PIERRE DRAGH
CONSULTING ENGINEERS

OFFICE
ADDRESS: 16 VICTORIA STREET,HALL,ACT,2618
TEL : 0438 625 440
FAX : (02) 6230 9695
EMAIL : PDRAGH@BIGPOND.COM

SITE ADDRESS

LOT 7 WOMBOIN

JOB DESCRIPTION

PROPOSED NEW DWELLING

CLIENT:

TONY MANSFIELD

DRAWING LIST

S0 - COVER SHEET
S1 - GENERAL NOTES
S2 - FOOTING & SLAB LAYOUT
S3 - ROOF BEAM LAYOUT

APPROVED BY:

NOTE
IT IS THE RESPONSIBILITY OF THE CLIENT IN CONSULTATION WITH THEIR BUILDER TO CHECK AND VERIFY THE BUILDABILITY OF THE DESIGN AS PRESENTED AND REFER ANY CONCERNS BACK TO THE ENGINEER PRIOR TO CONSTRUCTION.THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS.

Dwg No.
S0

GENERAL NOTES:

G.1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE ARCHITECT/ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.

G.2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.

G.3 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE BUILDER.

G.4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.

G.5 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE A.S. CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITY.

G.6 THE STRUCTURAL ELEMENTS SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES:

CONCRETE - A.S 3600
FOOTING - A.S 2870
STEEL - A.S 4100 & A.S. 4600

FOUNDATIONS AND FOOTINGS:

F.1 FOOTINGS HAVE BEEN DESIGNED FOR A UNIFORM BEARING PRESSURE (refer to sheet 2). FOUNDATION MATERIAL SHALL BE APPROVED FOR THIS PRESSURE BEFORE PLACING CONCRETE FOOTING.

F.2 THE SITE IS CLASSIFIED IN ACCORDANCE WITH GEOTECHNICAL REPORT (refer to sheet 2). WE DISCLOSE THAT WE HAVE NOT VERIFIED THIS REPORT AND THAT WE RELY ON ITS FINDINGS.

F.3 FOOTING SHALL BE PLACED CENTRALLY UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.

F.4 ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 2870

F.5 THE FOOTING DETAILS SHOWN ARE FOR THE SITE CLASSIFICATION STIPULATED, PDCE CONSULTING ENGINEERS TAKES NO RESPONSIBILITY FOR VARIATIONS WHICH MAY OCCUR DUE TO VARIATIONS IN SITE CONDITIONS.

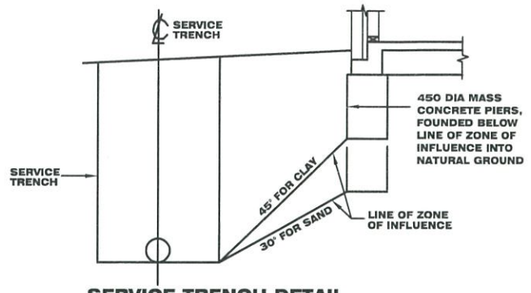
F.6 FILL USED IN THE CONSTRUCTION OF A SLAB EXCEPT WHERE THE SLAB IS SUSPENDED SHALL CONSIST OF A CONTROLLED FILL OR ROLLED FILL IN ACCORDANCE WITH A.S. 2870

A) ROLLED FILL CONSISTS OF MATERIAL COMPACTED IN LAYERS BY REPEATED ROLLING WITH AN EXCAVATOR. ROLLED FILL SHALL NOT EXCEED 600mm COMPACTED IN LAYERS NOT MORE THAN 300mm, FOR SAND MATERIEL OR 400mm COMPACTED IN LAYERS NOT MORE THAN 150mm FOR OTHERS MATERIAL.

B) CONTROLLED FILL SHALL CONSIST OF WELL GRADED SAND FILL UP TO 800mm DEEP, WELL COMPACTED IN NOT MORE THAN 300mm LAYERS BY VIBRATING PLATE OR VIBRATING ROLLER NON SAND FILL UP TO 400mm DEEP, WELL COMPACTED IN NOT MORE THAN 150 LAYERS BY A MECHANICAL ROLLER, CLAY FILL SHOULD BE MOIST DURING COMPACTION. THE DEPTHS OF FILL GIVEN ABOVE ARE DEPTHS MEASURED AFTER COMPACTION.FOR DEPTHS GREATER THAN THAT GIVEN ABOVE THE FILL SHALL BE SUBJECT TO CONTROL AND TESTING. IF TEST FAILS THEN PIERS ARE REQUIRED. CONTACT THIS OFFICE PRIOR TO FURTHER CONSTRUCTION.
EDGE BEAMS MAY BE FOUNDED ON CONTROLLED FILL EDGE BEAMS SHALL NOT BE FOUNDED ON ROLLED FILL

F.7 TOP SOIL CONTAINING GRASS ROOTS OR OTHER ORGANIC MATERIAL SHALL BE REMOVED FROM THE AREA ON WHICH THE SLAB IS TO REST.

