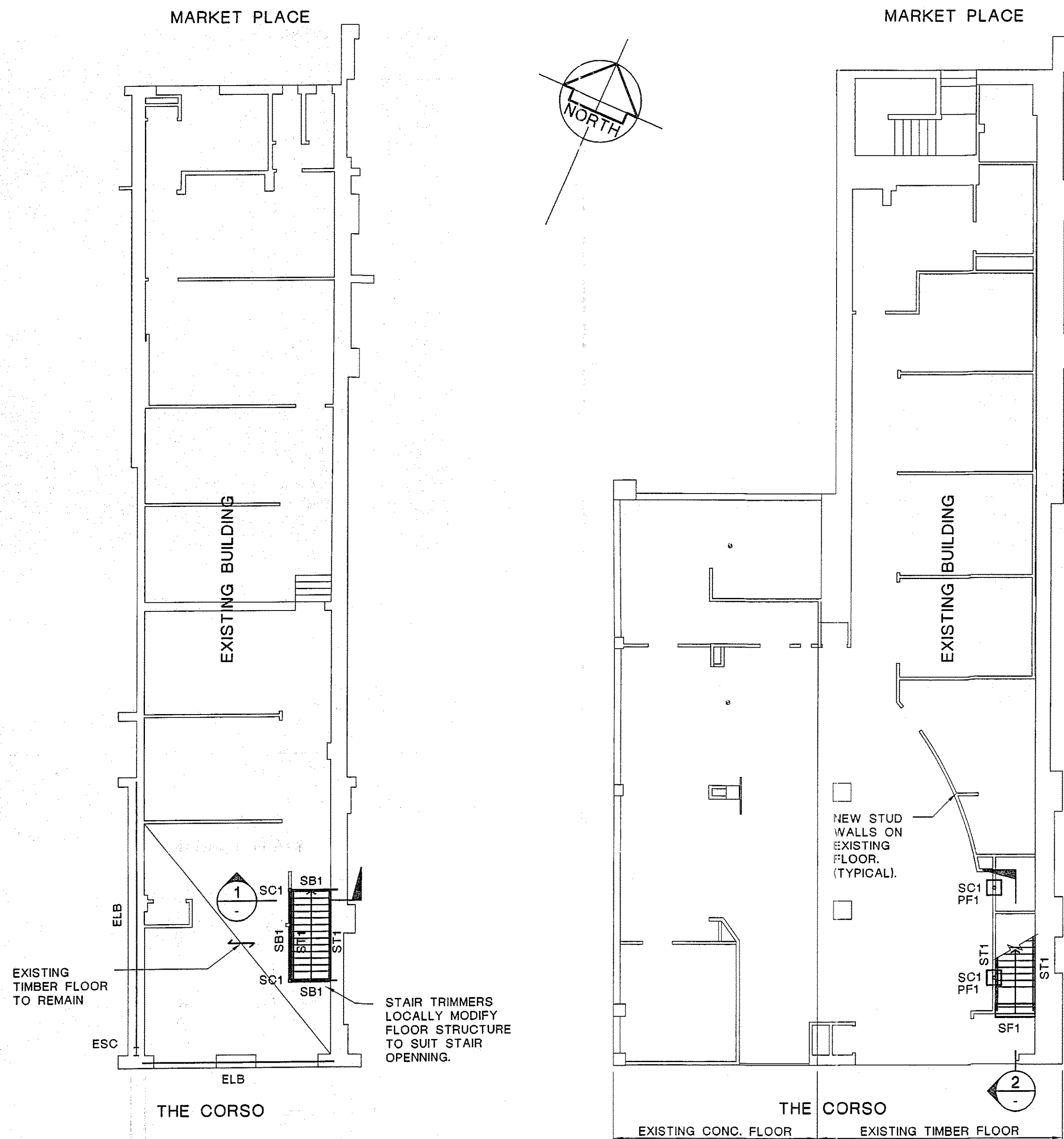


**FIRST FLOOR PLAN**

SCALE 1:100

STEEL BEAM SB1 --- 230 PFC
ELB --- EXISTING ASSUMED STEEL LINTEL BEAM
STAIR STRINGER ST1 --- 230 PFC
STEEL COLUMN SC1 --- 89x89x6 SHS
ESC --- EXISTING ASSUMED STEEL COLUMN
EXISTING ASSUMED FLOOR JOIST DIRECTION

