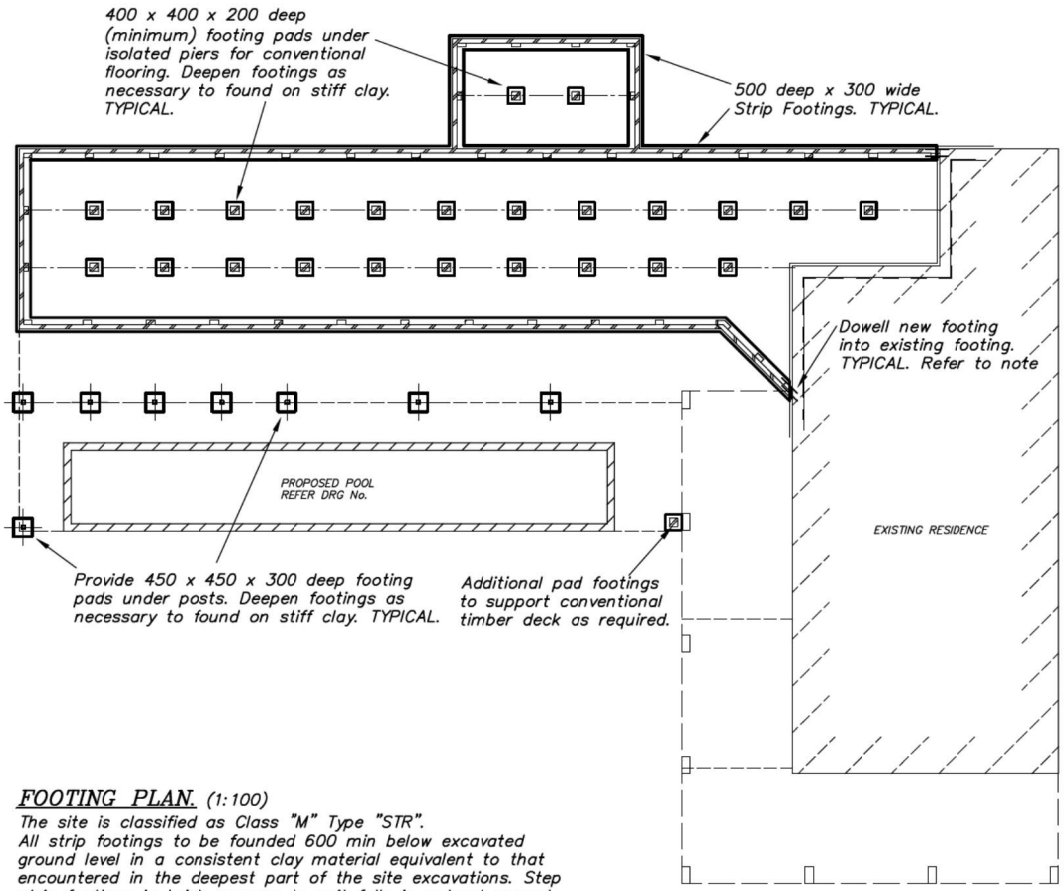

DESIGN WIND CATEGORY – (N1)
A.S.4055–2006 Wind Loads for Housing.
REGION A.

PIERING REQUIREMENTS.
Piers are not indicated on Plan, determine extent and requirements on site at time of excavation. Piers are required to all footings to maintain a consistent foundation material throughout. Provide 400 diameter piers at 2000 maximum centres. Base of pier holes to be clean and firm prior to pouring concrete, all loose material to be removed.

FOOTING PLAN. (1:100)
The site is classified as Class "M" Type "STR".
All strip footings to be founded 600 min below excavated ground level in a consistent clay material equivalent to that encountered in the deepest part of the site excavations. Step strip footings in brick courses to suit falls in natural ground and to maintain a consistent foundation material throughout. Reinforcement to be carried across full width of adjoining footings at all corners and intersections. Provide additional 4N12 Z–bars vertical (450 long legs top and bottom), with R8 ties at 300 crs to all footing steps of 450 and greater.

FOOTING REQUIREMENTS.
The footing must be inspected by the engineer during the course of the excavations, unless Geotechnical Engineers have been engaged for foundation inspections.

