PROPOSED ALTERATIONS & ADDITIONS AT 114 DELMAR PARADE, DEE WHY

GENERAL NOTES

1 THESE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND OTHER CONSULTANTS DRAWINGS ON THE PROJECT.

2. THESE ENGINEERING DRAWINGS HAVE BEEN PREPARED FROM INFORMATION AVAILABLE AT THE TIME OF ISSUE. AS THIS INFORMATION MAY BE THE SUBJECT OF CHANGE PRIOR TO OR DURING CONSTRUCTION THE CONTRACTOR IS TO ADVISE THE ENGINEER WHERE DISCREPANCIES OCCUR

3 THESE DRAWINGS SHALL NOT BE USED FOR FINAL SETOUT OF THE PROJECT UNLESS SPECIFICALLY STATED.

4. INSPECTIONS ARE REQUIRED TO BE PERFORMED BY A DULY APPOINTED INSPECTOR FROM 'CAPITAL ENGINEERING CONSULTANTS'. THESE INSPECTIONS ARE REQUIRED TO BE PERFORMED IN ACCORDANCE WITH THE SCOPE OF INSPECTIONS PREPARED BY 'CAPITAL ENGINEERING CONSULTANTS' THE INSPECTOR IS TO BE GIVEN A MINIMUM OF 24 HOURS NOTICE.

5. PRIOR TO THE COMMENCEMENT OF WORKS THE CONTRACTOR IS TO IDENTIFY ALL EXISTING SERVICES. ANY DAMAGE TO EXISTING SERVICES IS TO BE RECTIFIED AT THE CONTRACTORS EXPENSE. SERVICES SHOWN ON 'CAPITAL ENGINEERING CONSULTANTS' DRAWINGS ARE INDICATIVE ONLY.

6. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF THE WORKS AND ENSURE NO PART IS OVERSTRESSED

7. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT AUSTRALIAN STANDARDS AND BCA STATUTORY REQUIREMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

8 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT SUFFICIENT TOLERANCES ARE PROVIDED AND INTEGRATED THROUGHOUT ALL THE ELEMENTS OF THE WORKS.

9. ALL NON-LOAD BEARING ELEMENTS SHALL BE KEPT CLEAR OF THE STRUCTURE SOFFIT BY AN ALLOWANCE DETERMINED FROM SPAN/250 OR CANTILEVER/125 BUT NOT LESS THAN 20mm, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

10. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.

11. WIND AND EARTHQUAKE LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.2 AND AS1170.4 RESPECTIVELY BASED ON THE FOLLOWING DESIGN CRITERIA –

WIND LOADS:

REGION	A3
TERRAIN CATEGORY	2
GUST WIND SPEED V_{zu}(m/s)	46
SHIELDING M_s	1.0
TOPOGRAPHIC M_t	1.35
IMPORTANCE M_i	1.0

12. SUPERIMPOSED DEAD LOADS AND LIVE LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH AS1170.1 AND ARE SHOWN ON THE GENERAL ARRANGEMENT DRAWINGS.

FOUNDATION NOTES

1. REFER TO THE GEOTECHNICAL ENGINEERING REPORT SPECIFIED IN THE GENERAL NOTES FOR SITE SPECIFIC GEOTECHNICAL INFORMATION.

2. FOOTINGS TO BE FOUNDED ON MATERIAL HAVING AN ALLOWABLE BEARING CAPACITY OF 600 kPa IN ROCK. WHERE DIFFICULTY IN REACHING THE REQUIRED CAPACITY IS EXPERIENCED, 'CAPITAL ENGINEERING CONSULTANTS' IS TO BE CONTACTED TO RE-ASSESS THE FOOTING DESIGN

3. THE CONTRACTOR IS TO ENGAGE AND PAY A GEOTECHNICAL ENGINEER TO VERIFY THE BEARING CAPACITY OF THE FOUNDATIONS PRIOR TO PLACEMENT OF THE BLINDING LAYER

4. ALL LOOSE MATERIAL AND WATER TO BE CLEANED OUT OF THE FOUNDATION FORMWORK TO BE USED WHERE THE SIDES OF THE FOUNDATION ARE NOT STABLE.

5 A 50mm MINIMUM BLINDING LAYER SHOULD BE APPLIED TO THE BASE OF ALL FOUNDATIONS IMMEDIATELY AFTER VERIFICATION OF THE BEARING CAPACITY BY THE GEOTECHNICAL ENGINEER. WHERE THE FOUNDING MATERIAL IS DEEPER THAN REQUIRED FOR THE FOOTING THE EXCAVATION IS TO BE BACKFILLED WITH A WEAK MIX CONCRETE (N10) TO THE UNDERSIDE OF THE FOOTING.

6. WHERE AN EXCAVATION IS REQUIRED OR EXISTS BELOW THE BASE OF A FOOTING THE SIDE OF THE EXCAVATION SHALL BE LOCATED AWAY FROM EDGE OF FOOTING BY THE AME DISTANCE THAT THE EXCAVATION IS BELOW FOOTING BASE. WHERE THIS CANNOT BE ACHIEVED, 'CAPITAL ENGINEERING CONSULTANTS' SHALL BE CONTACTED FOR FURTHER DIRECTION. MASS CONCRETE IS TO EXTEND TO THE INFLUENCE LINE AS REQUIRED.

7 ALL WALLS AND COLUMNS SHALL BE CONCENTRIC WITH THE SUPPORTING FOOTINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

8. THE CONTRACTOR WILL ENGAGE A GEO-TECHNICAL ENGINEER TO BE ON SITE FULL TIME DURING EXCAVATION WORKS ON THE NORTHERN BATTER

CONCRETE NOTES

GENERAL

1 CONCRETE WORK SHALL BE IN ACCORDANCE WITH AS3600 AND WITH THE PROJECT SPECIFICATIONS.

2. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN ON 'CAPITAL ENGINEERING CONSULTANTS' DRAWINGS OR SPECIFICALLY APPROVED BY 'CAPITAL ENGINEERING CONSULTANTS'.

3. ALL THICKNESSES SHOWN ARE MINIMUM STRUCTURAL REQUIREMENTS, NO REDUCTION IN THICKNESS DUE TO FALLS OR TOPPING IS PERMITTED. REFER ARCHITECT DRAWINGS FOR ALL SLAB FALLS AND CONFIRMATION OF SLAB STEPS.

4. UNLESS A GROOVE LINE ALLOWANCE HAS BEEN NOTED ON THE DRAWINGS, NO GROOVE LINES ARE PERMITTED, EXCEPT AT SLAB LINES. ALL GROOVE LINES ARE TO BE SUBMITTED TO 'CAPITAL ENGINEERING CONSULTANTS' FOR APPROVAL.

5. THE FACE OF ALL CONCRETE AGAINST WHICH NEW CONCRETE IS TO BE CAST IS TO BE THOROUGHLY MECHANICALLY SCABBLED, FULLY EXPOSING THE AGGREGATE MATRIX

6. NO PENETRATIONS GREATER THAN 150mm DIAMETER, OR EMBEDMENT OF PIPES GREATER THAN 40mm DIAMETER OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE SLABS. FOR ALL OTHER CONCRETE MEMBERS NO PENETRATIONS, CHASES OR EMBEDMENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY 'CAPITAL ENGINEERING CONSULTANTS.

7. CONDUITS GREATER THAN 25mm DIAMETER CAST INTO CONCRETE MEMBERS SHALL BE SPACED AT A MAXIMUM DISTANCE POSSIBLE AND UNDER NO CIRCUMSTANCES CLOSER THAN A CLEAR SPACING OF TWICE THE LARGER CONDUIT DIAMETER FROM PARALLEL REINFORCEMENT OR ANY OTHER CONDUIT.

CONCRETE

1 THE CHARACTERISTIC COMPRESSIVE STRENGTH (f'_c) AT 28 DAYS OF IN PLACE CONCRETE SHALL BE AS NOTED ON THE DRAWINGS.

2 MAXIMUM AGGREGATE SIZE . 20mm

3. SLUMP.....80mm

4 ALL CONCRETE SHALL BE VIBRATED.

5 ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE SPECIFICATION

6. ALL CONCRETE SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH AS1012 AND THE PROJECT SPECIFICATION

7 ALL FORMWORK SHALL COMPLY WITH AS3610

REINFORCEMENT

1. REINFORCEMENT IS TO BE MANUFACTURED IN ACCORDANCE WITH AS1302 AND SHALL BE FIXED AS SHOWN ON DRAWINGS.

2 MATERIAL IS INDICATED BY THE FOLLOWING SYMBOLS:–
- Y DEFORMED BAR GRADE 400
- N DEFORMED BAR GRADE 500 (NORMAL DUCTILITY)
- R PLAIN ROUND BAR GRADE 250
- W PLAIN WIRE GRADE 450
- F FABRICS GRADE 450

3. THE BAR SIZE IS INDICATED BY A NUMBER AFTER THE SYMBOL WHICH INDICATES THE BAR DIAMETER IN MILLIMETERS.

4. REINFORCEMENT SPACING NOMINATED ON DRAWINGS IS TO ASSIST SCHEDULER AND STEELFIXER TO ASSESS TOTAL NUMBER OF BARS REQUIRED. WHERE BARS PLACED IN ACCORDANCE WITH SPACING NOMINATED FOIL WITH OTHER STRUCTURAL REQUIREMENTS, PREFERANCE IS TO BE GIVEN TO RELOCATING BARS BY LOCALLY ADJUSTING SPACING TO ENABLE ASSEMBLY OF REINFORCEMENT TO BE COMPLETED. ENGINEER IS TO BE CONTACTED IN THE EVENT THAT REINFORCEMENT IS NEEDED TO BE CUT ON SITE PRIOR TO CONTINUING.

5. LAP LENGTHS TO REINFORCEMENT BARS TO BE AS NOTED ON THE RELEVANT DRAWINGS.

6 WELDING OF REINFORCEMENT BARS IS NOT PERMITTED UNLESS APPROVED.

7. COVER SHALL BE AS NOTED ON THE RELEVANT DRAWINGS.

8. CONCRETE COVERS NOTED ARE MEASURED FROM THE FORMWORK OR GROUND FACE TO THE OUTERMOST REINFORCEMENT COMPONENT. ie. IN COLUMNS AND BEAMS TO THE OUTSIDE OF TIES OR LIGATURES.

9. COVER TO BE MAINTAINED DURING POURING BY THE USE OF PLASTIC CHAIRS OR PLASTIC TIPPED METAL CHAIRS.

10. WHERE NO REINFORCEMENT IS SHOWN ON THE DRAWING AT RIGHT ANGLES TO THE MAIN REINFORCEMENT DISTRIBUTION REINFORCEMENT IS TO BE PROVIDED.

MASONRY NOTES

1. ALL MASONRY SHALL COMPLY WITH AS3700 AND THE PROJECT SPECIFICATION.

2 CONCRETE MASONRY UNITS TO HAVE A MINIMUM CHARACTERISTIC UNCONFINED STRENGTH OF 20 MPa IN ACCORDANCE WITH AS2733.

3 MASONRY TO BE BEDDED IN FRESHLY PREPARED MORTAR

(a) CONCRETE BLOCKS –
MORTAR MIX TO BE UNIFORMLY MIXED IN A RATIO OF ONE PART CEMENT, ONE PART LIME AND SIX PARTS SAND CONFORMING TO AS2701. 'BRICKIES LOAM' SHALL NOT BE USED.

(b) CLAY BRICKS –
MORTAR MIX TO BE UNIFORMLY MIXED IN THE RATIO OF ONE PART CEMENT, THREE PARTS SAND AND ONE FOURTH PART LIME CONFORMING TO AS2701. 'BRICKIES LOAM' SHALL NOT BE USED

4 GROUT SHALL HAVE A COMPRESSIVE STRENGTH (f'_c) OF 20 MPa AT 28 DAYS, A SLUMP OF 125mm IN A 150mm SLUMP CONE, A MAXIMUM AGGREGATE SIZE OF 10mm AND BE IN ACCORDANCE WITH AS3700.

5 BEDDING OF MASONRY SHALL BE FULL FACE WITH CROSS JOINTS COMPLETELY FILLED JOINT THICKNESS SHALL NOT EXCEED 12mm.

6 PROVIDE WALL TIES AT 600mm MAXIMUM CENTRES VERTICALLY AND HORIZONTALLY. REFER TO MASONRY DETAILS FOR WALL TIE SETOUT AT OPENINGS

7 THE CAVITY SHALL NOT EXCEED 100mm AND SHALL NOT BE SMALLER THAN 40mm UNLESS NOTED OTHERWISE. KEEP CAVITY CLEAN AND CLEAR OF OBSTRUCTIONS.

8. RAKING OF JOINTS IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM 'CAPITAL ENGINEERING CONSULTANTS.

9 ALL WALLS TO BE KEPT STABLE AT ALL STAGES OF CONSTRUCTION AND NOT BE OVER STRESSED AT ANY TIME

10 UNLESS NOTED OR SHOWN OTHERWISE ON DRAWINGS THERE ARE TO BE NO CHASES OR RECESSES PERMITTED IN MASONRY WALLS WITHOUT THE PRIOR APPROVAL OF 'CAPITAL ENGINEERING CONSULTANTS.

TIMBER NOTES:

T1 AS 1684 IS RELEVANT TO DOMESTIC CONSTRUCTION IN SHELTERED LOCATIONS.

T2 SOFTWOOD MINIMUM GRADE F7 U.N.O.
HARDWOOD MINIMUM GRADE F11 U.N.O.

T3 EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS I OR II OR IMPREGNATED GRADE F7. PRESSURE TREATED TO AS1684 AND RE-DRILLED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. PROVIDE DOCUMENTATION.

T4 ALL BOLTS IN TIMBER CONSTRUCTION TO BE MIN M16 U.N.O. BOLT HOLES TO BE DRILLED EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES BOLT DIAMETER.

T5 FINISHED TIMBER SIZES.
SEASONED SOFTWOOD +5,–0mm
UNSEASONED SOFTWOOD F7+3,–3mm
F7+2,–4mm
SEASONED HARDWOOD +2,–0mm
UNSEASONED HARDWOOD –3,–3mm
(SEE ALSO CLAUSE 1.6.2 IN AS 2082)

T6 ALL TIMBER JOINTS AND NOTCHES TO BE 100mm MINIMUM FROM LOOSE KNOTS. SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.
FOR JOISTS SPANNING GREATER THAN 3m AND LESS THAN 4.2m PROVIDE ONE ROW OF BLOCKING MID-SPAN.
FOR JOISTS SPANNING GREATER THAN 4.2m AND UP TO 6.0m PROVIDE TWO ROWS OF BLOCKING AT 1/3 POINTS.
FOR DEEP JOISTED FLOORS WHERE A CONTINUOUS TRIMMING JOIST IS NOT PROVIDED AT END OF JOISTS BLOCKING IS REQUIRED AT 1800 MAXIMUM CENTERS. (REFER TO AS 1684)

T7 BLOCKING IS NOT REQUIRED FOR JOISTS SPANNING LESS THAN 3m.

STRUCTURAL STEELWORK NOTES

S1 ALL MATERIALS, WORKMANSHIP, FABRICATION AND ERECTION SHALL COMPLY WITH THE REQUIREMENTS OF AS4100, AS1538, AS1554 AND THE SPECIFICATION.

S2 UNLESS SHOWN OTHERWISE, ALL STEEL SHALL BE IN ACCORDANCE WITH AS1204 GRADE 300. ALL STEEL HOLLOW SECTIONS SHALL BE GRADE 350 U.N.O. AND SHALL BE IN ACCORDANCE WITH AS1163.
ALL PRESSED METAL PURLINS AND GIRTS SHALL BE GRADE 450 STEEL IN ACCORDANCE WITH AS1538

S3 UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING MINIMUM REQUIREMENTS:

(i) ALL WELDS SHALL BE 6MM CONTINUOUS FILLET WELDS ALL ROUND.
(ii) ALL BOLTS SHALL BE M20 – 8.8/S, WITH A MINIMUM OF 2 BOLTS PER CONNECTION.
PURLIN BOLTS TO BE M12 – 4.6/S WITH A MINIMUM OF 2 BOLTS PER PURLIN END.
(iii) ALL GUSSET AND CLEAT PLATES SHALL BE 10mm THICK (U.N.O)
(iv) ALL CAP PLATES SHALL BE 10 mm THICK. (U.N.O)
(v) ALL BASE PLATES SHALL BE 10 mm THICK. (U.N.O.)

S4 BOLT DESIGNATION:
4.6/S REFERS TO COMMERCIAL BOLTS OF STRENGTH GRADE 4.6 TO AS1111 TIGHTENED TO A SNUG TIGHT CONDITION.

8.8/S REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 TIGHTENED TO A SNUG TIGHT CONDITION.

8.8/TB REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A BEARING JOINT

8.8/TF REFERS TO HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS1252 FULLY TENSIONED TO AS4100 AS A FRICTION JOINT.

S5 HIGH STRENGTH BOLTED JOINTS SHALL BE IN ACCORDANCE WITH AS1511. THE SPECIFIED BOLT TENSION SHALL BE OBTAINED BY USE OF THE "PART TURN" METHOD OF TIGHTENING.

S6 ALL WELDS SHALL BE SP (SPECIAL PURPOSE) IN ACCORDANCE WITH AS1554. ALL ELECTRODES SHALL BE CLASS E48. ALL BUTT WELDS SHALL BE FULL STRENGTH COMPLETE PENETRATION WELDS.

S7 SUBSTITUTIONS FOR STEEL SECTIONS SHOWN ON DRAWINGS SHALL NOT BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.

S8 ALL STEELWORK BELOW GROUNG OR FINISHED SURFACE LEVEL IS TO BE HOT-DIPPED GALVANIZED.

BRICK LINTEL SCHEDULE

OPENING SIZE (mm)	INTERNAL SKIN	EXTERNAL SKIN	END BEARING
UP TO 900mm	100 x 8mm FLAT BAR	100 x 6mm FLAT BAR	100 mm
1200	100 x 10mm FLAT BAR	100 x 8mm FLAT BAR	100 mm
1500	100 x 100 x 8mm ANGLE	100 x 100 x 6mm ANGLE	150 mm
2100	150 x 100 x 8mm ANGLE	150 x 100 x 6mm ANGLE	150 mm
2400	150 x 100 x 8mm ANGLE	150 x 100 x 8mm ANGLE	150 mm
2700	150 x 100 x 10mm ANGLE	150 x 100 x 10mm ANGLE	150 mm
3000	150 x 100 x 12mm ANGLE	150 x 100 x 12mm ANGLE	150 mm

*ALL STEEL LINTELS TO BE HOT DIPPED GALVANIZED

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

CONSTRUCTION CERTIFICATION

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: COVER SHEET

Date 23.04.2014	Design P.E.	Approved	
Scale 1:100@A2	Drawn P.E.	PAUL EL–BAYEH B.E.,M.E.(struct/foundation),M.I.E. Aust	
Project Number ST14170	Drawing Number S0	Revison A	

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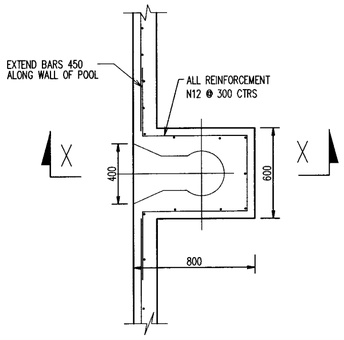
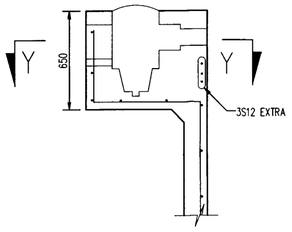
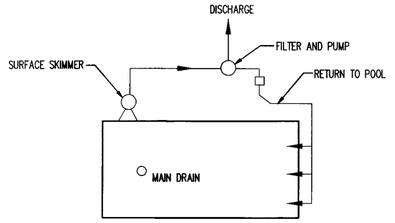


PLAN – SECTION Y–Y



ELEVATION – SECTION X–X

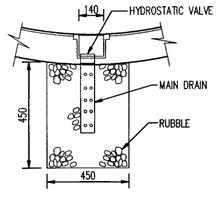


PLUMBING LAYOUT

DIAGRAMATIC ONLY

SKIMMER BOX DETAIL

SCALE 1:20



MAIN DRAIN DETAIL

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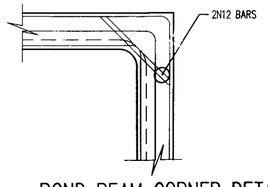
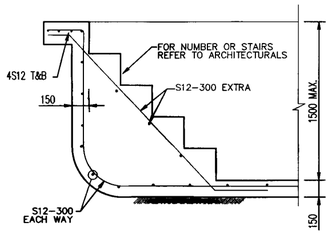


BOND BEAM CORNER DETAIL

SCALE 1:50



TYPICAL STAIR SECTION

CONSTRUCTION CERTIFICATION

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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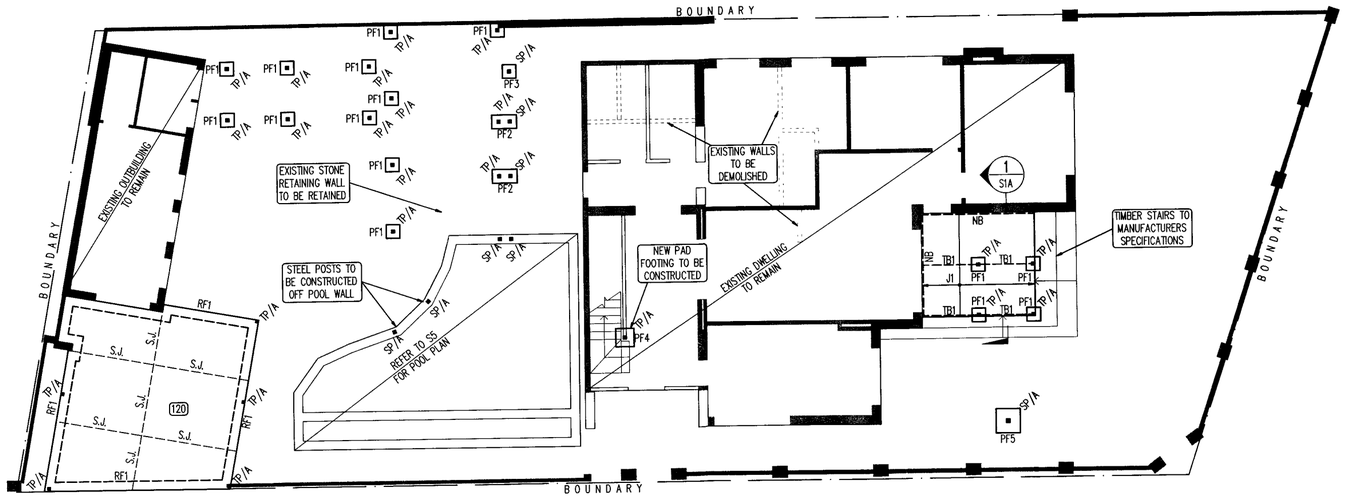
Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: SWIMMING POOL SECTIONS & DETAILS

Date: 23.04.2014	Design: P.E.	Approved: PAUL EL–BAYEH B.E.,M.E.(struct/foundation),M.I.E. Aust	
Scale: 1:100@A2	Drawn: P.E.		
Project Number: ST14170	Drawing Number: S5A	Revison: A	

A2 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



FOOTING PLAN

SCALE 1:100

NOTES:
1. SITE IN ACCORDANCE WITH AS2870 CLASS A – GEOTECH TO CONFIRM
2. SAFE BEARING CAPACITY HAS BEEN ASSUMED TO BE A MIN. OF 400 kPa TO BE BEARING ON NATURAL ROCK STRATA
3. DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTURALS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
5. GEOTECHNICAL ENGINEER TO VERIFY THE SAFE BEARING CAPACITY OF FOUNDATION MATERIAL PRIOR TO CONSTRUCTION.

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f'c
FOOTINGS	80mm	20mm	A	20MPa
RAFT SLAB	80mm	20mm	A	25MPa

REINFORCEMENT COVER SCHEDULE				
MEMBER	COVER (mm)			EXPOSURE CLASSIFICATION
	TOP	BOTTOM	SIDES	
FOOTINGS	50mm	50mm	50mm	B1
INTERNAL SLAB	30mm	30mm	30mm	A1
EXTERNAL SLAB	40mm	40mm	40mm	A2

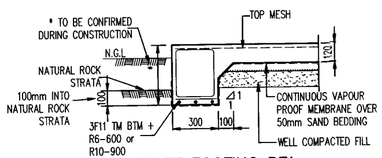
LEGEND :

- NEW NON-LOAD BEARING TIMBER WALL
- EXISTING WALL TO BE DEMOLISHED
- EXISTING LOAD BEARING WALL REMAINING
- TP/A — TIMBER POST ABOVE FOOTING/SLAB
- SP/A — STEEL POST ABOVE FOOTING/SLAB

CARPORT RAFT SLAB – 120mm SLAB U.N.O

SCALE: 1:100

NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SETOUT, LEVELS, FALLS ETC.
2. ALL SLABS TO BE REINFORCED WITH SL82 MESH TOP
3. ISOLATION JOINT – 10mm POLYETHYLENE (MUST BE LOCATED BETWEEN THE WALLS/COLUMNS AND THE NEW SLAB)



RAFT FOOTING RF1

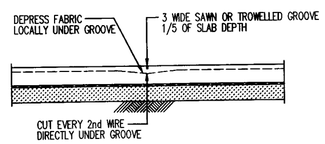
SCALE 1:20

PORCH FRAMING

SCALE: 1:100

NOTES:
1. ALL EXPOSED TIMBER TO BE PRESSURE TREATED TO AS1684
2. A\L DETAILS TO BE CONFIRMED DURING CONSTRUCTION
3. ALL TIMBER TO BE IN ACCORDANCE TO AS1684
4. NB – DENOTES NAILING BEAM

TIMBER MEMBER SCHEDULE		
MARK	TYPE & GRADE	SIZE
TB1	TIMBER BEAM	2/140 x 45 F7 (TREATED PINE)
J1	TIMBER JOISTS	120 x 45 F7 (TREATED PINE) @ 450 CTS
TP	TIMBER POST	90 x 90 HARDWOOD POST



S.J. – SAWN CONTROL JOINT

SCALE 1:20

NOTE: SAWCUT TO BE MADE WITHIN 16 HOURS OF CASTING SLAB

CONSTRUCTION CERTIFICATION

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: GROUND FLOOR FOOTING PLAN

Date	Design	Approved
23.04.2014	P.E.	PAUL EL-BAYEH B.E.,M.E (struct/foundation),M.I.E. Aust
Scale: 1:100@A2	Drawn: P.E.	
Project Number: ST14170	Drawing Number: S1	Revison: A

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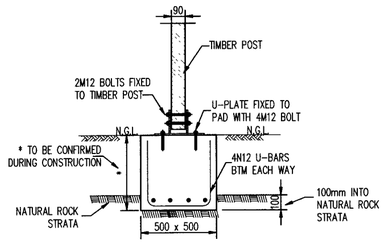
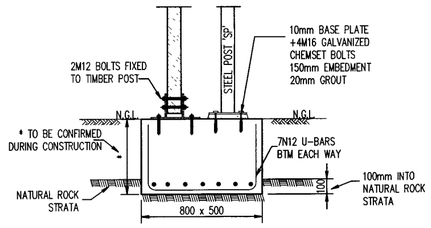


PAD FOOTING 1
-PF1-



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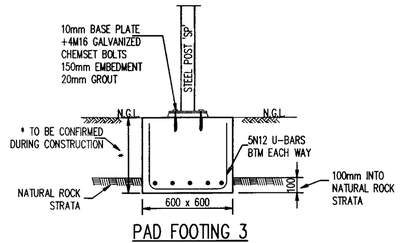

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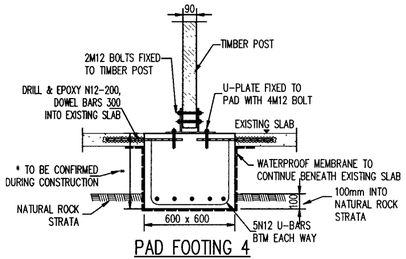
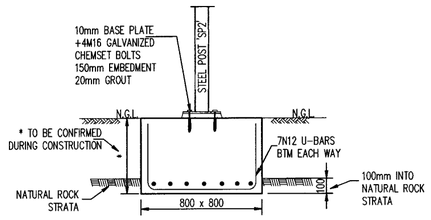
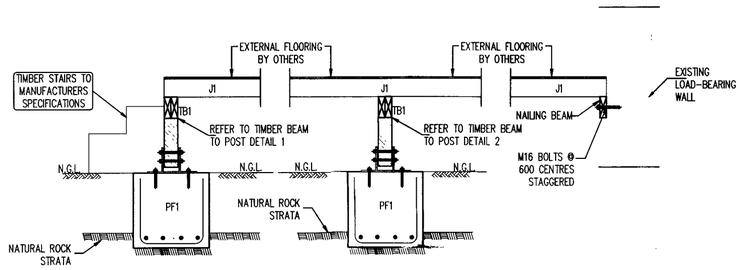


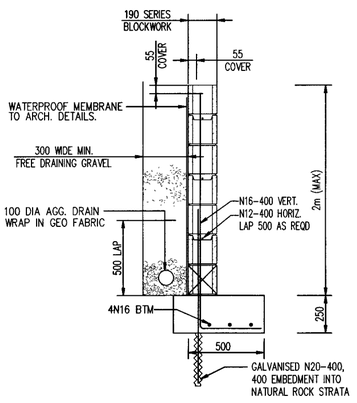
PAD FOOTING 4
-PF4-



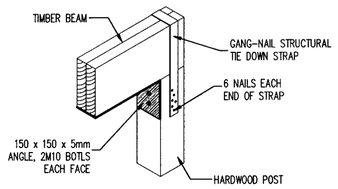
PAD FOOTING 5
-PF5-



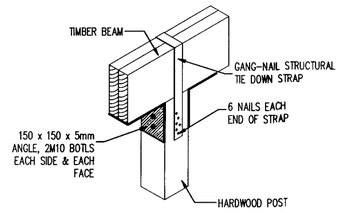
SECTION 1/S1
SCALE 1:20



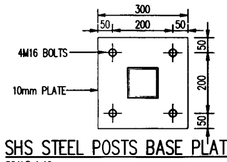
RETAINING WALL DETAIL
SCALE 1:20 WHERE REQUIRED



TIMBER BEAM TO POST
CONNECTION DETAIL 1



TIMBER BEAM TO POST
CONNECTION DETAIL 2



SHS STEEL POSTS BASE PLATE DETAILS
SCALE 1:10
1. ALL BASE PLATES TO BE 10mm PLATE (8mm CFW)
2. ORIENTATE BASE PLATE TO SUIT WALL LOCATION
3. 4M16 CHEMSET ANCHOR BOLTS WITH 75mm EMBEDMENT

CONSTRUCTION CERTIFICATION

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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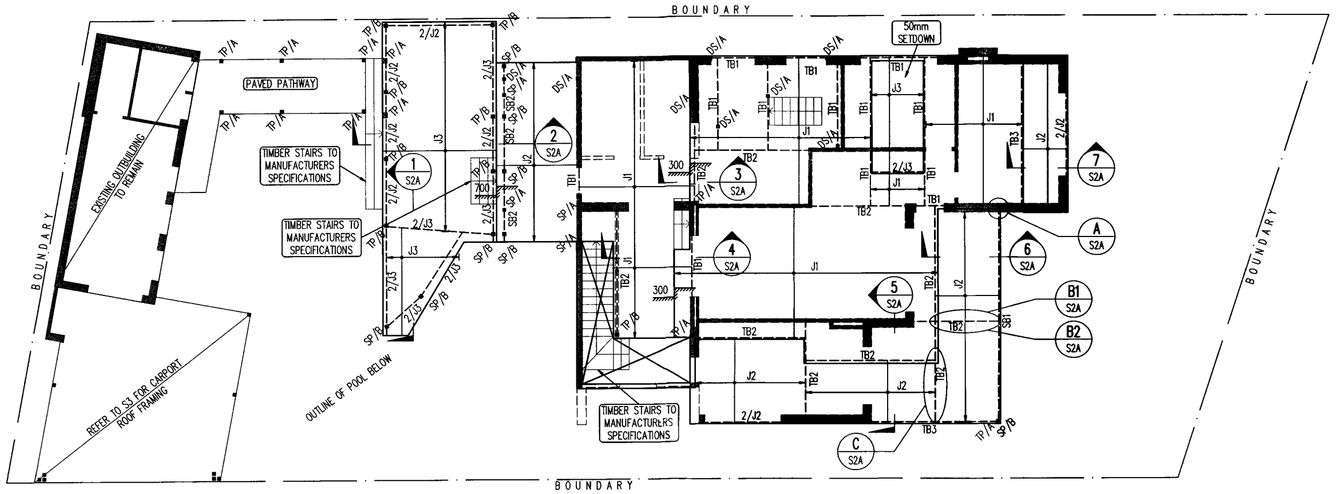
Client
MR & MRS NAPIER

Project
114 DELMAR PARADE, DEE WHY

Title
GROUND FLOOR SECTIONS & DETAILS

Date	Design	Approved
23.04.2014	P.E.	PAUL EL-BAYEH B.E.,M.E.(struct/foundation),M.I.E. Aust
Scale 1:100@A2	Drawn P.E.	
Project Number ST14170	Drawing Number S1A	Revison A

A2 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



FIRST FLOOR FRAMING PLAN

SCALE: 1:100

NOTES:
1. ALL EXPOSED STEEL TO BE PRESSURE GALVANIZED
2. ALL STEEL FIXINGS TO BE IN ACCORDANCE TO AS4100
3. ALL EXPOSED TIMBER TO BE PRESSURE TREATED TO AS1684
4. ALL DETAILS TO BE CONFIRMED DURING CONSTRUCTION
5. ALL TIMBER TO BE IN ACCORDANCE TO AS1684
6. ROOF TO BE BUILT IN ACCORDANCE TO AS1684
7. NB – DENOTES NAILING BEAM

ALL BEAMS TO BE SUPPORTED BY DOUBLE STUDS IF NO HARDWOOD POST IS DENOTED ON PLAN

FLOOR MEMBERS ARE NOT DESIGNED TO CARRY ROOF LOADS. ENGINEER TO BE NOTIFIED IF SIZES TO SUPPORT LOAD BEARING WALLS ARE REQUIRED

LEGEND :

- NEW NON-LOAD BEARING TIMBER WALL BELOW
- EXISTING LOAD BEARING WALL BELOW
- DS/A DENOTES DOUBLE STUD ABOVE
- SP/A DENOTES STEEL POST ABOVE
- TP/A DENOTES TIMBER POST ABOVE
- SP/B DENOTES STEEL POST BELOW
- TP/B DENOTES TIMBER POST BELOW

STEEL MEMBER SCHEDULE

MARK	TYPE & GRADE	SIZE
SB1	STEEL BEAM	380 PFC
SB2	STEEL BEAM	180UB 22.2
SP	STEEL POST	89 x 89 x 5mm SHS

NOTE: ALL EXTERNAL/EXPOSED STEEL BEAMS, POSTS, PLATES, BOLTS, WELDS TO BE FULLY GALVANIZED

TIMBER MEMBER SCHEDULE

MARK	TYPE & GRADE	SIZE
TB1	TIMBER BEAM	2/290 x 45 F7
TB2	TIMBER BEAM	2/300 x 45 HYSPAN
TB3	TIMBER BEAM	2/300 x 63 HYSPAN
J1	TIMBER JOISTS	290 x 45 F7 @ 450 CTS OR 300-45 HYJOIST @ 450 CTS
J2	TIMBER JOISTS	190 x 45 F7 (TREATED PINE) @ 450 CTS
J3	TIMBER JOISTS	240 x 45 F7 (TREATED PINE) @ 450 CTS
TP	TIMBER POST	90 x 90 HARDWOOD POST

CONSTRUCTION CERTIFICATION

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Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: FIRST FLOOR FRAMING PLAN

Date: 23.04.2014	Design: P.E.	Approved: PAUL EL-BAYEH B.E.,M.E.(struct/foundation),M.I.E Aust
Scale: 1:100@A2	Drawn: P.E.	
Project Number: ST14170	Drawing Number: S2	Revison: A

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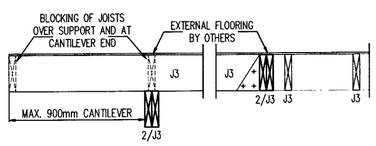
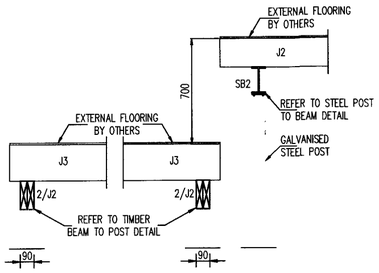


SECTION 1 S2
SCALE 1:20



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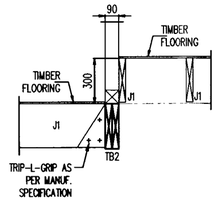
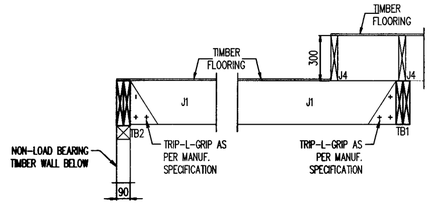


SECTION 3 S2
SCALE 1:20



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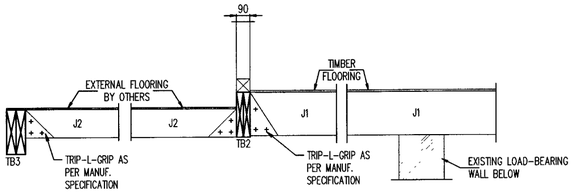
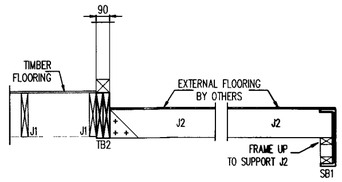
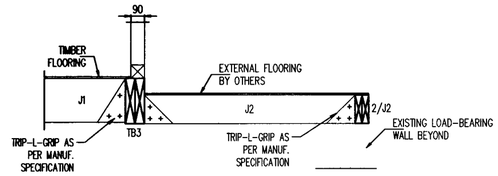


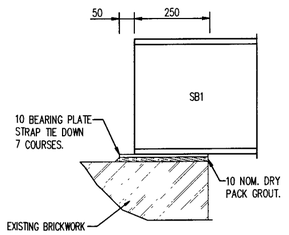
SECTION 5 S2
SCALE 1:20



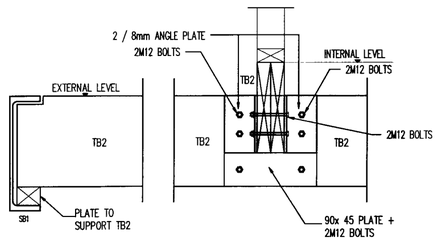
SECTION 5 S2
SCALE 1:20



SECTION 7 S2
SCALE 1:20



DETAIL A S2
SCALE 1:10



DETAIL B1 S2
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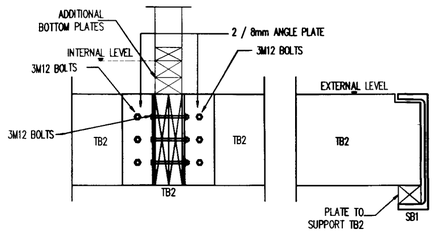

DETAIL B2 S2
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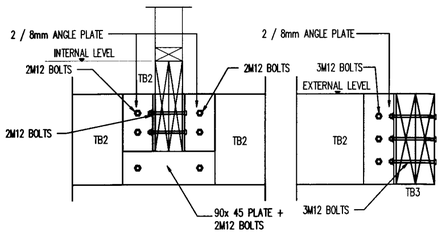

DETAIL C S2
SCALE 1:10

CONSTRUCTION CERTIFICATION

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Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: FIRST FLOOR SECTIONS & DETAILS

Date 23.04.2014	Design P.E.	Approved
Scale 1:100@A2	Drawn P.E.	PAUL EL-BAYEH B.E.,M.E.(struct/foundation),M.I.E Aust
Project Number ST14170	Drawing Number S2A	Revison A

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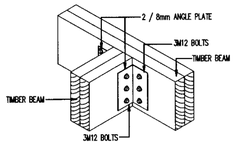
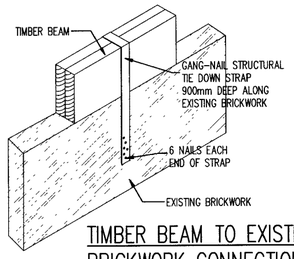
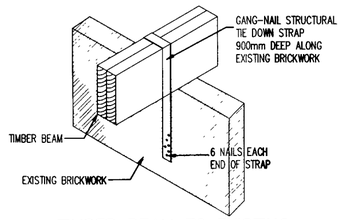


TIMBER BEAM CONNECTION



TIMBER BEAM TO EXISTING BRICKWORK CONNECTION 1



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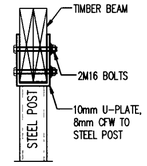
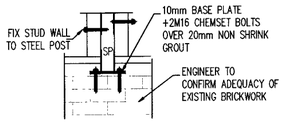
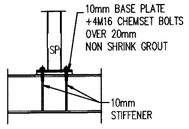


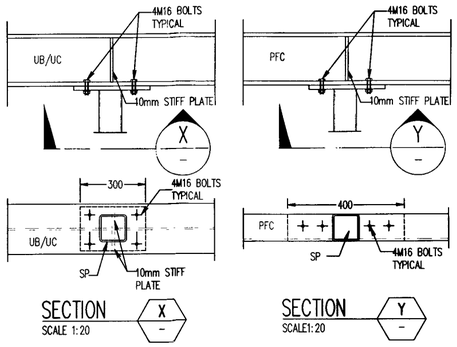
TIMBER BEAM TO STEEL POST CONNECTION DETAILS



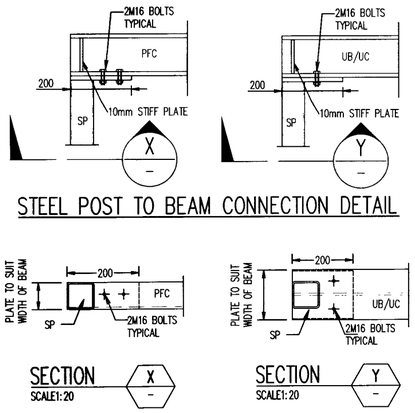
STEEL POST TO EXISTING BRICKWORK CONNECTION DETAIL



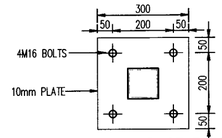
STEEL POST TO STEEL BEAM CONNECTION DETAIL



STEEL POST TO BEAM CONNECTION DETAIL



STEEL POST TO BEAM CONNECTION DETAIL



SHS STEEL POSTS BASE PLATE DETAILS

SCALE 1:10

1. ALL BASE PLATES TO BE 10mm PLATE (8mm CFW)
2. ORIENTATE BASE PLATE TO SUIT WALL LOCATION
3. 4M16 CHEMSET ANCHOR BOLTS WITH 75mm EMBEDMENT

CONSTRUCTION CERTIFICATION

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Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: FIRST FLOOR SECTIONS & DETAILS

Date 23.04.2014	Design P.E.	Approved	
Scale 1:100@A2	Drawn P.E.	PAUL EL-BAYEH B.E.,M.E (struct/foundation),M.I.E Aust.	
Project Number ST14170	Drawing Number S2B	Revison A	

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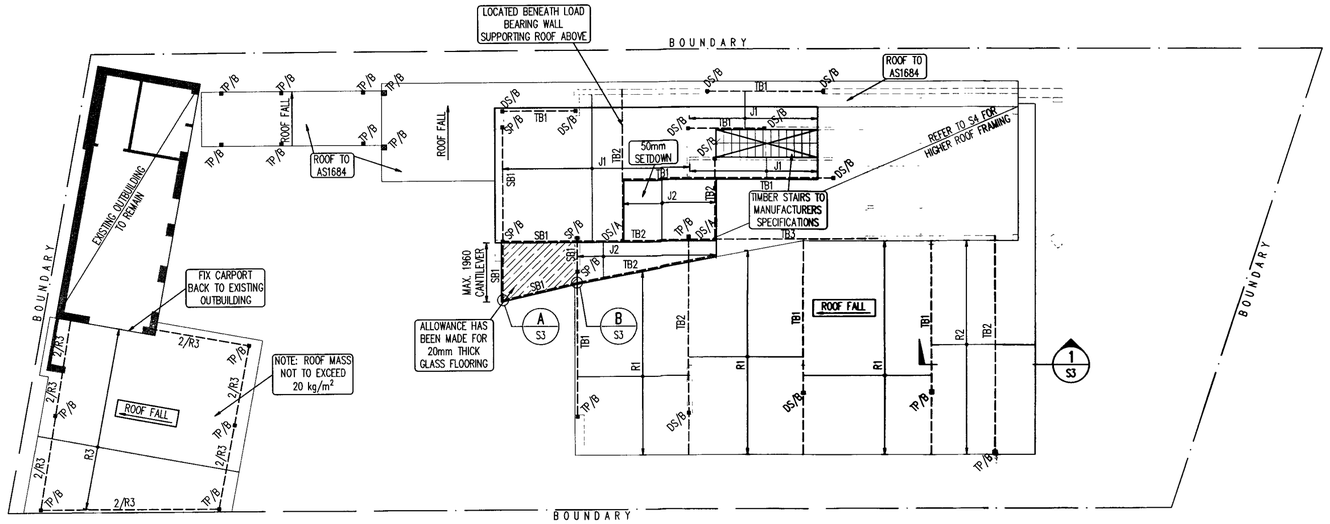


LOFT FLOOR & LOWER ROOF FRAMING PLAN

SCALE: 1:100

NOTES:
1. ALL EXPOSED STEEL TO BE PRESSURE GALVANIZED
2. ALL STEEL FIXINGS TO BE IN ACCORDANCE TO AS4100
3. ALL EXPOSED TIMBER TO BE PRESSURE TREATED TO AS1684
4. ALL DETAILS TO BE CONFIRMED DURING CONSTRUCTION
5. ALL TIMBER TO BE IN ACCORDANCE TO AS1684
6. ROOF TO BE BUILT IN ACCORDANCE TO AS1684
7. NB – DENOTES NAILING BEAM

ALL BEAMS TO BE SUPPORTED BY DOUBLE STUDS IF NO HARDWOOD POST IS DENOTED ON PLAN

FLOOR MEMBERS ARE NOT DESIGNED TO CARRY ROOF LOADS. ENGINEER TO BE NOTIFIED IF SIZES TO SUPPORT LOAD BEARING WALLS ARE REQUIRED

LEGEND :

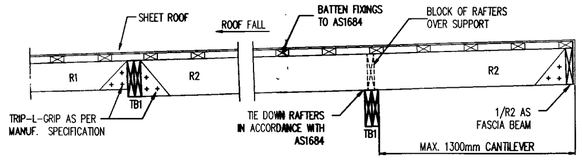
NEW LOAD BEARING TIMBER WALL BELOW

STEEL MEMBER SCHEDULE

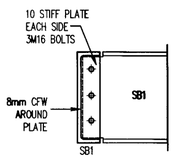
MARK	TYPE & GRADE	SIZE
SB1	STEEL BEAM	300 PFC
SP	STEEL POST	89 x 89 x 5mm SHS

TIMBER MEMBER SCHEDULE

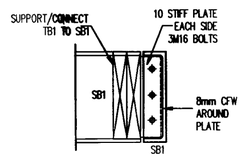
MARK	TYPE & GRADE	SIZE
TB1	TIMBER BEAM	2/290 x 45 F7
TB2	TIMBER BEAM	2/300 x 63 HYSPAN
TB3	TIMBER BEAM	2/400 x 45 HYSPAN
J1	TIMBER JOISTS	290 x 45 F7 @ 450 CTS OR 300–45 HYJOIST @ 450 CTS
J2	TIMBER JOISTS	240 x 45 F7 (TREATED PINE) @ 450 CTS
R1	TIMBER RAFTERS	190 x 45 F7 @ 600 CTS
R2	TIMBER RAFTERS	240 x 45 F7 @ 600 CTS
R3	TIMBER RAFTERS	240 x 45 F7 (TREATED PINE) @ 600 CTS
TP	TIMBER POST	90 x 90 HARDWOOD POST



SECTION 1 S3
SCALE 1:20



DETAIL A S3
SCALE 1:10



DETAIL B S3
SCALE 1:10

CONSTRUCTION CERTIFICATION

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A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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www.capitalengineering.com.au

Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: LOFT FLOOR & LOWER ROOF FRAMING PLAN

Date: 23.04.2014	Design: P.E.	Approved: PAUL EL–BAYEH B.E.,M.E.(struct/foundation),M.I.E Aust
Scale: 1:100@A2	Drawn: P.E.	
Project Number: ST14170	Drawing Number: S3	Revison: A

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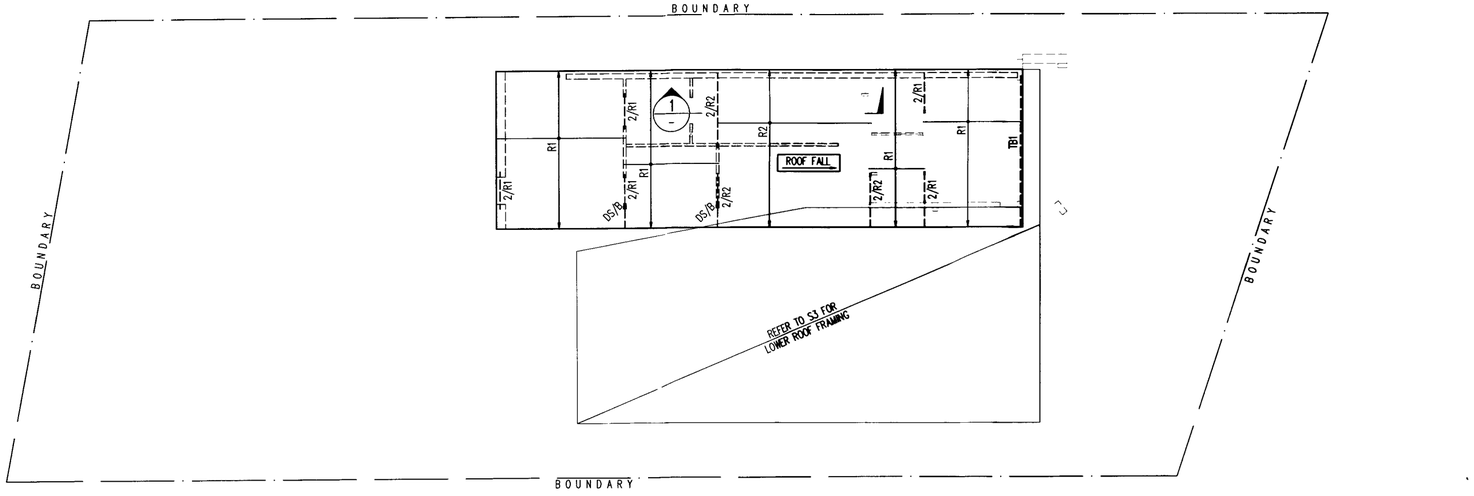


HIGHER ROOF FRAMING PLAN

SCALE: 1:100

NOTES:
1. ALL EXPOSED TIMBER TO BE PRESSURE TREATED TO AS1684
2. ALL DETAILS TO BE CONFIRMED DURING CONSTRUCTION
3. ALL TIMBER TO BE IN ACCORDANCE TO AS1684
4. ROOF TO BE BUILT IN ACCORDANCE TO AS1684

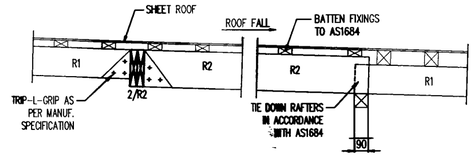
ALL BEAMS TO BE SUPPORTED BY DOUBLE STUDS IF NO HARDWOOD POST IS DENOTED ON PLAN

LEGEND :

⊂===⊃ LOAD BEARING TIMBER WALL BELOW

⊂===⊃ NON-LOAD BEARING TIMBER WALL BELOW

TIMBER MEMBER SCHEDULE		
MARK	TYPE & GRADE	SIZE
TB1	TIMBER BEAM	2/240 x 35 F7
R1	TIMBER RAFTERS	190 x 45 F7 @ 600 CTS
R2	TIMBER RAFTERS	240 x 45 F7 @ 600 CTS
DS	DOUBLE STUD	DOUBLE STUD



SECTION 1/- SCALE 1:20

CONSTRUCTION CERTIFICATION

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: HIGHER ROOF FRAMING PLAN

Date: 23.04.2014	Design: P.E.	Approved: PAUL EL-BAYEH B.E.,M.E (struct/foundation),M.I.E. Aust	
Scale: 1:100@A2	Drawn: P.E.		
Project Number: ST14170	Drawing Number: S4	Revison: A	

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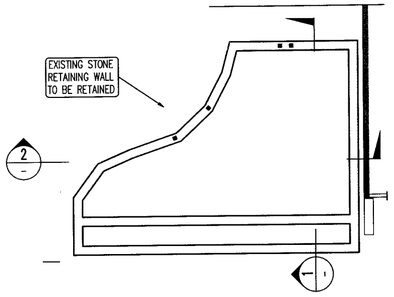
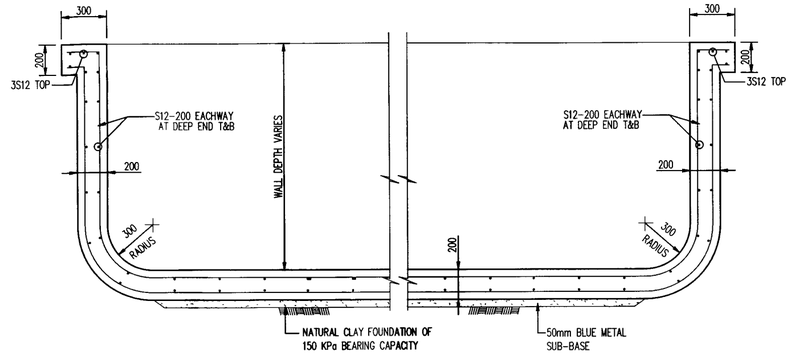


SWIMMING POOL DETAILS TO BE CONFIRMED DURING CONSTRUCTION

CONCRETE PIERS MAY BE REQUIRED – ENGINEER TO INSPECT B.E.L OF POOL & CONFIRM

CONCRETE QUALITY				
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	f'c
POOL BASE / WALLS	80mm	20mm	A	32 MPa



SECTION 1 (-)
SCALE 1:20

POOL SPECIFICATION

1. PLUMING IS TO BE IN ACCORDANCE WITH WRITTEN RECOMMENDATIONS OF FILTER MANUFACTURER
2. WALKWAYS ARE NOT DESIGNED TO SUPPORT MASONARY WALLS UNLESS OTHERWISE NOTED
3. DESIGN LIVE LOAD FOR WALKWAYS AND CONCOURSES 3 kPa

CONSTRUCTION NOTES

1. ALL DIMENSIONS LOCATING POOL ARE BE TAKEN FROM ARCHITECTURAL DRAWINGS
2. WRITTEN DIMENSIONS TO BE TAKEN IN REFERENCE TO SCALE
3. ENGINEER TO BE ADVISED IF EXCAVATION IS IN FILL OR IF EXCESSIVE GROUND WATER IS ENCOUNTER
4. SUPPORTING FOUNDATION MATERIAL TO BE STIFF CLAY OF UNIFORM MOISTURE CONTENT WITH SAFE BEARING CAPACITY OF 150 kPa
5. WHERE IT IS CONSIDERED THAT GROUND WATER CAN BUILD UP TO A LEVEL 500mm ABOVE THE FLOOR OF THE EXCAVATION ADEQUATE DRAINAGE SHALL BE PROVIDED UNDER THE POOL FLOOR
6. CONCRETE TO HAVE A MINIMUM DESIGN STRENGTH OF f'c = 32 MPa AT 28 DAYS CONCRETE TO BE PNEUMATICALLY APPLIED
7. UPON COMPLETION OF CONCRETING THE HYDROSTATIC VALVE IS TO BE CHECKED TO ENSURE EFFECTIVE AND SUFFICIENT OPERATION
8. ALL REINFORCEMENT TO BE SUPPORTED BY BAR CHAIRS
9. REINFORCEMENT IS TO BE STRUCTURAL GRADE DEFORMED BAR GRADE TO 230 TO AUSTRALIAN STANDARD AS1302
10. WATER FACE REINFORCEMENT TO HAVE 65mm CONCRETE COVER REAR FACE REINFORCEMENT HAVE 50mm COVER FROM REAR REAR FACE IF FORMED AND 65mm COVER ISF SPRAYED AGAINST GROUND
11. ALL BARS SHALL BE SPLICED 40 BAR DIAMETERS MIN.
12. SPLICES IN BOND BEAM BARS SHALL BE STAGGERED
13. ALTERNATIVE REINFORCEMENT TO BE TEMCORE BARS IN ACCORDANCE WITH AS 1302 410 Y

SECTION 2 (-)
SCALE 1:20

CONSTRUCTION CERTIFICATION

DO NOT SCALE DRAWING, USE FIGURED DIMENSIONS ONLY

Rev.	Description	By.	App.	Date
A	ISSUED FOR C.C.	P.E.	P.E.	23.04.2014

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Client: MR & MRS NAPIER

Project: 114 DELMAR PARADE, DEE WHY

Title: SWIMMING POOL PLAN, SECTIONS & DETAILS

Date: 23.04.2014	Design: P.E.	Approved: PAUL EL-BAYEH B.E.,M.E (struct/foundation),M.I.E. Aust
Scale: 1:100@A2	Drawn: P.E.	
Project Number: ST14170	Drawing Number: S5	Revison: A

A2 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150