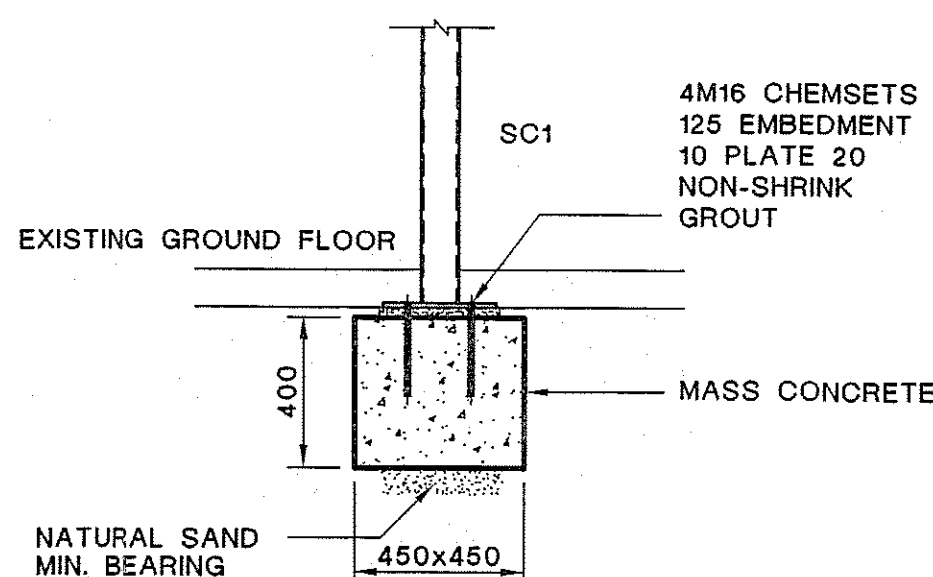
NOTE:
ALL STEEL MEMBERS TO HAVE 2 COATS OF ZINC PAINT, 50µm THICKNESS.

GROUND FLOOR PLAN

SCALE 1:100

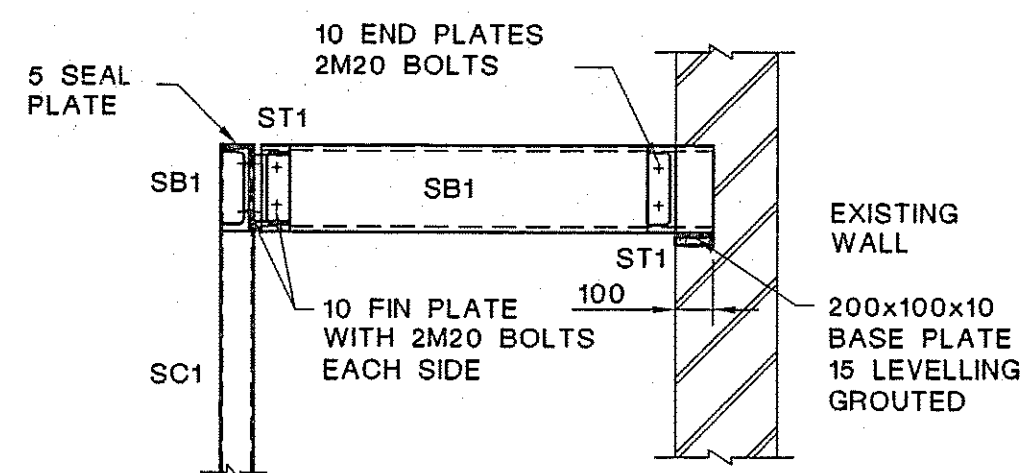
STRIP FOOTING SF1 --- 400x400D
PAD FOOTING PF1 --- 450x450x400D
STEEL COLUMN SC1 --- 89x89x6 SHS