DOWEL REQUIREMENTS.
Provide 4N12 dowels (2 top, 2 bottom) x 600 long at junction with existing footing. Drill and epoxy grout 300 into existing footing beam. Use "EPIREZ 633" non sag epoxy mortar binder, or an approved equivalent.

0 1 2 3 4 5 6 7 8
Metres - Scales Indicated Accurate if Printed on A2

GENERAL NOTES.

These drawings are to be read in conjunction with the Architectural drawings and the specification.

DO NOT SCALE. All dimensions are to be obtained from the Architect's drawings unless specifically shown hereon.

During construction the structure shall be maintained in a stable condition and no part shall be overstressed.

All workmanship and materials shall be in accordance with the requirements of the current editions, including amendments, of relevant Australian Standards & Codes of Practice, The Building Code of Australia and the By–Laws and Policies of the Local Goverment Authority except as varied by the Contract Documents.

U.N.O. Design Live Loads are as follows: –
Roof = 0.25 kPa
Floor = 1.5 kPa
Garage = 3.0kPa

FOUNDATION NOTES.

Footings have been designed for an allowable bearing pressure of 200 kPa on STIFF CLAY

Foundation material shall be approved prior to construction proceeding.

DOMESTIC CONSTRUCTION.
Site Classification is M
Footing system SR
The Owner's attention is drawn to Appendix A of AS 2870 – "Performance Requirements and Foundation Maintenance".

CONCRETE NOTES.

U.N.O. Concrete is to have the following qualities: –
F'c = 20 MPa.
Max. Aggregate size = 20 mm.
Slump = 80 mm.
Cement Type – A.

No additives are to be added to the concrete without the approval of the Engineer.

Minimum lap to fabric sheets to be two cross wires plus 50 mm.

For rectangular fabric, place top fabric main wires (close spaced wires) uppermost and bottom fabric main wires lowermost aligned as shown.

Reinforcement is represented diagrammatically it is not necessarily shown on true projection.

In determining the length of reinforcing bars the dimension from the end of a rod to the closest set out line only, may be scaled.

Splices in reinforcement shall be made only in the positions shown. Where lap length is not shown in main rods and/or cross rods it shall be sufficient to develop the full strength of the reinforcement.

All rods in trimmer rod groups are to be the same length (only one rod is shown full length on plan). Space rods at approximately 75 mm centres.

All concrete sizes shown are minimum and do not included thickness of applied finishes.

Do not make unspecified construction joints without the approval of the Engineer.

Do not place conduits, pipes, etc., within the concrete cover.

U.N.O. suspended floors, beams, etc., are to remain propped for a minimum of 21 days after the completion of pouring.

Do not construct masonry on suspended slabs or beams until all props have been removed.

Vapour barrier to be 0.2 mm minimum thickness polythene, lapped a minimum of 200 mm and taped at all joints and around all plumbing fittings.

All pest control and termite protection to be the Builders responsibility, and in accordance with Local Government Authority requirements.

CONCRETE COVERS.

It is important that all reinforcement be kept in correct position during concrete placement. Provide sufficient supports under reinforcement to achieve correct covers as noted on these details.
RF72 & lighter fabrics – 600 maximum centres each way.
Remainder – 800 maximum centres each way.

ALL DIMENSIONS ARE IN MILLIMETRES
IF IN DOUBT – ASK.

Refer to Drg No 2 for Details.

DESIGN: S.J.E.
DRAWN: D.A.M.
DATE: 15.2.12
SCALES: 1:100
APPROVED: BEng MIEAust

CLIENT: D & J Holland
PROJECT: Proposed Alterations and Additions at
SITE: Lot 12 (229) Tumbi Road, TUMBI UMBI
TITLE: FOOTING PLAN

