



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NASIONALE SENIOR SERTIFIKAAT

GRAAD 12

INGENIEURSGRAFIKA EN -ONTWERP V1 FEBRUARIE/MAART 2012

PUNTE: 100

TYD: 3 uur

Hierdie vraestel bestaan uit 6 bladsye.

INSTRUKSIES EN INLIGTING

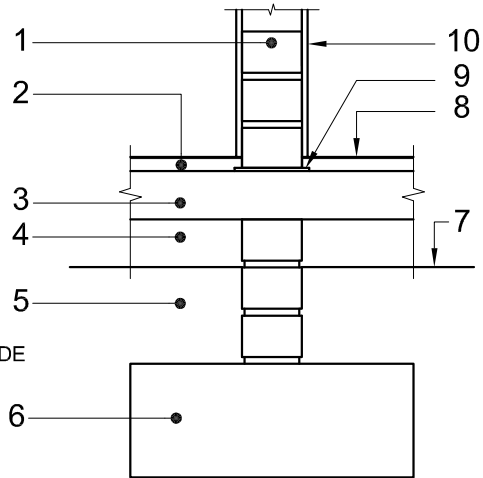
1. Hierdie vraestel bestaan uit VIER vrae.
2. Beantwoord AL die vrae.
3. ALLE tekene is in eerstehoekse ortografiese projeksie, tensy anders aangedui.
4. ALLE tekene moet voltooi word met instrumente, tensy anders aangedui.
5. ALLE antwoorde moet akkuraat en netjies geteken word.
6. AL die vrae moet, soos voorgeskryf, op die VRAESTEL beantwoord word.
7. AL die bladsye moet weer in nommervolgorde vasgekram word, ongeag of die vraag beantwoord is.
8. Tydsbeplanning is noodsaaklik om al die vrae te voltooi.
9. Drukskryf jou eksamennummer in die blokkie voorsien op elke bladsy.
10. Enige besonderhede of afmetings wat nie gegee is nie, moet in goeie verhouding veronderstel word.

SLEGS VIR AMPTELIKE GEBRUIK										
VRAAG	PUNTE BEHAAL			½	TEKEN	GEMODEREER			½	TEKEN
1										
2										
3										
4										
TOTAAL										
	2	0	0			2	0	0		

