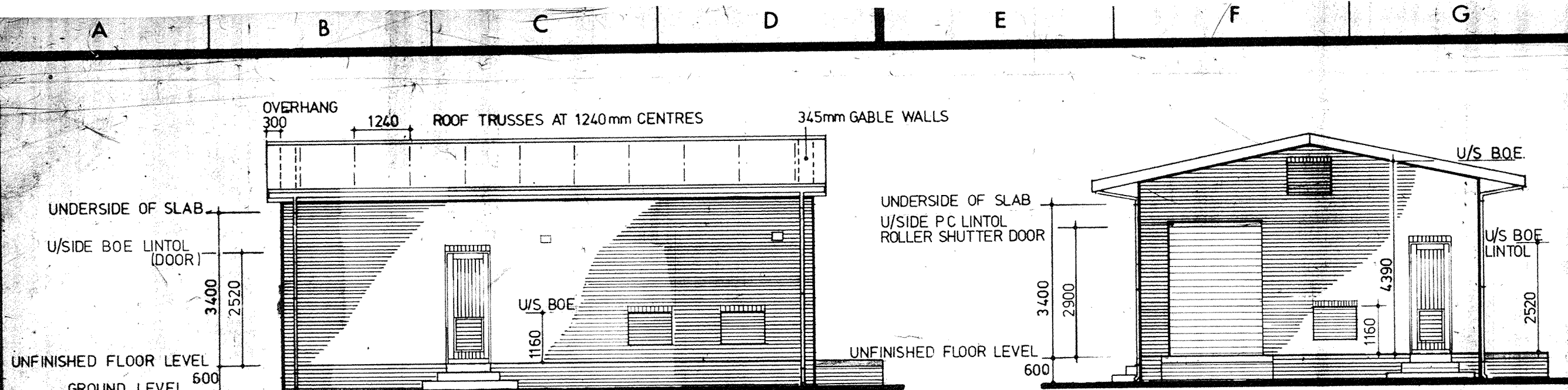
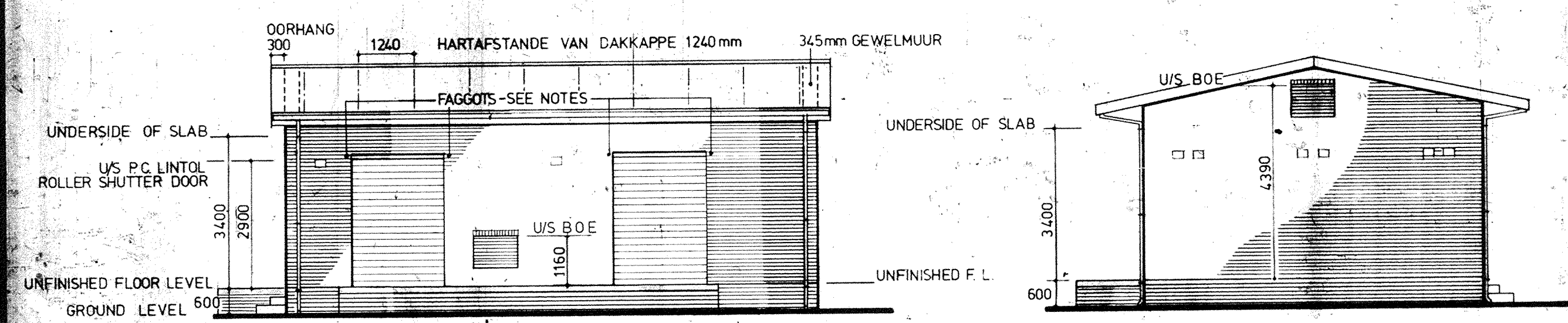




BACK ELEVATION
SCALE 1:100



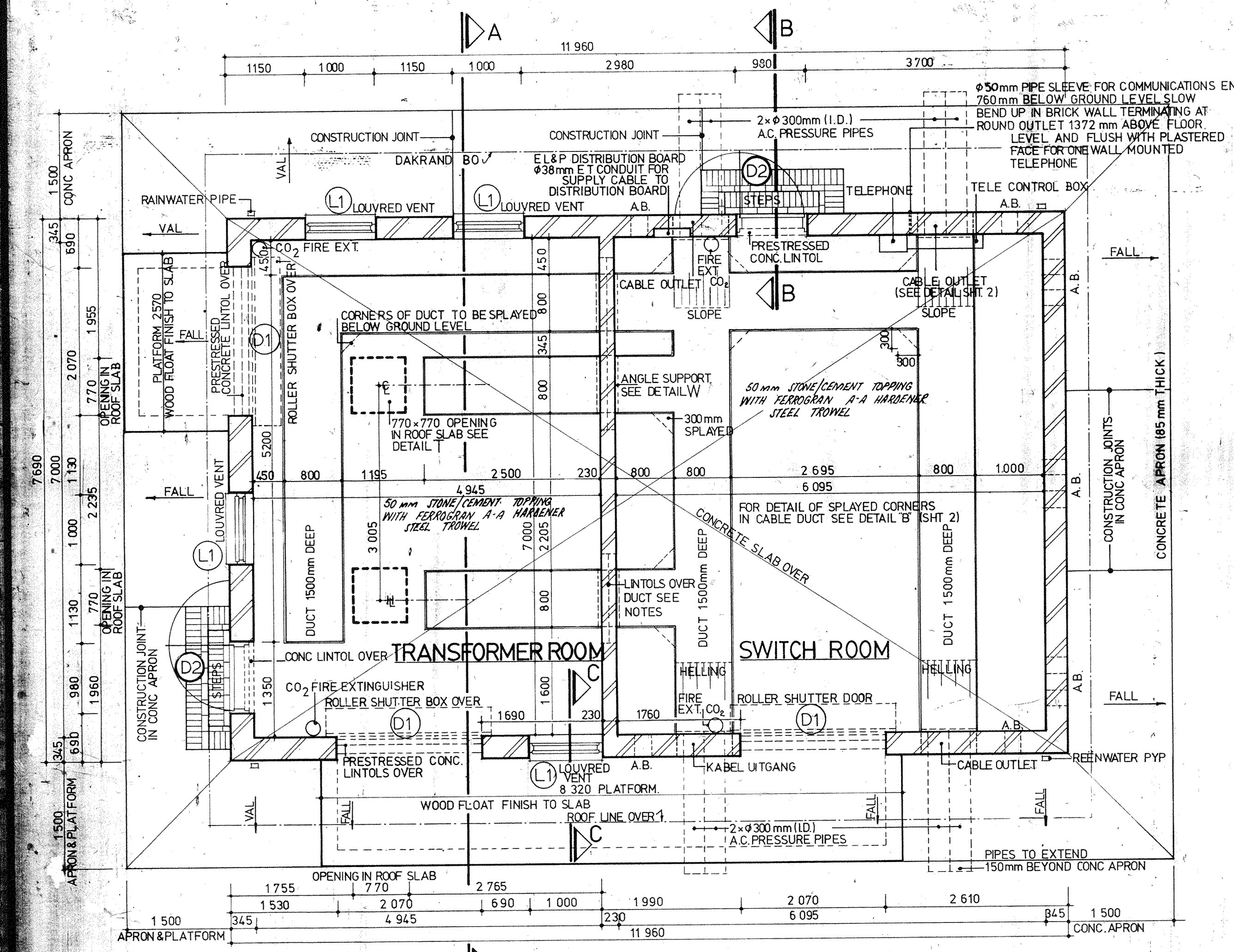
FRONT ELEVATION
SCALE 1:100

SIDE ELEVATION
SCALE 1:100

SIDE ELEVATION
SCALE 1:100

- GABLE WALLS 345mm
- FASCIA - ASBESTOS CEMENT 150 x 15
- BARGEBOARD - ASBESTOS CEMENT 225 x 15
- ROOF PITCH 11° 50'
- GUTTER 125 x 100 - ASBESTOS
- DOWNPIPE 100 x 75 - ASBESTOS
- AIR BRICKS TO BE VERMIN PROOFED
- LOUVRED VENTS TO BE GALVANISED
- LIGHT FACE BRICK
- B.O.E. LINTOL OVER LOUVRED VENTS AND SMALL DOOR
- PRECAST LINTOL OVER ROLLER SHUTTER DOOR OPENING
- QUARRY TILE CILLS FOR LOUVRED VENTS INTERNAL AND EXTERNAL
- PLATFORM SURFACE TO BE NON-SLIP WOOD FLOAT FINISH
- DARK FACE BRICK PLINTH
- LOUVRED VENT IN GABLE WALL TO HAVE QUARRY TILE CILL EXTERNALLY ONLY

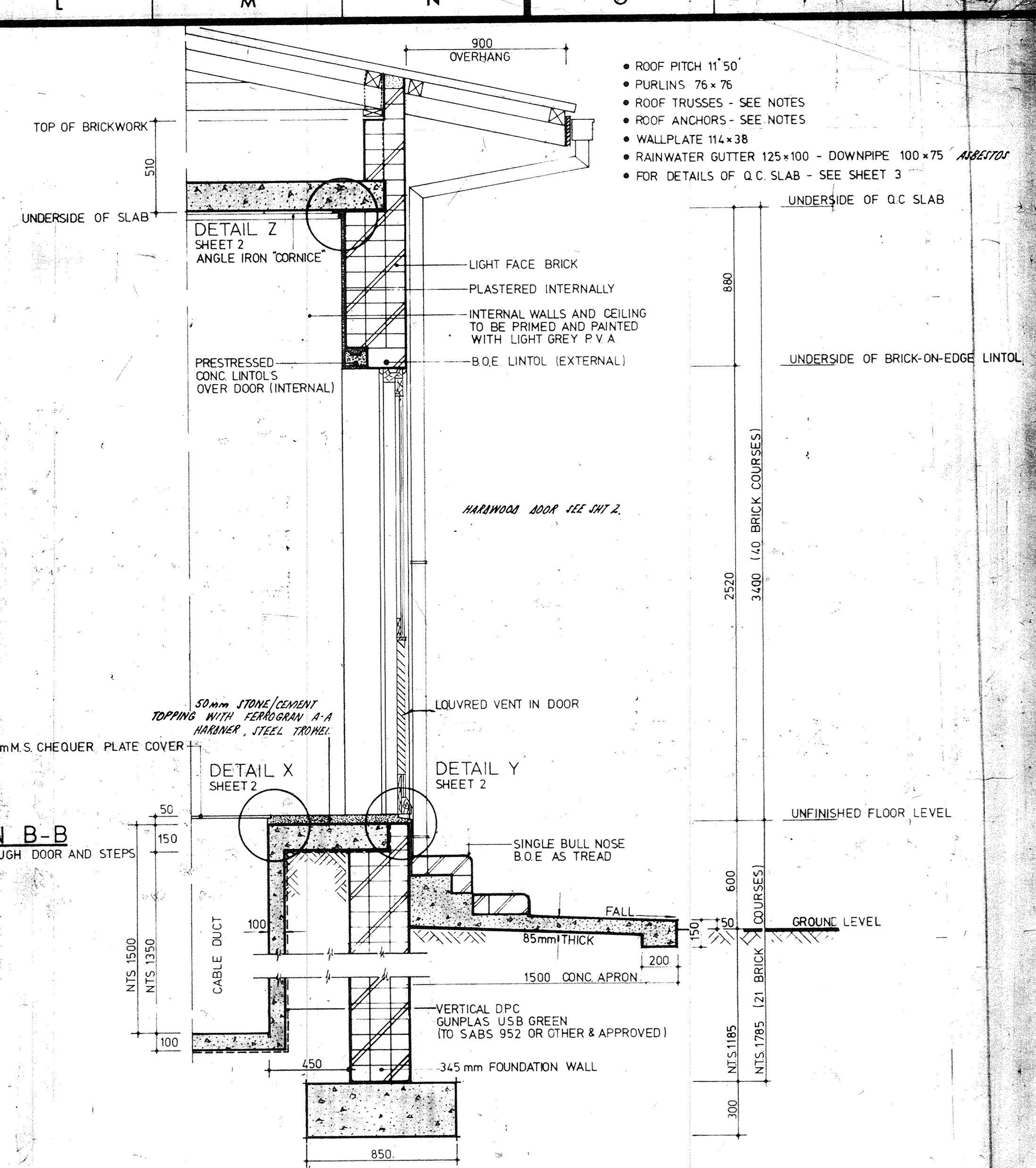
- GEWELMUR 345mm
- FASSIE - ASBESTEMENT 150 x 15
- WINDVEER - ASBESTEMENT 225 x 15
- DAKHELLING 11° 50'
- REENWATERGEUT 125 x 100 - ASBEST
- REENWATERPYP 100 x 75 - ASBEST
- ROTDIGTE LUGSTENE
- HORTJIEVENTILASIE MOET 'GEGALVANISEER WEES'
- LIGTE SIERSTEEN
- B.O.K. LAEI OOR HORTJIEVENTILASIE EN KLEIN DEUR
- VOORAFGEIETE LAEI OOR ROLLUK DEUROOPENING
- KLEITELVENSTERBANK BINNE EN BUITE
- PLATFORMOPPERVLAKTE MOET HOUTVLOTAFWERKING WEES
- DONKER SIERSTEENPLINT



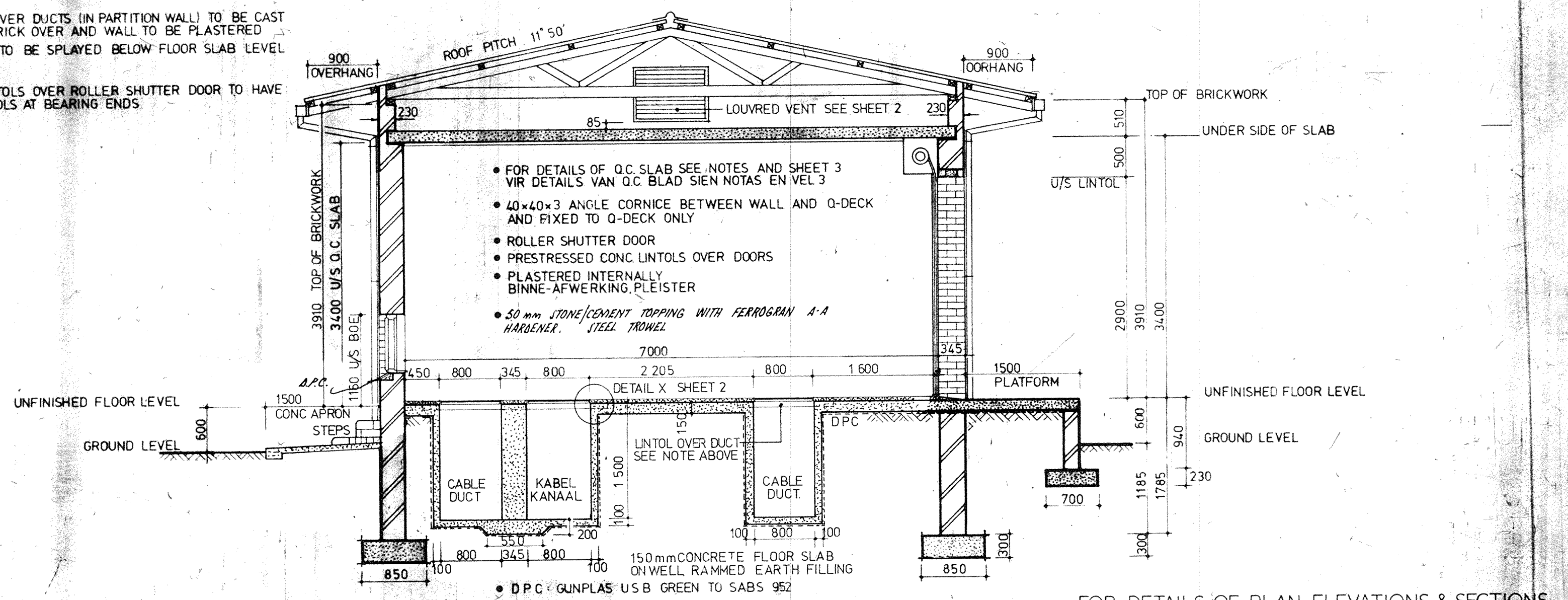
PLAN
SCALE 1:50

NOTES

- ROOF TRUSSES: PREFABRICATED ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE STANDARD BUILDING REGULATIONS CHAPTER 7 - STRUCTURAL TIMBER AND CHAPTER 3 - LOADS. CONNECTING SYSTEMS USED IN THE MANUFACTURE OF TRUSSES SHALL HAVE BEEN TESTED BY THE C.S.I.R. AND SHALL BE TO THE ENGINEER'S APPROVAL.
- ROOF ANCHORS: GALVANISED MILD STEEL STRAPS (38x12mm-18 GGE) TO BE BUILT INTO BRICK WALL 8-10 COURSES DOWN, AT 1240mm CENTRES. SPIKE TO WALL PLATE, TURN OVER PURLIN, SPIKE TO RAFTER AND AGAIN SPIKE TO WALL PLATE.
- Q-DECK SLAB: ROOF SLAB: R.C. DETAILS FOR Q-DECK CONCRETE SLAB TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. MESSRS. H.H. ROBERTSON (AFRICA) PTY LTD OR OTHER AND APPROVED - SEE SHEET 3.
- REINFORCING: PROVIDE 4 x 8mm MILD STEEL RODS PER COURSE FOR 4 COURSES ABOVE B.O.E. LINTOLS OVER DOOR, LOUVRED VENTS AND VENTS IN GABLE WALLS.
- CABLE DUCTS: PRESTRESSED LINTOLS OVER DUCTS (IN PARTITION WALL) TO BE CAST IN CONC FLOOR WITH BRICK OVER AND WALL TO BE PLASTERED. ALL CORNERS OF DUCTS TO BE SPLOYED BELOW FLOOR SLAB LEVEL.
- FAGGOTS AND LINTOLS: PRESTRESSED CONC LINTOLS OVER ROLLER SHUTTER DOOR TO HAVE FAGGOTS COVERING LINTOLS AT BEARING ENDS.



