

CPCCBC4012

READ AND INTERPRET PLANS AND SPECIFICATIONS

WORKBOOK

Participant name	Kandy-lee Ashby
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FOR THE PARTICIPANT

Instructions

- You will complete written activities as outlined on the following pages. You must attempt all questions and provide enough detail in your responses to demonstrate your knowledge.
- The timeframe for these tasks will be established by your Assessor or Training Plan, but additional time may be allowed upon negotiation with the Assessor.
- You must complete all questions unassisted by the Assessor or other personnel but may refer to reference material as needed. All questions must be answered correctly for a 'Satisfactory' assessment outcome to be awarded.
 - An oral examination may be allowed under certain circumstances, whereby your answers will be documented by another party.
 - Any written questions that are incomplete, or not answered satisfactorily will need to be completed again after further training support.
 - If you answer a question incorrectly but modify your response, put your initials next to the written change (or the Assessor must initial a verbal change).

Resources required

Pen

FOR THE ASSESSOR

Instructions

- Where oral examination has occurred, ensure that this is acknowledged in writing (e.g. FT001 and Assessor Comments)
- All questions must be satisfactorily demonstrated by the Participant for a Satisfactory determination (indicated by an Assessor tick to the right of the question).
- Assessors are to complete marking in pen of a different colour to the Participant.
- If the Participant verbally modifies their response, write in the modified response verbatim and put your initials next to the written change.

ASSESSOR COMMENTS
As necessary, outline: • Details on reattempts, alternative arrangements or reasonable adjustments made. • Where a Participant is deemed 'Not Satisfactory', provide recommendations for future training.

NOTE

At times, you will be provided with a specific business context to which you must respond, otherwise it is anticipated that you will use a workplace of your choosing (your own, or hypothetical) to provide the context to the task.

At all times, the responses in your assessment must reference **Australian** (Queensland or Federal) documentation, including legislation, regulations, codes of practice, standards and guidance publications.

For the following activities, name the State/Territory you will base your research on.

State/ Territory	Queensland
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ACTIVITY 1

Research and document your findings regarding legislation and codes that apply in your state/territory relevant to the following three (3) items. Summarise the requirements relevant to building drawings and sketches you identified and provide the URL where you sourced your responses.

- Smoke alarms in a new building
- Pool fences
- Protection of waterways

a) Smoke alarms**Name of Legislation (Commonwealth or State)**

AS3786-2014

Summary of relevant excerpt/requirement

Smoke alarms must be

- Photoelectric
- Comply with the standard (Body of alarm must display 'AS3786-2014')
- Hardwired to the main power supply with a second source (i.e. non-removable 10 year battery) or be powered by 10 year non-removable batteries type photoelectric smoke alarm.
- Be interconnected to every other alarm in the dwelling so ~~at~~ they are all active together.

Source (URL or web source)

www.qfes.qld.gov.au/smokealarms

b) Pool fence installation

Name of Legislation (Commonwealth or State)
AS 1926.2007
Summary of relevant excerpt/requirement
Swimming pools must have a barrier which: a) is continuous for the full extent of the hazard b) is of strength and rigidity to withstand foreseeable impact of people. c) Restricts the access of young children to the pool and the immediate pool surrounds, including access to from class 1, 2 or 3 buildings or class 4 parts of buildings located within or outside the pool area. d) has any gates fitted with latching devices not readily opened by young children and constructed to automatically close and latch.
Source (URL or web source)
hprv.qld.gov.au/-data/assets/pdf_file/0015/4812/qldcmp3.4_swimmingpoolbarriers.pdf
e) except for indoor pools, does not incorporate any doors providing access to or from a building.

c) Protection of waterways

Name of Legislation (Commonwealth or State)
Environmental Protection Act 1994
Summary of relevant excerpt/requirement
Erosion and Sediment control (ESC) on construction sites. Land and infrastructure development (all residential, commercial, industrial and public infrastructure developments on land, such as subdivisions, roads, rail, bulk water distribution and hospitals) are subject to legal requirements for depositing prescribed water contaminants in waters, including water contamination caused by the release of sediments during the construction stage of Urban land development under the Environmental protection Act 1994.
Source (URL or web source)
legislation.qld.gov.au/environment.des.qld.gov.au

Satisfactory Outcome



ACTIVITY 2

Access Handout 1 (HO1 - Floor Plan with dimensions) and respond to the following:

- a) What is used for the internal wall lining?
- b) What is used for the external cladding?
- c) What roofing cladding is required?
- d) How do you identify the smoke alarm installation points?

a) What is used for the internal wall lining?

