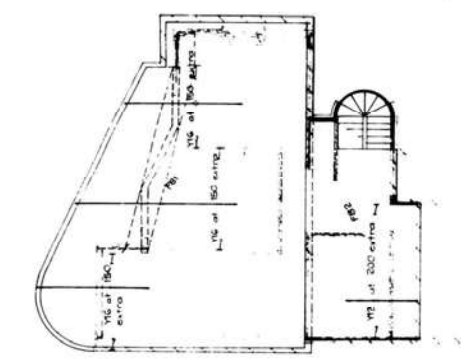
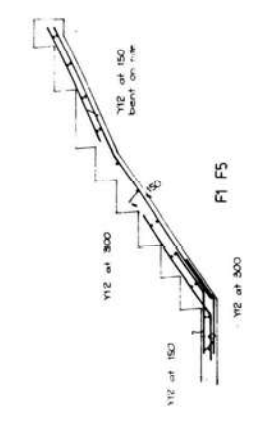
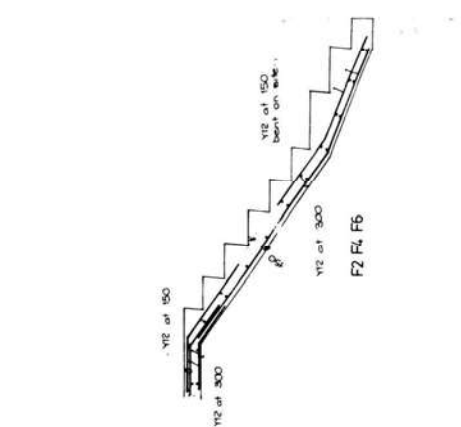
MM MICROSYSTEMS (02) 682 6111

1079/86

SPECIFICATION NOTES



STAIR MARKING ELEVATION



DESCRIPTION	DATE	BY
B Section 2 omitted beam removed (10/1/84)	10/1/84	MF
A Section 1 corrected (10/11/86)	10/11/86	MF

AMENDMENTS

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE
GLADESVILLE FOR
MR & MRS A. MILETTA

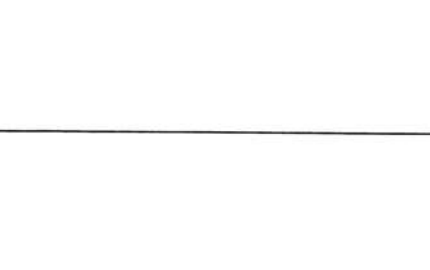
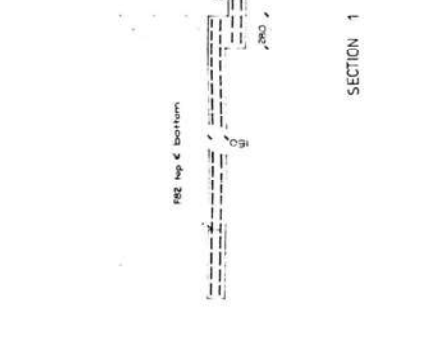
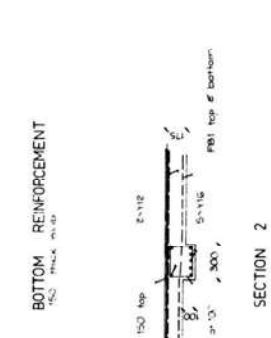
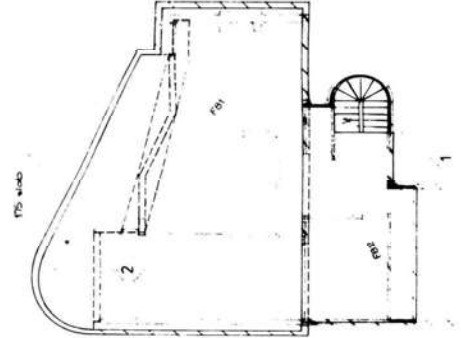
Location & Project