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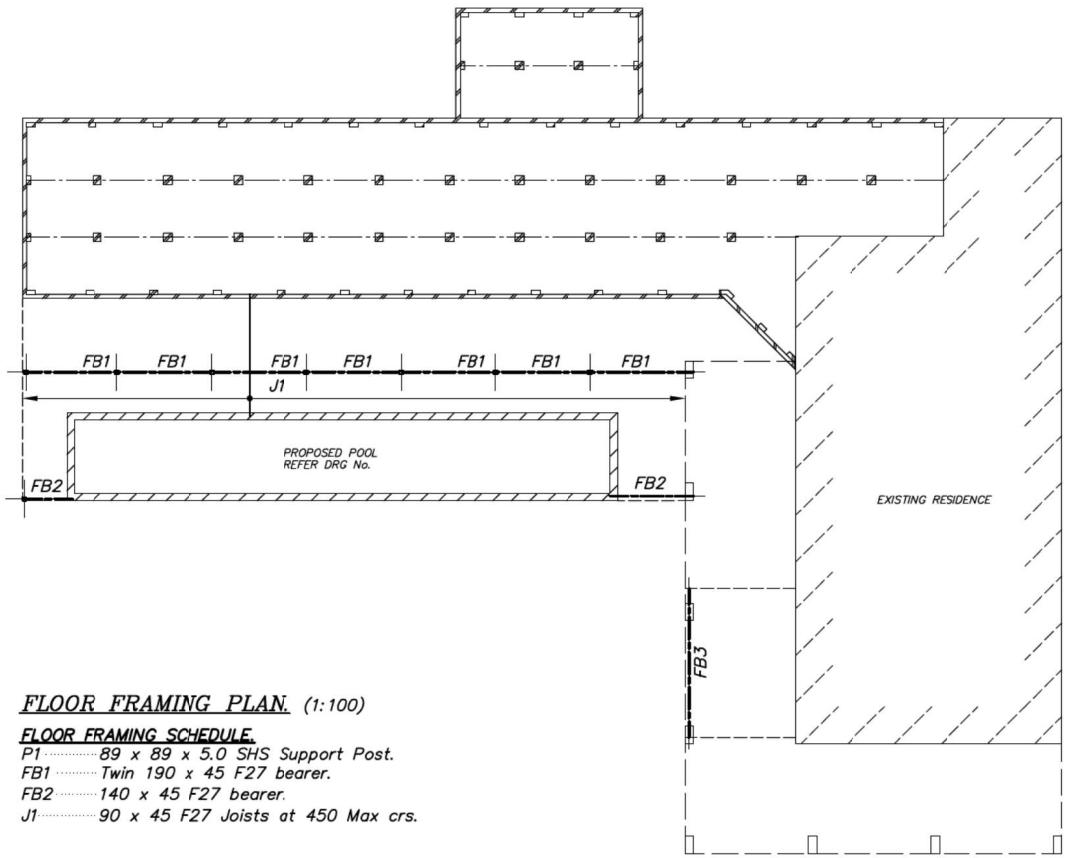
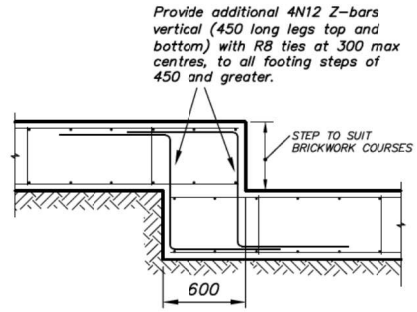
JOB NUMBER: 1202006
DRG NO: 1of5
REVISION:



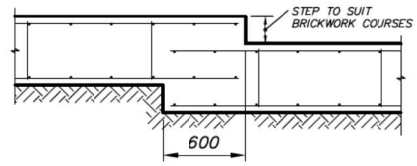
FLOOR FRAMING PLAN. (1:100)

FLOOR FRAMING SCHEDULE.

P1 ..... 89 x 89 x 5.0 SHS Support Post.
FB1 ..... Twin 190 x 45 F27 bearer.
FB2 ..... 140 x 45 F27 bearer.
J1 ..... 90 x 45 F27 Joists at 450 Max crs.

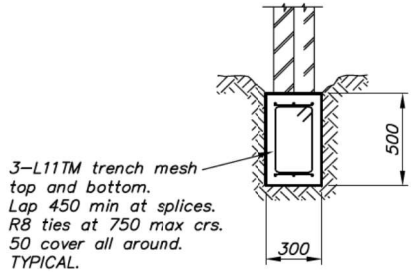


FOOTING STEP OVER 450mm



FOOTING STEP UNDER 450mm

TYPICAL STEP IN STRIP FOOTING



A-STRIP FOOTING. (1:20)

0 1 2 3 4 5 6 7 8
Metres - Scales Indicated Accurate if Printed on A2

Refer to Drg No 1 for General Notes.