F.8 IF ANY FOOTING IS LOCATED SUCH THAT A LINE DRAWN AT 45 DEGREES FOR CLAY AND 30 DEGREES FOR SAND FROM ITS BASE INTERSECTS A SERVICE TRENCH THEN PIERS ARE REQUIRED AS PER DETAIL BELOW.



SERVICE TRENCH DETAIL
N.T.S.

CONCRETE WORK:

C.1 ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH A.S. 3600. & A.S. 2870

C.2 CONCRETE QUALITY SHALL BE AS TABULATED BELOW U.N.O. AND SHALL BE VERIFIED BY TESTS.

ELEMENT	SLUMP mm	MAX. SIZE AGG. mm	CEMENT TYPE	EXPOSURE CLASSIFIC.	CONCRETE GRADE	COVER mm
SLABS ON GROUND	100	20	A	A1	20N	20 TOP 30 BTM 40 EXTERNAL
FOOTINGS	100	20	A	A1	20N	40
SUSPENDED SLAB	80	20	A	A1	32N	30 TOP 20 BTM 40 EXTERNAL

C.3 ALL CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH A.S. 3600. WHERE CURING COMPOUNDS ARE USED IT MUST BE APPLIED AS FOLLOWS:
A) ONTO SLAB WITHIN 2HRS OF FINISHING OPERATION
B) ONTO WALLS AND COLUMNS IMMEDIATELY AFTER REMOVAL OF FORMWORK.

C.4 SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

C.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.

C.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY.

C.7 HORIZONTAL FORMWORK SHALL BE STRIPPED WHEN APPROVED BY THE ENGINEER.

C.8 UNLESS NOTED OTHERWISE NO ALLOWANCE HAS BEEN MADE FOR STACKED MATERIALS OR MACHINERY ON THE CONCRETE STRUCTURE.

C.9 NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

C.10 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY, IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C.11 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.

C.12 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

C.13 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

C.14 ALL REINFORCING BARS SHALL COMPLY WITH A.S. 4671. ALL FABRIC SHALL COMPLY WITH A.S. 4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.

C.15 REINFORCING SYMBOLS:
N - DENOTES GRADE D500 HIGH STRENGTH DEFORMED BARS TO A.S. 4671.
R - DENOTES GRADE R250 HOT ROLLED PLAIN BARS TO A.S. 4671.
SL - DENOTES HARD-DRAWN WIRE SQUARE REINFORCING FABRIC TO A.S. 4671.
RL - DENOTES HARD-DRAWN WIRE RECTANGULAR REINFORCING FABRIC TO A.S. 4671.
THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETRES.

C.16 FABRIC REINFORCEMENT TO BE LAPPED ONE MESH PLUS 30mm. LAPS IN POSITIONS OF MAXIMUM MOMENT ARE NOT PERMITTED.

C.17 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS GENERALLY AT NOT GREATER THAN 800 CENTERS BOTH WAYS. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.

C.18 ALL TENSILE REINFORCEMENT TO BE LAPPED AS SHOWN (u.n.o.):-

REINF. BAR	N12	N16	N20	N24
LAP LENGTH mm	500	600	700	800

DRAINAGE NOTES:

D.1 ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 2870

D.2 DRAINAGE SHALL BE CONSTRUCTED TO AVOID WATER PONDING AGAINST OR NEAR THE FOOTING. THE GROUND IN THE IMMEDIATE VICINITY OF THE PERIMETER FOOTING, INCLUDING THE GROUND UPHILL FROM THE SLAB ON CUT-AND-FILL SITES, SHALL BE GRADED TO FALL 50mm MINIMUM AWAY FROM THE FOOTING OVER A DISTANCE OF 1m. SURFACE OR SUBSURFACE DRAINS SHALL BE USED TO CHANNEL WATER AWAY AND CONNECTED TO STORM WATER SYSTEM. ANY PAVING SHALL ALSO BE SUITABLY SLOPED

