

## IM ENGINEERING & ACCREDITED CERTIFIER

No.79 South Street, Granville, 2142  
Tel: 9682 4141 email: imengineering@optusnet.com.au

1<sup>st</sup> September 2020

To whom it may concern,

**RE: Structural Design for lift at  
No.23A Bungan Head Road, Newport.**

This is to certify that our structural design (Drawing No.2020011 S1 dated 1/9/2020) for the proposed lift at the above address has been prepared in accordance with the following Australian Standards:

- AS 3600 (Concrete Structure)
- AS 2870-1996 (Residential Slabs & Footings-Construction)
- AS 4100 (Steel Structure)

We hereby certify that the above building is structurally adequate to support all loads as specified in AS 1170.1 & 2 (Loading Code).

We hope this certificate meets your requirements. Should you require any help or further explanations, please do not hesitate to contact us.

Yours faithfully,



I. Makdissi  
B.E. Civil Eng'g (UWS); M.I.E.(Aust) NER  
NSW, Queensland & Victoria  
Qualified Acoustic, Civil & Structural Engineer  
Accredited Certifier – Building Inspector

GENERAL NOTES

- G1. 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 FOR DECISION BEFORE PROCEEDING WITH THE WORK.
- G2. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION AND FABRICATION IS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.
- G3. DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A STABLE CONDITION AND ENSURING NO PART SHALL BE OVERSTRESSED UNDER CONSTRUCTION ACTIVITIES.
- G4. WORKMANSHIP AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RELEVANT CURRENT S.A.A. CODES INCLUDING ALL AMENDMENTS, AND THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- G5. THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE ENGINEER BUT IS NOT AN AUTHORISATION FOR AN EXTRA. ANY EXTRA INVOLVED MUST BE TAKEN UP WITH THE ARCHITECT BEFORE THE WORK COMMENCES.
- G6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL LEVELS ARE EXPRESSED IN METRES.
- G7. ALL PROPS AND FORMWORK FOR BEAMS AND SLABS SHALL BE REMOVED BEFORE CONSTRUCTION OF ANY MASONRY WALLS OR PARTITIONS ON THE FLOOR.
- G8. ALL NON LOADBEARING WALLS SHALL BE KEPT CLEAR OF THE UNDERSIDE OF SLABS AND BEAMS BY 20mm UNLESS OTHERWISE
- G9. THIS FOOTING IS NOT FOR SOILS IN A FILLED SITE