SECTION B-B
SECTION THROUGH DOOR AND STEPS
SCALE 1:20



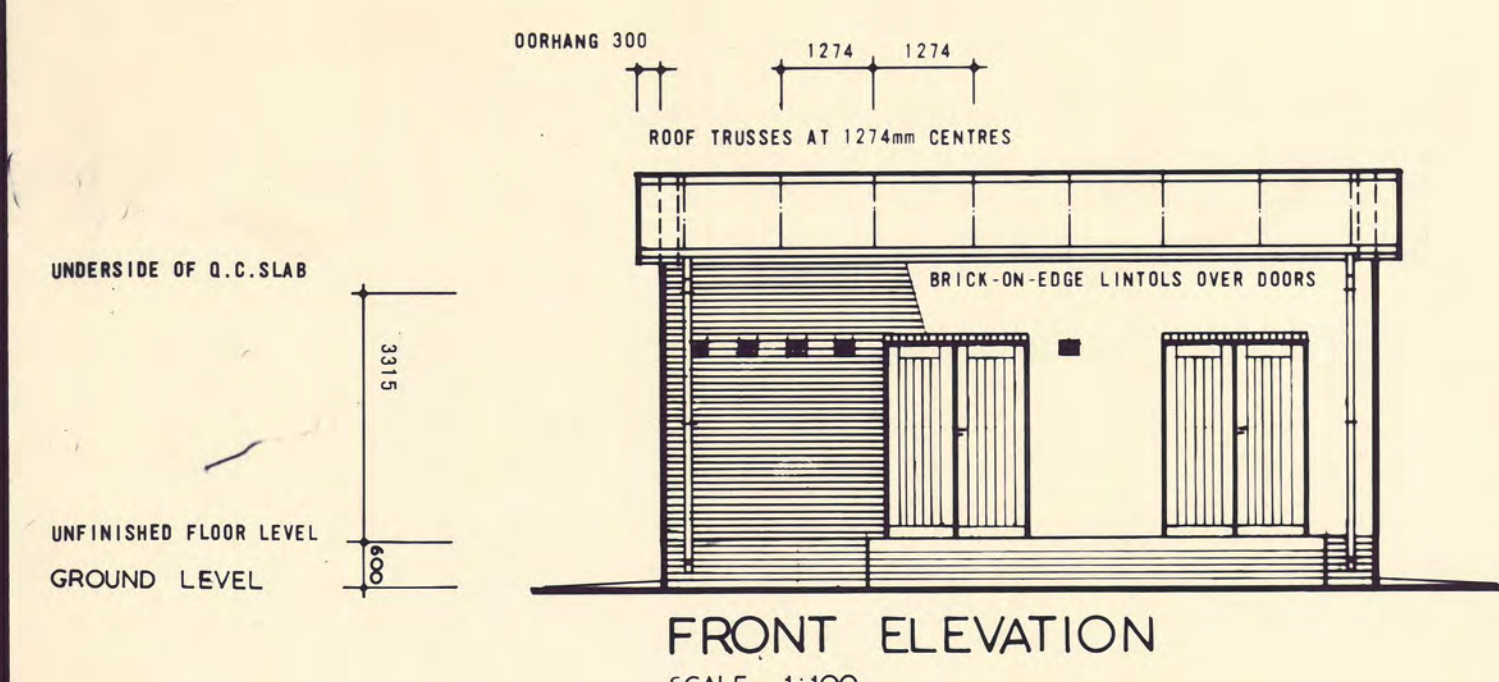
SECTION A-A
SCALE 1:50

- ROOF PITCH 11° 50'
- PURLINS 76 x 76
- ROOF TRUSSES - SEE NOTES
- ROOF ANCHORS - SEE NOTES
- WALL PLATE 114 x 38
- RAINWATER GUTTER 125 x 100 - DOWNPIPE 100 x 75 - ASBESTOS
- FOR DETAILS OF Q.C. SLAB - SEE SHEET 3

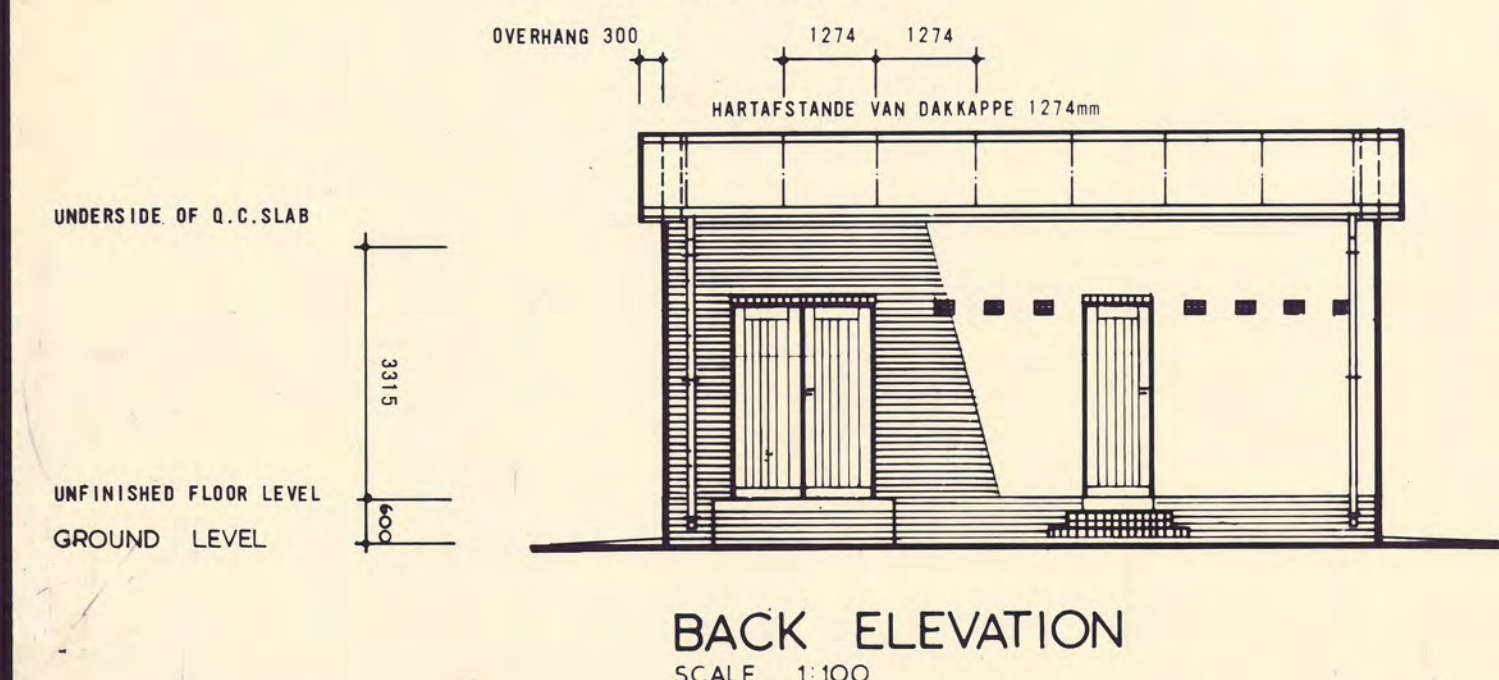
FOR DETAILS OF PLAN, ELEVATIONS & SECTIONS SEE SHEET 1
FOR DETAILS OF DOORS, VENTS, DUCTS, ETC. SEE SHEET 2
FOR DETAILS OF Q.C. SLAB SEE SHEET 3
AREA: 91.972 m²

OPMERKINGE • BESYFERDE AFMETINGS MOET BY VOORKEUR SO GESKAALDE AFMETINGS GEBRUIK WORD • ALLE AFMETINGS MOET NAGEGAAN WORD ALVORENS DAAR MET ENIGE WERK N. AANVANG-GENEEM WORD • IN HANDEL VERKRYGBARE ARTIKELS VAN NAGENOEG GELYKSTAANDE IMPERIALE GROOTTES SAL AANVAARBAAR WEES. MAAR DIT IS DIE VERANTWOORDELIKEHEID VAN DIE AANNEMER OM TE VERSEKER DAT VERWANTE ITEMS ONDERLING BEHOORLIK PAS. • FIGURED DIMENSIONS MUST BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS • ALL DIMENSIONS MUST BE CHECKED BEFORE COMMENCING ANY WORK • COMMERCIALY AVAILABLE ARTICLES OF APPROXIMATELY EQUIVALENT IMPERIAL SIZES WILL BE ACCEPTABLE BUT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RELATED ITEMS WILL FIT PROPERLY		NOTES NOTE: 1. PROVISION OF TELECONTROL ACCOMMODATION TO BE MADE AS PER DRWG. ST. CLE 39-31.		WYSIGINGE TELECONTROL REQUIREMENTS ADDED MR.		AMENDMENTS J. G. HOLAHAN		RICHARDS BAY MULTI-PURPOSE BULK HANDLING FACILITIES		SAS SAR 443-R-29	
HOOFARGITEUR CHIEF ARCHITECT DATUM: 12-12-78		ARGITEUR ARCHITECT S.G. SILCOCK ARG. VERW. ARCH. REF. 3549/36		GEKALKER TRACED H. CLARE-TALBOT SHI. VERW. C.C.E. REF. W(1)57/15/3		NAGESIEN CHECKED 1:100, 1:50, 1:20		ELECTRICAL SUB-STATION PLAN, ELEVATIONS & SECTIONS BUILDING NO. 36 TYPE E		ELEKTRIESE SUBSTASIE PLAN, AANSIGTE EN DEURSNEE GEBOU NO. 36 East Arriv TIPE E	

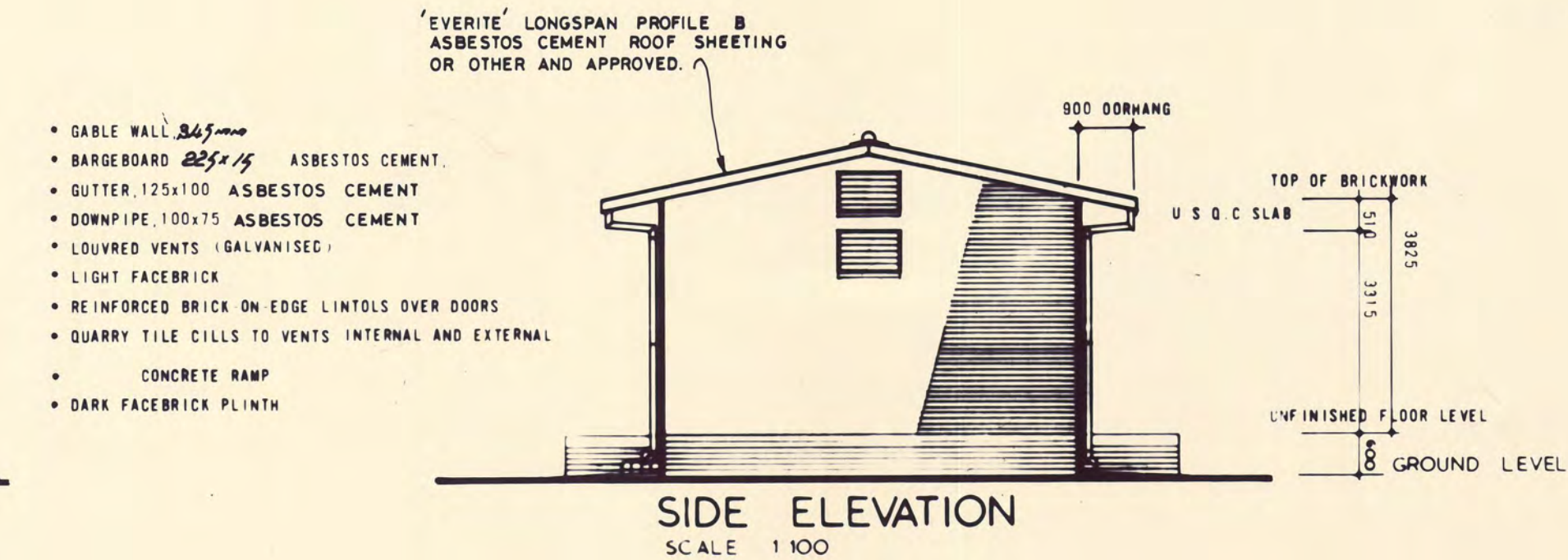
1
2
3
4
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7