D.3 PLUMBING TRENCHES SHALL BE SLOPED AWAY FROM THE HOUSE AND SHALL BE BACKFILLED WITH CLAY IN THE TOP 300mm WITHIN 1.5m OF THE HOUSE. THE CLAY USED FOR BACKFILLING SHALL BE COMPACTED. WHERE PIPES PASS UNDER THE FOOTING. SYSTEM, THE TRENCH SHALL BE BACKFILLED WITH CLAY OR CONCRETE TO RESTRICT THE INGRESS OF WATER BENEATH THE FOOTING SYSTEM.

D.4 EXCAVATIONS NEAR THE EDGE OF THE FOOTING SYSTEM SHALL BE BACKFILLED IN SUCH A WAY AS TO PREVENT ACCESS OF WATER TO THE FOUNDATION. FOR EXAMPLE, EXCAVATIONS SHOULD BE BACKFILLED ABOVE OR ADJACENT TO THE FOOTING. WITH MOIST CLAY COMPACTED BY HAND-RODDING OR -TAMPING. POROUS MATERIAL SUCH AS SAND, GRAVEL OR BUILDING RUBBLE SHOULD NOT BE USED.

D.5 WATER RUN-OFF SHALL BE COLLECTED AND CHANNELLED AWAY FROM THE HOUSE DURING CONSTRUCTION.

D.6 PENETRATIONS OF THE EDGE BEAMS AND FOOTING BEAMS ARE TO BE AVOIDED, BUT WHERE NECESSARY SHALL BE SLEEVED TO ALLOW FOR MOVEMENT.

D.7 CONNECTION OF STORMWATER DRAINS AND WASTE DRAINS SHALL INCLUDE FLEXIBLE CONNECTION.

STRUCTURAL STEEL:

S.1 ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 4100 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

S.2 UNLESS OTHERWISE NOTED, ALL STEEL SHALL BE IN ACCORDANCE WITH:
A.S. 3679.1 GRADE 300 FOR ROLLED SECTIONS.
A.S. 1163 GRADE 350 FOR RHS SECTIONS.
A.S. 1163 GRADE 350 FOR CHS SECTIONS.
A.S. 3378 GRADE 350 FOR ALL PLATE.
A.S. 3679.1 GRADE 350 FOR ALL FLAT
A.S. 1397 GRADE 450 FOR 1.5, 1.9, 2.4 AND 3.0 BMT OF COLD-FORMED STEEL SECTIONS.

S.3 UNLESS NOTED OTHERWISE ALL WELDS SHALL BE 6mm CONTINUOUS FILLET WELDS AND ALL GUSSET PLATES SHALL BE 10mm THICK.

S.4 BUTT WELDS WHERE INDICATED IN THE DRAWINGS ARE TO BE COMPLETE PENETRATION BUTT WELDS AS DEFINED IN A.S. 1554.

S.5 UNLESS OTHERWISE SHOWN ALL BOLTS SHALL BE 16mm DIA HIGH STRENGTH (H.S.) BOLTS SHALL CONFORM TO A.S. 1252 AND SHALL BE INSTALLED IN ACCORDANCE. WITH A.S. 4100 AS DIRECTED BY THE ENGINEER.

S.6 UNLESS NOTED OTHERWISE ALL BEAMS TO BE SUPPORTED ON BRICKWORK/ENGAGED BRICK PIERS (110mm BRICK BEARING REQUIRED) PLACE INCOMPRESSIBLE PACKING AS REQUIRED UNDER THE ENDS OF THE BEAM TO ENSURE EVEN BEARINGN ON BRICKWORK.

S.7 UNLESS NOTED OTHERWISE PROTECTIVE COATINGS FOR STEELWORK SHALL BE AS TABULATED BELOW AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE BSA.