A2
ORIGINAL SHEET SIZE.

DESIGN:	S.J.E.
DRAWN:	D.A.M.
DATE:	15.2.12
SCALES:	1:100 1:20
APPROVED:	BEng MIEAust

CLIENT: D & J Holland
PROJECT: Proposed Alterations and Additions at
SITE: Lot 12 (229) Tumbi Road, TUMBI UMBI
TITLE: SUB-FLOOR FRAMING & DETAILS

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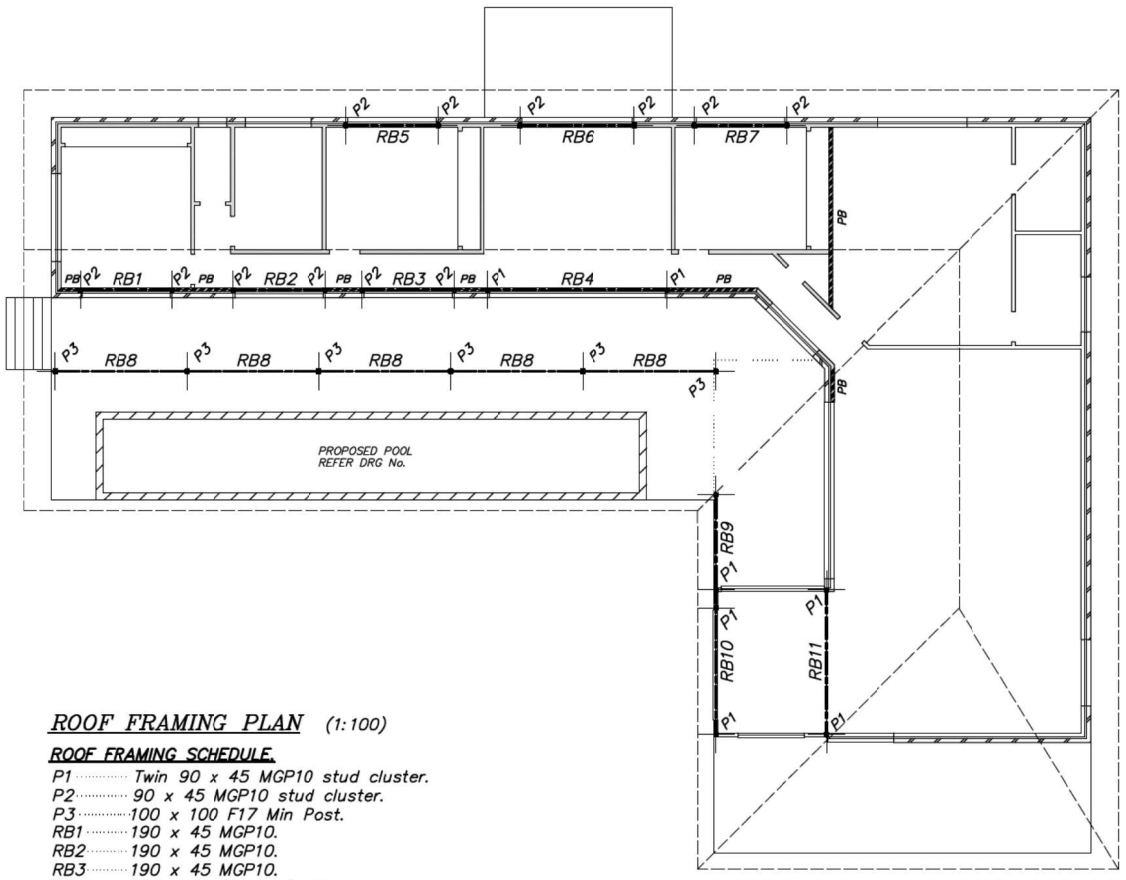
JOB NUMBER: 1202006
DRG NO: 2of5
REVISION:



ROOF FRAMING PLAN (1:100)

ROOF FRAMING SCHEDULE.