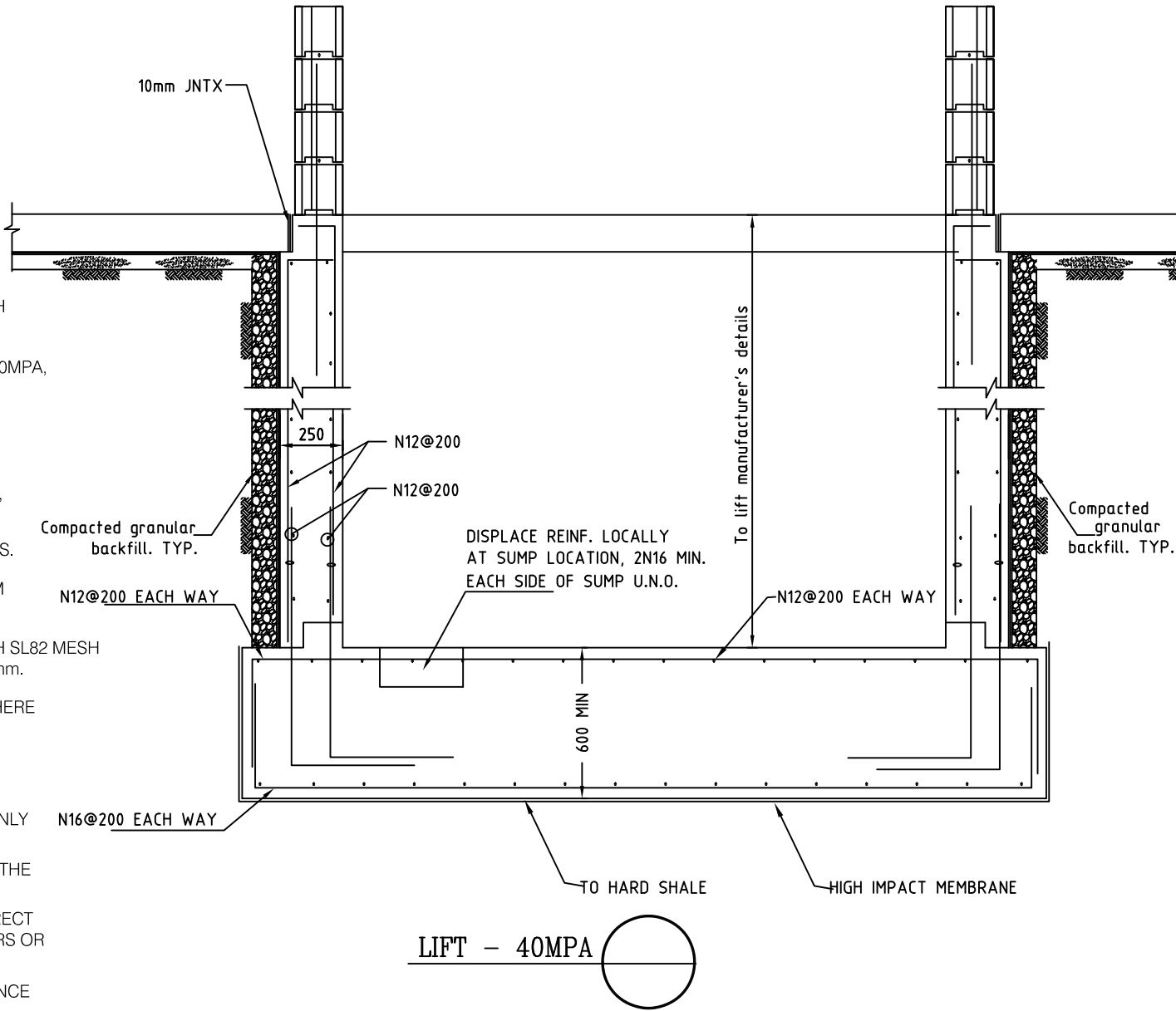
G9. ARTICULATION JOINTS MUST BE USED TO MEET FOOTING DEPTH SIZES PROVIDED IN THIS DESIGN. WITHOUT ARTICULATION JOINTS FOOTINGS DEPTH SHOULD BE AT 1000mm.

FOOTING NOTES

F1. FOOTING TO START MINIMUM 200mm BELOW NATURAL GROUND LEVEL.

CONCRETE NOTES

- C1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.
- C2. CONCRETE FOR TRENCHES, PADS, PIERS AND ON GROUND SLAB IS 40MPA, 40MPA FOR SUSPENDED SLABS & COLUMNS.
- C3. COVER TO FOOTINGS IS 50mm, 50mm TO INTERIOR SLABS AND 50mm TO VERANDAHS AND COLUMNS.
- C4. MESH LAP IS 2 FULL SQUARES, LAP IS 450mm ON N12, 600mm ON N16, 1000mm ON N20 AND 1250mm ON N24.
- C5. CONCRETE IS CURED BY WATERING IT THREE TIMES A DAY FOR 5 DAYS.
- C6. FILL UNDER ON-GROUND SLAB TO BE WELL COMPACTED IN MAXIMUM LAYERS OF 150mm BY REPEATED ROLLING WITH AN EXCAVATOR.
- C7. ON-GROUND SLAB IS MINIMUM 140mm THICK, AND REINFORCED WITH SL82 MESH TOP AND BOTTOM IN AREA WHERE CONMPACTED FILL EXCEEDS 500mm.
- C8. FORMWORK TO REMAIN IN POSITION FOR A MINIMUM OF 14 DAYS. WHERE SLABS AND BEAMS TO SUPPORT BRICK WORK, FORMWORK TO BE REMOVED PRIOR TO COMMENCEMENT OF BRICK WORK.
- C9. BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS.
- C10. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN OR SPECIFICALLY APPROVED BY THE ENGINEER.
- C11. WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE ENGINEER.
- C12. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS.
- C13. FORMWORK SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH AS1509.



Civil, Acoustic & Structural Engineers  
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Project: STRUCTURAL DESIGN

PROPOSED ADDITIONS  
NO.23A BUNGAN HEAD ROAD,  
NEWPORT

Designed by  
P. MAKDISSI  
Drawn by  
P. MAKDISSI  
Checked by  
I. MAKDISSI  
Date  
1/9/2020

Scale  
AS SHOWN  
Job No.  
2020011  
Drawing No.  
2020011 S1

Rev.

No.	Date	Revision	By

STEEL TO HAVE MINIMUM  
50mm COVER FOR ALL REINFORCEMENT