



DRAWING NOTES

GENERAL

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 Engineer for decision before proceeding with the work.

G2. Dimensions shall not be obtained by scaling the structural drawings.

G3. Setting out dimensions shown on the drawings shall be verified by the builder.

G4. During construction the structure shall be maintained in a stable condition and no part shall be overstressed.

DESIGN LOADS

L1. The structural work on these drawings has been designed in accordance with the SAA Loading Code AS1170 Part 1 and 2, current edition with amendments, or the following Live Loads:

FOUNDATIONS

F1. Foundations have been designed for an allowable bearing intensity of _____.

Foundation material shall be approved for this pressure before placing concrete.

CONCRETE

C1. All workmanship and materials shall be in accordance with AS 3600.

C2. Concrete quality shall be as per the following table, quality shall be verified by testing as described in AS 3600.

Element	Slump mm	Maximum Aggreg. Size (mm)	Cement Type	Admixture	Concrete Grade MPa
Footings	80	20	GB	-	25
Slabs on Ground	80	20	GB	-	25
Suspended Slabs	80	20	GP	-	32

C3. Construction joints where not shown on the drawing shall be referred to the Engineer for approval.

C4. No holes of chases other than those shown on the structural drawings shall be made in concrete members without prior approval of Engineer.

C5. Pipes of conduits shall not be placed within concrete members unless shown on the drawings.

C6. Unless noted otherwise beam depths are written first and include slab thickness if any. Concrete mix for steel encasement to be 1:2:4.

C7. Stripping of concrete formwork shall be strictly as per AS 3610. Any queries shall be referred to Engineer prior to commencement of stripping.

C8. Where secondary tie bar are not shown provide _____ at _____.

C9. Formwork to remain in position for a minimum of _____ days.

C10. Concrete shall be moist cured for 7 days and protected at all times from excessive temperature.

REINFORCEMENT

R1. Reinforcement is represented diagrammatically. It is not necessarily in true projection.

R2. Splices in reinforcement shall not be made other than where shown on drawings, unless approval is obtained from Engineer. Where the lap length is not shown it shall be sufficient to develop the full strength of the reinforcement. Welding of reinforcement shall not be permitted unless shown on the drawings.

R3. Cold worked reinforcement shall not be cut on site by oxy torch. Such reinforcement is to be cut by saw only.

R4. Clear concrete cover to reinforcement shall be as follows:

ELEMENT	CAST IN FORMS COMPLYING WITH AS 3610		
	CONDITION 1 Not exposed to weather, ground, water or fresh water	CONDITION 2 To be exposed to weather, ground, water or fresh water	CONDITION 3 Cast against other formwork or the ground
Pad footings or pile caps	-	65	75
Strip footing	-	50	65
Bored or cast Piers	-	50	75
Walls incl. retaining walls	20	30	65
Beams	25	40	65
Slab incl. joint & hollow block construction	20	30	65

R5. Slabs poured over a membrane on ground are Condition 2.

NB. All reinforcing bars shall comply with AS 1302. All fabric shall comply with AS 1301 and AS 1304 and shall be supplied in flat sheets.

R7. Reinforcement symbols:
S - Structural grade deformed bar to AS 1302.
C - Cold worked deformed bar to AS 1302.
R - Structural grade round bar to AS 1302.
F - Hard drawn wire fabric to AS 1304.

R8. Fabric reinforcement to be lapped 200mm at ends and side. Laps in positions of maximum moments are not permitted.

R9. All reinforcement shall be firmly supported on insulated steel or plastic chains at not greater than 900 centres both ways. Rods shall be tied at alternate intersections.

BRICKWORK AND BLOCKWORK

B1. All workmanship and materials shall be in accordance with AS 3700.

B2. Strength of bricks, class of blocks, and type of mortar shall be _____ and shall be verified by test according to relevant standards.

B3. Allowance is to be made for expansion in external brickwork and blockwork walls by providing joints at 8.0m centres as shown on the drawing or as instructed by the Architect or Engineer. Articulated walling should be in accordance with C29 from the Cement and Concrete Association.

B4. Loadbearing brickwork or blockwork supporting concrete or steel members shall be trowelled smooth and separated at the bearing surface by 2 layers of metal bond break or equivalent.

B5. Non-loadbearing brickwork or blockwork to have a layer of cantileer or equivalent on top course to separate from member over.

B6. Brickwork or blockwork shall not be built on suspended slabs or beams until all props and work under have been removed.

B7. Cleanout openings shall be provided in bottom course of all reinforced blockwork.

STRUCTURAL STEEL

S1. Fabricate and erect all structural steelwork in accordance with AS 1250 and AS 1554. Except where varied by the contract documents.

S2. Connections shall be provided to carry the reactions shown unless otherwise detailed.

S3. The builder shall prepare workshop drawings and submit them for approval. Fabrication shall not commence until approval has been received.

S4. Unless otherwise noted use:
(a) 10mm thick gusset, fin and end plates weld all round.
(b) M16 Commercial class bolt.
(c) 6mm Continuous fillet welds.
Electrodes to conform to AS 1553.

S5. Provide temporary bracing in accordance with specification. Do not erect under base plates until first level steelwork is plumb and fixed by welding or bolting. Prepare and finish steelwork surfaces as specified, or as follows: _____.

S6. _____

NOTE: ALL SAA PUBLICATIONS TO BE CURRENT AND READ IN CONJUNCTION WITH THEIR VARIOUS PARTS AND/OR AMENDMENTS.

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Proposed Alterations Structural Details.
 For: ARTAS
 At: Glen Innes RTA

REVISIONS: C2

Date: 14/6/11	Designed: G.M.	Job Number: 20100255-GME
Drawn: G.M.	Checked: _____	Scale: As Shown
		SO2/C2