P1 ..... Twin 90 x 45 MGP10 stud cluster.
P2 ..... 90 x 45 MGP10 stud cluster.
P3 ..... 100 x 100 F17 Min Post.
RB1 ..... 190 x 45 MGP10.
RB2 ..... 190 x 45 MGP10.
RB3 ..... 190 x 45 MGP10.
RB4 ..... 360 x 63 'Hyspan' LVL.
RB5 ..... 190 x 45 MGP10.
RB6 ..... Twin 190 x 45 MGP10.
RB7 ..... 190 x 45 MGP10.
RB8 ..... Twin 240 x 35 F27 or Twin 240 x 45 Hyspan LVL or 300 x 63 Hyspan LVL or Twin 290 x 35 MGP10.
RB9 ..... 190 x 45 MGP10.
RB10 ..... 200 x 63 Hyspan LVL or 240 x 45 Hyspan LVL.
RB11 ..... 300 x 63 Hyspan LVL or 180 PFC.
PB ..... Ply Brace Panel. Refer to AS1684 table 8.18 (n) Type D. All other bracing not indicated on plan in accordance with AS1684.

PLY BRACED WALLS.
Plywood Braced walls denoted on Plan thus – PB

1:100 0 1 2 3 4 5 6 7 8
Metres - Scales Indicated Accurate if Printed on A2

Refer to Drg No 1 for General Notes.

A2
ORIGINAL SHEET SIZE.

DESIGN: S.J.E.
DRAWN: D.A.M.
DATE: 15.2.12
SCALES: 1:100
APPROVED: BEng MIEAust

CLIENT: D & J Holland
PROJECT: Proposed Alterations and Additions at
SITE: Lot 12 (229) Tumbi Road, TUMBI UMBI
TITLE: ROOF FRAMING PLAN

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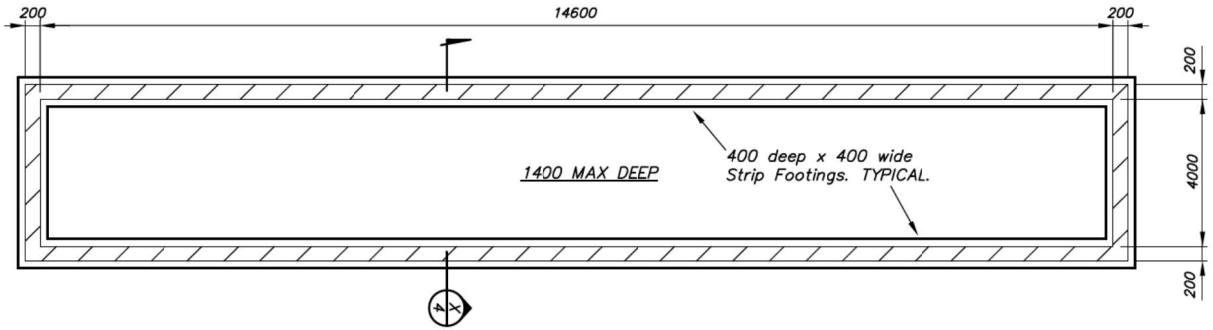
JOB NUMBER: 1202006
DRG NO: 3of5
REVISION:



POOL LAYOUT PLAN (1:50)

Concrete Strength for Pool to be F'c=32 MPa (10mm aggregate – pool mix)
Pool base is to be excavated onto consistent firm clay throughout.

THIS DESIGN APPLIES FOR POOL ONLY UNDER THE FOLLOWING CONDITIONS:

a) Soil supporting pool to have an allowable bearing capacity of 200 kPa.

b) Pool walls must not project more than 900 above supporting ground level unless detailed on this drawing.

c) Concrete block or brick walls must not be built on edge of walkways unless detailed on this drawing.

POOL NOTES.

All workmanship and materials shall be in accordance with the requirements of the relevant S.A.A. Codes.

All concrete shall comply with AS 3600.

Concrete to be pnuematically applied.

Reinforcement to have c minimum lap of 600.

Cover to reinforcement as follows:–
Wall & Base ..... 50 to water
Wall & Base ..... 60 to soil
Coping Beams ..... 40 top

Reinforcement shall be accurately supported by means of plastic coated steel chairs in accordance with AS 3600 spaced at 800 maximum centres bothways to prevent movement when placing concrete.

Reinforcement shall be adequately wire tied with the ends bent back into the plane of reinforcement.