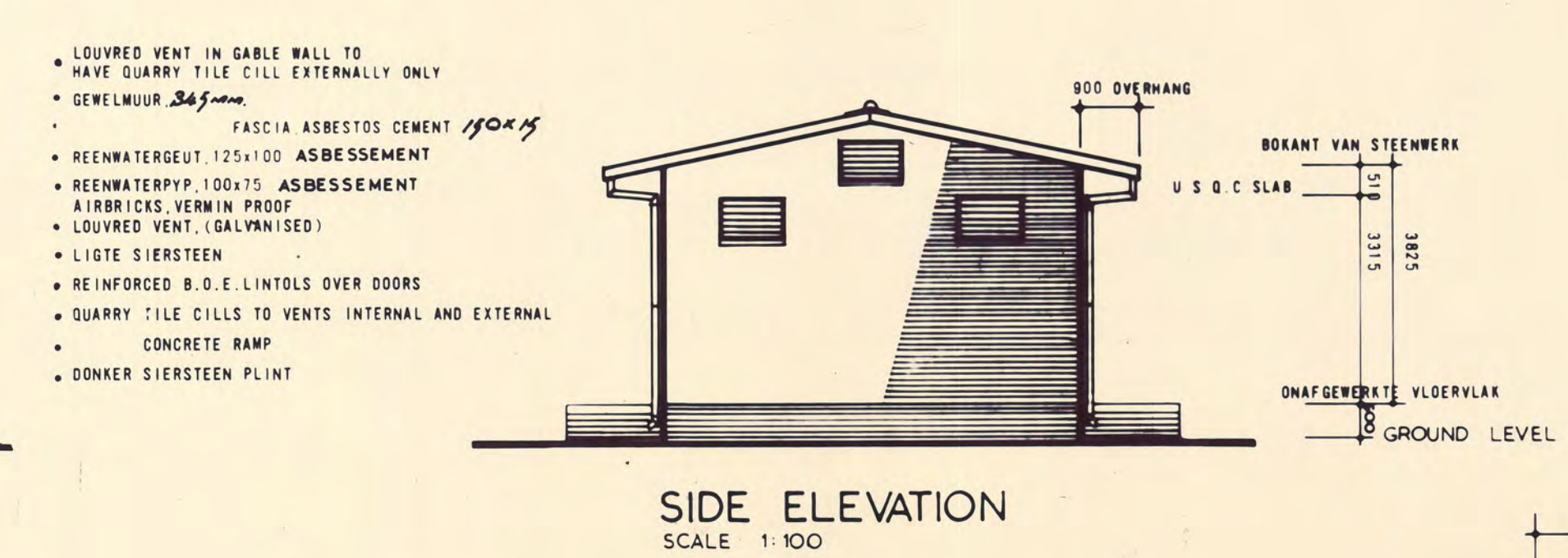
FRONT ELEVATION
SCALE 1:100



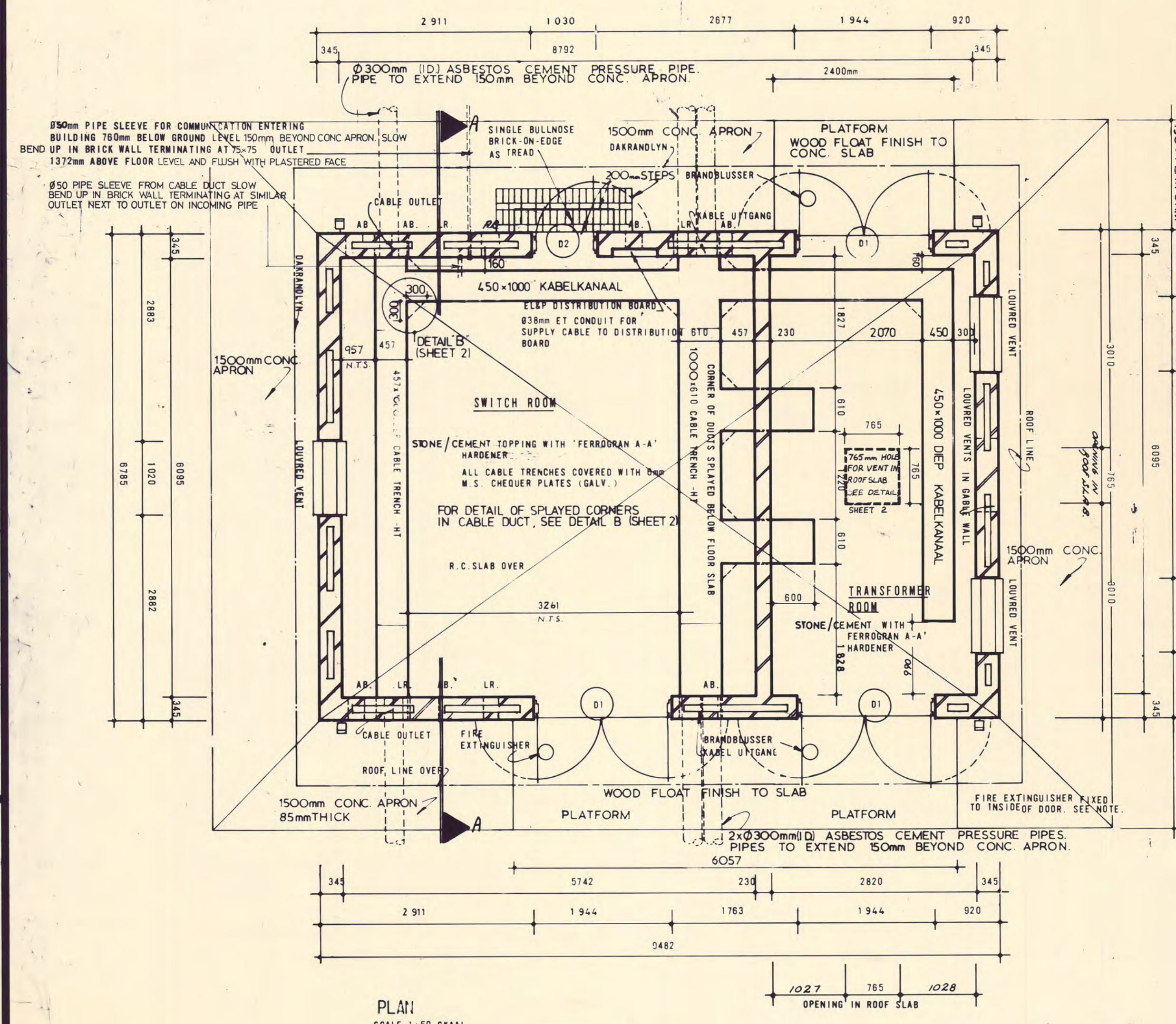
BACK ELEVATION
SCALE 1:100



SIDE ELEVATION
SCALE 1:100

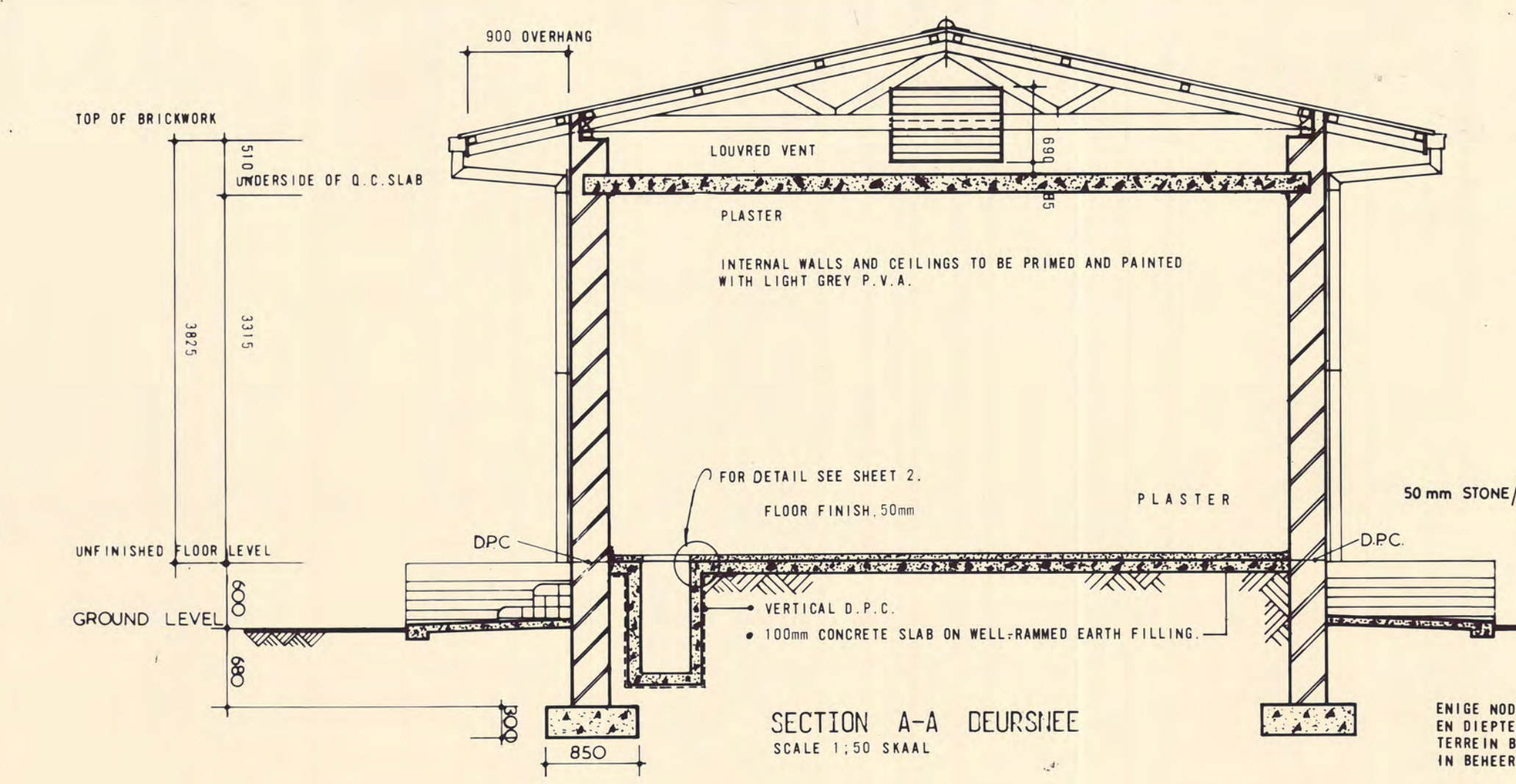


SIDE ELEVATION
SCALE 1:100

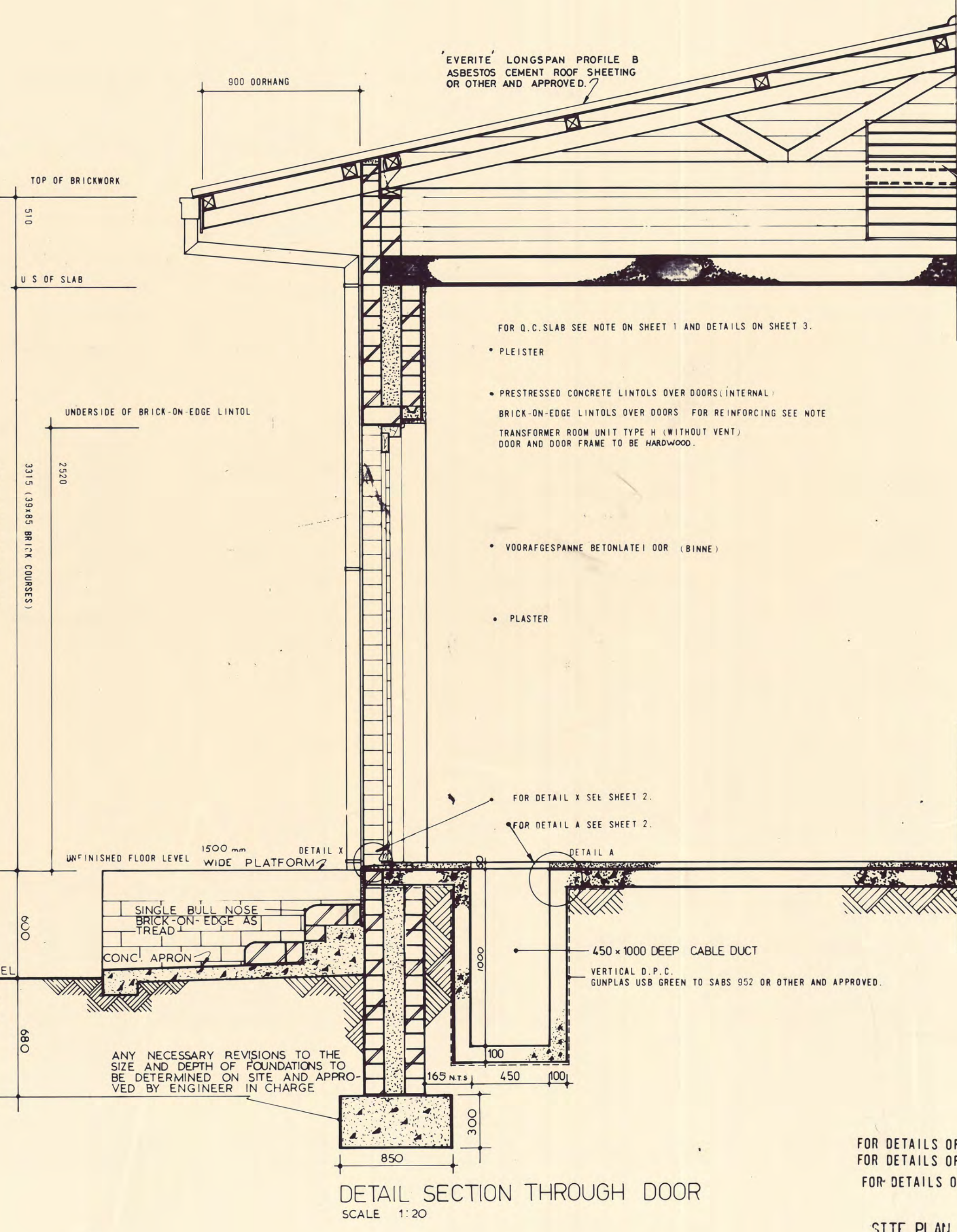


PLAN
SCALE 1:50

NOTES
1. NOTE ON ROOF TRUSSES
2. NOTE ON ROOF ANCHORS
3. NOTE ON ROOF DECK
4. NOTE ON REINFORCEMENT
5. CAVITIES
6. TELE CONTROL



SECTION A-A DEURSNEE
SCALE 1:50



DETAIL SECTION THROUGH DOOR
SCALE 1:20

SEE NOTE ON REINFORCING ABOVE LOUVRED VENT IN GABLE WALL
• ROOF PITCH 11°50'
• PURLINS 76x76
• ROOF TRUSSES SEE NOTE
• ROOF ANCHORS SEE NOTE
• WALLPLATE 114x38
• RAINWATER GUTTER 125x100 ASBESTOS CEMENT
• RAINWATER DOWNPIPE 100x75 ASBESTOS CEMENT
• FOR DETAILS OF O.C. SLAB SEE SHEET 3
• PLEISTER

ENIGE NODIGE VERANDERINGE AAN DIE GROOTTE EN DIEPTE VAN DIE FONDAMENTE MOET OP DIE TERREIN BEPAAL WORD EN DEUR DIE INGENIEUR IN BEHEER GOEDKEUR WORD
• ROOF PITCH 11°50'
• DAKLATTE 76x76
• VIR DAKKAPPE SIEN NOTA
• VIR DAKANKERS SIEN NOTA
• MUURPLAAT 114x38
• REENWATERGUT 125x100 ASBESSEMENT
• REENWATERPPYP 100x75 ASBESSEMENT
• VIR DETAILS VAN O.C. SLAB SIEN VEL 3

FOR DETAILS OF PLANS ELEVATIONS AND SECTIONS SEE SH 1
FOR DETAILS OF DOORS VENTS ETC SEE SH 2
FOR DETAILS OF ROOF SLAB SEE SHEET 3

SITE PLAN NO. DHNW 3-A-69
AREA 64 335 SQUARE METRES

OPMERKINGE
NOTES
• BESTYDEDE AFMETINGS MOET BY VOORKEUR SO GESKAALDE AFMETINGS GEBRUIK WORD
• ALLE AFMETINGS MOET NAGEGAAN WORD ALDRENS DAAR MET ENIGE WERK N AANVAAR GENEEM WORD
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NOTES
1. 3 kg CO2 AS MARKED ON PLAN FIXED TO INSIDE OF DOUBLE DOORS.
2. SUBSTITUTION TO BE REQUESTED TO WITH A TYPE 1-39(D) TYPAL SECURITY FENCING WITH DOUBLE VERTICALLY FACING TO THE INSIDE OF THE PROPERTY.

NR	NO	DATUM	DATE	S	WYSIGINGE	AMENDMENTS
1	80-02-19				NOTE RE HOLE IN ROOF SLAB CHANGED.	

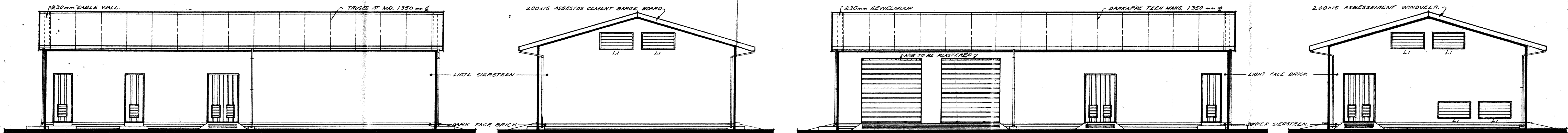
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GETEKEN DRAWN B.N. SWART	ARGITEK ARCHITECT B.N. SWART	ROOF ARCHITECT ARCHITECT B.N. SWART	ROOF ARCHITECT ARCHITECT B.N. SWART
GEKALKEER TRACED B.N. SWART	ARGITEK ARCHITECT B.N. SWART	ROOF ARCHITECT ARCHITECT B.N. SWART	ROOF ARCHITECT ARCHITECT B.N. SWART
NAGESIEN CHECKED W.P.	ARGITEK ARCHITECT W.P.	ROOF ARCHITECT ARCHITECT W.P.	ROOF ARCHITECT ARCHITECT W.P.

RICHARDS BAY HARBOUR
WESTERN END OF DEPARTURE YARD
ELECTRICAL SUBSTATION PLAN, SECTION AND ELEVATIONS
BUILDING NO 49
TYPE A

RICHARDS BAY HARBOUR
WESTELIKE KANT VAN VERTREK- WERF
ELEKTRIESE SUBSTASIE PLAN, DEURSNEE EN AANSIGTE
GEBOU NO 49
TYPE A

SAS	SAR
443-R-32	1
VEL SHEET	1
WYSIGINGE/AMENDMENTS	

443-R-32 sh. 1/1

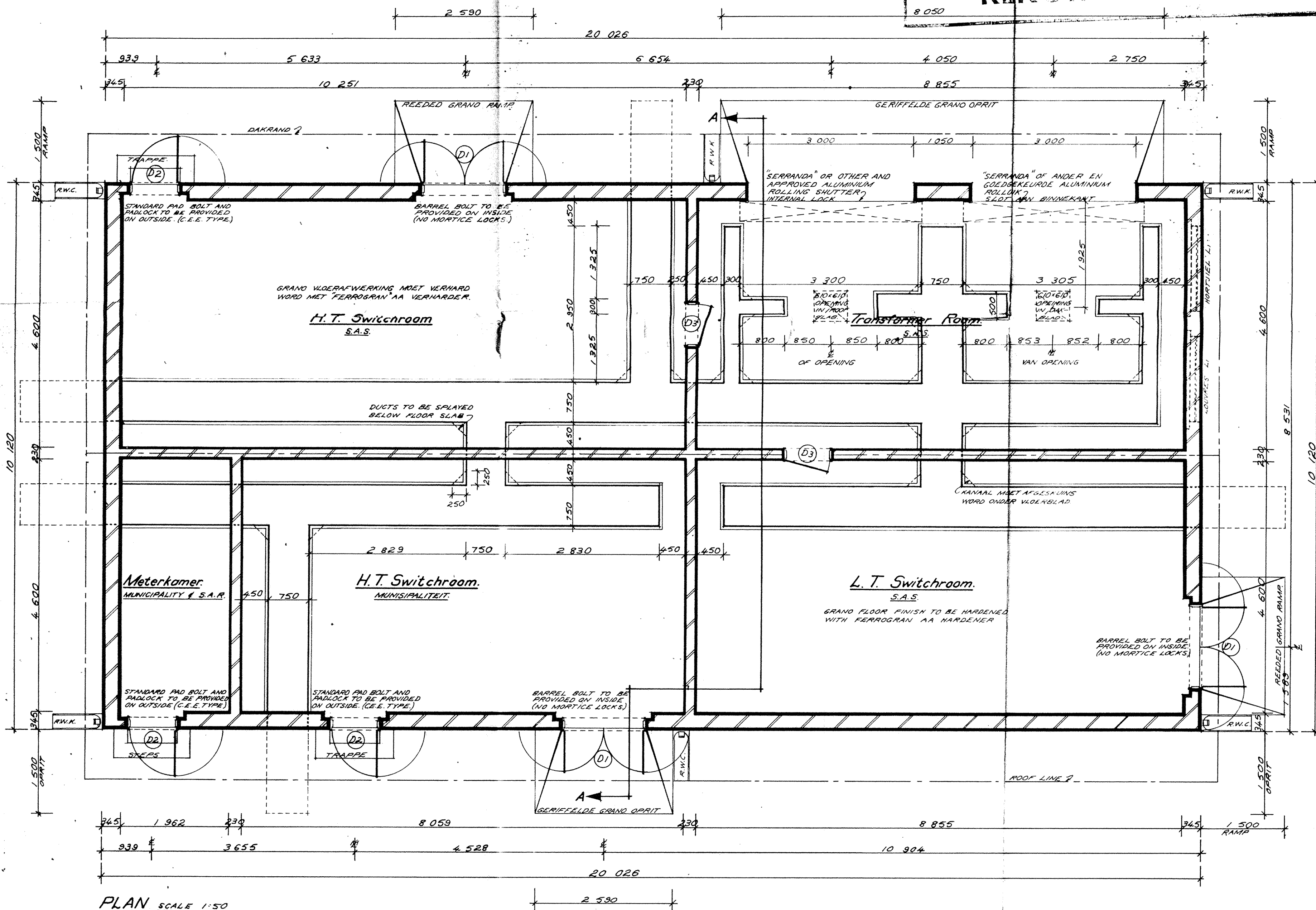
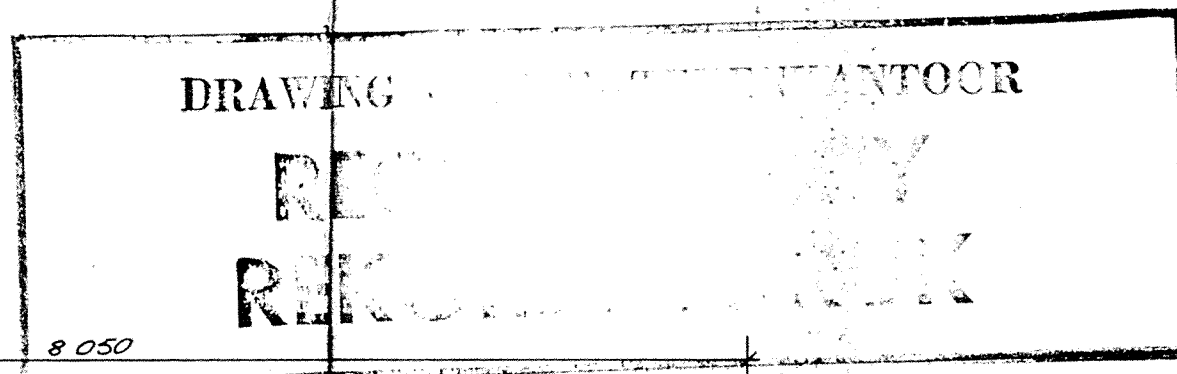