F'c = 25MPa

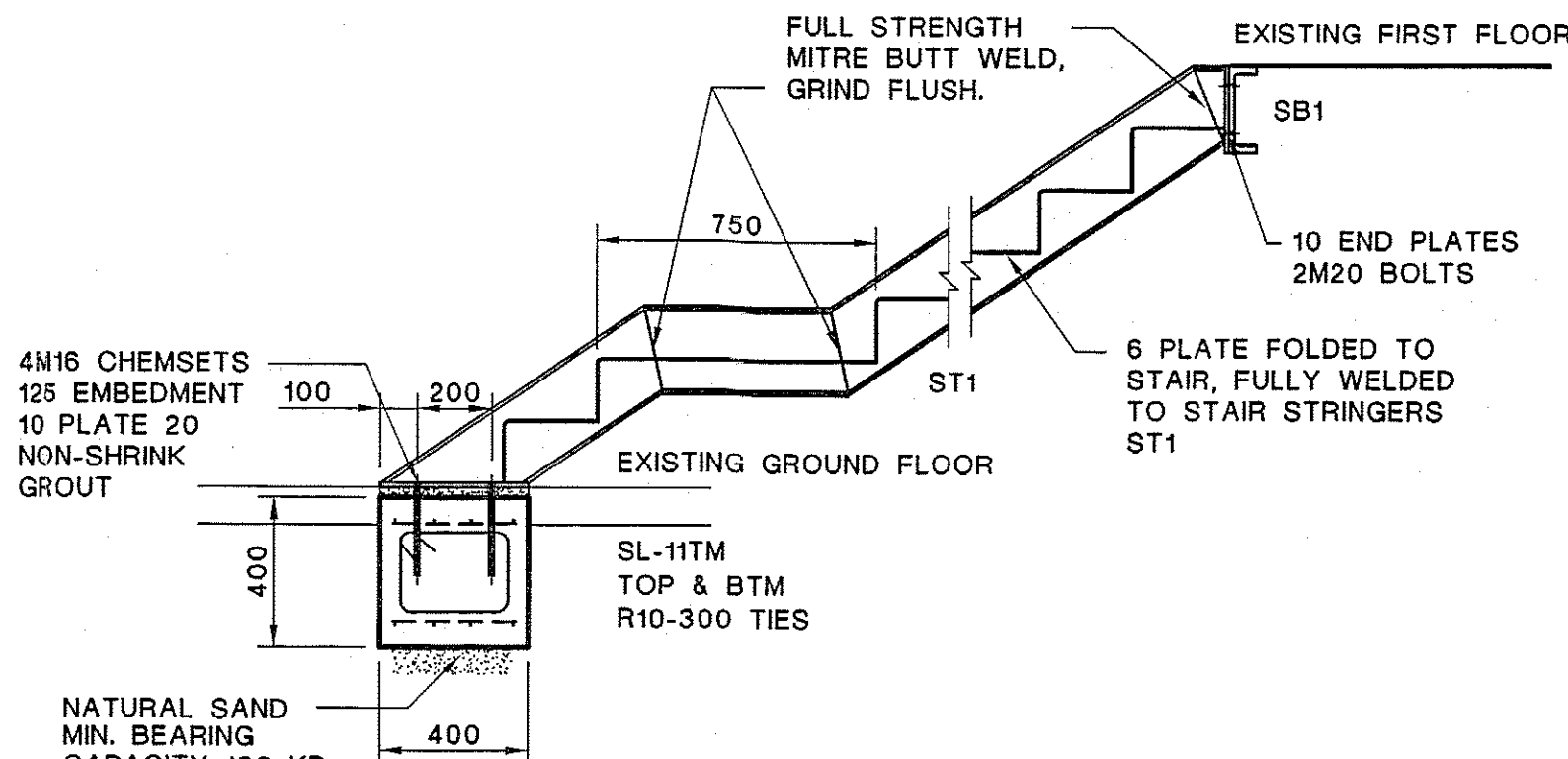
**PF1 DETAIL**

SCALE 1:20

F'c = 25MPa

**SECTION 1**

SCALE 1:20

**SF1 DETAIL**

SCALE 1:20

F'c = 25MPa

SECTION 2

SCALE 1:20

STEELWORK NOTES

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SAA CODE AS 410 EXCEPT WHERE VARYED BY THE CONTRACT DOCUMENTS.
- STEELWORK GRADE 250 MPa SHALL BE USED FOR BEAMS AND SECTIONS TO AS 2479 GRADE 355 MPa FOR HOLLOW SECTIONS TO AS 1163 GRADE 450 MPa FOR COLD FORMED SECTIONS TO AS 1171.
- FOUR COPIES OF SHOP DETAIL DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE COMMENCING FABRICATION. APPROVAL SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR CORRECTNESS OF DIMENSIONS OR COMPLIANCE WITH THE CONTRACT DOCUMENTS.
- ALL WELDS SHALL BE E46 ELECTRODE 6mm CONTINUOUS FILLET WELDS 16 CPM U.L.O. AND WILL BE CATEGORY SP TO AS 1554.1.
- ALL BOLTS TO BE GALVANIZED. ALL BOLTS TO BE 20mm GRADE 8.8/8.8 IN 2mm CLEARANCE HOLES U.L.O. PLATES, CLEATS AND STIFFENERS SHALL BE 10mm PLATE U.L.O.
- ALL WELDING SHALL BE IN ACCORDANCE WITH AS 1554.
- ALL STEELWORK EXPOSED TO VIEW SHALL HAVE WELD SPATTER, FLUX, DINGS, BURRS, ETC. REMOVED AND ALL SEALING AND BUTT WELDS GROUND FLUSH. ALL EXTERNAL FILLET WELDS TO BE CONTINUOUS.
- HIGH STRENGTH BOLTS SHALL BE GRADE 8.8 CONFORMING AS 1552 AND INSTALLED IN ACCORDANCE WITH AS 1109. TIGHTEN USING APPROVED LOAD INDICATOR WASHERS FOR T8 AND T6.
- S DENOTES SNUG TIGHT GRADE 4.6 OR 8.8 BOLTS.
- T8 DENOTES BEARING HOLES SURFACE MAY BE PAINTED. GRADE 8.8 BOLTS.