Scale 1/100 1/20
Date OCT 86
Drawn by MF
Checked by MF

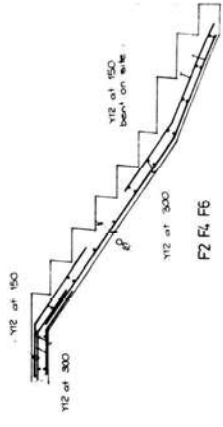
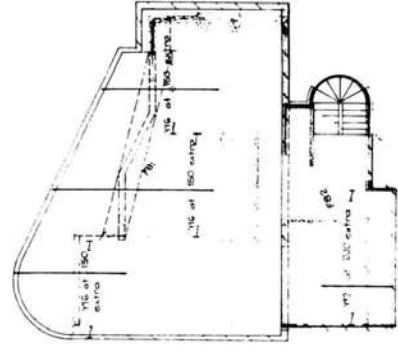
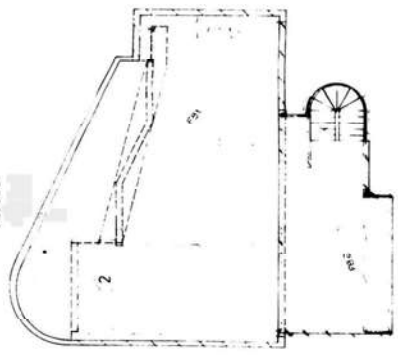
LEVEL 04 & STAIR DETAILS

Drawing Title
Drng. No. 1023/4 B

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QUALIFIED OR PART QUALIFIED ARCHITECT/ENGINEER



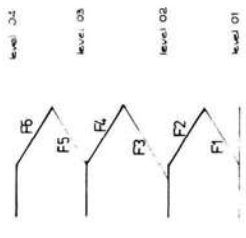
1023/4 E
SPECIFICATION NOTES



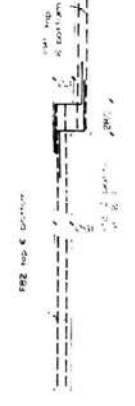
BOTTOM REINFORCEMENT

TOP REINFORCEMENT

STAIR MARKING ELEVATION



SECTION 2



SECTION 1

AMENDMENTS	
DESCRIPTION	Date
B. Section 2, subject beam-reinforced to 1750	10/1/86
A. Section 1, subject beam-reinforced to 1750	10/1/86

PROPOSED RESIDENCE
LOT 19 SHACKEL AVE.
GLADESVILLE FOR
MR & MRS A MILETTA

Scale 1/100 1/20
Date OCT 86
Drawn by MF
Checked by

LEVEL 04 & STAIR DETAILS

1023/4 E

CONTRACTOR: THE UNIVERSITY OF MISSISSIPPI...
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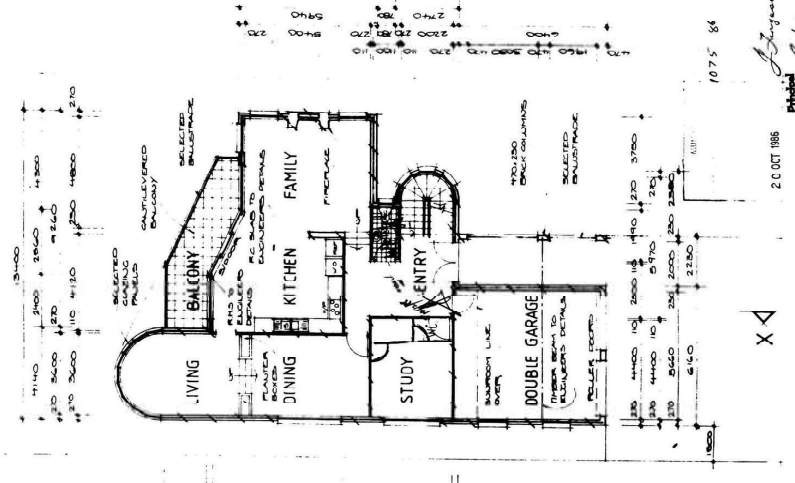
1079/86



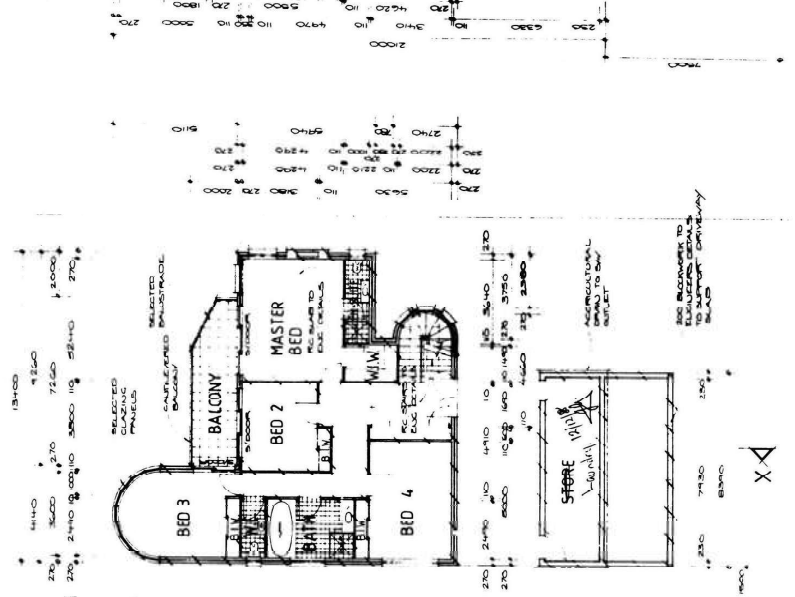
X4

X4

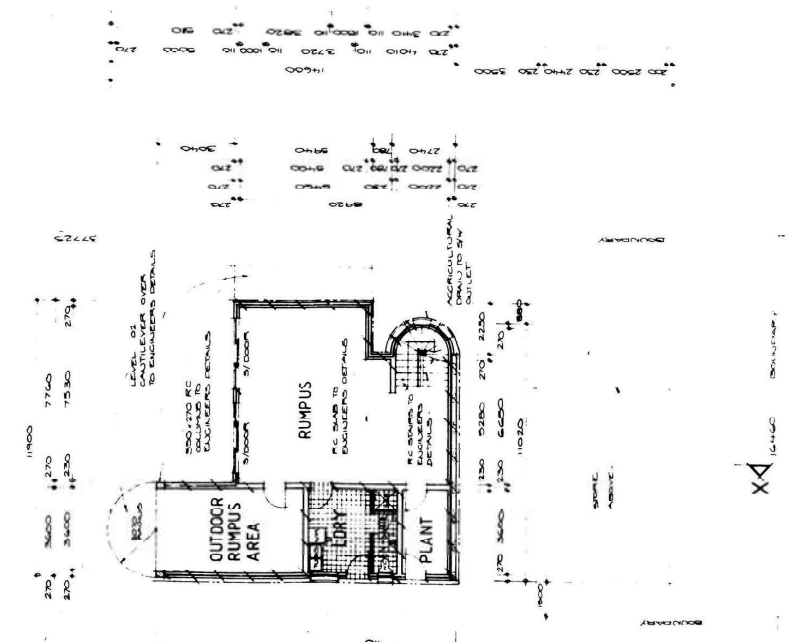
X4



FLOOR LEVEL 01



FLOOR LEVEL 02



FLOOR LEVEL 03

APPENDICES
 2/10 96 CELLAR & RELATED
 2/10 96 OUTDOOR RUMPUSS
 2/10 96 OFF ROAD DRIVE

CLIENT
 MICROSYSTEMS & TELECOM

WORKING DRAWINGS

DATE 27 OCT 96
SCALE AS SHOWN
PROJECT AS SHOWN
CLIENT AS SHOWN
CONTACT AS SHOWN

IF IN DOUBT - ASK
 ALL DIMENSIONS ARE TO BE VERIFIED ON SITE

A.J. HOWE DESIGN AND CONSTRUCTION
 SUITE 7/22 NELSON STREET, FAIRFIELD
 TELEPHONE 727 3915 or 728 887

A.J. HOWE B.Sc. (Architecture) Uni. of N.S.W.