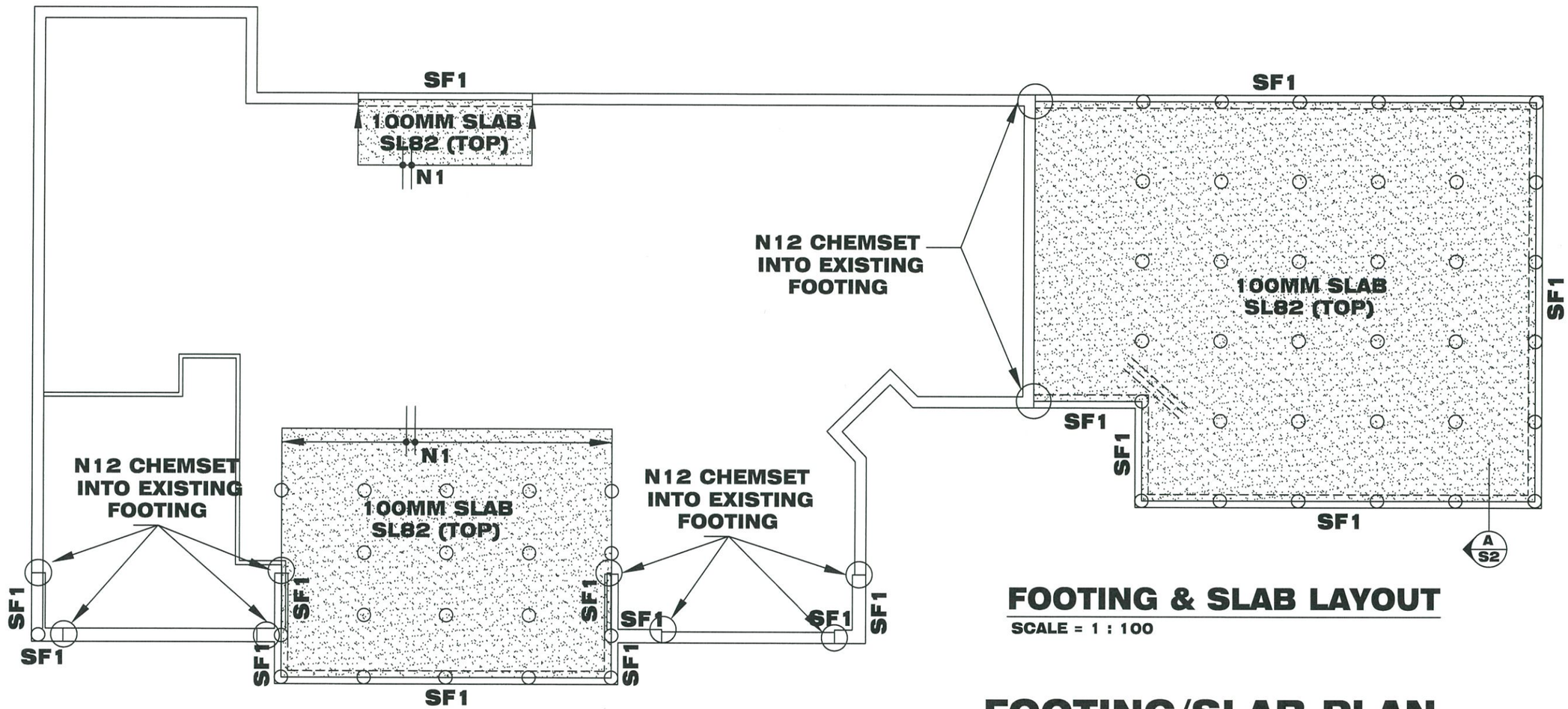
ENVIRONMENT (EXPOSURE CLASSIFICATION AS PER BCA)	GENERAL STRUCTURAL MEMBERS (NOT BUILT INTO MASONRY OR CONCRETE)		LINTELS (BUILT INTO MASONRY OR CONCRETE)
	INTERNAL	EXTERNAL	
VERY LOW	R0		
LOW	R0	R1	R2
MEDIUM	R0	R2	R3
HIGH	R1	R3	R4
VERY HIGH	R1	R4	R5
PROTECTIVE COATING SPECIFICATION TO A.S. 2699.3			

REVISION DETAILS

NO.	DESCRIPTION	DATE	NAME

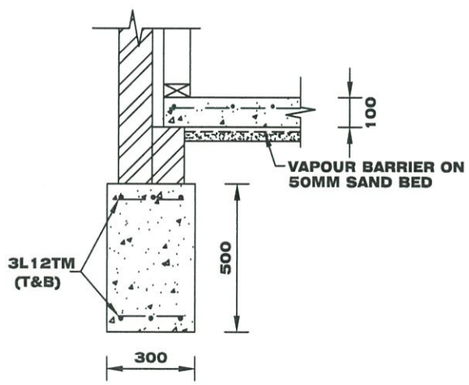
PIERRE DRAGH
CONSULTING ENGINEERS
OFFICE: 16 VICTORIA STREET,HALL, ACT,2618
PH : 0438 625 440 Web: www.pdcengineers.com.au
FAX : (02) 6230 9695 email : pdragh@bigpond.com