- T8 DENOTES FRICTION GRIP HOLES SURFACE MUST BE UNPAINTED. GRADE 8.8 BOLTS.
- ALL CLEATS AND DRILLING FOR FIXING OF PURLINS, TIMBER MEMBERS ETC. TO BE PROVIDED BY THE CONTRACTOR. PROPRIETARY ITEMS (e.g. PURLIN BOLTS) TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
- CONCRETE UNPAINTED STRUCTURAL STEELWORK SHALL BE UNPAINTED AND ENCASED WITH 20MM MESH, PROVIDE 20mm COVER TO MESH FOR UNPAINTED THICKNESS REFER TO DETAILS.
- INTERNAL STEELWORK SHALL BE GIVEN TWO COATS OF ZINC PHOSPHATE TO A DRY FILM THICKNESS OF 50µm U.L.O. BEFORE ENCASED OR PAINTING STEELWORK IS TO BE CLEAN OF ALL LOOSE RUST, MILL SCALE, OIL AND NO. TO CLASS 2 AS 1552.
- EXTERNAL STEELWORK SHALL BE PAINTED IN ACCORDANCE WITH AS 2312 - 1984.
- WHERE NOTED GALVANIZED STEELWORK SHALL BE CHEMICALLY DESCALED AND CLEANED BEFORE GALVANIZING BY IMMERSING IN A BATH OF HOT ZINC TO PRODUCE A ZINC COATING OF 65g/m² IN ACCORDANCE WITH AS 1552.
- ALL TRANSPORT AND ERECTION ARRANGINGS, SITE WELDS, ETC. SHALL BE REINFORCED BY THOROUGHLY WIRE BRUSHING ALL AFFECTED AREAS TO ACHIEVE A CLEAN SOUND SUBSTRATE AND PATCH COATED AS FOR PRIMING EXCEPT THAT THE MINIMUM FILM THICKNESS SHALL BE 50% GREATER THAN THE ORIGINAL PRIMER.
- THE CONTRACTOR SHALL PROVIDE ADDITIONAL TEMPORARY BRACING TO ADEQUATELY AND SAFELY HOLD STEELWORK IN POSITION DURING CONSTRUCTION.
- PROVIDE ROOF SHEETING SUPPORT ANGLES TO ALL ROOF RIPS AND VALLEYS.
- ALL PURLIN BRIDGING TO EXTEND TO FASCIA MEMBER, TO AND BETWEEN RIDGE PURLINS OR OTHER HOT-ROLLED STEEL SECTION AS APPLICABLE.

