

GENERAL NOTES:

- ENGINEER'S DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND GENERAL CONDITIONS OF THE CONTRACT, THE ASSOCIATED ARCHITECTURAL DRAWINGS, THE ENGINEER'S SOIL AND FOOTING CONSTRUCTION REPORT AND ANY OTHER DRAWINGS RELATING TO THIS PROJECT.
- ALL DIMENSIONS, LEVELS AND SETTING OUT SHALL BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS AND CHECKED ON SITE PRIOR TO COMMENCING FABRICATION AND, OR, CONSTRUCTION.
- THE ENGINEER'S DRAWINGS MUST NOT BE SCALED.
- ALL DIMENSIONS IN mm UNLESS OTHERWISE SPECIFIED.
- ADDITIONS AND SUBSTITUTIONS SHALL ONLY BE MADE WITH THE ENGINEER'S PRIOR KNOWLEDGE AND APPROVAL.

SITE INSPECTIONS:

- SITE INSPECTIONS MUST BE CARRIED OUT BY THE ENGINEER AT THE FOLLOWING STAGES:
- AFTER TRENCHING OF FOOTINGS & PIERS AND PRIOR TO PLACEMENT OF THE MOISTURE BARRIER.
  - AFTER PLACEMENT OF REINFORCEMENT PRIOR TO POURING OF CONCRETE OF ALL FOOTING, SUSPENDED SLABS, BEAMS, COLUMNS, RETAINING WALLS ETC.
  - ALL STEEL WORK AT TIME OF ERECTION.
  - AS OTHERWISE REQUESTED BY THE ENGINEER, OWNER OR CONTRACTOR NOTE THAT 24 HOUR NOTICE MUST BE GIVEN BEFORE EACH INSPECTION.

MASONRY NOTES:

- ALL BRICKWORK SHALL COMPLY WITH AS3700 "MASONRY STRUCTURES".
- ALL BLOCKWORK SHALL COMPLY WITH AS3700 "MASONRY STRUCTURES".
- ALL BRICKWORK AND BLOCKWORK SHALL BE TEMPORARILY BRACED DURING CONSTRUCTION.

CONCRETE NOTES:

- ALL CONCRETE CONSTRUCTION SHALL COMPLY TO THE PROVISIONS OF AS3600 "CONCRETE STRUCTURES", AS3610 "FORMWORK FOR CONCRETE" AND ANY OTHER RELATED CODES.
- CONCRETE SHALL BE MADE WITH PORTLAND CEMENT, COARSE AGGREGATE, FINE AGGREGATE AND WATER. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR PRODUCING THE CONCRETE WHICH WILL HAVE THE PROPERTIES SPECIFIED AND IN ADDITION TO THE ASSESSMENT DONE BY THE SUPPLIER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT "PROJECT ASSESSMENT" PROCEDURES ON ALL CONCRETE IN ACCORDANCE WITH THE REQUIREMENTS OF AS3600, SECTION 17 & AS1579.
- THE CHARACTERISTIC COMPRESSIVE STRENGTH OF THE CONCRETE (f<sub>c</sub>), AS DEFINED IN AS3600 CLAUSE 3.1.1, TO BE AS FOLLOWS, UNLESS SPECIFIED OTHERWISE:  
32 MPa FOR FOOTINGS AND SLAB ON GROUND. 32 MPa FOR SUSPENDED SLABS, BEAMS, AND COLUMNS. 10 MPa FOR FOUNDATION PREPARATION CONCRETE, WHERE SPECIFIED.
- DESIGN, SUPPLY AND CONSTRUCTION OF ALL FORMWORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF AS3610 TO PRODUCE CONCRETE TO THE DIMENSIONS, SHAPE AND ALIGNMENTS REQUIRED.
- ALL CONCRETE WILL COMPACTED WITH A MECHANICAL VIBRATOR.
- ALL CONCRETE SHALL BE PROPERLY CURED BY KEEPING ALL EXPOSED SURFACES IN A MOIST OR DAMP CONDITION FOR AT LEAST SEVEN DAYS AFTER PLACING OR BY SPRAYING WITH AN APPROVED CURING COMPOUND. REMOVAL OF FORMS SHALL COMPLY WITH AS3600 SECTION 17.6 "FORMWORK".
- STEEL REINFORCEMENT SHALL COMPLY WITH THE CURRENT STANDARDS LISTED BELOW AND AS APPLICABLE. REINFORCEMENT DESIGNATIONS ARE AS FOLLOWS:  
R<sub>L</sub>SL<sub>7</sub>M - WELDED DEFORMED MESH GRADE 500 TO AS4671  
R - PLAIN ROUND BAR GRADE 250 TO AS4671  
W - HARD DRAWN PLAIN WIRE GRADE 500 TO AS4671  
N - HOT-ROLLED DEFORMED BAR GRADE 500 TO AS4671
- PLACE REINFORCEMENT ACCURATELY IN POSITION AND FASTEN SECURELY TO PREVENT DISPLACEMENT DURING PLACING OF CONCRETE.
- COVER TO REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS3600 SECTIONS 4 AND 5 BUT NOT LESS THAN THE FOLLOWING, UNLESS NOTED OTHERWISE:  
PAD FOOTINGS  
STRIP FOOTINGS 75 mm ALL ROUND  
40 mm TOP  
65 mm BOTTOM AND SIDES  
RAFT FOOTINGS 40 mm TOP  
50 mm BOTTOM AND SIDES  
25 mm TOP  
30 mm BOTTOM  
SLAB ON FILL 20 mm TOP AND BOTTOM  
INTERNAL SUSPENDED SLABS 40 mm TOP  
40 mm BOTTOM  
EXTERNAL SUSPENDED SLABS 40 mm TOP  
40 mm BOTTOM  
BEAMS AND COLUMNS 40 mm ALL ROUND
- UNLESS NOTED OTHERWISE ALL REINFORCEMENT MINIMUM LAPS SHALL BE 45 BAR DIAMETERS FOR 'N' DESIGNATED BARS AND 300mm FOR FABRIC. THE LAPS SHALL BE STAGGERED AND THEIR LOCATION SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- CONCRETE CONSTRUCTION JOINTS, SHALL BE FORMED IN THE MANNER AND AT THE LOCATIONS INDICATED ON THE DRAWINGS. ALL CONSTRUCTION JOINTS TO BE THOROUGHLY SCABBLED OF ALL LAITANCE AND POORLY COMPACTED MATERIAL.
- FILLING SHALL BE FILLING SAND OR QUARRY RUBBLE FREE FROM CLAY LUMPS, DEBRIS, WEEDS, ROOTS OR OTHER FOREIGN MATTER, AND SHALL BE COMPACTED IN 150mm LAYERS TO NOT LESS THAN 95% MODIFIED COMPACTION WITH THE DRY DENSITY RATIO DETERMINED ACCORDING TO AS1289, E4.1.
- PROVIDE TERMITE PROTECTION TO AS3660.
- PROVIDE CONTINUOUS FORTECOR OR EQUAL 0.3mm MOISTURE BARRIER THROUGHOUT UNDERSIDE OF FLOOR SLAB, LAPPED 250mm MINIMUM AND TAPED.
- ALL CONCRETE COLUMN BELOW GROUND/PAVING LEVEL TO BE PROTECTED BY 3 COATS OF BITUMEN PAINT TO 50mm NOM ABOVE GROUND/PAVING LEVELS.