FRONT ELEVATION SKAAL 1:100

SY-AANSIG SCALE 1:100

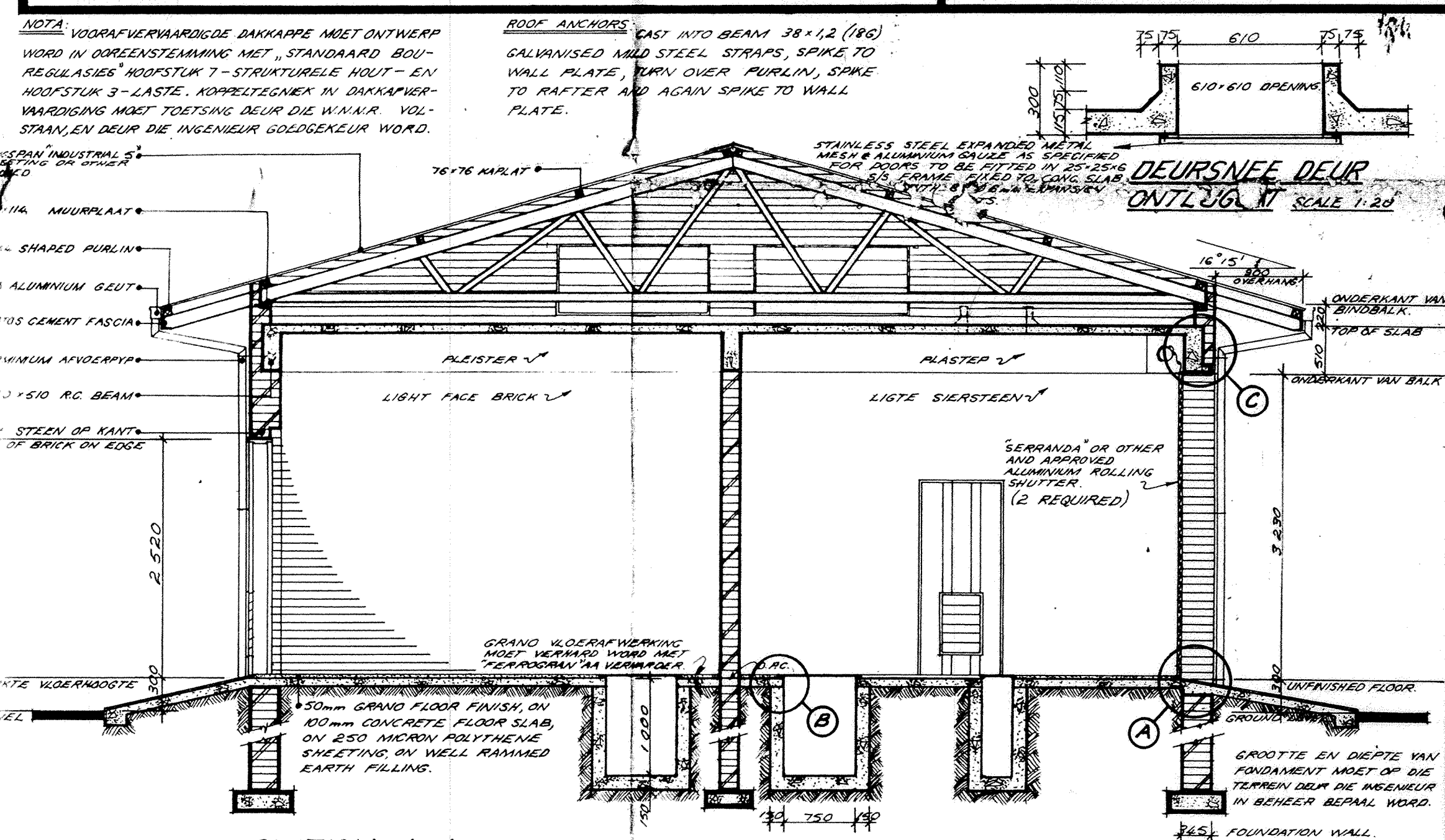
AGTERAANSIG SCALE 1:100

SIDE ELEVATION SKAAL 1:100

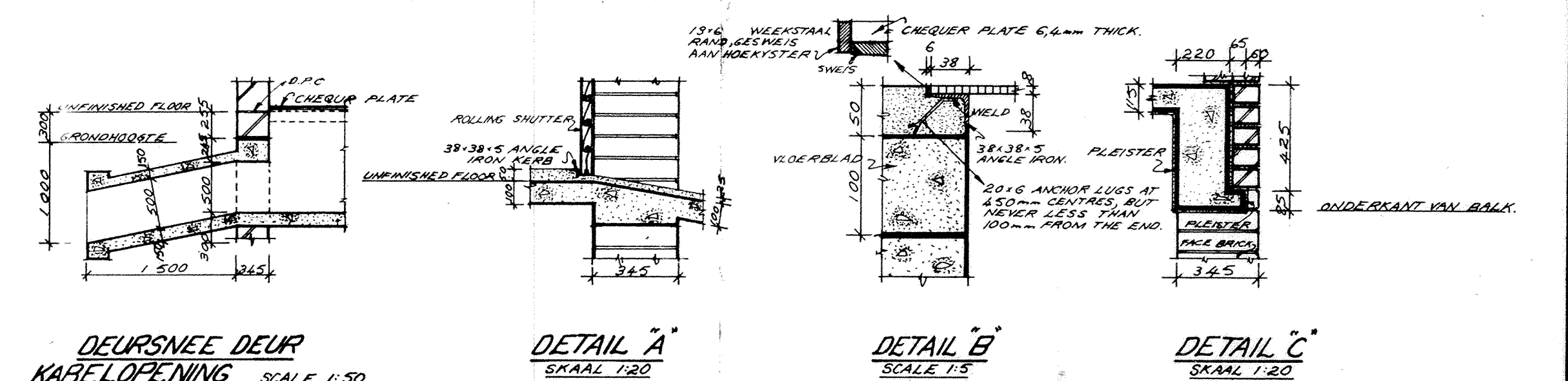


PLAN SCALE 1:50

DIAGRAM SKAAL 1:50 SCALE				DIAGRAM SKAAL 1:50 SKAAL			
TYPE	NO REQ.	L.H.	R.H.	TYPE	NO REQ.	L.H.	R.H.
DOOR				DOOR			
DEUR				DEUR			
FRAME				FRAME			
RAAM				RAAM			
DEURSKEDULE				LOUVRE SCHEDULE			



SECTION A-A SKAAL 1:50



DEURSKEDULE KABELOPENING SKAAL 1:50

DETAIL A SKAAL 1:20

DETAIL B SKAAL 1:5

DETAIL C SKAAL 1:20

OPMERKINGE NOTES

- BESYFERDE AFMETINGS MOET BY VOORKEUR BO GESKAALDE AFMETINGS GEBRUIK WORD.
- ALLE AFMETINGS MOET NAGEGAAN WORD ALVORENS DAAR MET ENIGE WERK 'N AANVANG GENEEM WORD.
- IN HANDEL VERBODIGBARE ARTIKELS VAN NAGENOE GELYKSTAANDE IMPERIALE GROOTTES SAL AANVAARBAAR WEES, MAAR DIT IS DIE VERANTWOORDELIKHEID VAN DIE AANNEMER OM TE VERSEKER DAT VERWANTE ITEMS ONDERLING BEHOORLIK PAS.
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1. 230mm REINFORCED BRICK ON EDGE OVER DOORS & LOUVRES.
2. FOR SITE PLAN SEE DRAWING 'SB 1-4 SHEET 3'

WYSIGINGE AMENDMENTS

NR	NO	DATUM DATE	S	WYSIGINGE	AMENDMENTS
1	13/4/15	J.K.		THICKNESS OF SLAB OVER CABLE OPENING CHANGED.	

HOOFARGITEK	J.G. HOLAHAN.	SIVILE HOOFINGENIEUR
CHIEF ARCHITECT		CHIEF CIVIL ENGINEER
DATUM	14.5.75	DATE
ARGITEK		ARCHITECT
GETEKEN	J.H. KRUGER	ARG. VERW
DRAWN		ARCH. REF
GEKALKEER	J.H. KRUGER	SHL. VERW.
TRACED		C.C.E. REF
NAGESIEN	E.V.R.	SCALE
CHECKED		AS SHOWN

HARBOUR.	STAGE 2	RICHARDS BAY	FASE 2	HAWK.	SAS SAR
NORTH EL#P INTAKE			NOORD EL#K INLAAT		
SUB STATION			SUB - STASIE		
			443-R-8		
			VEL SHEET 1		
			WYSIGINGE AMENDMENTS		

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GENERAL

1. ALL WRITTEN DIMENSIONS TO TAKE PREFERENCE OVER SCALED DIMENSIONS
2. ALL LEVELS AND DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK COMMENCES

No.	DATE	INIT.	REVISIONS
D	99-07-10	PJJ	REDRAWN
E	99-09-20	PJJ	OVERHANG, APRON, FACE BRICK

NORTH EAST ELEVATION

1 : 100

NORTH WEST ELEVATION

1 : 100

SOUTH WEST ELEVATION

1 : 100

SOUTH EAST ELEVATION

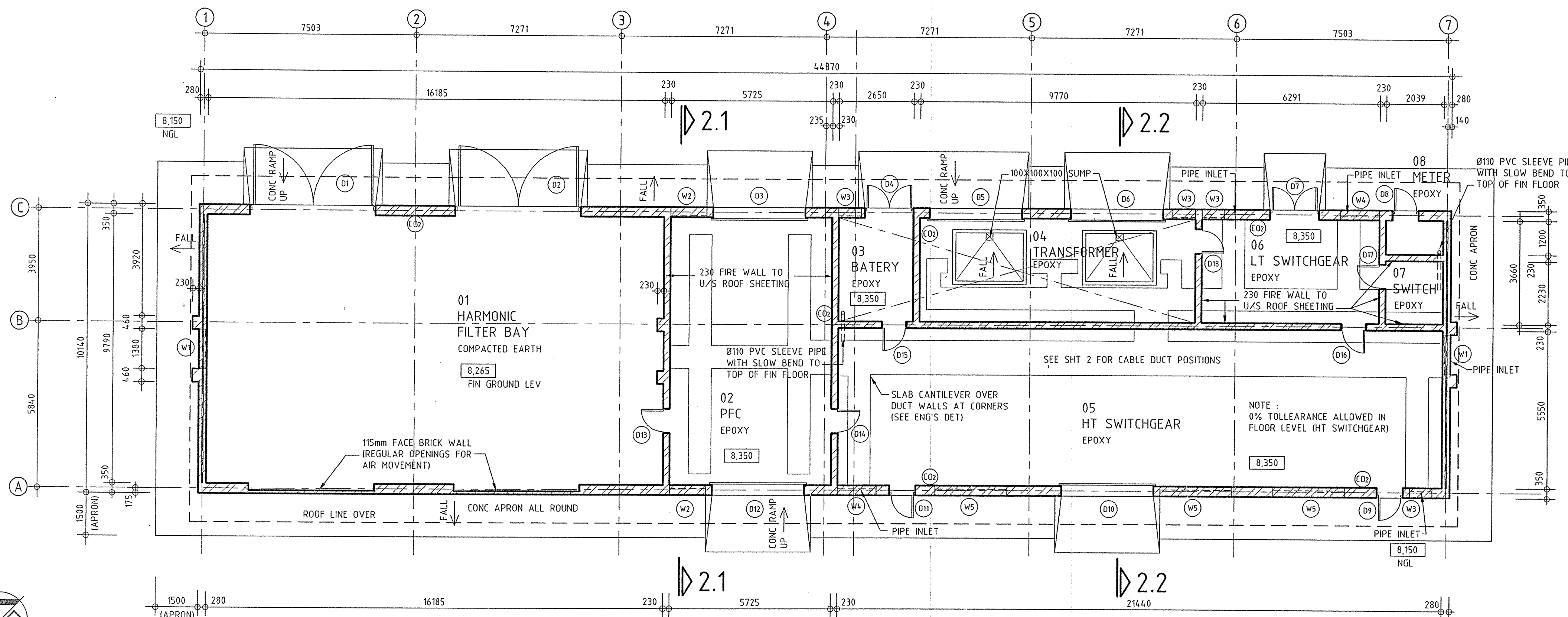
1 : 100

FLOORS :

1. ALL GRANO TO BE PRIMED WITH 'SEALGUARD' AND FINISHED WITH 'SEALGUARD' EPOXY COATING
2. HARMONIC FILTER BAY : WELL COMPACTED EARTH

DOORS :

1. ALL INTERNAL DOORS AND FRAMES TO BE STEEL FIRE DOORS
2. ALL EXTERNAL DOORS AND FRAMES TO BE TIMBER WITH ALUM LOUVRES



PLAN

1 : 100

LEVELS :

8,350 INDICATES UNFINISHED FLOOR LEVELS
DATUM = MSL

FIRE NOTES

FIRE CLASSIFICATION CLASS D1
FIRE NOTES ACCORDING TO SABS 0400/NBR

1. FIRE EQUIPMENT SIGNAGE IN TERMS OF TT29/32
2. 30m FIRE HOSE REELS TO COMPLY WITH SABS S43 TT34. WATER SUPPLY TO BE MINIMUM Ø50 (SEE SITE PLAN)
3. PORTABLE FIRE EXTING. TO COMPLY WITH TT37
4. FIRE HYDRANTS TO COMPLY WITH TT35 WATER SUPPLY TO BE MINIMUM Ø75 (SEE SITE PLAN)
5. ALL WATER SUPPLY PIPES TO HOSE REELS AND HYDRANTS TO BE CONNECTED TO EXISTING FIRE WATER SUPPLY PIPE
6. STRUCTURAL ELEMENTS TO COMPLY WITH TT7, TT9
7. ALL DUCTS TO BE SEALED AT WALLS WITH FIRE RESISTANT FOAM
8. CABLES TO BE FIRE PROTECTED UP TO 1 metre FROM WALLS

9kg CARBON DIOXIDE PORTABLE FIRE EXTING.