SITE PREPARATION

- SITE IS ASSUMED AS CLAY A NATURAL SAND - IN ACCORDANCE WITH AS2078 RESIDENTIAL SLABS AND FOOTING CODE, TO BE CONFIRMED ON SITE BY GEOTECHNICAL ENGINEER.
- REMOVE ALL TOP SOIL AND ORGANIC MATERIAL. STOCKPILE TOP SOIL FOR FUTURE LANDSCAPING. PROOF ROLL EXPOSED SUBGRADE TO 90% STANDARD MAXIMUM DRY DENSITY AT 12% OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH AS2078 E11. REMOVE SOFT AREAS AND REPLACE WITH FILL.
- IF FILL OR ROCK IS ENCOUNTERED DURING EXCAVATION NOTIFY ENGINEER.

TIMBER NOTES:

- ALL TIMBER DESIGN, CONSTRUCTION AND MATERIAL TO BE TO AS1728.1, AS1728.2 AND NEW SOUTH WALES TIMBER TREATMENT MANUAL.
- AS1728.1 SHALL BE APPLIED TO DOMESTIC CONSTRUCTION IN SHELTERED LOCATIONS.
- SOFTWOOD TO BE MINIMUM GRADE F7 U.L.O. HARDWOOD TO BE MINIMUM GRADE F8.
- EXTERNAL TIMBER TO BE EITHER HARDWOOD DURABILITY CLASS 1 OR CLASS 2 AS PER AS1728.1 OR IMPREGNATED PINE GRADE F7, PRESURE TREATED TO AS1728.1 AND RE-IMPREGNATED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. SUPPLY SUPPORTING DOCUMENTATION FOR PRESERVATIVE TREATMENT.
- TIMBER TRUSSES TO BE PRE-CAMBERED AN AMOUNT EQUAL TO DEAD LOAD DEFLECTION. THREE (3) COPIES OF SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL CLEARLY SHOWING THE DESIGN LOADS ON THE ROOF AND CEILING AND TRUSSES NODE POINT LOADS AND PRECAMBER.
- ALL BOLTS IN TIMBER CONSTRUCTION TO BE MINIMUM 16mm U.L.O. BOLT HOLES TO BE DRILLED EXACT SIZE. WASHERS UNDER HEADS AND NUTS TO BE AT LEAST 2.5 TIMES BOLT DIAMETER.
- TIMBER DIMENSIONS ON THE FINISHED WIDTH AND THICKNESS TO BE:
SEASONED SOFTWOOD -5-9mm
UNSEASONED SOFTWOOD -1-3mm
LESS THAN OR EQUAL TO F7-2,4mm
SEASONED HARDWOOD -1-3mm
UNSEASONED HARDWOOD -1-3mm (SEE ALSO CLAUSE 16.2 IN AS2078)
- ALL TIMBER JOINTS AND NOTICES ARE TO BE 30mm MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VENEER OR OTHER DEFECTS.

GENERAL NOTES

- THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND ANY OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE SUPERINTENDENT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT SAA CODES, LOCAL GOVERNMENT REQUIREMENTS OR OTHER RELEVANT BUILDING AUTHORITY.
- ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE. ENGINEERS DRAWINGS SHALL NOT BE SCALED.
- DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STEADY CONDITION AND NO PART SHALL BE OVERSTRESSED. THE OCCUPATIONAL HEALTH AND SAFETY ACT AND WORKCOVER CODES OF PRACTICE SHALL BE COMPLIED WITH.
- U.L.O. DENOTES "UNLESS NOTED OTHERWISE". ALL DIMENSIONS SHOWN ARE IN MILLIMETRES U.L.O.

FOUNDATIONS

- FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 100 kPa U.L.O. FOUNDATION MATERIAL SHALL BE APPROVED FOR THIS PRESSURE BEFORE PLACING CONCRETE IN FOOTINGS.
- REFER TO GEOTECHNICAL REPORT No. _____ BY _____

LOADING

- SUPERIMPOSED FLOOR LOADS ARE GENERALLY IN ACCORDANCE WITH AS/NZS108.1 OR AS NOTED IN TABLE L4.
- WIND LOADS ARE IN ACCORDANCE WITH AS/NZS1012.2 AS FOLLOWS:
REGION = A WIND SPEED VELOCITY V_w = 45 m/s TYPICAL CATEGORY = 3
- EARTHQUAKE LOADS ARE IN ACCORDANCE WITH AS1701.4 PART 4 AS FOLLOWS:
LIVE LOADING: S = 1.0
- LIVE LOADING: S = 1.0