FINALE VERWERKTE PUNT	NAGESIEN DEUR
100	

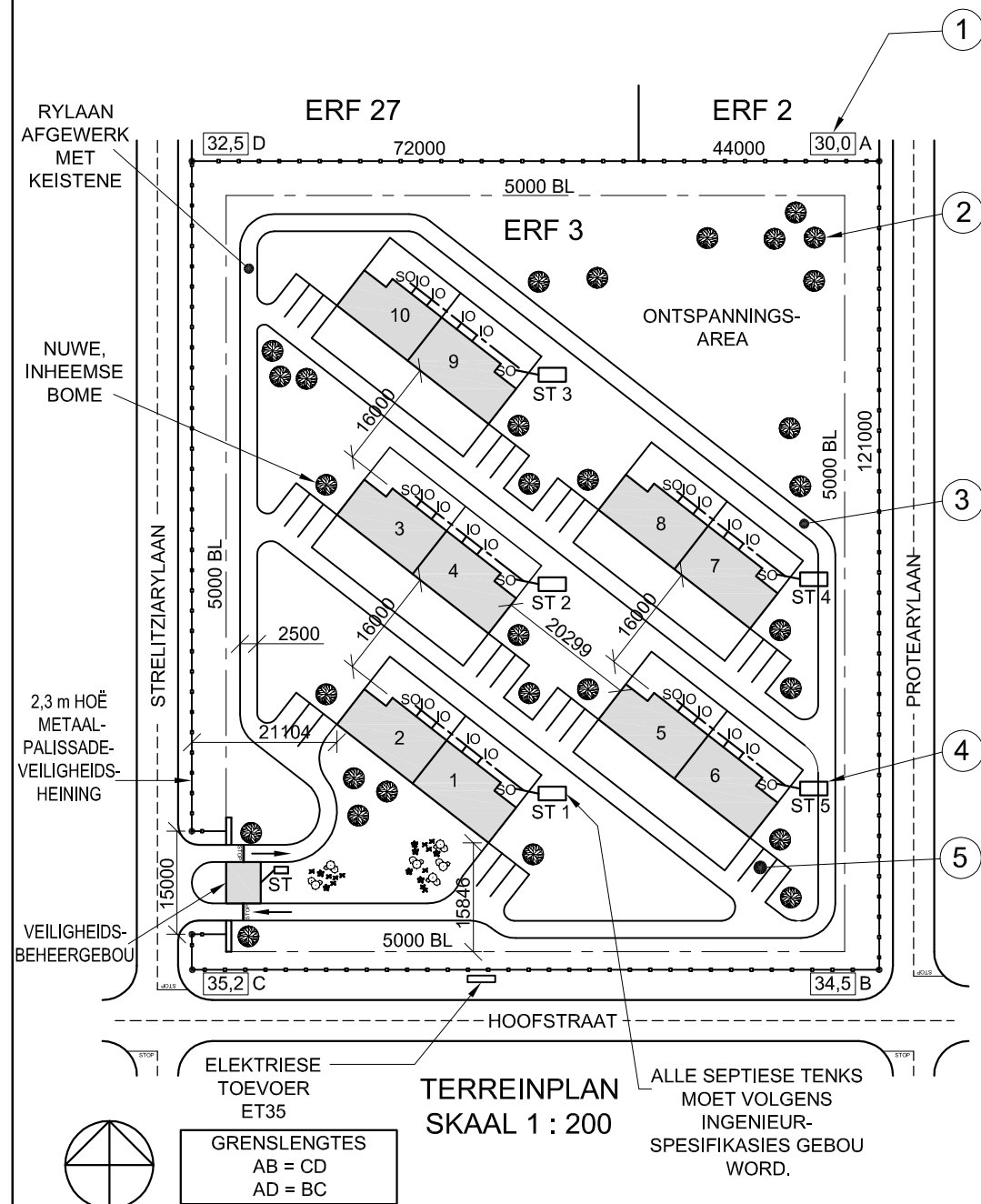
VOLTOOI DIE VOLGENDE:
SENTRUMNUMMER
SENTRUMNUMMER
EKSAMENNUMMER
EKSAMENNUMMER





LET WEL:
DIE ARSERINGSBESONDERHEDE
IS UITGELAAT.

GEDETAILLEERDE TEKENING VAN 'N SNIT DEUR DIE
SUBSTRUKTUUR VAN 'N NIE-LASDRAENDE MUUR



TERREINPLAN
SKAAL 1 : 200

ALLE SEPTIESE TENKS
MOET VOLGENS
INGENIEUR-
SPESIFIKASIES GEBOU
WORD.

GRENSLENGTES
AB = CD
AD = BC

NOTA:
Kontrakteurs moet alle afmetings en hoogtes
op die terrein bevestig voordat daar met werk
begin word. Argitekte moet onmiddellik in
kennis gestel word van enige afwykings.

14. In die spasie hieronder, teken, in
netjiese vryhand, die vooraansig
en boaansig van die SABS 0143-
konvensie vir 'n STORT.



ARGITEK SE HANDTEKENING

KLIËNT SE HANDTEKENING

HERSIENING DATUM BESKRYWING

**NEW WAVE
ARCHITECTS**

5 ARGILERYLAAN
DURBAN
Tel: 031 303 8459

GEDRUK DEUR ZAPPY DRUKKERS DRUKDATUM 2012-01-10

TEKENTITEL
TERREINPLAN

PROJEK
NUWE TROSBEHUISING VIR
DIE DUBE TRUST OP ERF 3
TE STRELITZIARYLAAN 58
GINGINDLOVU.

PROJEKNUMMER 18 TEKENINGNUMMER 002-A

VERWYSINGSKODE Q1P1-SUP-2012 GETEKEN DEUR SANELE NAGESIEN DEUR LEBO

DATUM 2011-02-30 SKAAL 1 : 200



VRAAG 1: ANALITIES (SIVIEL)

Gegee:

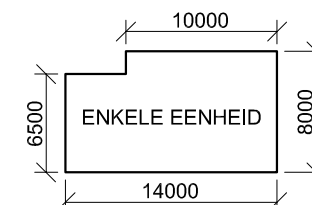
'n Gedetailleerde tekening van 'n snit deur die substruktuur van 'n nie-lasdraende muur, die terreinplan vir 'n nuwe kompleks met 10 troshuise, 'n titelpaneel en 'n tabel met vrae. Die tekene is nie volgens die aangetoonde skaal voorberei nie.

Instruksies:

Voltooi die tabel hieronder deur die vrae, wat almal na die bygaande tekene en titelpaneel verwys, netjies te beantwoord. [30]

VRAAG		ANTWOORD	
1	Met verwysing na die gedetailleerde tekening van 'n snit deur die substruktuur van 'n nie-lasdraende muur, verbind die nommer op die tekening met die korrekte komponent in die kolom regs van hierdie vraag.	FONDASIE	10
		VOGWEERLAAG	
		GRONDVLAK	
		BINNEMUUR	
		BETONBLAD	
		GEKOMPakteERDE HARDEPUIN	
		ONGESTEUREDE AARDE	
		VLAKLAAG	
		PLEISTER	
		VOLTOOIDE VLOERVLAK	
2	Wat is die verwysingskode van die tekening?		1
3	Wie was verantwoordelik vir die druk van die terreinplan?		1
4	Wat is die afstand vanaf die boulyn na die palissadeheining?		1
5	In watter straat is die toegang tot die eiendom geleë?		1
6	Wat word deur die kenmerk by 1 aangedui?		1
7	Benoem die kenmerk by 2.		1
8	Benoem die kenmerk by 3.		1
9	Benoem die kenmerk by 4.		1
10	Benoem die kenmerk by 5.		1
11	Hoeveel geboue is op die erf?		1
12	Wat is die oppervlakafwerking van die rylane in die kompleks?		1
13	Bepaal die totale lengte van die metaalpalissade-veiligheidsheining in meter. Toon ALLE berekeninge.		3
14	In die spasie voorsien in die titelpaneel, teken, in netjiese vryhand, die vooraansig en boaansig van die SABS 0143 konvensie vir 'n stort.		3
15	In die spasie hieronder, bepaal die totale oppervlakte van 'n enkele eenheid in vierkante meter.		3
		TOTAAL	30

ANTWOORD 15
Toon ALLE berekeninge.



