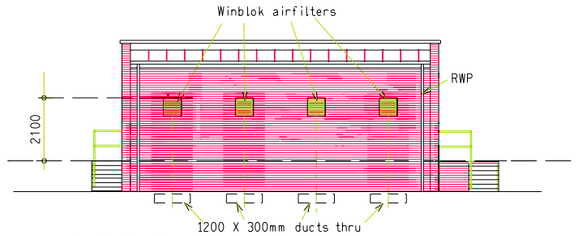


SIDE ELEVATION

REAR ELEVATION

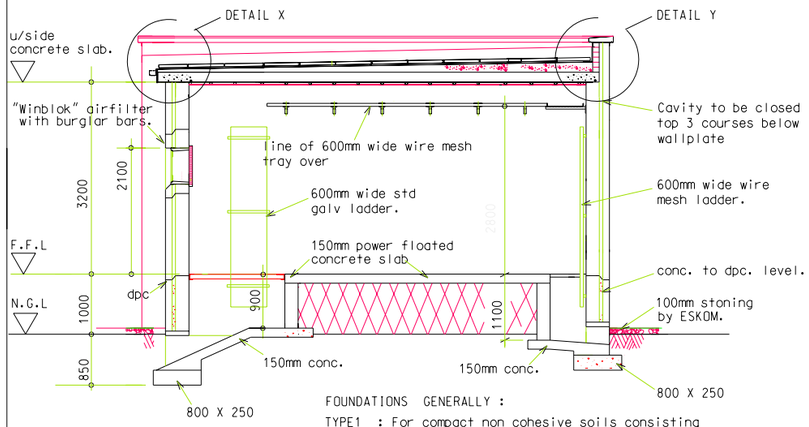
SIDE ELEVATION

FRONT ELEVATION

ROOF SLAB WATERPROOFING : ABE 4mm " INDEX FIDIA" or equal approved heat sealed to sloping cement screed (fall 1 : 50) applied by approved waterproofing contractor and according to Manufactureres specification.. Where required 600 x 600 x 50 concrete paving slabs to be layed over waterproof membrane for vandalproofing.

ROOF SLAB : To be precast RC. roofslabs or poured in-situ R.C. slab designed to span 6620mm. Layed in accordance with Manufacturers spec and conditions. Slab to be designed by a registered Professional Engineer who is to supply suitable drawings, supervise construction and supply ESKOM with a signed completion certificate .

CEILING : 38 X 38 battens fixed to concrete slab @ 400mm c/cs supporting 4mm Nutec fibre/cem sheeting. Joints to have H section pvc. Std coved cornice.



SECTION A - A

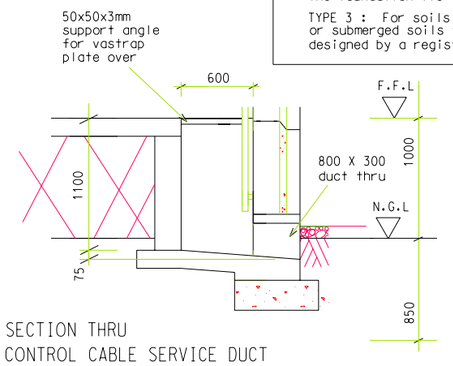
SCALE 1 : 50

FOUNDATIONS GENERALLY :

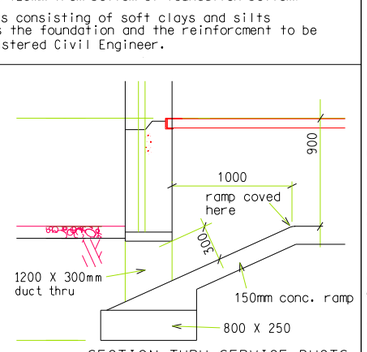
TYPE1 : For compact non cohesive soils consisting of gravels and sands located above the water table NO reinforcing is required.

TYPE 2 : For stiff or firm cohesive soils consisting of clays and silts the foundation to have a single layer of BRC Weldmesh 617 placed in the centre of the foundation ,ie 125mm from bottom of foundation bottom.

TYPE 3 : For soils consisting of soft clays and silts or submerged soils the foundation and the reinforcment to be designed by a registered Civil Engineer.

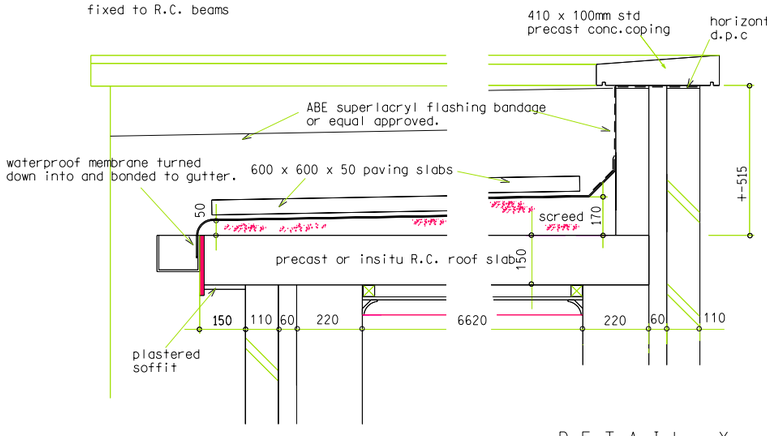


SECTION THRU CONTROL CABLE SERVICE DUCT



SECTION THRU SERVICE DUCTS

GUTTER :
115 x 125 fib/cem. gutter brass screwed to 225 x 15mm fibre/cem. fascia fixed to R.C. beams

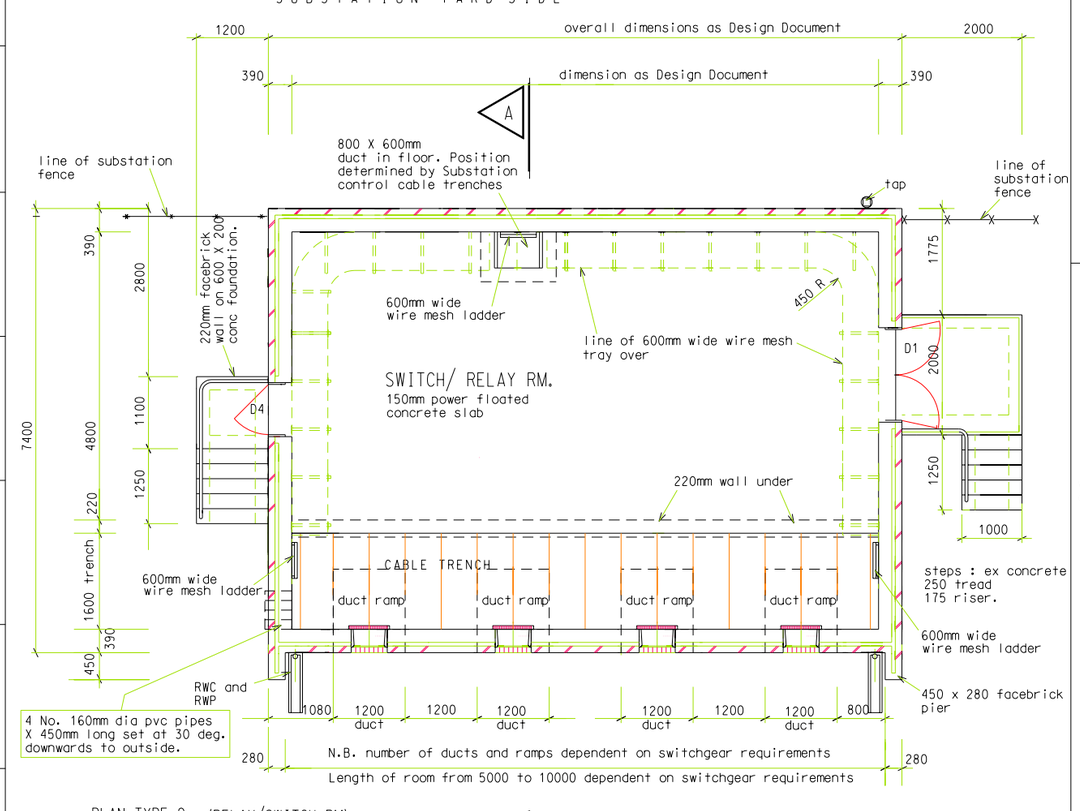


D E T A I L X

Scale 1:10

D E T A I L Y

SUBSTATION YARD SIDE



PLAN TYPE 9. (RELAY/SWITCH RM)

SCALE 1 : 50

SPECIFICATION

GENERAL:
This specification to be read in conjunction with ESKOM's Standard Specification and General Conditions of Contract.
Contractor to pay all fees in regard to services supplied by and for the Local Authority.
Portable latrines to be provided and serviced by Contractor.
Contractor to include in his pricing for the temporary supply of water and power for construction purposes.

FOUNDATIONS:
To sizes and depths shown.Concrete to be 15 mPa strength.
Reinforcing as shown on Section A - A

WALLS: Below ground : well burnt red hard clay R.O.K. bricks.
Internal walls : Red clay R.O.K. bricks.(min. compressive strength 7 mPa.)
REV.1 Facebricks : Smooth or rustic IRONSPOTS min.35 mPa or to ESKOM approval and start 1 course below final ground line.
Cavity walls to be 110 - 60 - 110 skins with 60mm cavity

Brikforce : 150mm wide galv. to first 4 courses above foundations and top 3 courses below wallplate. Gables 75mm width every 4th course to ridge. Wallties : Galv. " Butterfly" type, 5 per sq metre in wall. 300 c/c at jambs D.P.C. : Gunplas " Brikgrip " 375 microns, stepped at floor levels in cavity walls, and around openings.
Joints : Facebrick, 10mm raked, all other joints to be keyed for plastering. Every fourth perpend above stepped dpc to be raked clear to drain cavity.
Mortar: 1:4 (cement : sand)

PLASTERWORK:
Internally, 15mm thickness, smooth steel float finish. Mix 1:1:6 (cement:lime:sand). Externally 20mm thickness wood float mix 1:4.

FLOORS: SWITCH /RELAY ROOM
ABE "Korocron" cementatious floor hardener to Manufacturers spec. on 150 mm thickness 30mPa power floated concrete on sand fill compacted in 150mm layers. Reinforcing to be BRC 617 Weldmesh min. 50mm from bottom of slab.

N.B. FLOOR LEVEL TO BE LAYED TO A TOLERANCE OF 0.5MM PER METRE WITH A MAXIMUM OF 2.50MM DIFFERENCE OVER THE LENGTH.

STEPS AND LOADING BAY : 150mm brush finish 30mPa concrete layed to falls as shown. Reinforcing as Switch rm.

FLOOR FINISHES:
Relay/Switch room: 2 coats Sika Purigo 5S transparent sealer or equal approved applied after commissioning of electrical equipment by ESKOM.

N.B. NO skirtings required.

CEILINGS: See roof construction.

DOORS: Refer to door schedule drg D-DT-5238 sheet 13 for details.

AIRFILTERS: To be Winblok WI(A)66 fitted with external nat. anodised al. louvre and purpose made al. frame internally. Std burglar bars to be fitted to outside. See detail drg. D-DT-5238 sheet 13.

SERVICE TRENCHES:Walls to be bagged brick, all trench covers and channels by contractor. Refer to D-DT-5238 Sh.13 for trench details. edging. Trench covers as shown ex 4.5mm thk. "vastrap" with 25mm dia lifting holes.
SWITCHGEAR RACK OUT STEEL PLATES : Contractor to fix in position (after installation of switchgear by specialist contractor) 3mm thick X 1225mm galv.plates with CSK s/steel screws @ 500mm c/cs.
Contractor to refer to Design Document as to extent (length) of plates required.

SANITARYWARE: Hose tap: Cobra No. 108LK

PAINTER: Galv. steel: Galvkleen followed by 1 coat calcium plumbate primer, 1 coat universal undercoat, 1 coat gloss enamel.
Trench covers: one coat red lead primer, 1 coat u/ undercoat, 2 coats eggshell enamel. Colour: light grey to ESKOM approval.
Internal walls & ceilings: 1 filler coat, 2 coats Dulux "Wash 'n Wear" pva, or similiar approved. colour white. Final coat to be applied by contractor only after commissioning of all electrical equipment by Eskom.

WATER SUPPLY : Run in 15mm copper from water tank/ municipal supply to external tap.

Rev 1

5238 SH.16	LIGHTING AND POWER LAYOUT
5238 SH.14	BATTERY RM.SINK
5238 SH.13	DETAILS AND DOOR SCHEDULE
D-DT-	
DRG NO.	REFERENCE DRAWINGS:

THIS DRAWING IS THE NEW OFFICIAL REVISION. IT SUPERCEDES ALL OTHER PUBLISHED DRAWINGS.

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
1	D-DT-5074 CHANGED TO D-DT-5238	PBM	B.P.H	B.P.H.	05/04/2005	
0	DRAWING NO. CHANGED FROM D-DT-5074	VvZ	JFS	JFS	10/12/2002	

Eskom Distribution

AUTH: B.P. HILL
DATE: 10/12/2002
CHKD: J.F. SCHOLTZ
DATE: 10/12/2002
DRAWN: C.GRAY
DATE: 09/12/2002

NATIONAL STD. (CONCRETE FLAT ROOF)
"COMBO" CONTROL BUILDING TYPE 9
DETAIL PLAN, SECTIONS & ELEVATIONS

D-DT-5238

SET	SHEET	REVISION
16	9	1

THIS DRAWING HAS BEEN CREATED ON A C.A.D. SYSTEM AND ANY AMENDMENT TO THE DRAWING MUST BE EFFECTED ONLY ON THE SAME C.A.D. SYSTEM

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SCALE 1:

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