Element	Design Live Load kPa
STAIR	4.0

CONCRETE NOTES

CONCRETE QUALITY SHALL BE AS FOLLOWS:

Element	Fc	Slump	Max. Agg. Size	Reinforcement cover
FOOTINGS	25	80	20	Inter: 50 Ext: 50

- U.L.O. CEMENT SHALL BE TYPE GP.
- DESIGNER TO PROVIDE FOR A SUPPLY RESULTS OF PROJECT TESTING IN ACCORDANCE WITH AS1079 U.L.O.
- U.L.O. CONCRETE SHRINKAGE TO BE 700 MICROSTRAIN MAXIMUM AT 56 DAYS. TEST METHOD AS1079.13
- CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.
- DEPTH OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.
- FOR CHAMBERS, DRIP GROOVES, RELETS ETC. REFER ARCHITECTS DETAILS.
- NO HOLES, CHASES OR DEPRESSIONS OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- CONCRETE COVER SHALL BE MAINTAINED BY THE USE OF PLASTIC BAR CHAIRS AT 75mm MAXIMUM CENTRES U.L.O. PLASTIC TYPED FERROUS CHAIRS ARE NOT PERMITTED.
- CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF THE ENGINEER IN WRITING.
- REINFORCEMENT SYMBOLS:
S - CONCRETE GRADE 250 DEFORMED WIRE REINFORCING SQUARE FABRIC OF DUCTILITY CLASS L TO AS4671.
R - CONCRETE GRADE 350 DEFORMED WIRE REINFORCING RECTANGULAR FABRIC OF DUCTILITY CLASS L TO AS4671.
N - CONCRETE GRADE 350 DEFORMED BARS OF DUCTILITY CLASS N TO AS4671.
S - CONCRETE GRADE 250 DEFORMED BARS OF DUCTILITY CLASS N TO AS4671.
- REINFORCEMENT IS REPRESENTED DIAGMATICALLY AND NOT NECESSARILY IN TRUE POSITION. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER.
- MINIMUM FABRIC LAP SHALL BE TWO TRANSVERSE WIRES PLUS 30mm. MINIMUM 50mm LAP LENGTH FOR TRENCH MESH.
- ALL CONCRETE SHALL BE PLACED AND CURED IN ACCORDANCE WITH SECTION 19 AS3600. CURING MUST BE APPLIED TO SLABS IMMEDIATELY AFTER FINISHING AND ONTO WALLS AND COLUMNS IMMEDIATELY AFTER REMOVAL OF FORMWORK. CURING COMPOUNDS MUST BE COMPATIBLE WITH FINISH FINISHES. PVA BASED CURING COMPOUNDS ARE NOT PERMITTED.
- BUILDER SHALL BE RESPONSIBLE FOR DESIGN OF FORMWORK, SHORING AND SCAFFOLDING. FORMWORK AND SHORING SHALL COMPLY WITH AS2048. SCAFFOLDING SHALL COMPLY WITH AS/NZS5074.
- NO FORMWORK SHALL BE STRIPPED UNLESS APPROVED BY THE ENGINEER.
- SLABS AND BEAMS SHALL BEAR ONLY ON THE COLUMNS AND WALLS SHOWN ON THE DRAWINGS.
- ALL OTHER BUILDING ELEMENTS SHALL BE KEPT 10mm CLEAR FROM SUPPORTS OF TRUSSES.
- WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE M20-300 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 40mm.