EKSAMENNOMMER	
EKSAMENNOMMER	2



VRAAG 2: ONTWIKKELING

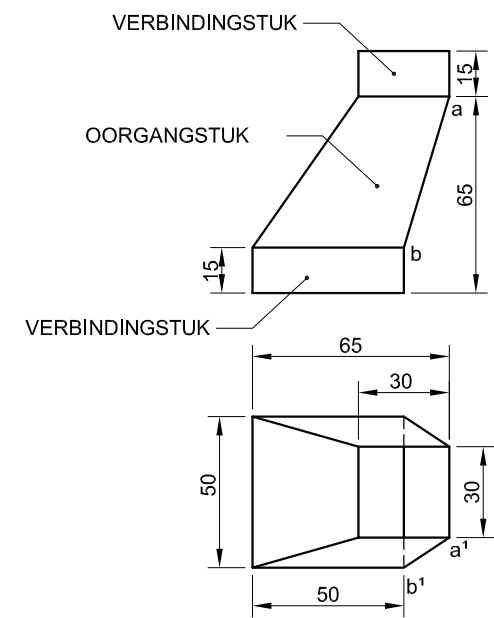
Gegee:

Die vooraansig en boaansig van 'n gedeelte van 'n kanaal wat 'n vierkant-na-vierkant-oorgangstuk met twee verbindingstukke toon.

Instruksies:

- 2.1 Teken, volgens skaal 1 : 1, die gegewe vooraansig en boaansig van die gedeelte van die kanaal.
- 2.2 Ontwikkel die oppervlak van SLEGS die oorgangstuk. Maak sy AB die naat.

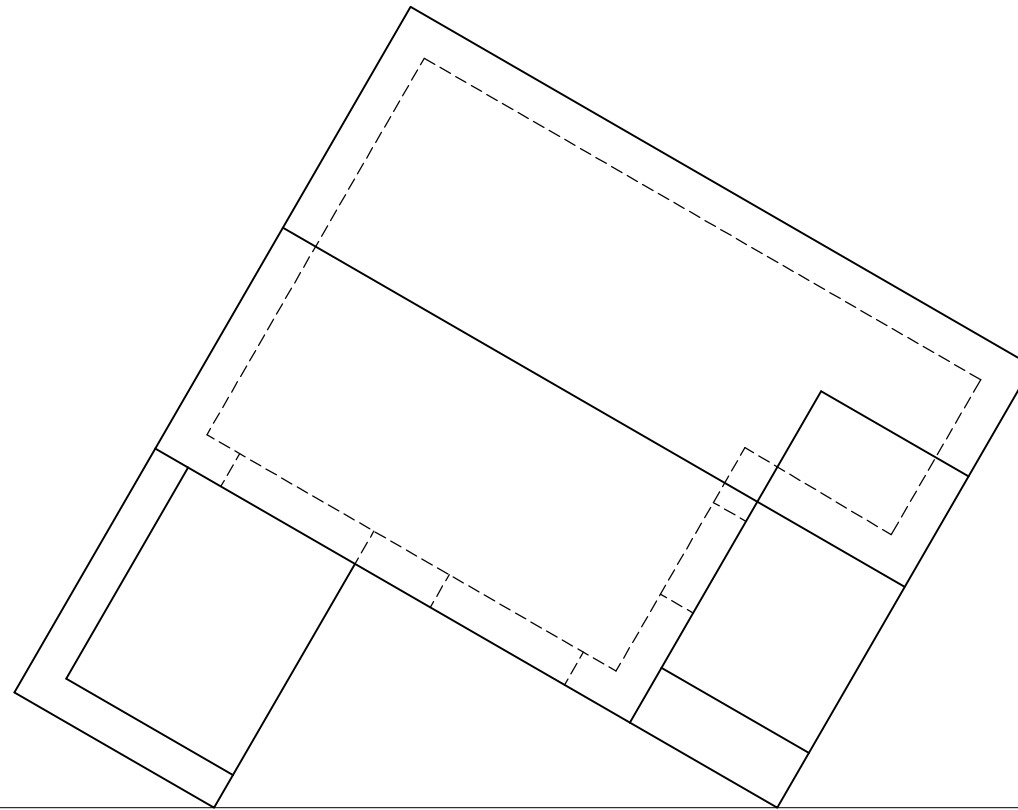
Toon ALLE nodige konstruksies en voulyne. **[34]**



SY **AB** IS DIE NAAT.