SCHEDULE OF AREAS :

HARMONIC FILTER BAY :	166,09m²
PFC :	61,25m²
BATTERY :	11,44m²
TRANSFORMER :	4,0,10m²
SWITCHGEAR :	162,36m²
METER & SWITCH :	8,56m²
TOTAL :	449,91m²

PROTEKON

22 OCT 1999

CONTROLLED COPY

CONSTRUCTION
DRAWING

NO. 27

SIGNER:

**ARCHITECTS
ENGINEERS
PROJECT MANAGERS
QUANTITY SURVEYORS**
PROTEKON
KwaZulu Natal
A BUSINESS UNIT OF TRANSHET LTD. REG. NO. 90/00900/06

EEL ROAD, BAYHEAD
BOX 1073, DURBAN
TEL. 031 3615917
FAX. 031 3615918

PROJECT
**PORT OF RICHARDS BAY
NEWARK ROAD**
**PROPOSED NEW HARBOUR
WEST SUB-STATION (NEPTUNE)**
PART OF 87 BAYVIEW

DRAWING
PLAN, ELEVATIONS

CLIENT PORTNET

SIGNED

DESIGNED C. MEIER

DRAWN P. Kowit **CHECKED**

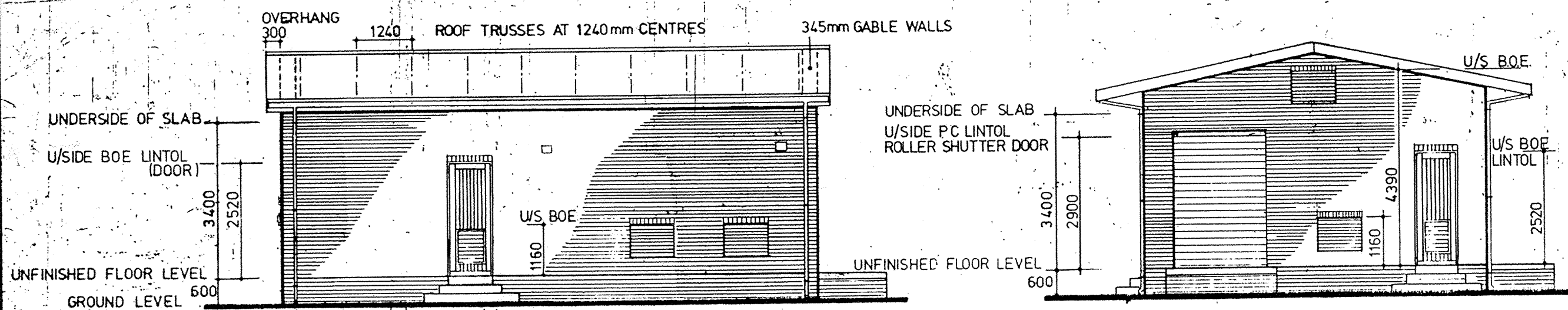
PROJECT LEADER

CLIENT MANAGER

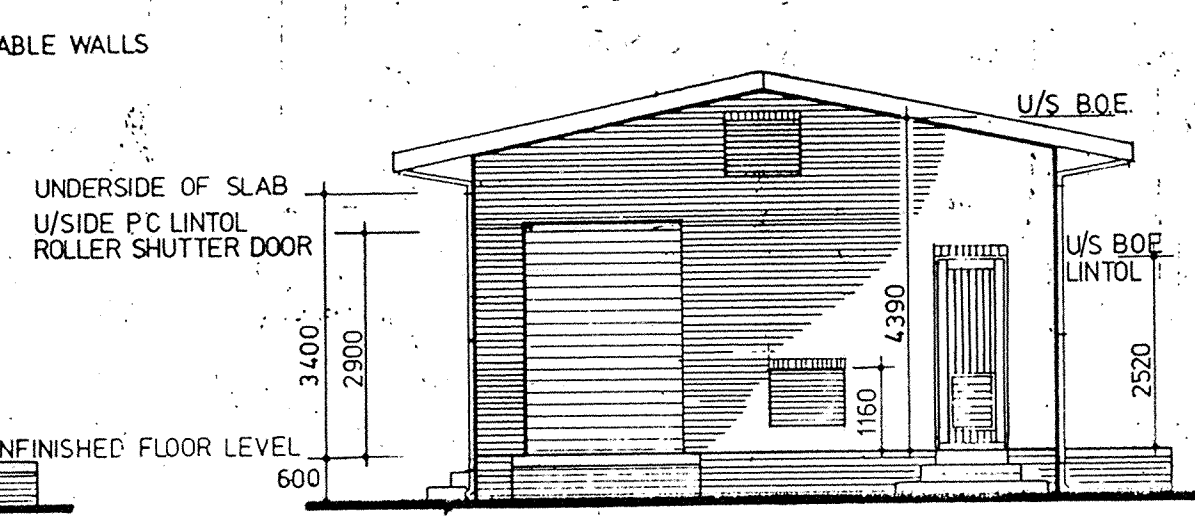
SEGMENT MANAGER

CAD REF. N80-0001 **DATE** JULY 1999

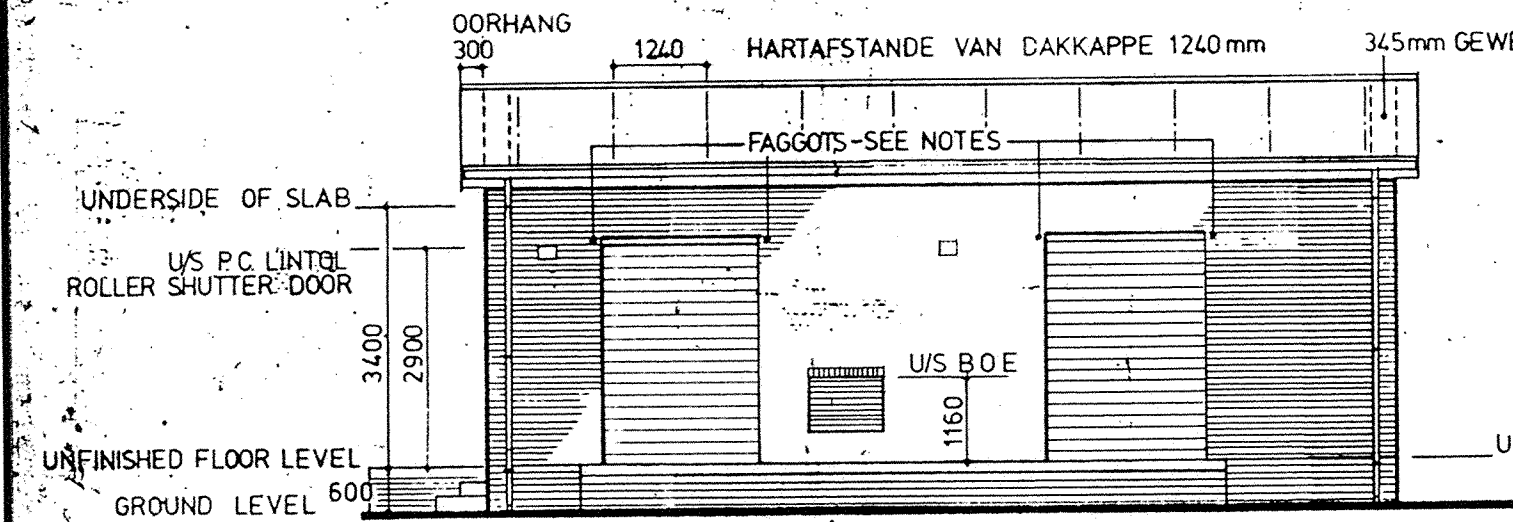
ARCHITECTURAL DRAWING No. **DWG TYPE** **SHEET** **REV.**
PPD: N80 **W** **001** **E**



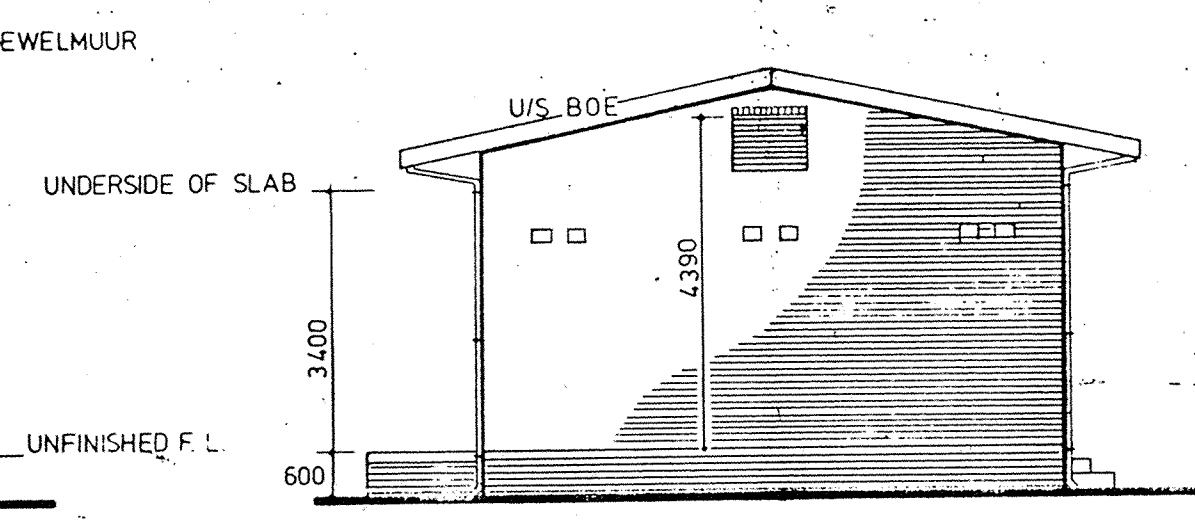
BACK ELEVATION
SCALE 1:100



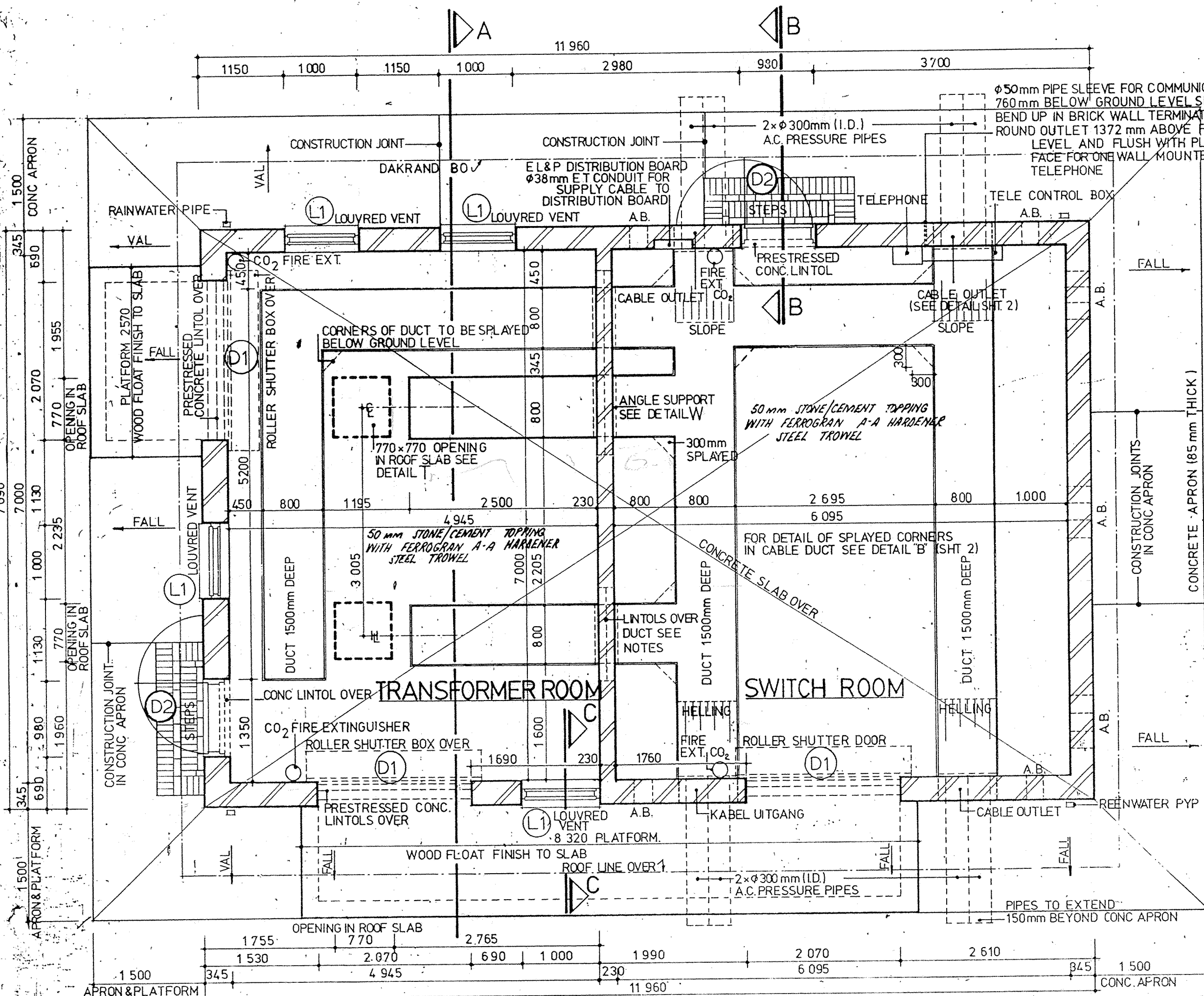
SIDE ELEVATION
SCALE 1:100



FRONT ELEVATION
SCALE 1:100



SIDE ELEVATION
SCALE 1:100



PLAN
SCALE 1:50

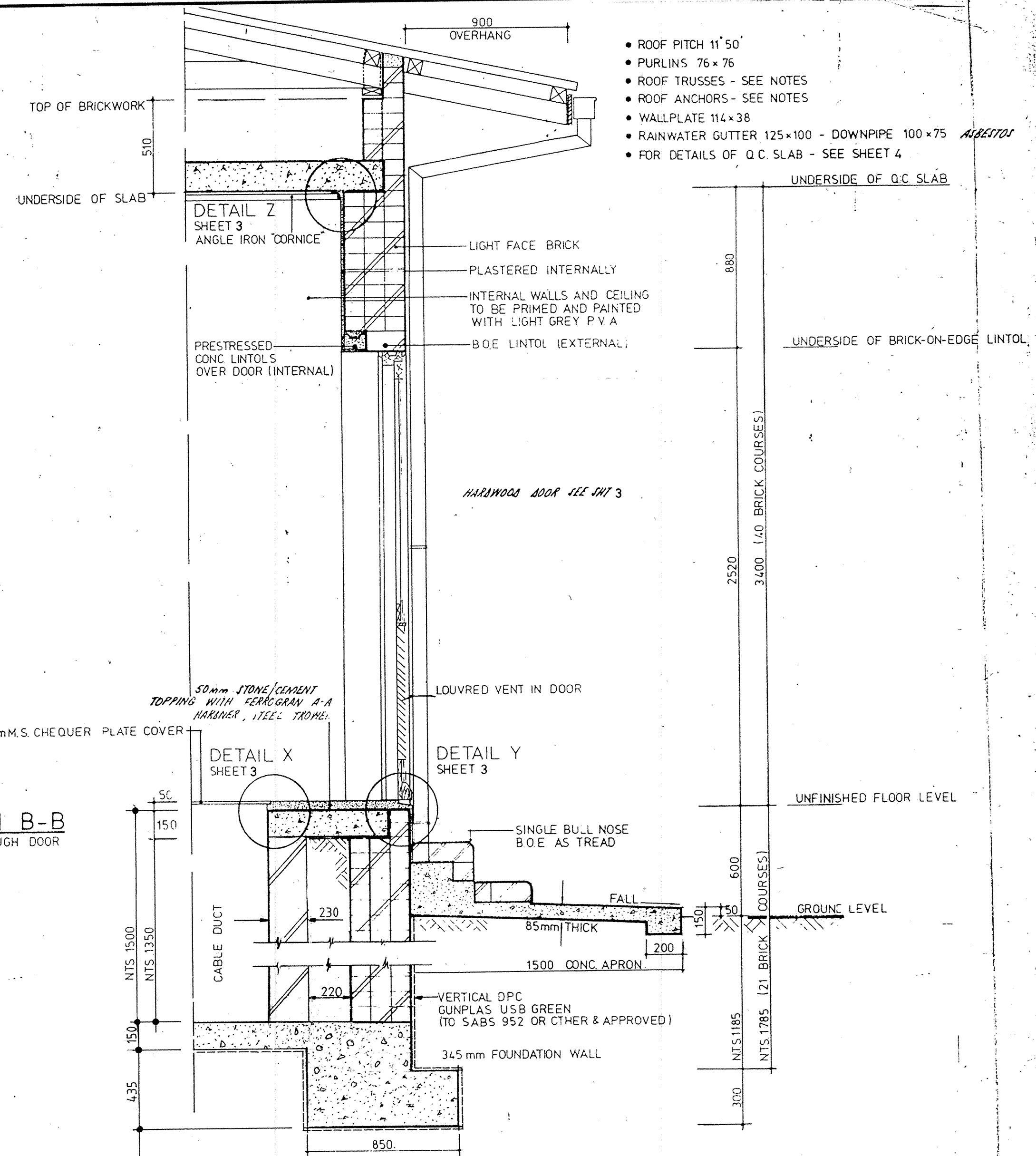
- OPMERKINGE**
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- ROOF COVERING - PROFILE B ASBESTOS CEMENT SHEETING
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- FASCIA - ASBESTOS CEMENT 150 x 15
- BARGEBOARD - ASBESTOS CEMENT 225 x 15
- ROOF PITCH 11° 50'
- GUTTER 125 x 100 - ASBESTOS
- DOWNPIPE 100 x 75 - ASBESTOS
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- LOUVRED VENTS TO BE GALVANISED
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- B.O.E. LINTOL OVER LOUVRED VENTS AND SMALL DOOR
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- LOUVRED VENT IN GABLE WALL TO HAVE QUARRY TILE CILL EXTERNALLY ONLY