Clay bricks to all internal walls

b) What is used for the external cladding?

Colorbond custom orb sheeting. to rdae areas.
To other areas painted render finish.

c) What roof cladding is required?

Colorbond custom orb sheeting.

d) How do you identify the smoke alarm installation points?

Ⓢ is the symbol for each smoke alarm installation point.

**Satisfactory
Outcome**



ACTIVITY 3

Access Handout 2 (HO2 - Footing Plan) and Handout 3 (HO3 - Slab Plan) and respond to the following:

a) Specify the size and type of reinforcing to be used for BP.1 in Handout 2 (HO2 - Footing Plan)

b) How do you determine where each BP.1 footing pier should be placed?

c) Mark each of the load bearing points in Handout 3 (HO3 - Slab Plan)

a) Specify the size and type of reinforcing to be used for BP.1

Reinforcement Vertical S.N12
Ligs Rb Helix - 200mm Pitch.

b) How do you determine where each BP.1 footing pier should be placed?

Refer to the footing plans and details for the BP.1 locations. Set out would be completed from site gridlines and scaled

c) Mark each of the load bearing points in Handout 3 (HO3 - Slab Plan)

Refer to markup plan .

Off plan.

Satisfactory Outcome

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ACTIVITY 4

Access Handout 4 (HO4 - Residential Floor Plan) and respond to the following:

- a) Which drawings are shown in these plans?
- b) Which Australian Standard must be referenced when installing termite protection?
- c) Make a list of the finishes noted on the document.

a) Which drawings are shown in these plans?

Floor plans and site Elevations.

b) Which Australian Standard must be referenced when installing termite protection?

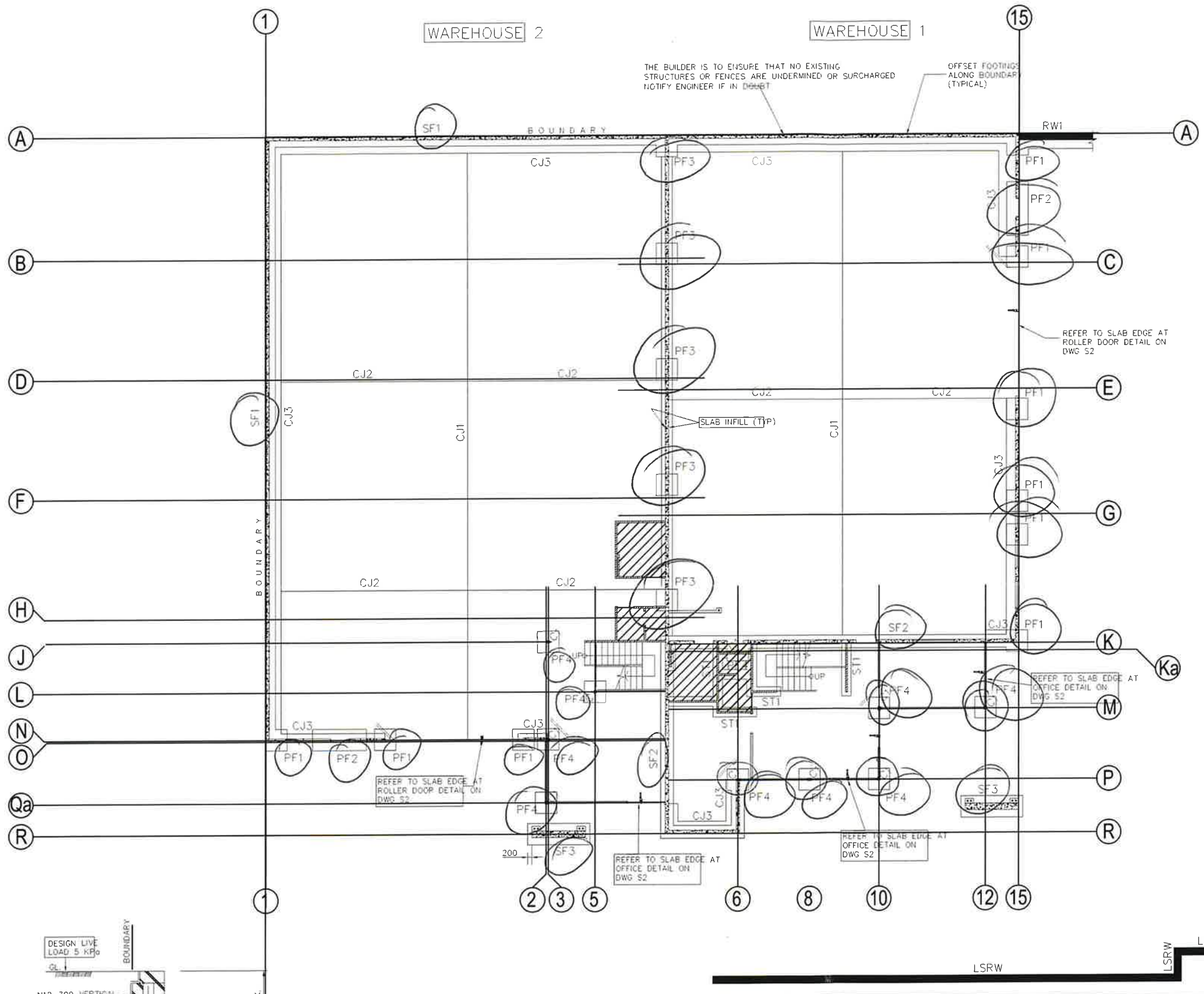
AS 3660 SE.

c) Make a list of the finishes noted on the document.

Roof - custom orb deep ocean ~~etc~~ colourbond.
Gutter/fascia - Deep ocean colourbond.
Walls - Dulux Cargo River
Corbells - Dulux calf skin.
Windowframes - Powdercoat Anstech Grey
Paving - lifestyle paving liquid limestone.

Satisfactory
Outcome





BRICK RETAINING WALL NOTES

1. COMPACT ALL GRAV UNDER AND IN FRONT OF RETAINING WALLS TO RESIST 7 BLOWS PER 300MM STANDARD PERCH SAND PENETROMETER TEST.
2. CONCRETE TO COMPLY WITH AS 3600 & SHALL BE PRE-PAVED FROM AN APPROVED SUPPLIER.
3. ALL STEEL REINFORCEMENT TO COMPLY WITH AS 1300 & 1303.
4. PROVIDE WALL TIES ACROSS CAVITY AT 345mm (VERTICAL SPACING) & 600mm (HORIZONTAL SPACING) WITH 75mm MINIMUM EMBEDMENT INTO EACH LEAF. THE WALL REINFORCEMENT IS TO BE PREVENT DISPLACEMENT DURING POUR.
5. POUR CONCRETE TO CAVITY IN LITS NOT EXCEEDING 500mm TO REQUIRED HEIGHT AND COMPACT BY THOROUGH ROOING OR LIGHT VIBRATION.
6. DO NOT BACKFILL UNTIL WALL HAS BEEN POURED FOR 10 DAYS MIN.
7. PUMP RETAINING WALLS DURING BACKFILLING AND COMPACTING: PUMP FOR 3 DAYS MINIMUM AFTER SLAB POOR WHERE SLAB OVER OCCURS.
8. BUILDER TO PROVIDE ADEQUATE DRAINAGE AND WATERPROOFING TO PREVENT OF RETAINING WALLS.
9. NO PERMANENT DEAD LOADS/CHARGES ON RETAINING WALL IS ASSUMED. HORIZONTAL BACKFILL ONLY WITH NO STRUCTURE OR TRAFFIC LOADS TO BE CLOSER THAN THE RETAINING HEIGHT AWAY FROM THE WALL.
10. MAX DESIGN LIVE LOAD BEYOND WALL IS 3.0kPa (UNIFORMLY DISTRIBUTED).
11. RETURN REINFORCEMENT AROUND ALL OTHERS 450mm MINIMUM.
12. PROVIDE VERTICAL CONTROL JOINTS TO EXTERNAL RETAINING WALLS AT TWELVE METRE CENTRES (MAX).
13. THESE DETAILS ARE APPLICABLE TO CLASS A STABLE SUBGRADE. NOTIFY ENGINEER IF SOIL CONDITION IS OTHERWISE.
14. NOTIFY THE ENGINEER IF A FENCE IS TO BE BUILT ALONG TOP OF WALL. WALL ENDINGS AND REINFORCEMENT MAY NEED TO BE INCREASED.
15. MASONRY SHALL COMPLY WITH AS 3700.
16. MASONRY UNITS SHALL HAVE A MINIMUM UNIFORM CHARACTERISTIC COMPRESSIVE STRENGTH (F_{CD}) OF 12 MPa UNO (SEE GENERAL NOTES 6 & 7).
17. MORTAR MIX PROPORTIONS (BY VOLUME) SHALL BE: C1 : U1 : S6.
18. CONFINED RETAINING WALL HEIGHTS AND LOCATIONS WITH ARCHITECTURAL DRAWINGS AND ON SITE PRIOR TO COMMENCEMENT OF WORKS.
19. BRICKWORK LEAVES EITHER:
 1. HEADER BRICKS AT EACH STEPPED INTERVAL IN WHICH EACH ALTERNATE BRICK IS A HEADER, OR
 2. WALL TIES AT EACH STEPPED INTERVAL AT 400 CTS MAX. HORIZ.

CONCRETE QUALITY

LOCATION	STRENGTH GRADE	MAX AGG SIZE (mm)	SLUMP (mm)
FOOTINGS	N25	20	80
SLAB (WALL MOUNT)	N25	20	80
SLAB (OFFICE)	N25	20	80
SLAB (PANEL)	REFER TO DWG S3		

CONCRETE

1. ALL CONCRETE TO COMPLY WITH AS 3600 & SHALL BE PRE-PAVED FROM AN APPROVED SUPPLIER.
2. CONCRETE QUALITY

3.3 NOTIFY THE ENGINEER AT LEAST 24 HOURS BEFORE PLACING CONCRETE.

3.4 BUILD FORMWORK FROM ARCHITECTURAL DRAWINGS. CHECK FOR BUILT-IN FORMS, FLASHINGS, TIES, PLUMBING AND ELECTRICAL FITTINGS, DUCTS, VENTS ETC.

3.5 COMPACT CONCRETE BY USING APPROVED MASONRY VIBRATORS.

3.6 BEAMS AND SLABS TO BE POURED MONOLITHICALLY.

3.7 LOCATE CONDUITS UNDER TOP STEEL AND OVER BOTTOM STEEL.

3.8 ALL LOAD BEARING BRICKWORK AND BLOCKWORK TO BE BUILT HARD UP TO UNDERSIDE OF SLAB. CONCRETE POURED USE TWO LAYERS OF P.G. OR OTHER APPROVED BINDER.

3.9 PROVIDE 2 LAYERS OF PD (OR SIMILAR APPROVED) BOARD BREAKER BELOW ALL UPPER LEVEL WALLS ON SUSPENDED SLAB.

3.10 SECURE ALL CONCRETE BY KEEPING MOIST FOR 7 DAYS MIN.

3.11 USE ONLY ORDINARY PORTLAND CEMENT TYPE 1 A TO CONCRETE.

3.12 WHEN BRITTLE FLOOR FINISHES (E.G. TILES) ARE TO BE USED, THE BUILDER IS REFERRED TO CL 5.7.7 OF AS 3600 FOR EXTRA MEASURES TO BE TAKEN TO REDUCE THE EFFECT OF SLAB SPALLING CRACKING.

3.13 GENERALLY, ALL PENETRATIONS REQUIRED IN CONCRETE ARE SHOWN ON THE STRUCTURAL DRAWINGS. THE BUILDER IS TO SEEK THE APPROVAL OF THE ENGINEER IF ANY ADDITIONAL PENETRATIONS ARE REQUIRED.

FORMWORK

1. FORMWORK SHALL COMPLY WITH AS 3600.
2. BUILD ALL FORMWORK FROM ARCHITECTURAL DRAWINGS.
3. MINIMUM STRIPPING TIMES

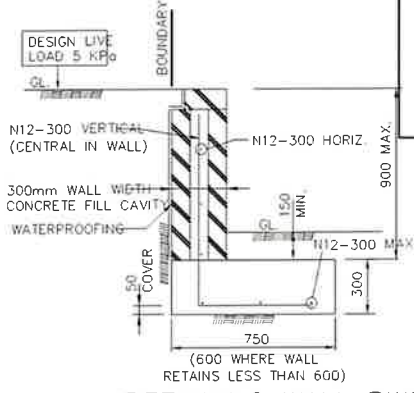
WALLS AND COLUMNS	3 DAYS U.N.O
BEAMS, SLABS AND STAIRS	10 DAYS U.N.O

5.4 BRICK PRIOR SLABS AND BEAMS FOR 28 DAYS MINIMUM.

IF BRICKWORK IS TO BE BUILT ON SLAB, ALLOW CONCRETE TO REACH STRENGTH GRADE PRIOR TO ALL PRIOR AND LOW SLAB TO ALLOW DEFLECTION TO OCCUR BEFORE BRICKWORK COMMENCED. NO BRICKWORK TO BE BUILT ON PROPOSED SLABS.

6.0 MASONRY

1. MASONRY SHALL COMPLY WITH AS 3700.
2. MASONRY UNITS SHALL HAVE A MINIMUM CHARACTERISTIC UNIFORM COMPRESSIVE STRENGTH (F_{CD}) OF 12 MPa UNO WITH A MORTAR CLASSIFICATION OF M3 MIX.
3. MORTAR: IN SEVERE WEARING ENVIRONMENTS, USE M4 MORTAR FOR EXTERNAL MASONRY.
4. LOADING: MASONRY SHALL HAVE ALL JOINTS AND PERPENDS FULLY BEDDED.
5. REINFORCE ALL MASONRY WALLS ON SLAB (WHICH NO SLAB UNITS) WITH 2-45 GALL RODS PER LEAF. 15 (80mm) UP FROM SLAB AND OVER OPENINGS, EXTENDING 500mm BEYOND OPENINGS.
6. WHERE MASONRY JOINTS STEEL OR CONCRETE STRUCTURES THEY SHALL BE FIXED WITH APPROVED BRICK TIES EVERY 4TH COURSE. STANDARD AND VERTICAL BRICKS UP TO 100mm HIGH 2ND COURSE.
7. CUTTING AND CHASING OF LOAD BEARING MASONRY IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
8. ALL WALL TIES, CORRELATORS, ACCESSORIES, UNITS & SHELF ANGLES ARE TO BE TREATED FOR CORROSION PROTECTION IN ACCORDANCE WITH AS 3700 (TABLES F1 TO F5) THE BUILDING.
9. UNLESS OTHERWISE SHOWN, ALL BOLTED CONNECTIONS ARE TO DEVELOP FULL STRENGTH OF MEMBERS JOINED.
10. STEEL BEAMS TO BE FABRICATED WITH NATURAL CAMBER UP.
11. UNLESS OTHERWISE NOTED, USE:
 - (a) 10mm SHD GUSSET PLATE AND END PLATES AND 2-16M 8/5 BOLTS
 - (b) 10mm CONTINUOUS OR FLAT WELD
12. ALL BOLTED CONNECTIONS TO BE BEARING CATEGORY 8.8/5 UNO.
13. PROVIDE TEMPORARY BRACING DURING ERECTION.
14. UNDER 1/2 CENT. SAND DRAIN UNDER ALL SEATING AND BASE PLATES ENSURING THE SPACE UNDER THE PLATES IS COMPLETELY FILLED.
15. WHERE MASONRY WALLS ABUT OR ADJACENT TO STEEL COLUMNS, WELD A VERTICAL RIGID ROD TO COLUMN LENGTH OF WELD TO BE 25mm EACH SIDE OF ROD EVERY 350mm. PROVIDE 5mm CLEARANCE BETWEEN ROD AND COLUMN FACE.
16. ALL INTERNAL STEELWORK TO BE GALVANIZED USING A RED OXIDE ZINC PHOSPHATE PRIMER ON CLEANED SURFACES UNO.
17. EXTERNAL STEELWORK: TREATMENT TO CONFORM WITH AS/NZS 2312 (HOT DIP GALVANIZED).
18. ISOLATED FORMED SECTIONS TO CONFORM TO AS 1397 - C 450 (450 MPa MIN. YIELD STRESS).
19. PROVIDE EXTRA PURGING & GITS AS REQUIRED TO SATISFY PENETRATIONS AND OUTGITS.
20. STEELWORK IN CONTACT WITH THE GROUND IS TO BE COATED WITH 2 COATS DULUX ANTI-RUST 300 (MIN. 200 MICRONS) OR SIMILAR APPROVED.
21. PURCHASE/NOTE: - PURGING AND GITS ARE TO BE IN ACCORDANCE WITH (BHP-BP), STRAHLER OR OTHER SECTIONS APPROVED IN WRITING BY THE ENGINEER, COMPLYING WITH ALL 1397, AND A MINIMUM GALVANIZED COATING OF 2500 (3500/2500).
22. CLEAR CONNECTIONS ARE TO BE IN ACCORDANCE WITH AS 3600 STANDARDISED CONNECTIONS OR MANUFACTURER'S RECOMMENDATIONS UNO BOLTING AND BRACING TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



RETAINING WALL RW1

- CONFIRM EXTENT & LOCATION OF RETAINING WALL WITH ARCH'L DWG'S.
- REFER TO RETAINING WALL NOTES ABOVE.

FOOTING & GROUND SLAB PLAN

WAREHOUSE: 125 THICK SLAB, SL72 MESH TOP, 30 COVER

OFFICE: 100 THICK SLAB, SL62 MESH TOP, 30 COVER

- BUILDER TO CONFIRM ALL LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS.
- PLACE MESH ON APPROVED SUPPORT CHAIRS PRIOR TO CONCRETE PLACEMENT.
- PROVIDE 2-N16 BARS x 1500 LONG CENTRAL IN SLAB AT ALL RE-ENTRANT CORNERS.
- INDICATES 25mm RECESS TO WET AREAS. MAINTAIN 100 THICK SLAB. CONFIRM EXTENT WITH ARCH'L DWGS.
- CJ1, CJ2, CJ3 - SLAB CONTROL JOINT AS PER DWG S2

LEGEND

- COLUMNS:**
- C1 - 100 x 4 SHS
- PAD FOOTING:**
- PF1 - 1200 x 1200 x 300 DP, N12-200 CTS BOTTOM EACH WAY
 - PF2 - 1200 x 2500 x 300 DP, N12-200 CTS BOTTOM EACH WAY
 - PF3 - 1200 x 1200 x 300 DP, N12-200 CTS BOTTOM EACH WAY
 - PF4 - 1000 x 1000 x 350 DP, N12-200 CTS BOTTOM EACH WAY
- STRIP FOOTINGS:**
- SF1 - 800 x 300 DP, L8TM TOP & BOTTOM
 - SF2 - 600 x 300 DP, L8TM BOTTOM
 - SF3 - 1000 x 300 DP, L8TM BOT



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