ASSESSERINGSKRITERIA				
1	VOORAANSIG + BOAANSIG	11		
2	WARELENGTE-METODE	10		
3	ONTWIKKELING	13		
TOTAAL		34		
EKSAMENNUMMER				
EKSAMENNUMMER				3





VRAAG 3: PERSPEKTIEF

Gegee:

Twee aansigte van 'n kothuis en die inligting benodig om 'n tweepuntperspektieftekening te teken.

PV – Prentvlak

HL – Horisonlyn

GL – Grondlyn

SP – Staanpunt

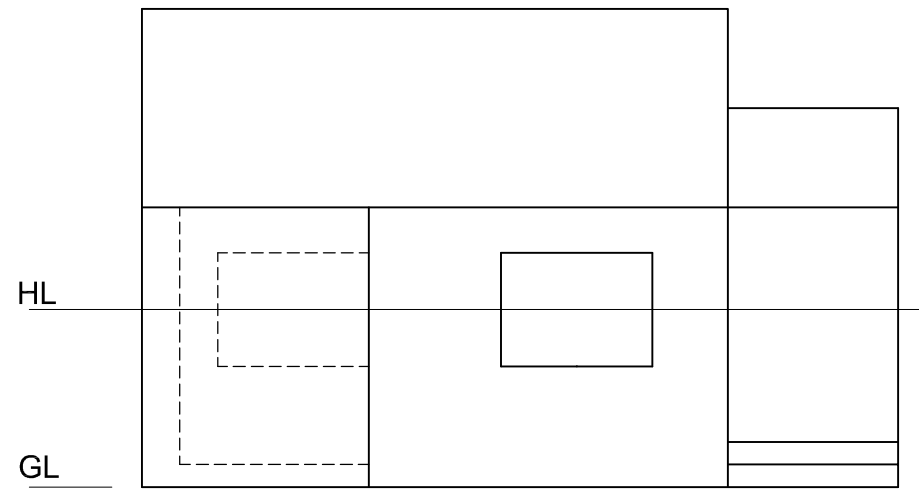
Instruksies:

Voltooi die perspektieftekening.

- Rig die tekenvel volgens die grondlyn (GL).
- Toon ALLE nodige konstruksies.
- Toon die muurdikte by die deur en die vensters.
- GEEN verborge besonderhede word verlang nie. **[40]**

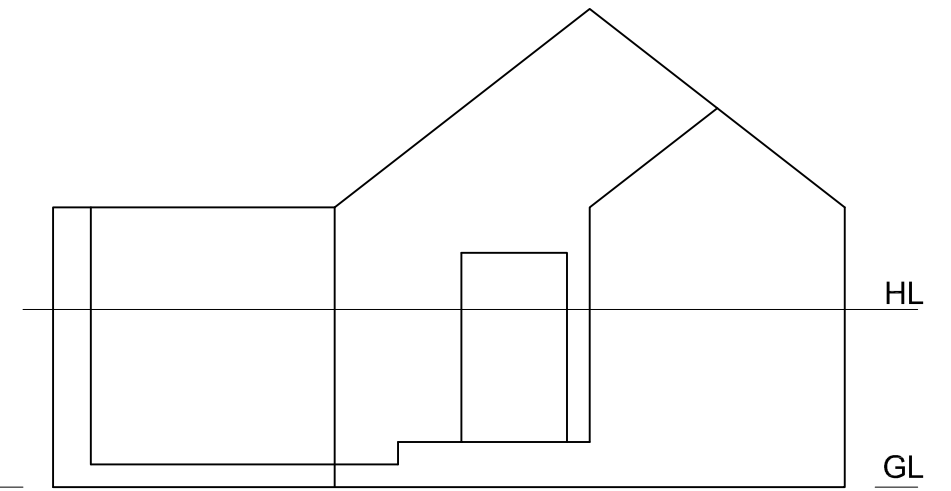
PV

PV



HL

GL



HL

GL

SP

ASSESSERINGSKRITERIA			
KONSTRUKSIES + VP'e	7		
TRAPPE	7		
MURE + DEUR + VENSTERS	17		
DAK	9		
TOTAAL	40		
EKSAMENNUMMER			
EKSAMENNUMMER			
EKSAMENNUMMER			4