MASONRY

- ALL MASONRY CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700.
- U.L.O. BRICKS USED IN LOAD BEARING CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 20 MPa U.L.O. THE BRICK CHARACTERISTIC EXPANSION "ε" SHALL NOT EXCEED 0.0001/m FOR WHICH COMPLIANCE CERTIFICATION SHALL BE OBTAINED FROM THE BRICK SUPPLIER.
- CONCRETE BLOCKS SHALL BE GRADE TO U.L.O. IN ACCORDANCE WITH AS/NZS4459.
- CLEAN CUT OPENINGS ARE REQUIRED AT THE BASE OF ALL REINFORCED BLOCK WALLS AND ABOVE HORIZONTAL CONSTRUCTION JOINTS.
- ALL CORERS SHALL BE CLEANED OF MORTAR AT THE END OF EACH DAY. GROUT IN CORERS SHALL BE COMPACTED BY RODDING OR OTHER APPROPRIATE MEANS TO 100% MAXIMUM HIGH LITS.
- A 30mm WIDE STRIP OF COARSE GRAINED GRANULAR DRAFFL IS TO BE PLACED AROUND ALL REINFORCING WALLS. REFER TO SPECIFICATION RE PERMEABLE AND SUB-SOIL DRAINAGE.
- MORTAR SHALL BE PREPARED AND COMPOSED OF CEMENT - LIME - SAND IN THE RATIO 1:1:4 U.L.O. MORTAR BED THICKNESS SHALL NOT EXCEED 20mm. MORTAR BOND STRENGTH SHALL BE A MINIMUM OF F_{at} = 1.2MPa. BOND WRENCH TESTS ON A TEST PANEL OR IN SITU TO AS3700 SHALL BE CARRIED OUT TO CONFIRM BOND STRENGTH.
- NO AIR ENTRAPPING AGENTS SHALL BE USED IN THE MORTAR.
- WHERE SLABS OR BEAMS BEAR ON MASONRY, A LEVEL SMOOTH BED OF MORTAR SHALL BE PLACED ON THE TOP COURSE AND COVERED WITH TWO LAYERS OF SUPER ALCOUR OR OTHER APPROVED MATERIAL.
- NO MASONRY WALLS SHALL BE DIRECTED ON SUSPENDED SLABS AND BEAMS UNTIL ALL PROPPING AND SHORING IS REMOVED.
- MASONRY WALLS SHALL BE TIED TO RETURN WALLS OR ADJACENT STRUCTURAL ELEMENTS USING APPROVED WALL TIES. FREE VERTICAL MASONRY EDGES TO BE RESTRAINED USING 75 x 75 x 4 PINS HIDDEN UNLESS OTHER METHOD IS INDICATED.
- CHASES, HOLES, RECESSES ETC. SHALL NOT BE MADE IN LOAD BEARING MASONRY WALLS.
- VERTICAL CONTROL JOINTS IN CLAY AND CALCIUM SULFATE BRICK WALLS TO BE 200mm MAXIMUM APART. VERTICAL CONTROL JOINTS IN CONCRETE BRICK AND AAC BLOCK WALLS TO BE 600mm MAXIMUM APART. VERTICAL CONTROL JOINTS IN REINFORCED CONCRETE BLOCK WALLS TO BE 800mm MAXIMUM APART.
- STEEL PRODUCTS, INCLUDING REINFORCEMENT, WALL TIES AND ACCESSORIES SHALL COMPLY WITH AS/NZS3600 AND AS3700 U.L.O. ABOVE GROUND EXTERIOR WALLS TIES WITHIN 50mm OF THE CASTLINE SHALL HAVE A CORROSION RESISTANCE RATING OF P2 AND WILL BE STAINLESS STEEL GRADE 316. FOR ALL OTHER AREAS U.L.O. ABOVE GROUND EXTERIOR WALLS TIES SHALL HAVE A CORROSION RESISTANCE RATING OF P2 AND WILL BE HEAVILY GALVANIZED TYPE A WIRE CONFORMING TO AS/NZS4549.
- REINFORCE INTERNAL AND EXTERNAL BRICK SKINS WITH ONE LAYER OF MASONRY REINFORCEMENT IMMEDIATELY ABOVE FIRST BRICK COURSE ABOVE FLOOR AND UNTEL LEVELS. LAP REINFORCEMENT 400mm AROUND CORNERS. LAY 1ST COURSE ON 1 LAYER OF ALCOUR SEPARATION.

2	CO-ORDINATION ISSUE	BZL	19.02.09	
1	PRELIMINARY ISSUE	BZL	18.02.09	
Issue	Reason for Issue	Drawn	Issue Date	Sign & Date Verification

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Client
ST. GEORGE BANK

Project
**ALTERATIONS AND ADDITIONS
AT 17 THE CORSO
MANLY**

Title
**GROUND AND FIRST FLOOR PLANS
AND DETAILS**

Original Sheet Size	© Copyright Low & Hooke Partners as at date of issue	
A1	THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS ENDORSED BELOW	

Scales	Job No.	Dwg No.	Issue
1:100, 20	608421	S1	2

This plan/specification is to be read in conjunction with the Approved Documentation of Certificate No. _____ Date _____
086/10 22-03-10
DIX GARDNER PTY LTD