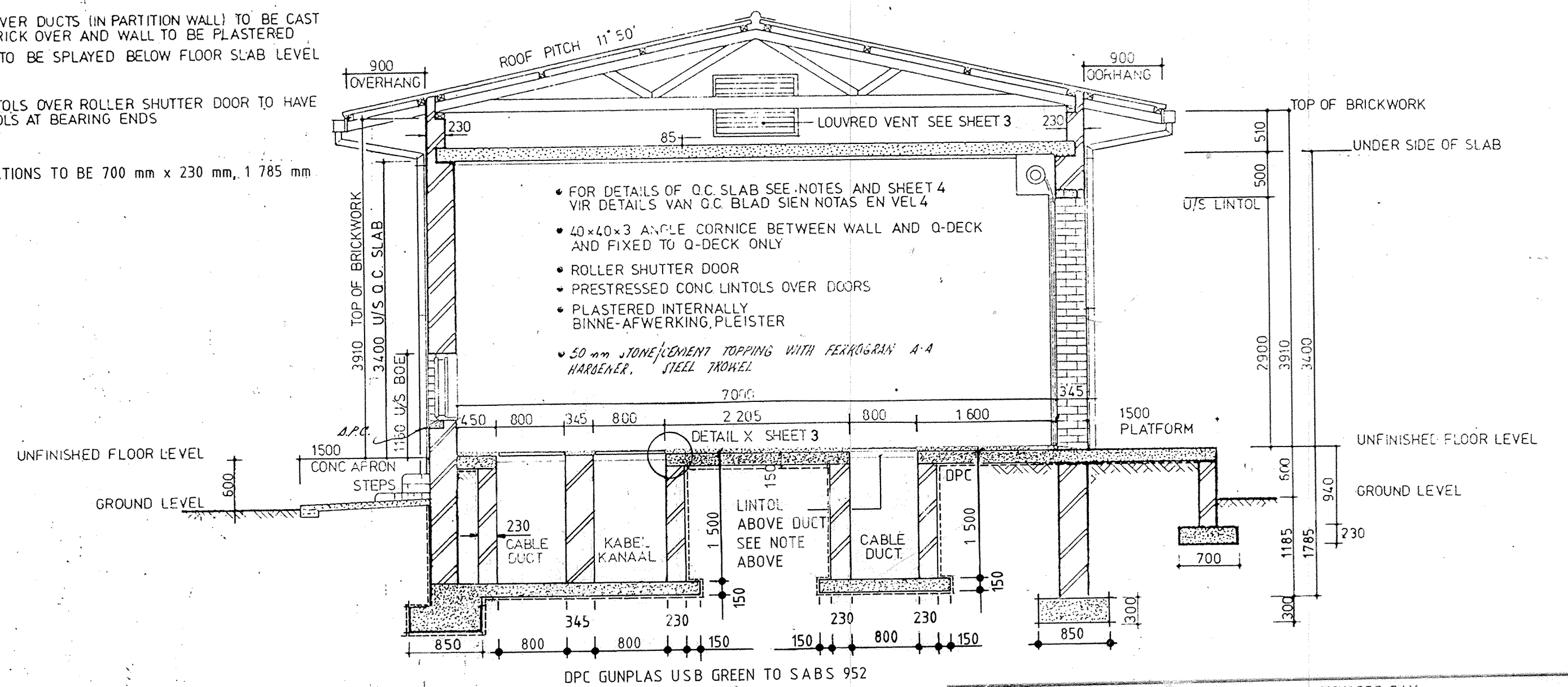
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- WINDVEER - ASBESSEMENT 225 x 15
- DAKHELLING 11° 50'
- REENWATERGEUT 125 x 100 - ASBEST
- REENWATERPYP 100 x 75 - ASBEST
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- HORTJIEVENTILASIE MOET GEGALVANISEER WEES
- LIGTE SIERSTEEN
- B.O.K. LAEI OOR HORTJIEVENTILASIE EN KLEIN DEUR
- VOORAFGEDETE LAEI OOR ROLLIK DEUROPENING
- KLEITELVENSTERBANK BINNE EN BUITE
- PLATFORMOPPERVLAKTE MOET HOUTVLOTAFWERKING WEES
- DONKER SIERSTEENPLINT

NOTES

- ROOF TRUSSES
PREFABRICATED ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE STANDARD BUILDING REGULATIONS CHAPTER 7 - STRUCTURAL TIMBER AND CHAPTER 3 - LOADS. CONNECTING SYSTEMS USED IN THE MANUFACTURE OF TRUSSES SHALL HAVE BEEN TESTED BY THE C.S.I.R. AND SHALL BE TO THE ENGINEER'S APPROVAL
- ROOF ANCHORS
GALVANISED MILD STEEL STRAPS (38x12mm-18 GGE) TO BE BUILT INTO BRICK WALL 8-10 COURSES DOWN, AT 1240mm CENTRES, SPIKE TO WALLPLATE, TURN OVER PURLIN, SPIKE TO RAFTER AND AGAIN SPIKE TO WALLPLATE
- O-DECK SLAB
ROOF SLAB - R.C. DETAILS FOR O-DECK CONCRETE SLAB TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION MESSRS H.H. ROBERTSON (AFRICA) PTY LTD OR OTHER AND APPROVED - SEE SHEET 4
- REINFORCING
PROVIDE 4 x 8mm MILD STEEL RODS PER COURSE FOR 4 COURSES ABOVE B.O.E. LINTOLS OVER DOOR LOUVRED VENTS AND VENTS IN GABLE WALLS
- CABLE DUCTS
PRESTRESSED LINTOLS OVER DUCTS (IN PARTITION WALL) TO BE CAST IN CONC FLOOR WITH BRICK OVER AND WALL TO BE PLASTERED
ALL CORNERS OF DUCTS TO BE SPLAYED BELOW FLOOR SLAB LEVEL
- FAGGOTS AND LINTOLS
PRESTRESSED CONC LINTOLS OVER ROLLER SHUTTER DOOR TO HAVE FAGGOTS COVERING LINTOLS AT BEARING ENDS
- FOUNDATIONS
INTERNAL WALL FOUNDATIONS TO BE 700 mm x 230 mm, 1 785 mm BELOW FLOOR LEVEL



SECTION B-B
SECTION THROUGH DOOR AND STEPS
SCALE 1:20



SECTION A-A
SCALE 1:50

FOUNDATIONS
ANY NECESSARY CHANGE IN DEPTH AND SIZE OF FOUNDATIONS TO BE DETERMINED ON SITE AND APPROVED BY ENGINEER IN CHARGE

FONDAMENTE
ENIGE NODIGE VERANDERINGE IN DIE DIEPTTE EN GROOTTE VAN DIE FONDAMENTE MOET OP DIE TERREIN BEPAAL WORD EN DEUR DIE INGENIEUR IN BEHEER GOEDGEKEUR WORD

DESIGNED ONTWERP	CCE	SCALE SKAAL	AS SHOWN	FILE REF. LEER VERW.	HAM 14/4/94	DATE 21 APRIL 1995	AMENDMENT WYSIGING
DRAWN GETEKEN	P.M.	FILE REF. LEER VERW.	HAM 14/4/94	DATE 21 APRIL 1995	AMENDMENT WYSIGING		
CHECKED NAGESIEN	ML	DATE 1995-03-15	DATE 21 APRIL 1995	AMENDMENT WYSIGING			

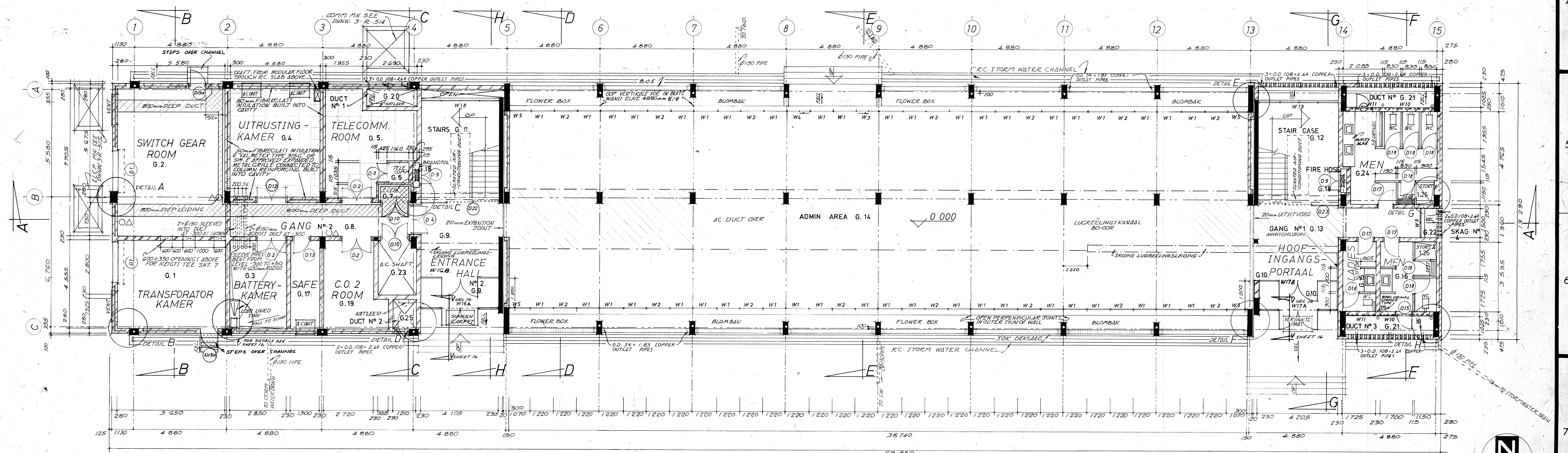
PORT OF RICHARDS BAY

ALUSAF - LIQUID PITCH STORAGE SUBSTATION

PLAN, ELEVATIONS & SECTIONS

R.B.H.

87 - R - 14 sh. 2

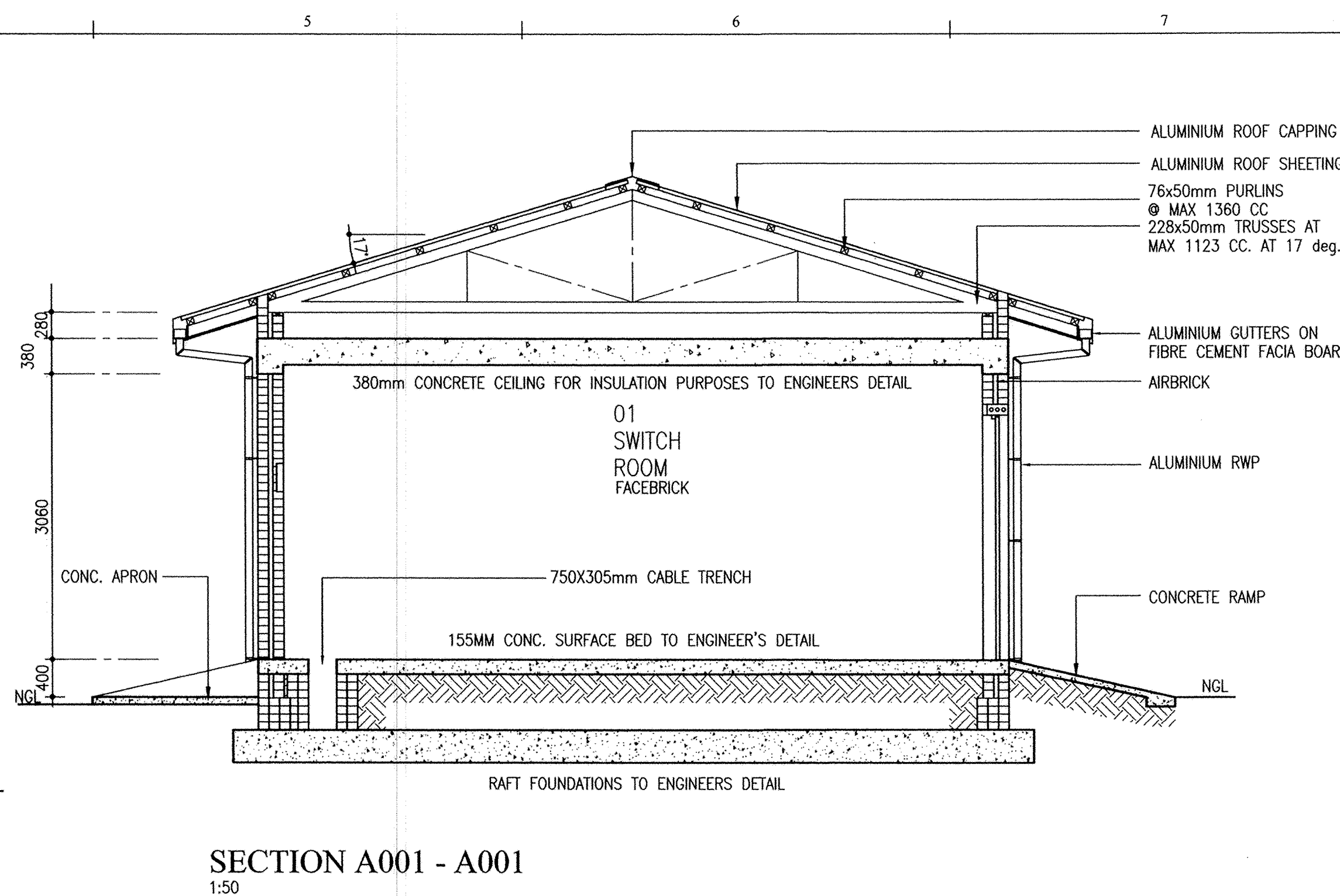


HIERDIE AREA VERGROOT
OP VEL 12

ANCE

THIS AREA ENLARGED
ON SHEET 15.

OPMERKINGE • BESYFERDE AFMETINGS MOET BY VOORKEUR BO GESKAALDE AFMETINGS GEBRUIK WORD. • ALLE AFMETINGS MOET NAGEGAAN WORD ALVORENS DAAR MET ENIGE WERK 'N AANVANG GENEEM WORD. • IN HANDELVERKRYGBARE ARTIKELS VAN NAGENOEG GELYKSTREKE IMPERIALE GROOTTES SAL AANVAARBAAR WEES, MAAR DIT IS DIE VERANTWOORDELIKHEID VAN DIE AANNEMER OM TE VERSEKER DAT VERWANTE ITEMS ONDERLING GEGHOORLIK PAS. • FIGURED DIMENSIONS MUST BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS. • ALL DIMENSIONS MUST BE CHECKED BEFORE COMMENCING ANY WORK. • COMMERCIALY AVAILABLE ARTICLES OF APPROXIMATELY EQUIVALENT IMPERIAL SIZES WILL BE ACCEPTABLE BUT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RELATED ITEMS WILL FIT PROPERLY.		NOTES - OPMERKINGE VIR AKKOMMODASIE, MEUBELUITLEGE EN AFWERKINGSKEDULE - VERWYSINGSKODES RIK VEL 25. FOR ACCOMMODATION, FURNITURE LAYOUT AND FINISHING SCHEDULE REFERENCE CODES SEE SHY. 25.		WYSIGINGE 1 1978-11-23 02 CHANGED TO D11 (CO. ROOM) 012 & 013 PROVIDED WITH DOOR CLOSER. 012 TO SWITCH GEAR ROOM REMOVED 015-0 EXTERIOR ENTRANCE DOORS PROVIDED WALL BETWEEN SWITCH GEAR AND TRANSFORMER ROOM BRICKED UP. JJJ SENEKAL		AMENDMENTS 2 1978-12-13 COMM. & ELEC MANIFOLDS SHOWN 4/1 & 2.		J. G. HOLAHAN. HOOFARGITEK CHIEF ARCHITECT DATUM 24-6-78 ARGITEK GETEKEN DRAWN GEAALKEER TRACED NAGESIEN CHECKED DAN ELLIS. DAN ELLIS. 4/1 ARG. VERW. ARCH. REF. SH. VERW. C.C.E. REF. SKAAL SCALE 3549 WH 517/15/3 AS SHOWN DOOS GETOON		RICHARDS BAAI MASSAVRAGKAAI EINDPUNTGEBOU. GRONDVLOERPLAN & DETAILS A TOT H		RICHARDS BAY BULK CARGO QUAY. TERMINAL BUILDING. GROUND FLOOR PLAN & DETAILS A TO H		SAS SAR 443-0-2 VEL SHEET 2 van 30 WYSIGINGE/AMENDMENTS 12	
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CLIENT



CLIENT DRAWING No.	
-	
APPROVED - CLIENT	APPROVED - CLIENT
-	-
PROJECT MANAGER	DATE
-	-

PROJECT DESCRIPTION

RICHARDS BAY

SOUTH DUNES WAGON

MAINTENANCE

DRAWING DESCRIPTION

SUB-STATION

**FLOOR PLAN, LOCALITY PLAN,
ELEVATIONS & SECTION**

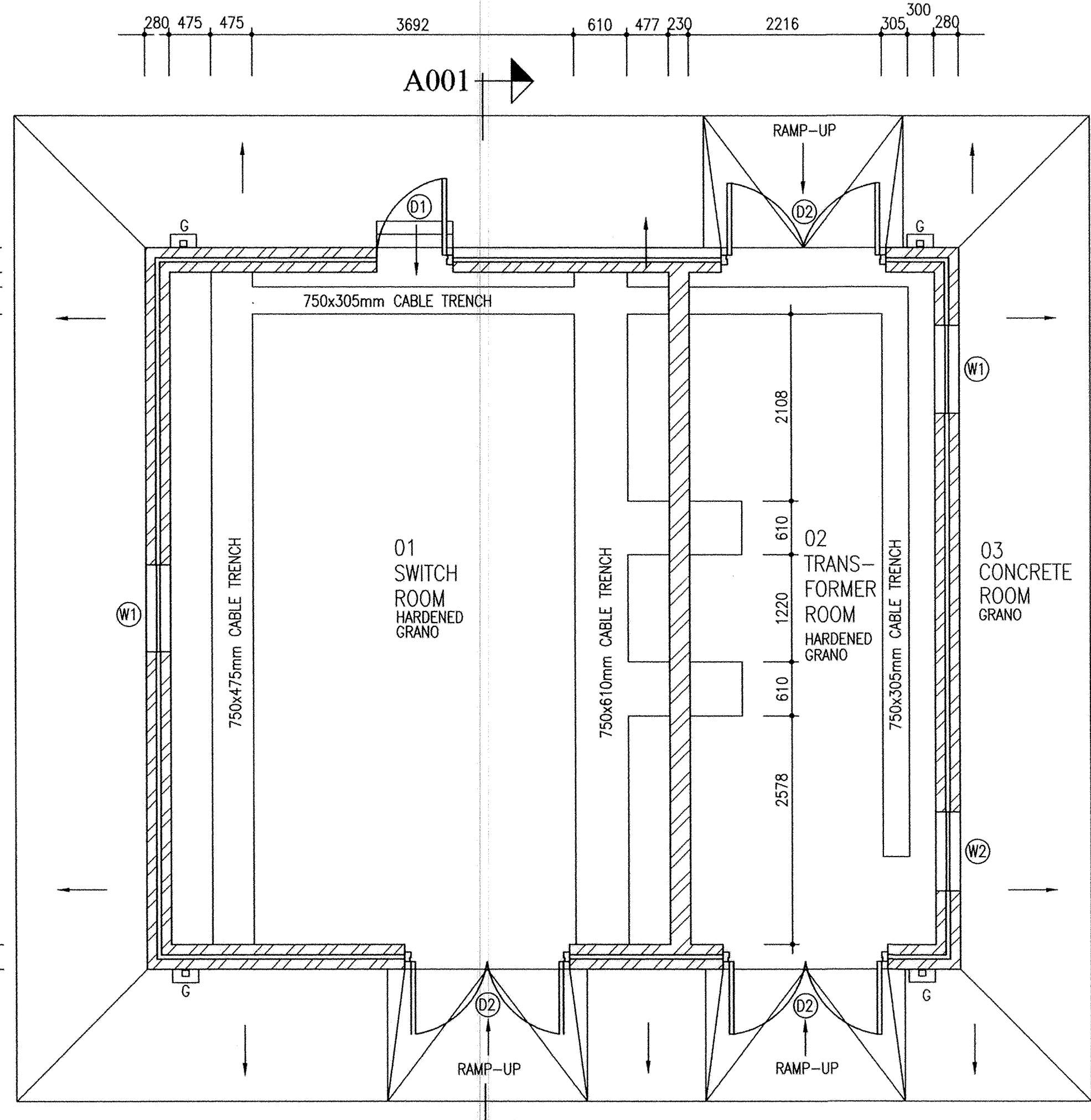
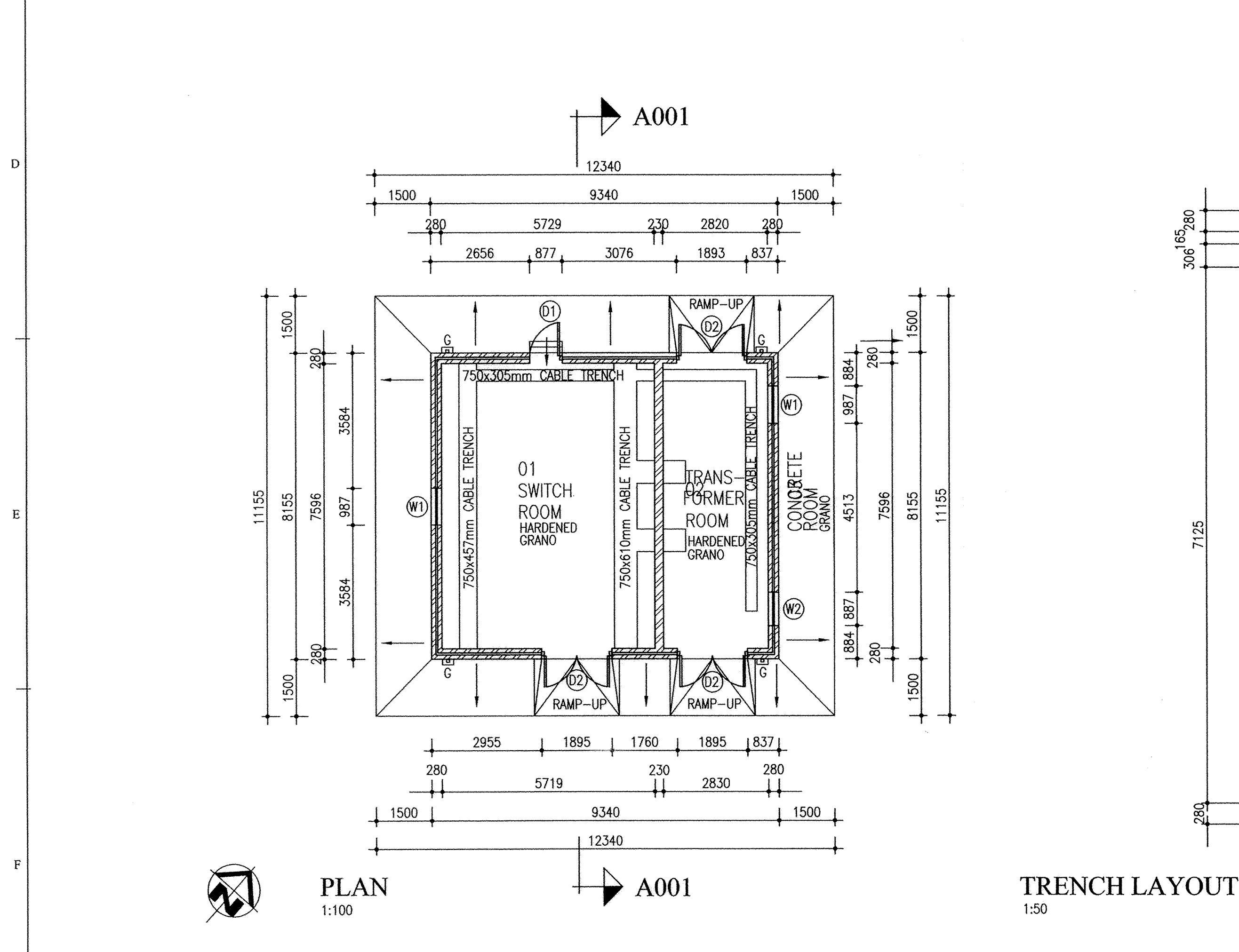
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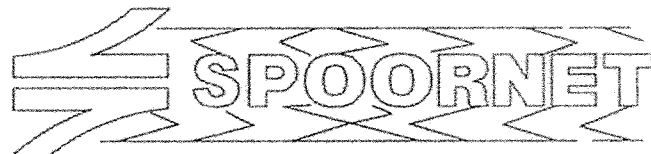
PROTEKON
Rail
Project Engineering

PROTEKON (Pty) Ltd.
Registration Number 1999/008932/07
A subsidiary of TRANSNET Limited

email protekonjhb@protekon.co.za
tel. (011) 308 3222

DRAWN C.A.B	CHECKED B.S	DATE	TEAM LEADER B.S	DATE
REGISTERED PROFESSIONAL B. STOFFELS			DATE	REG. NUMBER 6991
DRAWING NUMBER 312-0279-A-A			SHEET NUM. C001	REVISION 02

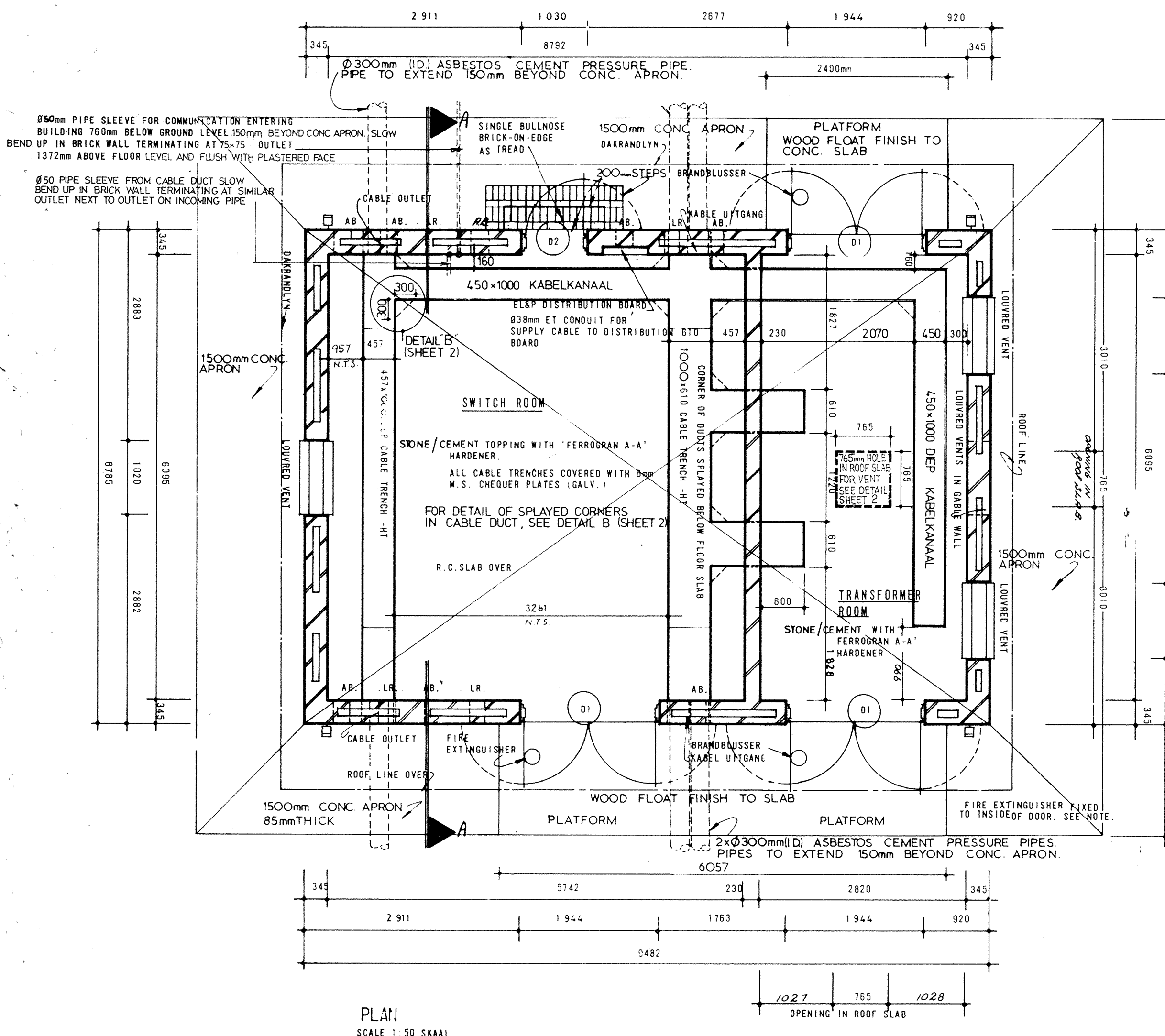
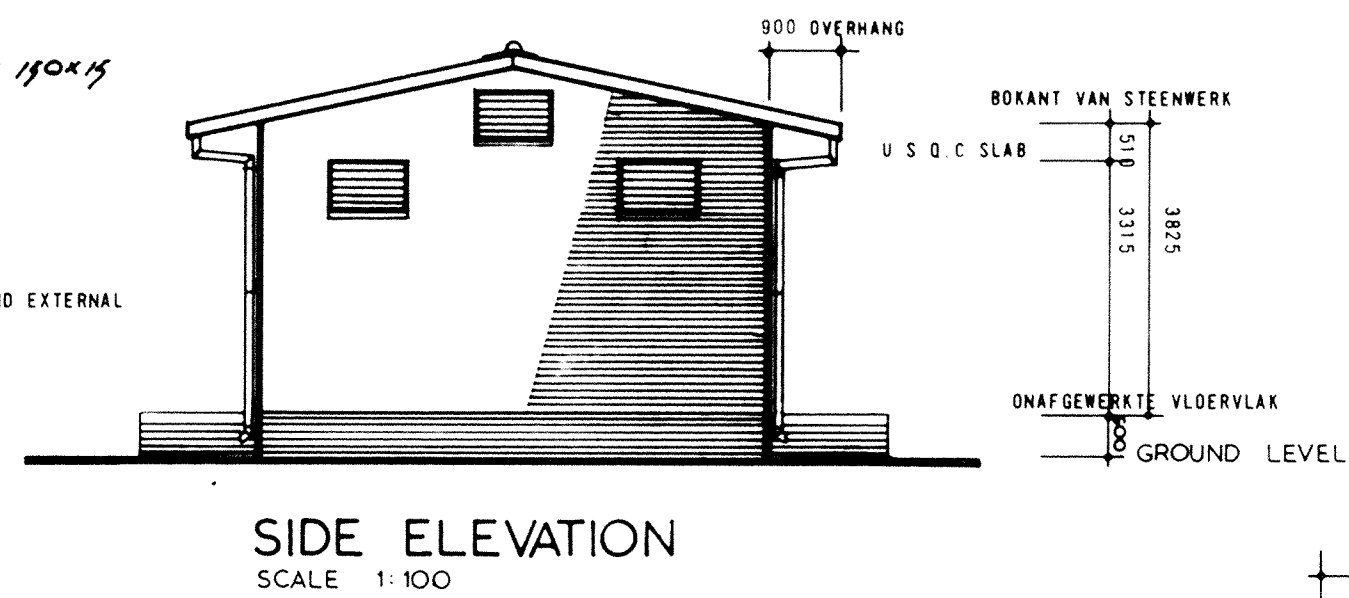
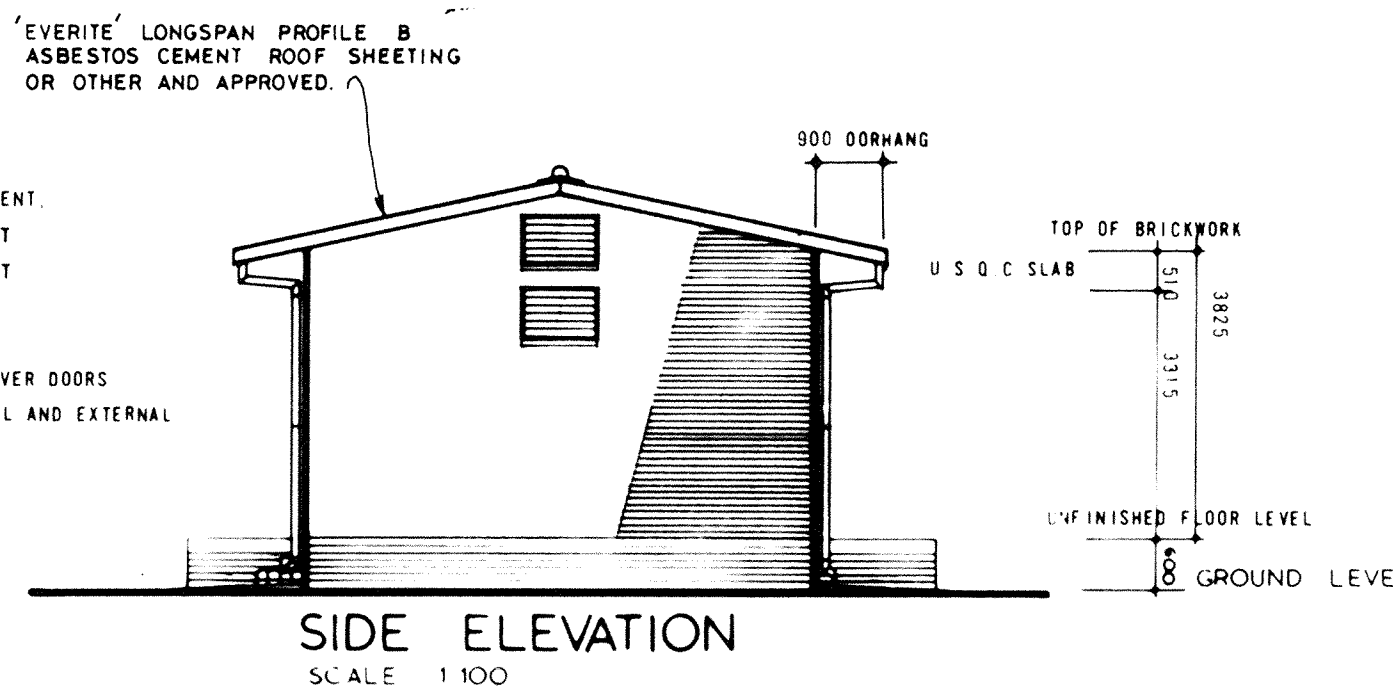
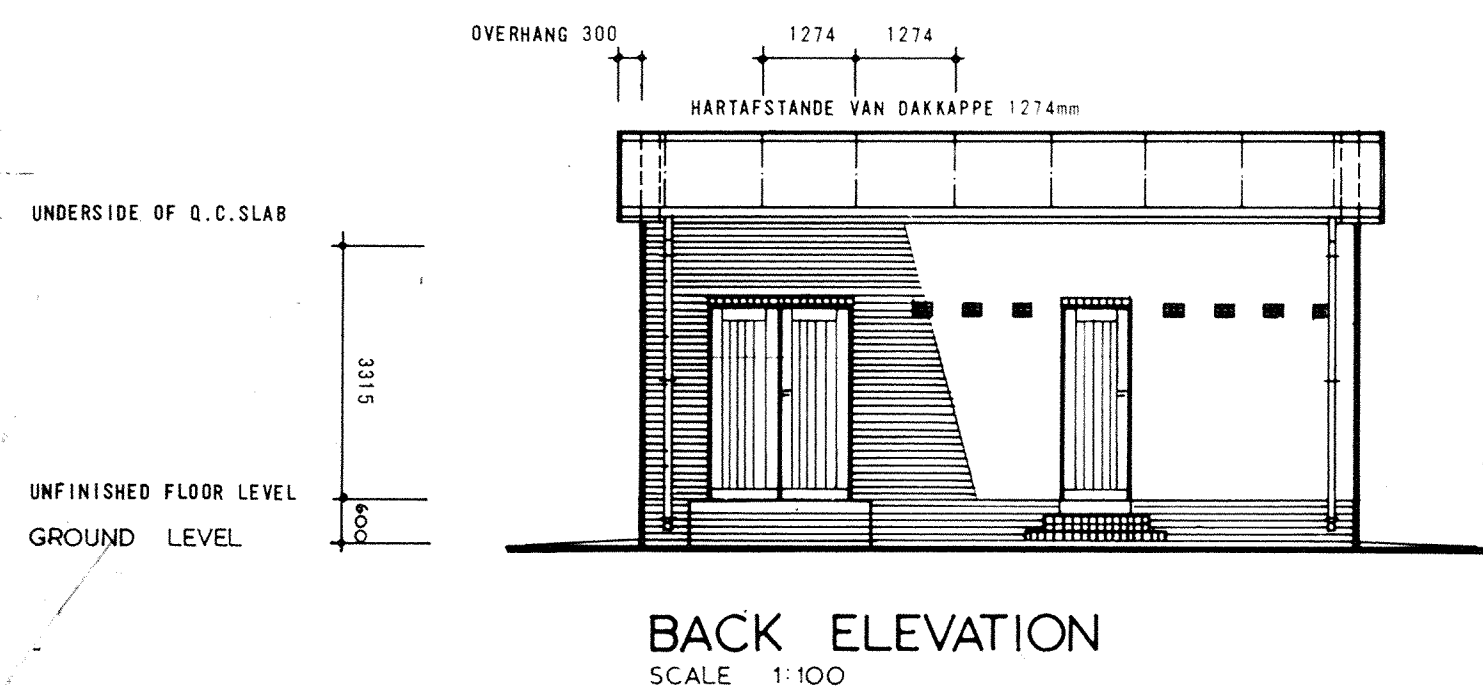
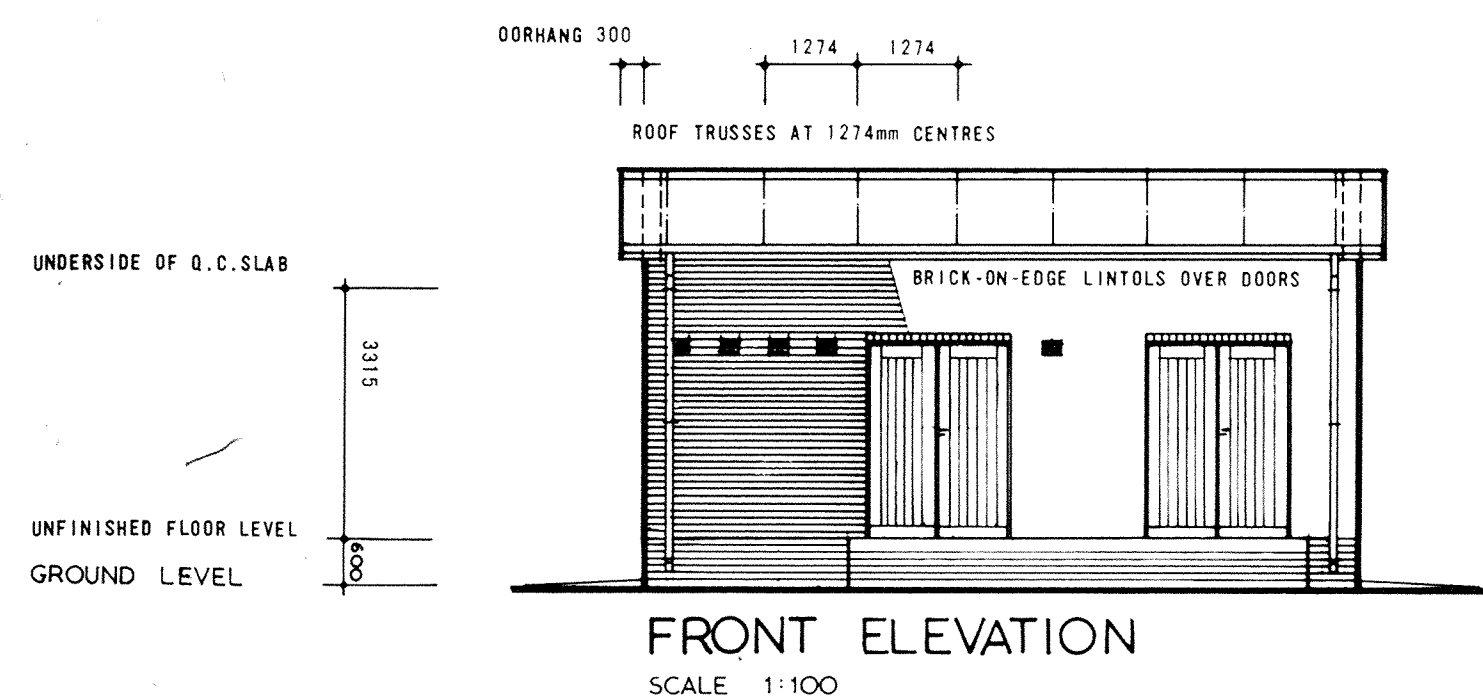


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PROJECT MANAGER	DATE			
RICHARDS BAY SOUTH DUNES WAGON MAINTENANCE				
SUB-STATION FLOOR PLAN, LOCALITY PLAN, ELEVATIONS & SECTION				
GENERAL SCALE = 1:100 on A1sheet				
 PROTEKON Rail Project Engineering PROTEKON (Pty) Ltd. Registration Number 1999/008932/07 A subsidiary of TRANSNET Limited email protekconjhb@protekon.co.za tel (011) 308 3222				
DRAWN	CHECKED	DATE	TEAM LEADER	DATE
C.A.B	B.S		B.S	
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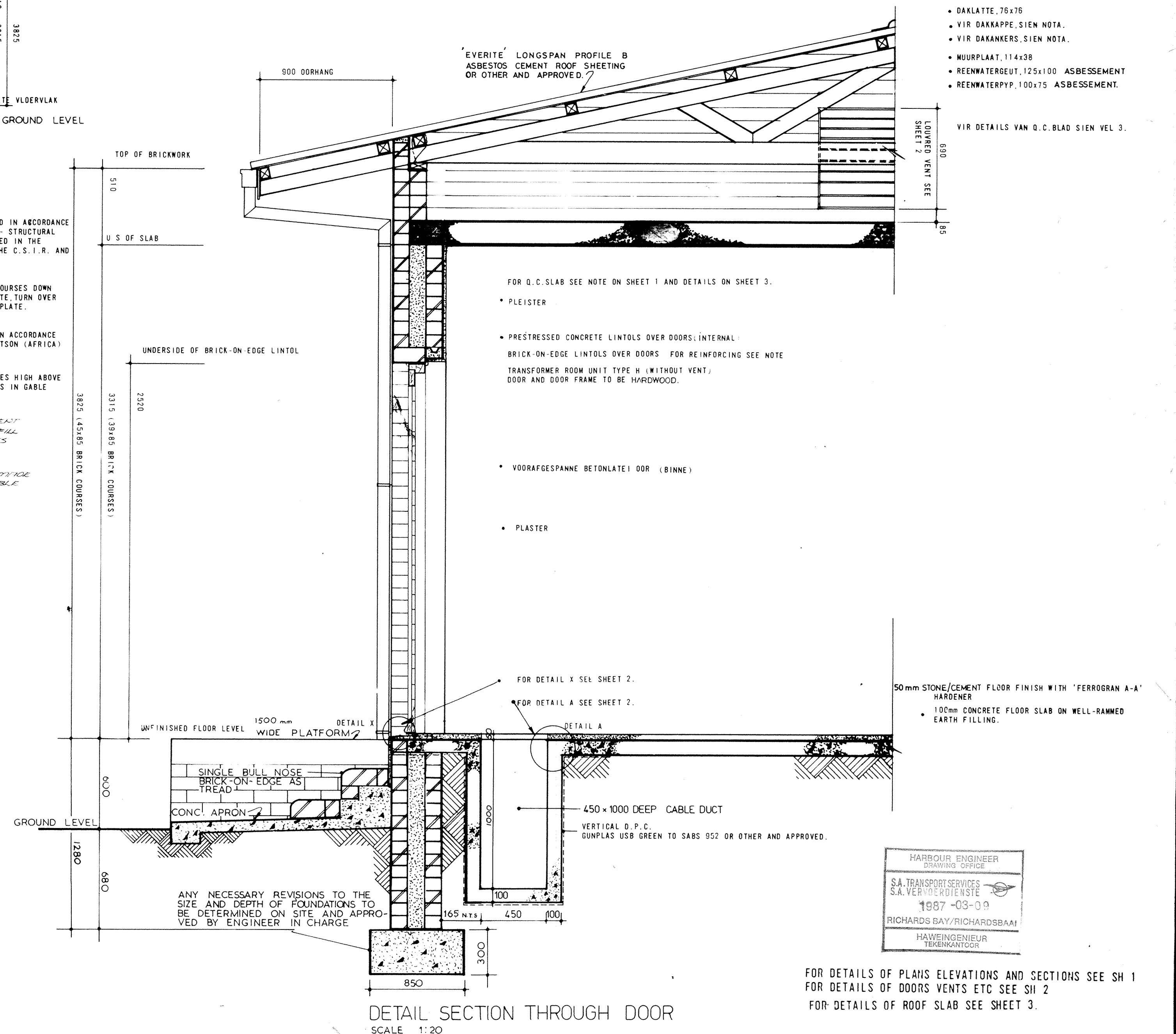
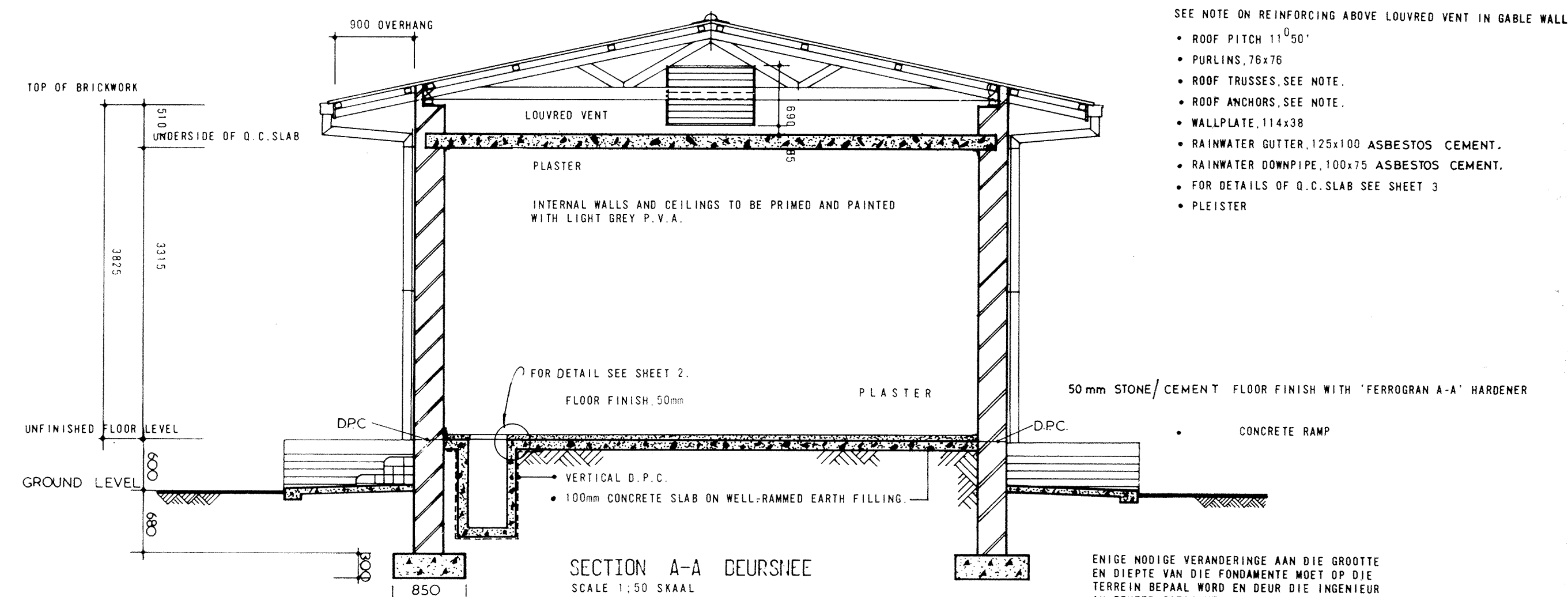
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990



- NOTES
- NOTE ON ROOF TRUSSES
PREFABRICATED TIMBER ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH 'THE STANDARD BUILDING REGULATIONS' CHAPTER 7- STRUCTURAL TIMBER AND CHAPTER 3- LOADS. CONNECTING SYSTEMS USED IN THE MANUFACTURE OF TRUSSES SHALL HAVE BEEN TESTED BY THE C.S.I.R. AND SHALL BE TO THE ENGINEER'S APPROVAL.
 - NOTE ON ROOF ANCHORS
BUILD 38x12(18 GGE) GALV. WILD STEEL STRAPS 8-10 COURSES DOWN INTO BRICK WALL AT 1274mm CENTRES SPIKE TO WALLPLATE, TURN OVER PURLIN AND SPIKE TO RAFTER AND AGAIN SPIKE TO WALLPLATE.
 - NOTE ON Q.C. DECK
ROOF SLAB: R.C. DETAILS FOR Q.C. DECK CONCRETE SLAB IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION-MESSRS. H.K. ROBERTSON (AFRICA) (PTY) LTD. OR OTHER AND APPROVED.
 - NOTE ON REINFORCEMENT
PROVIDE 4x10mm MILD STEEL RODS PER COURSE 4 COURSES HIGH ABOVE ALL DOORS AND LOUVRED VENTS INCLUDING LOUVRED VENTS IN GABLE WALLS.
 - CRACKS
CLOSE CRACKS WITH SUITABLE PERMEANT SEALANT. PROVIDE DOOR HEND HEIGHT. FILL CRACKS FILL PERMANENTLY WITH CRACK FILLER WITH CRACK FILLER.
 - TELE-CONTROL
RECOMMENDED FOR TELE-CONTROL IS IN THE 1800 DRAINING ST-CLE-39-51 PHONE CABLE TRENCH



- OPMERKINGE
- BESYFERDE AFMETINGS MOET BY VOORKEUR SO GESKAALDE AFMETINGS GEBRUIK WORD.
 - ALLE AFMETINGS MOET NAGEGAAN WORD ALVORENS DAAR MET ENIGE WERK N. AANVANG GENEEM WORD
 - IN HANDEL VERKRYGBARE ARTIKELS VAN NAGENOEG GELYKSTAANDE IMPERIALE GROOTTES SAL AANVAARBAAR WEES, MAAR DIT IS DIE VERANTWOORDELIKHEID VAN DIE AANNEMER OM TE VERSEKER DAT VERWANTE ITEMS ONDERLING BEHOORLIK PAS.
 - FIGURED DIMENSIONS MUST BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS
 - ALL DIMENSIONS MUST BE CHECKED BEFORE COMMENCING ANY WORK
 - COMMERCIALY AVAILABLE ARTICLES OF APPROXIMATELY EQUIVALENT IMPERIAL SIZES WILL BE ACCEPTABLE BUT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL RELATED ITEMS WILL FIT PROPERLY

- NOTES
1. 3 kg CO2 AS MARKED ON PLAN FIXED TO INSIDE OF DOUBLE DOORS.
 2. SUBSTITUTION TO BE REPEATED WITH A TYPE 1-39(E) TYPE SECURITY FLEXING WITH ANGLE VERTICALLY FACING TO THE INSIDE OF THE DOOR

NR	NO	DATUM	DATE	S	WYSIGINGE	AMENDMENTS
1	80-2-19				NOTE RE HOLE IN ROOF SLAB CHANGED.	

HOOFARGITEK CHIEF ARCHITECT DATE	ARCHITK	ARG. VERW ARCH REF	3549/48
GETEKEN DRAWN	B.N. SWART	SHI. VERW C.C.E. REF	W05/7/15/3
GEKALKEER TRACED	B.N. SWART	SKAAL	1:100, 1:50, 1:20
NAGESIEN CHECKED			

RICHARDS BAY HARBOUR

QUAY STAGING YARD
ELECTRICAL SUBSTATION
PLAN, SECTION AND ELEVATIONS
BUILDING N°
TYPE A

SAS SAR
443-R-31
VEL SHEET 1
WYSIGINGE/AMENDMENTS

KAAL-OPSTELTERREIN
ELEKTRIESE SUBSTASIE
PLAN, DEURSNEE EN AANSIGTE
GEBOU N°
TIPE A

SITE PLAN NO. DHNW 3-R-19
AREA 64 335 SQUARE METRES