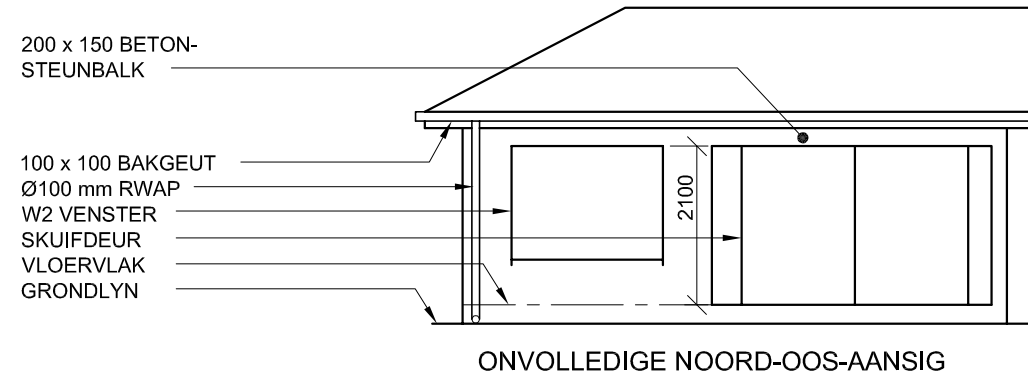


ELEKTRIESE SIMBOLE	DAKKOMPONENTE
	75 x 50 KAPLATTE
	228 x 20 FASSIEPLANK
	114 x 38 MUURPLAAT

TOEBEHORE	
	BAD (B) 1700 x 370
	TOILET (SK) 450 x 780
	WASBAK (WB) 450 x 180
	OPWASBAK (OWB) 950 x 510
	INGEBOUDE KAS (BIC) 875 x 600

DEUR- EN VENSTERSKEDULE	
	VENSTER (W1) 1000 x 1000
	VENSTER (W2) 2000 x 1000
	SKUIFDEUR EN RAAM (D2) 2100 x 2100
	DEUR EN RAAM (D) 2100 x 2100

NOTA: 150 x 20 VESELEMENTVENSTER-BANK ONDER ALLE VENSTERS



- TOEBEHORE**
- D1 SKARNIERDEUROOPENINGE
 - D2 SKUIFDEUROOPENING
 - W1, W2 VENSTEROPENINGE
 - B BAD
 - OWB OPWASBAK
 - SK TOILET
 - WB WASBAK
 - BIC INGEBOUDE KAS

- ELEKTRIESE TOEBEHORE**
- DRIEPOOL-LIGSKAKELAAR
 - ENKELPOOL-LIGSKAKELAARS
 - PLAFONLIG
 - 2 x 40 W FLUORESEERBUISE
 - SKAKELAARKRAGPUNT
- LET WEL:
DIE PYL TOON DIE LIGVERBINDING MET DIE SKAKELAAR AAN.

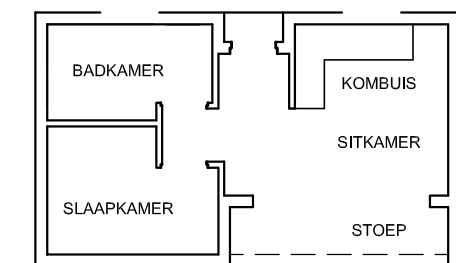
DAKNOTAS:
DAKBEDEKKING 15 mm GOLFYSTER-PLAAT OP 75 x 50 mm KAPLATTE @ 1450 s/s.

114 x 38 mm DAKKAPPE OP 114 x 38 mm MUURPLATE.

DAKHELLING 30° MET 228 x 20 mm FASSIEPLANK AAN BEIDE KANTE.

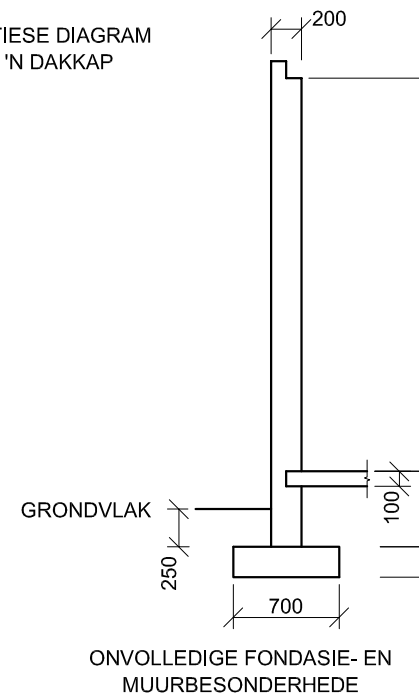
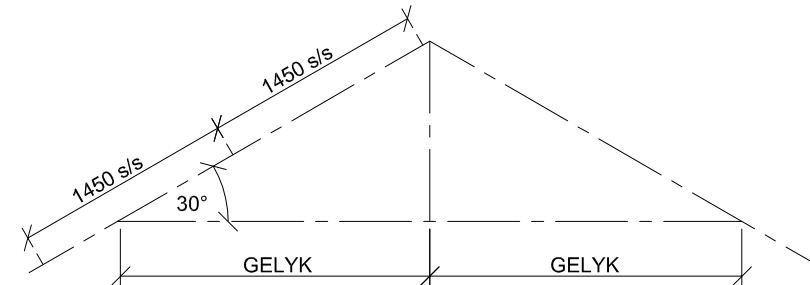
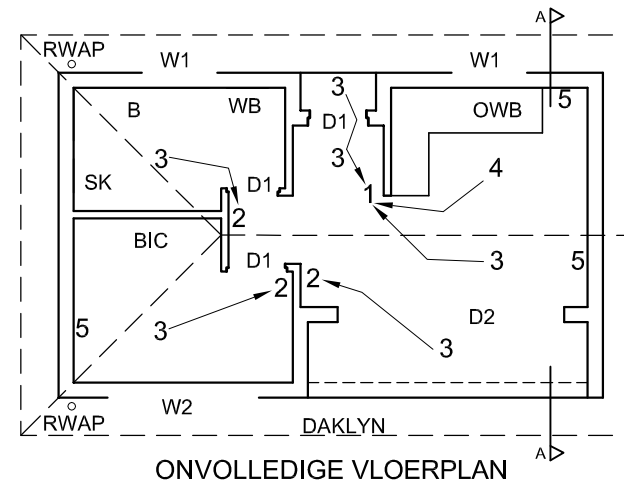
100 mm VIERKANTBAKGEUT