PROJECT: LOT 7 WOMBOIN
CLIENT: TONY MANSFIELD
DRAWING: GENERAL NOTES
Job No.
Rev.
SCALE: 1:100 DATE: 01/07/17
DESIGNED: KZ
DRAWN: SAJID
CHECKED: PD
Dwg No. S1



FOOTING & SLAB LAYOUT

SCALE = 1 : 100



TYPICAL SF1
SECTION A S2
SCALE = 1:20

FOOTING/SLAB PLAN

DESIGNED FOR CLASS `M` CLASSIFICATION.

LEGEND

FOR ALL FOOTING DETAILS REFER TO SECTIONS

DENOTES ADDITIONAL SL72 (BTM)

DENOTES 300Ø BORED PIERS TO 600 mm INTO NATURAL GROUND MAX 1800 CTS EACH WAY

DENOTES 3N12 OR 3L11TM (TOP) , 2000mm LONG, TIED TO UNDERSIDE OF SLAB MESH

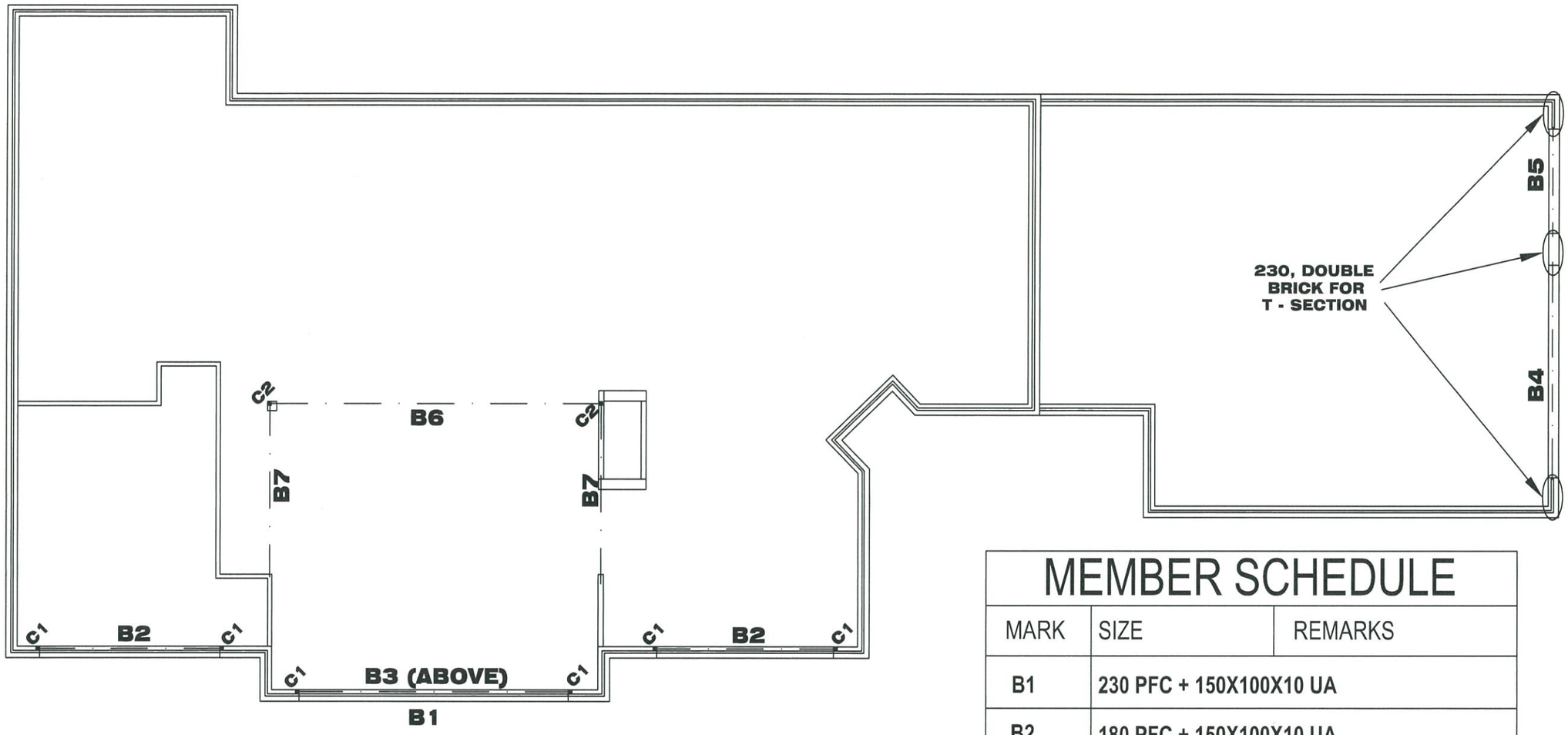
DENOTES 300Ø BORED PIERS TO INVERT LEVEL OF PIPE