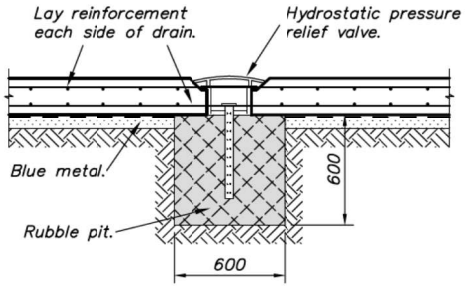
Pool walls and base to be 150 minimum thick UNLESS NOTED OTHERWISE.

The pool concrete shall be cured by hosing or other means to keep the surface continuously wet for 7 days. Concrete Strength F'c=32 MPa.

The Engineer to be advised if ground water is encountered during the excavation.

All fencing around pool is to be in accordance with Building Code of Australia requirements.

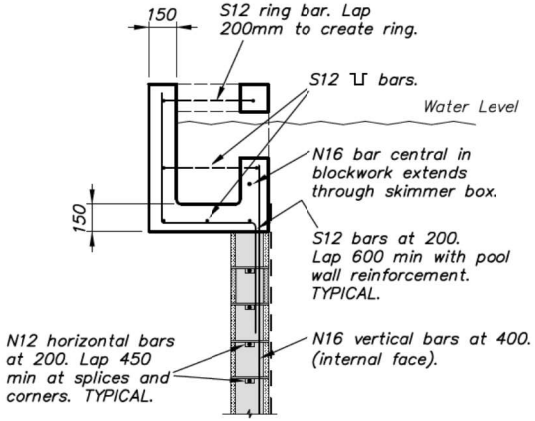
Written dimensions are to be preferred over scaled dimensions.



MAIN DRAIN DETAIL (1:20)
(IF REQUIRED)

PIERING REQUIREMENTS.

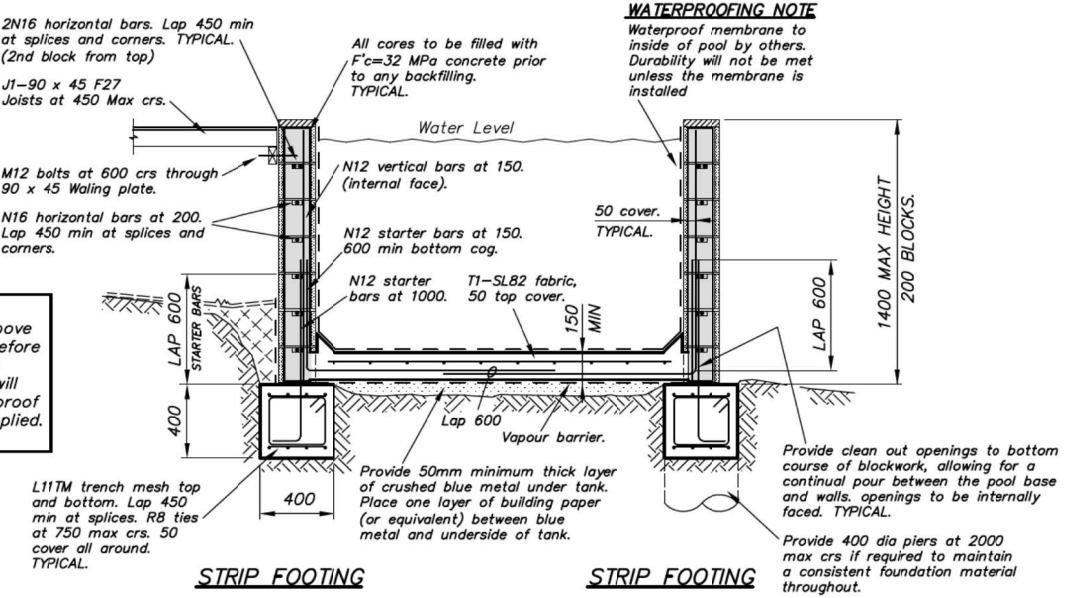
Piers are not indicated on Plan, determine extent and requirements on site at time of excavation. Piers are required to all footings to maintain a consistent foundation material throughout. Provide 400 diameter piers at 2000 maximum centres. Base of pier holes to be clean and firm prior to pouring concrete, all loose material to be removed.



SKIMMER DETAIL (1:20)
(OPTIONAL–NOT INDICATED ON PLAN)

NOTE
Filling to 600mm above floor level allowed before the installation of a hydro–static valve will be required. Water proof membrane to be applied. TYPICAL.