GIPSPALFONBORD OP 4 STROKE VAN 38 x 38 mm PLAFONLATTE, EWEREDIG GESPASIEER .



- VLOERAFWERKING**
- KOMBUIS: TEËLS
 - SITKAMER: TEËLS
 - STOEP: TEËLS
 - SLAAPKAMER: MAT
 - BADKAMER: TEËLS

KAMERAANDUIDINGS MET VLOERAFWERKINGS



VRAAG 4: SIVIELE TEKENING

Gegee:

- Die onvolledige noord-oos-aansig van 'n nuwe **kothuis** wat die mure, die posisie van die vensters, skuifdeur, die dak en notas toon
- Die onvolledige vloerplan wat die mure, posisie van die vensters, deure, toebehore en die elektriese toebehore toon
- Daknotas en 'n skematiese diagram van 'n dakkap
- 'n Diagram wat die kameraanduidings en vloerafwerkings toon
- Die onvolledige fondasie- en muurbesonderhede
- 'n Tabel met elektriese simbole
- 'n Tabel met dakkomponente
- 'n Tabel met toebehore
- 'n Deur- en vensterskedule
- Die onvolledige vloerplan van die nuwe **kothuis**, geteken volgens skaal 1 : 50, op bladsy 6

Instruksies:

- Beantwoord hierdie vraag op bladsy 6.
- Deur die gegewe onvolledige vloerplan te gebruik, teken, volgens skaal 1 : 50 en die spesifikasies, die volgende aansigte van die nuwe **kothuis**:
 - 4.1 Die volledige vloerplan
 - 4.2 Die noord-oos-aansig
 - 4.3 'n Deursnee-aansig volgens snyvlak A-A
- ALLE tekene moet voldoen aan die riglyne en konvensies vervat in die SABS 0143.

SPESIFIKASIES:

DIE VLOERPLAN

Voeg die volgende kenmerke by die tekening:

- AL die deure en vensters. Toon die oopmaakrigting van die skuifdeur.
- AL die toebehore soos aangedui deur die afkortings
- AL die elektriese toebehore soos aangedui deur die nommers
- AL die arseringsbesonderhede

DIE NOORD-OOS-AANSIG

Toon die volgende kenmerke op die tekening:

- Die buitemure
- Die dakbesonderhede, insluitend die geut, fassieplank en reënwaterafvoerpyp
- Die venster- en skuifdeurbesonderhede, insluitend al die oopmaakrigtings

DIE DEURSNEEAANSIG

Toon die volgende kenmerke op die tekening:

- Die volledige fondasie-, muur-, betonblad-, dak- en plafon-besonderhede
- Die skuifdeurbesonderhede
- AL die arseringbesonderhede

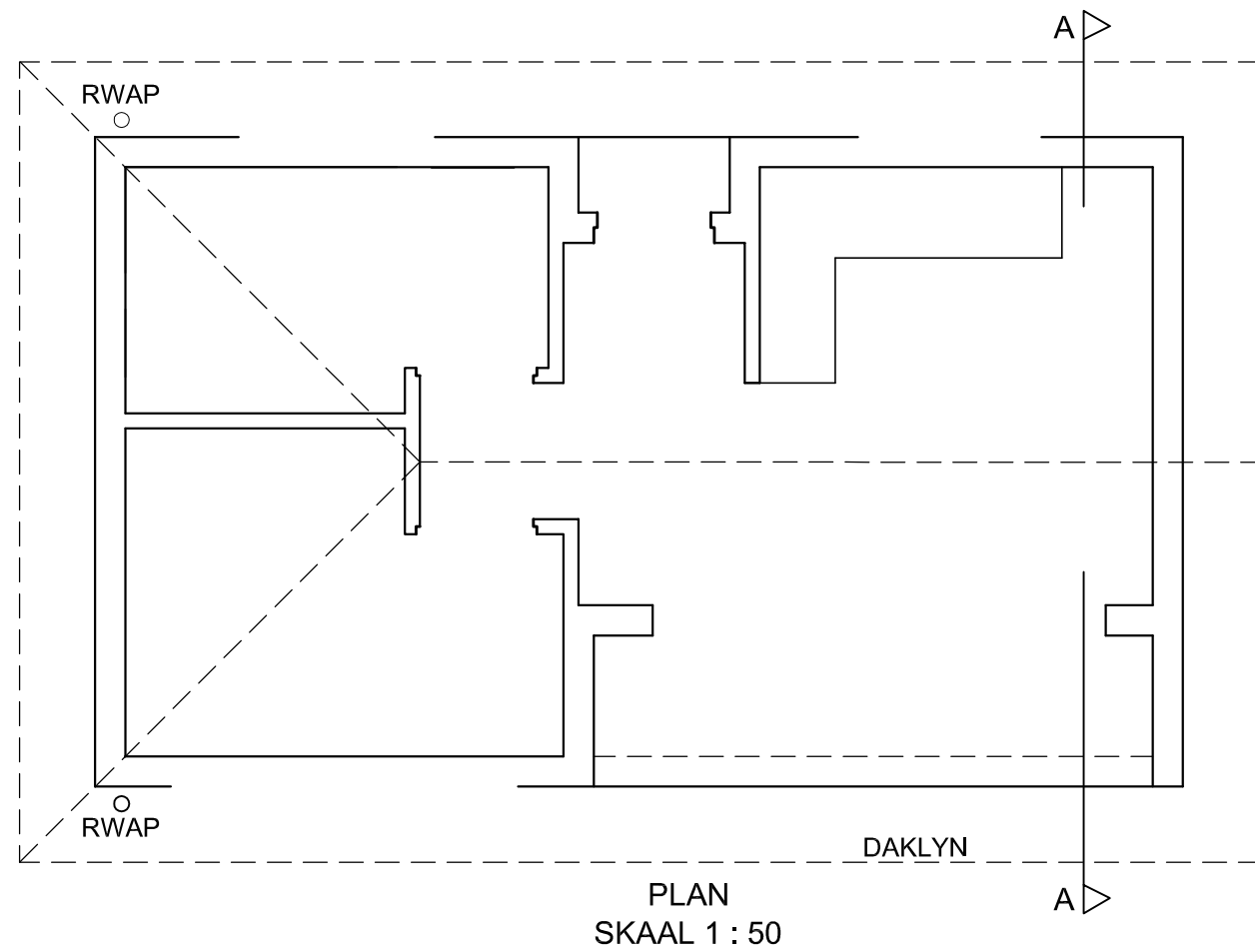
Benoem die volgende:

- Die noord-oos-aansig en die deursnee-aansig
- Die kameraanduidings met vloerafwerkings
- Deur die korrekte afkortings te gebruik, benoem die volgende kenmerke op die korrekte aansig: grondvlak en vogweerlaag.

LET WEL:

- ALLE substruktuurarsering mag in vryhand geteken word.





ASSESSERINGSKRITERIA				
VLOERPLAN				
1	BYSKRIFTE	5		
2	ELEKTRIES	8		
4	TOEBEHORE	6		
5	DEURE + VENSTERS	12		
6	ARSERING	6		
SUBTOTAAL		37		
NOORD-OOS-AANSIG				
1	MURE + VVV	4		
2	DAK + GEUT + RWAP	6 $\frac{1}{2}$		
3	VENSTERS + DEUR	9		
4	BYSKRIFTE	1 $\frac{1}{2}$		
SUBTOTAAL		21		
DEURSNEEAANSIG				
1	DAK	13		
2	MURE + VLOER + FONDASIES	15 $\frac{1}{2}$		
3	SKUIFDEUR	1		
4	BYSKRIFTE	1 $\frac{1}{2}$		
5	ARSERING	7		
SUBTOTAAL		38		
TOTAAL		96		
EKSAMENNUMMER				
EKSAMENNUMMER				6





basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P1
FEBRUARY/MARCH 2012

MARKS: 100

TIME: 3 hours

This question paper consists of 6 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions.
2. Answer ALL the questions.
3. ALL drawings are in first-angle orthographic projection, unless otherwise stated.
4. ALL drawings must be completed using instruments, unless otherwise stated.
5. ALL answers must be drawn accurately and neatly.
6. ALL the questions must be answered on the QUESTION PAPER as instructed.
7. ALL the pages must be re-stapled in numerical sequence, irrespective of whether the question was attempted.
8. Time management is essential in order to complete all the questions.
9. Print your examination number in the block provided on every page.
10. Any details or dimensions not given must be assumed in good proportion.