3CB-1A

1 2 3 4 5 6 7 8 9 10
 A1 A2 A3 A4 A5 A6

MM MICROSYSTEMS (02) 682 6111

20 OCT 1996
 Printed 10/96
 J. J. J.

PLANNING BOARD
 10/10/66
 10/10/66

1. GENERAL NOTES
 2. EXISTING CONDITIONS
 3. PROPOSED CONDITIONS
 4. SPECIAL REQUIREMENTS AND NOTES
 5. NOTES
 6. NOTES
 7. NOTES
 8. NOTES
 9. NOTES
 10. NOTES
 11. NOTES
 12. NOTES
 13. NOTES
 14. NOTES
 15. NOTES
 16. NOTES
 17. NOTES
 18. NOTES
 19. NOTES
 20. NOTES

1755 MUNICIPAL COUNCIL
 Ordinance No. 1075/66
CONDITIONS OF APPROVAL

19/10/66
 20/10/66
 21/10/66
 22/10/66
 23/10/66
 24/10/66
 25/10/66
 26/10/66
 27/10/66
 28/10/66
 29/10/66
 30/10/66
 31/10/66

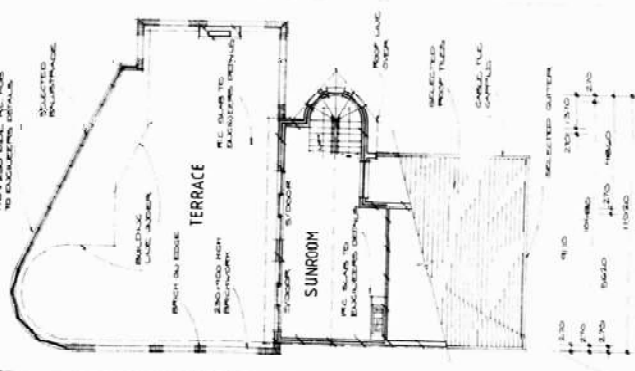
18. When the approved type of gutter crocking does not exist, the applicant shall have an approved crocking installed to Council and pay the requisite fee...
19. The applicant shall provide an intercepting drain 150 mm wide and 150 mm deep to be connected to the street table drain or Council's sewer system...
20. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
21. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
22. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
23. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
24. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
25. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...
26. The applicant shall provide a concrete apron to the street table drain or Council's sewer system...

10 OCT 1966
 MUNICIPAL BUILDING OFFICE

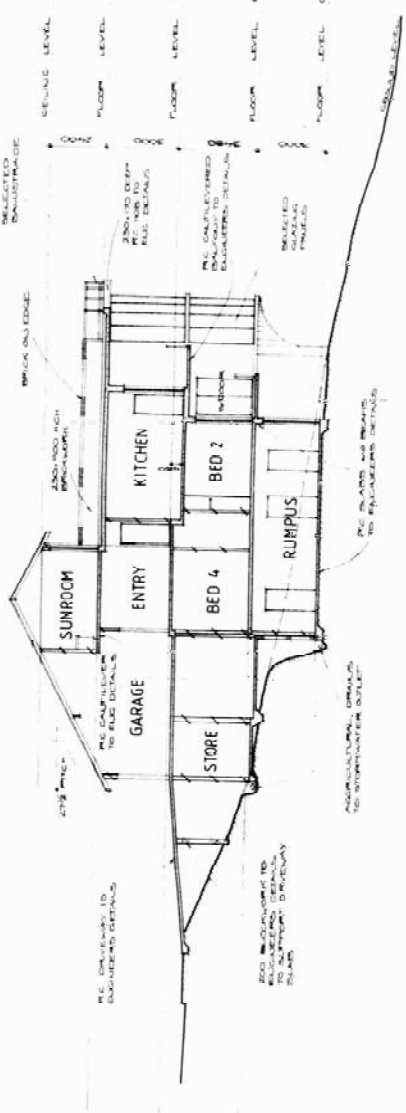
10/5/86



X4



FLOOR LEVEL 04 & TERRACE SCALE: 1/8" = 1'-0"



SECTION X - X SCALE: 1/8" = 1'-0"