WATERPROOFING NOTE
Waterproof membrane to inside of pool by others. Durability will not be met unless the membrane is installed



STRIP FOOTING

STRIP FOOTING

SECTION X/4
SCALE 1:20

0 100 200 300 400 500 600 700 800 900 1m
1 20
Metres - Scales Indicated Accurate if Printed on A2

A2
ORIGINAL SHEET SIZE.

DESIGN:	S.J.E.
DRAWN:	D.A.M.
DATE:	15.2.12
SCALES:	1:50, 1:20
APPROVED:	BEng MIEAust

CLIENT: D & J Holland
PROJECT: Proposed Alterations and Additions at
SITE: Lot 12 (229) Tumbi Road, TUMBI UMBI
TITLE: POOL LAYOUT AND DETAILS

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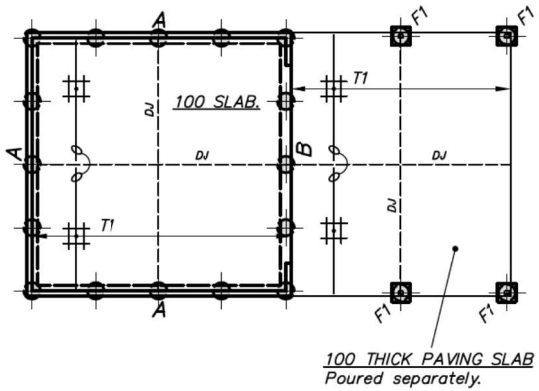
JOB NUMBER: 1202006
DRG NO: 4of5
REVISION:



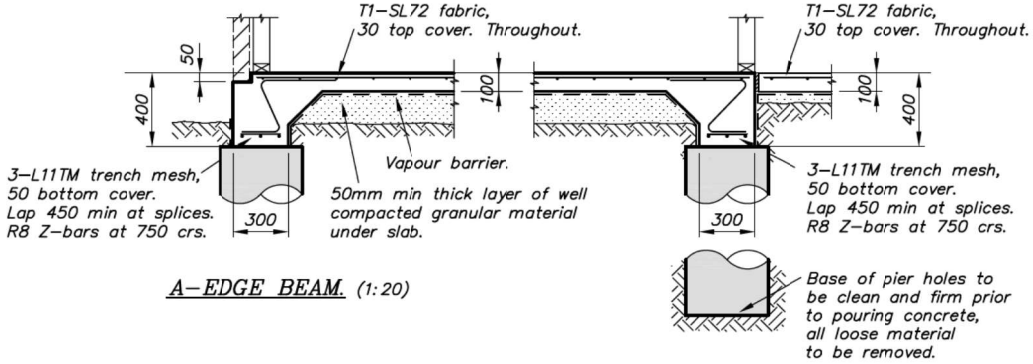
GARAGE & CARPORT SLAB PLAN (1:100)

FOOTING & RETAINING WALL SCHEDULE.

A ..... 400 deep x 300 wide Recessed Edge Beam.
B ..... 400 deep x 300 wide Edge Beam.
F1 ..... Provide 500 x 500 x 300 deep footing pad under Post. Deepen footing as necessary to found on stiff clay.

PIERING REQUIREMENTS.

Piers are required to footings as necessary to achieve a consistent stiff clay foundation material throughout. Provide 450mm diameter piers at 2000 maximum centres to suit. Base of pier holes to be clean and firm prior to pouring concrete, all loose material to be removed.



A–EDGE BEAM. (1:20)

B–EDGE BEAM. (1:20)

1:100 0 1 2 3 4 5 6 7 8
Metres - Scales Indicated Accurate if Printed on A2

Refer to Drg No 1 for General Notes.

A2
ORIGINAL SHEET SIZE.

DESIGN:	S.J.E.
DRAWN:	D.A.M.
DATE:	15.2.12
SCALES:	1:100 1:20
APPROVED:	BEng MIEAust

CLIENT: D & J Holland
PROJECT: Proposed Alterations and Additions at
SITE: Lot 12 (229) Tumbi Road, TUMBI UMBI
TITLE: GARAGE PLANS & DETAILS

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DRG NO: 5of5
REVISION: