

# abvd design

Consulting Structural and Civil Engineers

48 O'Neill Street, Brighton-Le-Sands NSW 2216

Phone: 02 9587-9192

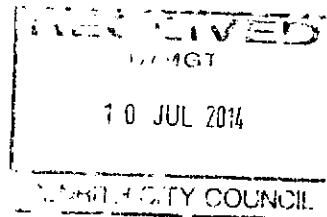
27 June 2014


## STRUCTURAL DESIGN CERTIFICATE

Re: Proposed Timber Deck at: 152 Parkriver Close, Mulgoa

We certify that the proposed timber deck footings 300mm diameter 20MPa mass concrete piers 600mm deep @ 1.8m centres are structurally adequate in accordance with AS1170, AS2870 and AS3600 requirements.

Yours faithfully,

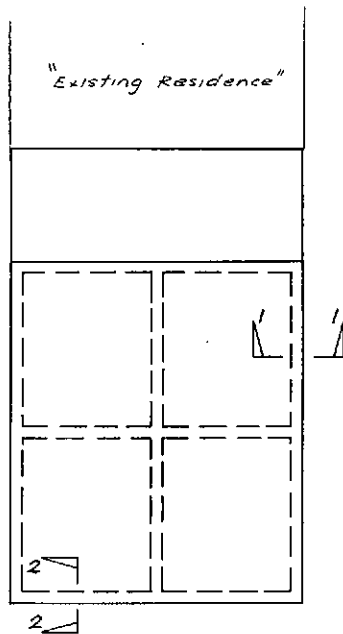


  
D. Miladinovic, MIE Aust, CPEng

ABVD Design

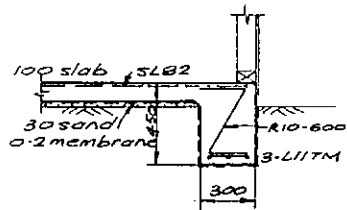




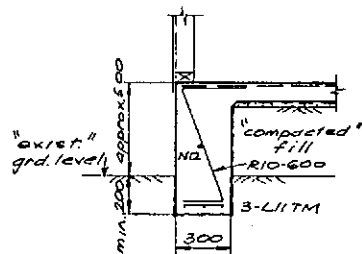


**RAFT SLAB PLAN**

Slab 100 mm thick, Reinf. SLB2 mesh top  
Beams 300 wide x 450 deep, Reinf. 3-L11 TM bottom.



**SECTION 1-1**



**SECTION 2-2  
(Deep Edge Beam)**

**CONSTRUCTION NOTES**

**GENERAL**

- G1 - THESE DIMENSIONS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL PLAN AND SPECIFICATIONS.
- G2 - DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
- G3 - EXISTING OBSTRUCTIONS TO THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE DISREGARDED UNLESS OTHERWISE SPECIFIED.
- G4 - ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SAN CODES, ORDINANCES AND BUILDING AUTHORITY.
- G5 - THE STRUCTURAL WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS:
 

RESIDENTIAL SLABS	Low Load (kPa)
OFFICES, PUBLIC WORKS, CONSUMER	2
BALCONIES, STAGES	3
FACTORIES, PLATFORMS	5
ROOFS	0.25

**FOUNDATIONS**

- F1 - FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING CAPACITY OF 100 KPa.
- F2 - THE SUBSOIL SHALL OBTAIN APPROVAL OF THE PREPARATION MATERIAL BEFORE PLACING CONCRETE.

**CONCRETE**

- C1 - ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1010.
- C2 - CONCRETE STRENGTH FC AT 28 DAYS:
 

FOOTINGS	25
SLABS AND BEAMS	20
EXPOSED CONCRETE	20
- C3 - CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
 

Interior	25
Exterior	30
In contact with earth	50
In contact with ground	50
- C4 - SIZE OF CONCRETE ELEMENTS IS NOT BELIEVED TO BE NECESSARY TO FINISHES.
- C5 - SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN LOCATIONS SHOWN WHERE LAP LENGTHS ARE NOT SHOWN THEY SHALL BE AS FOLLOWS:
 

100mm dia.	300mm
120mm dia.	350mm
150mm dia.	400mm
200mm dia.	500mm
- C6 - MINIMUM LAP FOR FABRIC SHALL BE TWO TIMES THE BAR SIZE.
- C7 - REINFORCEMENT SHALL BE:
  - 1 - BARS: AS 3672
  - 2 - BARS: AS 3672
  - 3 - BARS: AS 3672
  - 4 - BARS: AS 3672
  - 5 - BARS: AS 3672
  - 6 - BARS: AS 3672
  - 7 - BARS: AS 3672
  - 8 - BARS: AS 3672
  - 9 - BARS: AS 3672
  - 10 - BARS: AS 3672
  - 11 - BARS: AS 3672
  - 12 - BARS: AS 3672
  - 13 - BARS: AS 3672
  - 14 - BARS: AS 3672
  - 15 - BARS: AS 3672
  - 16 - BARS: AS 3672
  - 17 - BARS: AS 3672
  - 18 - BARS: AS 3672
  - 19 - BARS: AS 3672
  - 20 - BARS: AS 3672
- C8 - CONCRETE SHALL BE MECHANICALLY VIBRATED.
- C9 - CONCRETE SHALL BE SET-CURED FOR 7 DAYS AFTER PLACEMENT.
- C10 - HORIZONTAL FORMWORK SHALL BE STRIPPED WHEN APPROVED BY THE ENGINEER.
- C11 - DO NOT SUB MITIGATION ON EXPOSURE WORK UNTIL ALL PREPPING HAS BEEN REMOVED.

**BRICKWORK AND BLOCKWORK**

- B1 - ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS2700.
- B2 - STRENGTH OF BRICKWORK SHALL BE 20 MPa.
- B3 - WHERE CONCRETE BEARS ON BRICKWORK IT SHALL BE SEPARATED BY TWO LAYERS OF ALUMINUM OXIDE RETARDANT STRIP.
- B4 - PROVIDE VERTICAL CONTROL JOINTS IN BRICKWORK AND BLOCKWORK AT 2M CENTRE MAX.

**STRUCTURAL STEEL**

- S1 - ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1163.
- S2 - UNLESS OTHERWISE NOTED ALL BOLTS TO BE OF GRADE 8.8.
- S3 - ALL CONNECTIONS TO HAVE 6 BOLTS FOR PER CONNECTION WITH GUSSET PLATES UNLESS OTHERWISE NOTED OTHERWISE.
- S4 - UNLESS OTHERWISE NOTED ALL WELDS TO BE 6mm CONTINUOUS FILLET FROM EACH END.
- S5 - WELLS WHERE INDICATED SHALL BE FULL PENETRATION WELDS AS SET OUT IN AS1163.
- S6 - THE SUBMITTER SHALL SUBMIT 2 SETS OF SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. THESE DRAWINGS SHALL BE PREPARED BY THE SUBMITTER.
- S7 - STEEL MEMBERS TO BE VIBRE BRIDGES AND GIVEN ONE COAT OF AN APPROVED ZINC PHOSPHATE PRIMER.

01-03-13	ISSUED	all
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**PROPOSED DEVELOPMENT AT NO. 152  
PARK RIVER CLOSE MULGOA**

**RAFT SLAB PLAN AND DETAILS**

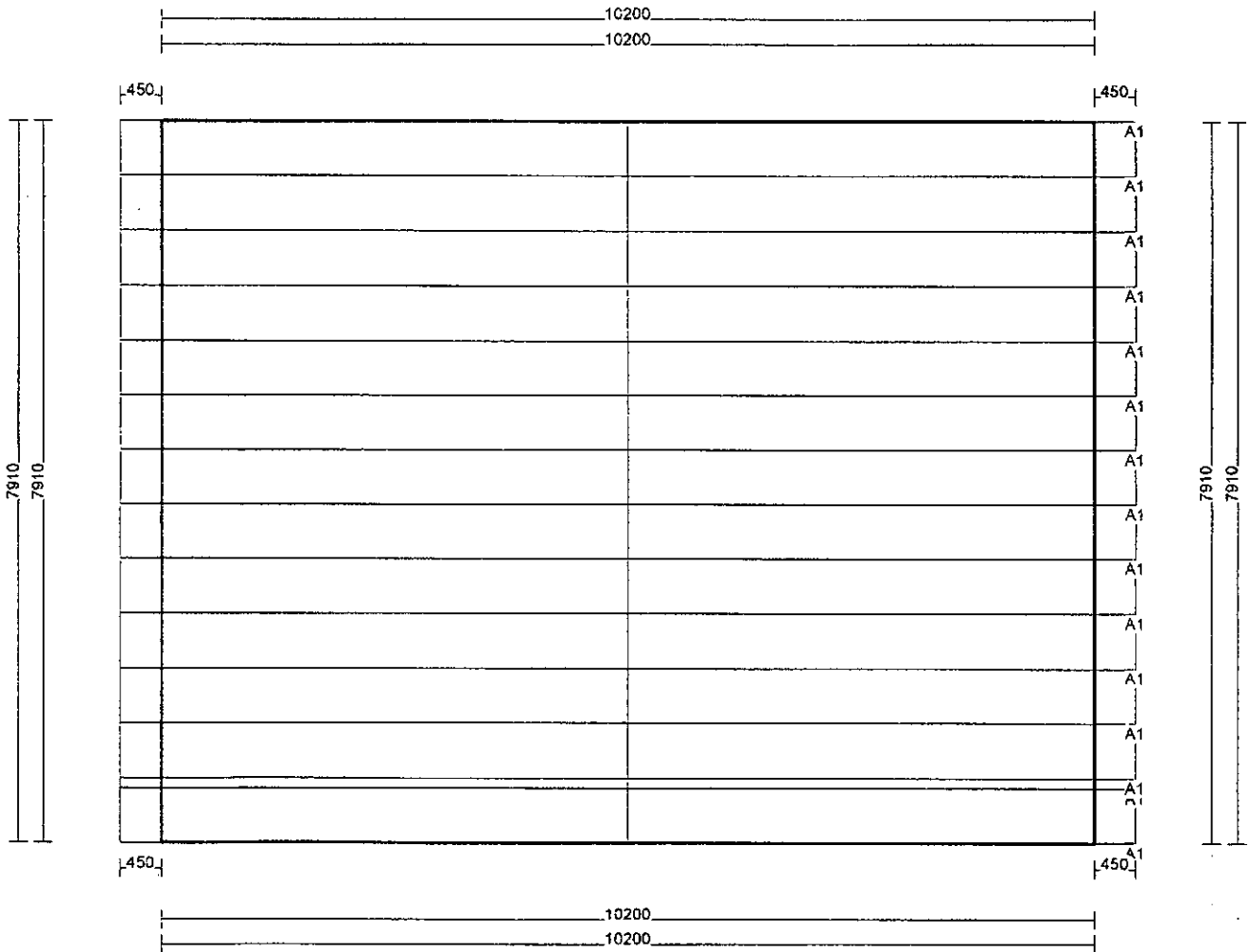
<p><b>AB Design</b> Consulting Structural &amp; Civil Engineers</p> <p>48 O'Neill Street, Brighton-le-sands NSW 2216 P.O. Box 245, Punchbowl NSW 2196 Phone: 9587 9192 - Mobile: 0415 275 601 Fax: 9587 9192 - Email: abvd@blgpond.net.au</p>	DRAWN <i>RN</i>
	CHECKED <i>Bliss</i> , MIE (MSE)
SCALE 1:100    1:20	DRG. NO. <b>1/4183</b>

ABC FRAMES & TRUSSES P/L ABN: 72  
14 AINE STREET  
ST. MARYS NSW 2760

Customer : WINDOOR  
Site : \*\*\*\*\* METRO

Gang-Nail Australia Ltd.  
RoofFAB 3

*Emailed 29/4/13.*



Roof : SHEET ROOFING  
Wind : Wind class N2  
Ceiling : 10 mm P/B 600 bat spc

Truss Spacing : 600 mm  
Lower Pitch : 31.00 degrees

1442  
Scale 1 : 75  
Mon Apr 22 16:24:54 2013