NOTES

- THIS DRAWING TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS & THE FOOTING CONSTRUCTION REPORT.
- MAINTAIN SLAB THICKNESS & FOOTING DEPTH AT ALL SETDOWNS.
- SD - DENOTES 25mm SETDOWN TO WET AREAS, PROVIDE 2 LAYERS SL72 FABRIC TOP. SET DOWN FOR SHOWER TO BE 50mm.
- SLAB ON GROUND TO BE 125mm THICK, SL92 FABRIC TOP & SL72 BOTTOM. TYPICAL UNO
- 2-N16, 2000mm LONG CRACK CONTROL BARS.
- ALL FOOTINGS TO BE FOUNDED 200mm (MIN) INTO NATURAL GROUND OR PROVIDE TRENCH PIERS 1200mm LONG x WIDTH OF FOOTING WIDE, AT 3000mm CENTRES, FOUNDED 200mm (MIN) INTO NATURAL GROUND.
- ALL BEAM LIGATURES TO BE REDUCED TO 300 CTS BETWEEN PIERS.
- WHERE BRITTLE FLOOR COVERINGS ARE TO BE USED eg LARGE TILED AREAS GREATER THAN 6m<sup>2</sup>, REINFORCEMENT IN SLAB SHALL BE INCREASED TO SL92 FABRIC TOP IN ACCORDANCE WITH AS2870 Sec 5.3.7 AND USE FLEXIBLE ADHESIVE GROUT BED SUCH AS 'RESIFLEX' OR A SIMILAR APPROVED PRODUCT.
- IF UNCONTROLLED FILL IS GREATER THAN 300, PROVIDE 125mm THICK SLAB SL92 FABRIC TOP & SL72 BOTTOM.
- WHERE A 30° LINE DRAWN FROM THE BASE OF THE FOOTING INTERSECTS AN ADJACENT TRENCH, UNDERMINING PIERS ARE REQUIRED. REFER TO DETAIL SHEET SD39 IN FOOTING CONSTRUCTION REPORT.
- USE 20 MPa CONCRETE FOR FOOTINGS AND SLAB ON GROUND (U.N.O.) (FOR SITES UP TO 1km FROM THE SEA, USE 32 MPa UNLESS SPECIFIED OTHERWISE.)
- FOOTINGS ON BOUNDARY ARE TO BE TRENCHED 600mm MIN. BELOW EXISTING GROUND LEVEL.
- IF THE NEIGHBOURING PROPERTY'S EXISTING GROUND LEVEL OR PROPOSED GROUND LEVELS ARE FOUND TO BE HIGHER THAN THE HOUSE REBATE OR FINISHED FLOOR LEVEL, CONCRETE UPSTAND MUST BE PROVIDED WITH WATER STOP. THIS OFFICE MUST BE NOTIFIED IMMEDIATELY FOR CONFIRMATION AND ADVICE.
- REACTIVE SOIL FOUND ON THIS SITE. PROVIDE TYPICAL SEWER EXPANSION JOINT FOR REACTIVE SOIL. DETAILS REFER TO FOOTING & CONSTRUCTION REPORT STANDARD DETAIL "SD24".
- IF FOR ANY REASON THE SITE CONDITIONS ARE ALTERED FROM THOSE CONDITIONS WHICH EXISTED AT THE TIME FOOTING AND CONSTRUCTION REPORT IS ISSUED, THEN THIS OFFICE MUST BE NOTIFIED IMMEDIATELY. THIS NOTE APPLIES PARTICULARLY TO SITE BOUNDARIES WHERE ADJOINING OWNERS MAY ALTER THE EXISTING SITE CONDITION AT ANY TIME.
- IF THE SLAB IS POURED IN TWO OR MORE STAGES, THIS OFFICE MUST BE NOTIFIED BEFORE POURING COMMENCES.
- PROVIDE CONTROL JOINTS IN FLOOR COVERING BETWEEN EXISTING & NEW SLAB. (i.e TILES)
- THIS SITE MUST BE PREWET AFTER THE REMOVAL OF TREES AND/OR DEMOLITION OF EXISTING STRUCTURES ON THE SITE. PREWETTING MUST ALSO OCCUR PRIOR TO CONSTRUCTION OF FOOTINGS.

FILL NOTES:

AS INDICATED BY SOME OF THE SOIL BORELOGS, THERE IS EXISTING FILL ON PARTS OF THIS SITE.

IF FILL IS FOUND DURING EARTHWORKS AND IS NOT COMPACTED WITH A CERTIFICATE WHICH COMPLIES WITH 'AS 2870', THE FOLLOWING MAY BE ADOPTED (NOTE THAT CONFIRMATION BY THIS OFFICE IS NECESSARY!).

RAFT FOOTINGS: - FOOTING BEAMS MAY BE FOUNDED DIRECTLY ONTO NATURAL GROUND OR PROVIDE TRENCH PIERS AT 3m CENTRES. PIERS TO BE 1200mm LONG x WIDTH OF FOOTING WIDE AND FOUNDED AT LEAST 200mm INTO NATURAL GROUND. PIERS GREATER THAN 800mm DEEP MUST BE REINFORCED WITH 6-N12 VERTICAL RODS AND POURED AT LEAST 24 HOURS PRIOR TO FOOTING BEAMS LIGATURE SPACING TO BE REDUCED TO 300mm BETWEEN PIERS. IF TOTAL DEPTH OF EXISTING AND NEW FILL EXCEEDS 300mm FLOOR SLABS MUST BE INCREASED IN THICKNESS TO 125mm AND REINFORCED WITH SL92 FABRIC TOP & SL72 BOTTOM.

IF UNCONTROLLED FILL IS GREATER THAN 300, PROVIDE 125mm THICK SLAB SL92 FABRIC TOP & SL72 BOTTOM.

190mm BLOCK WALL, CONCRETE FILLED WITH N16 @ 200CTS VERTICAL BARS TO FULL HEIGHT AND N12 @ 40CTS HORIZONTAL BARS. PROVIDE N16 STARTER BARSx1000mm LONG CAST 400mm INTO FOOTING @200CTS

DENOTES 1200mm LONG TRENCHED PIER x WIDTH OF FOOTING WIDE, FOUNDED 200mm (MIN) INTO NATURAL GROUND. PIERS GREATER THAN 800mm DEEP MUST BE REINFORCED WITH 6-N12 VERTICAL RODS & POURED AT LEAST 24 HOURS PRIOR TO FOOTING BEAMS. FOOTING BEAM LIGATURE SPACING TO BE REDUCED TO 300mm CTS BETWEEN PIERS.