P1 : N12 @ 400mm CTS CHEMSET INTO EXISTING FOOTING

REVISION DETAILS			
NO.	DESCRIPTION	DATE	NAME

PIERRE DRAGH
CONSULTING ENGINEERS
OFFICE:
16 VICTORIA STREET,HALL, ACT,2618
PH : 0438 625 440 Web: www.pdcengineers.com.au
FAX : (02) 6230 9695 email : pdragh@bigpond.com

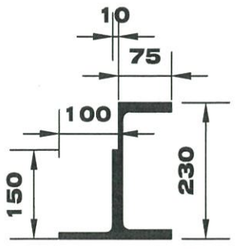
PROJECT: LOT 7 WOMBOIN
CLIENT: TONY MANSFIELD
DRAWING: FOOTING & SLAB LAYOUT
Job No.
Rev.
SCALE: 1:100 DATE: 01/07/17
DESIGNED: KZ
DRAWN: SAJID
CHECKED: PD
Dwg No. S2



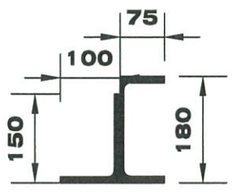
ROOF BEAM LAYOUT

SCALE = 1 : 100

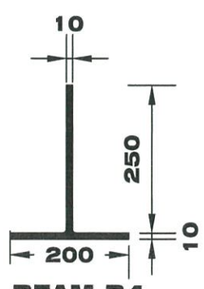
MEMBER SCHEDULE		
MARK	SIZE	REMARKS
B1	230 PFC + 150X100X10 UA	
B2	180 PFC + 150X100X10 UA	
B3	RACEKED 230 PFC + 150X100X10 UA	
B4	250X200X10	T- SECTION
B5	200X200X10	T- SECTION
B6	300 PFC + 150X100X10 UA	
B7	150 PFC	—
C1	75X75X4 SHS	—
C2	89X89X5 SHS	—



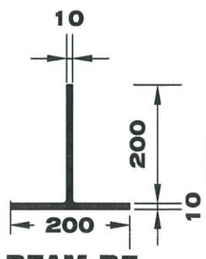
BEAM B1,B3
230 PFC +
150X100X10 UA
SCALE =1:10



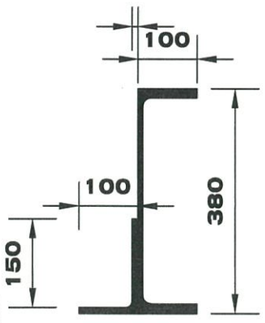
BEAM B2
230 PFC +
150X100X10 UA
SCALE =1:10



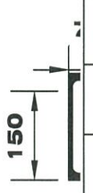
BEAM B4
250x200x10
T SECTION
SCALE =1:10



BEAM B5
200x200x10
T SECTION
SCALE =1:10



BEAM B8
380 PFC +
150X100X10 UA
SCALE 1:10



BEA
150
SCAL

REVISION DETAILS			
NO.	DESCRIPTION	DATE	NAME

PIERRE DRAGH
CONSULTING ENGINEERS
OFFICE: 16 VICTORIA STREET,HALL, ACT,2618
PH : 0438 625 440 Web: www.pdcengineers.com.au
FAX : (02) 6230 9695 email : pdragh@bigpond.com

PROJECT: LOT 7 WOMBOIN
CLIENT: TONY MANSFIELD
DRAWING: ROOF BEAM LAYOUT
Job No.
Rev.
SCALE: 1:100 DATE: 01/07/17
DESIGNED: KZ
DRAWN: SAJID
CHECKED: PD
Dwg No. S3