10/5/86

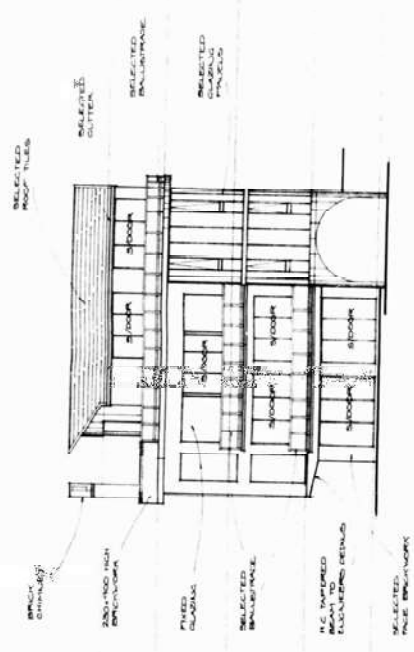
20 OCT 1986

Handwritten signature
John L. B.

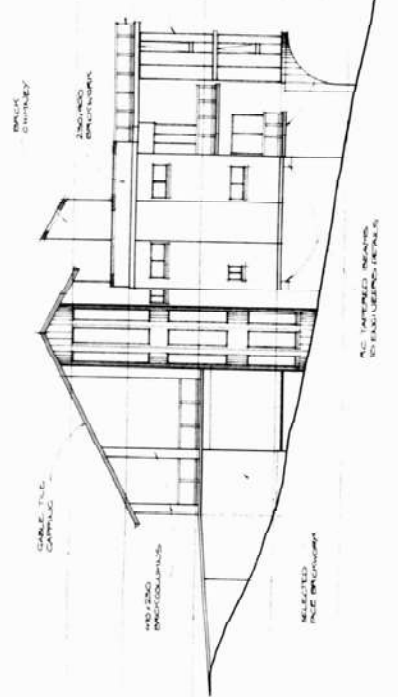
APPROVED FOR CONSTRUCTION SITE: 722 NELSON STREET, FAIRFIELD TELEPHONE: 727-3815 or 726-6817	PROJECT NO. 10240 CLIENT: MR. & MRS. A. PILETTA	IF IN DOUBT - ASK ALL DIMENSIONS ARE TO BE VERIFIED ON SITE (CHECK)	308-21A
WORKING DRAWINGS		A.J. POMEI DESIGN AND CONSTRUCTION 722 NELSON STREET, FAIRFIELD, VT 05455	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
MM MICROSYSTEMS (02) 682 6111

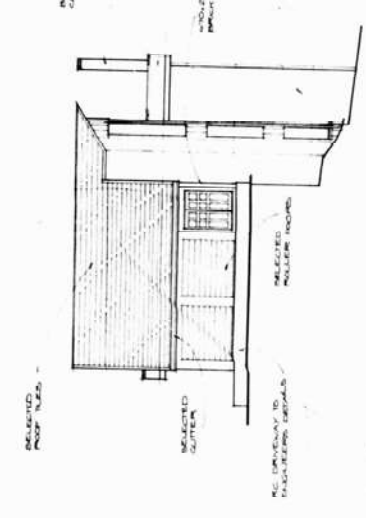
10/25/86



SOUTH ELEVATION SCALE 1:100



WEST ELEVATION SCALE 1:100



NORTH ELEVATION SCALE 1:100



EAST ELEVATION SCALE 1:100

20 OCT 1986
[Signature]

MICROSYSTEMS 2075 N. 15th Street Glendale, CA 91201 (818) 241-1111	JOB: PROPOSED MICROSYSTEMS AT LOT 114, BURNING WOOD GLENDALE, CA DT 103-40	CLIENT: MICROSYSTEMS ARCHITECT: MILETTA	A.J. ROMEO DESIGN AND CONSTRUCTION SUITE 722 NELSON STREET TELEPHONE: (213) 291-9700	IF IN DOUBT - ASK ALL DIMENSIONS ARE TO BE VERIFIED ON SITE	DATE: 10/25/86 DRAWN: [Signature] CHECKED: [Signature]
			WORKING DRAWINGS	A.J. ROMEO INC. ARCHITECTURE/UP OF N.S.W.	