FOR OFFICIAL USE ONLY										
QUESTION	MARKS OBTAINED			½	SIGN	MODERATED			½	SIGN
1										
2										
3										
4										
TOTAL										
	2	0	0			2	0	0		

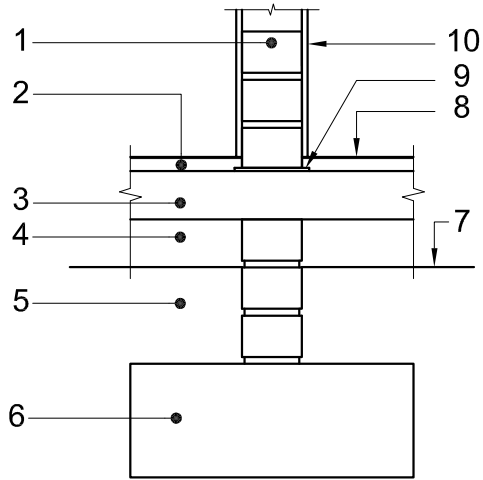
FINAL CONVERTED MARK	CHECKED BY
100	

COMPLETE THE FOLLOWING:
CENTRE NUMBER
CENTRE NUMBER
EXAMINATION NUMBER
EXAMINATION NUMBER

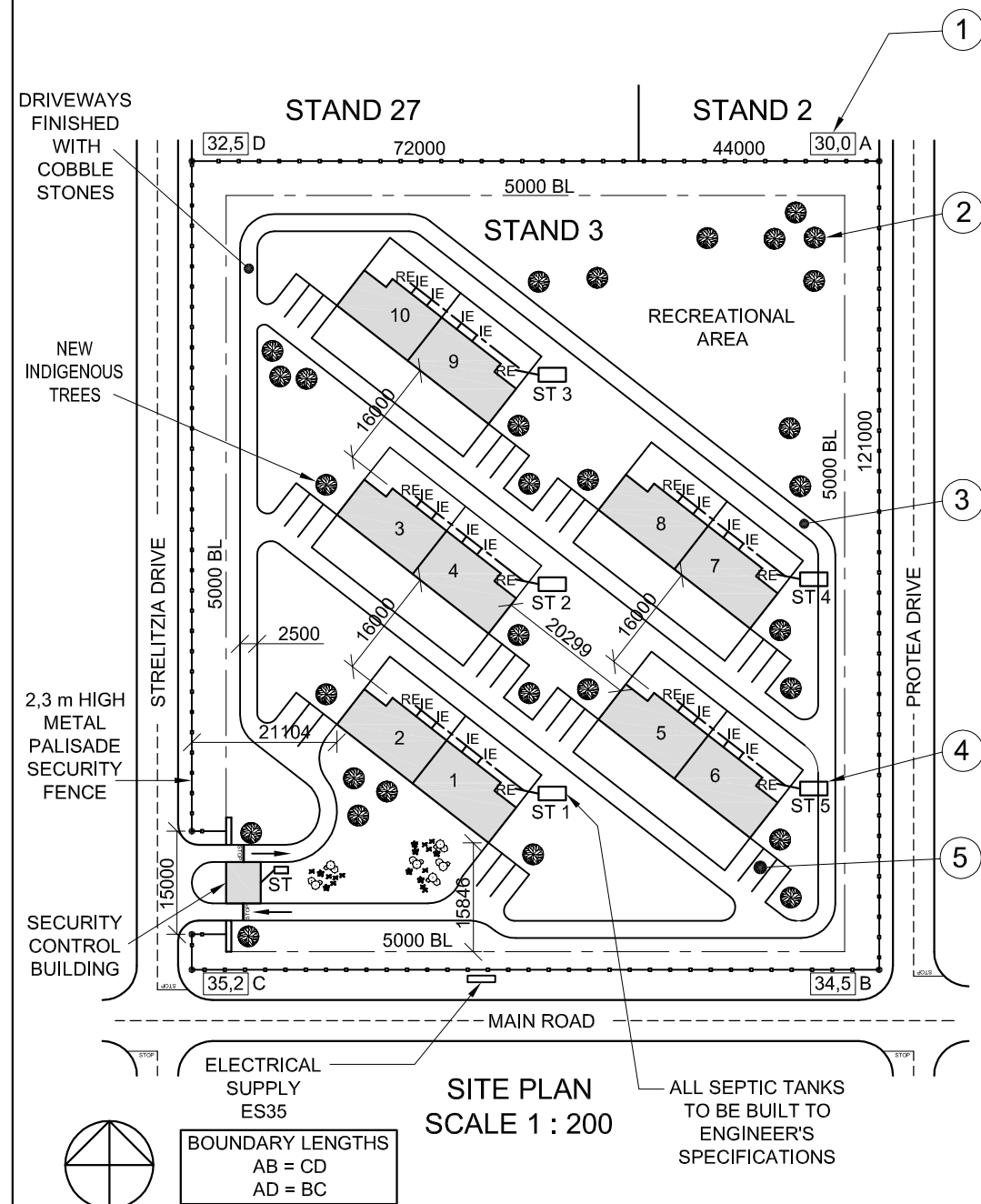




NOTE:
THE HATCHING DETAIL
HAS BEEN OMITTED.



DETAILED DRAWING OF A SECTION THROUGH THE
SUBSTRUCTURE OF A NON-LOAD-BEARING WALL

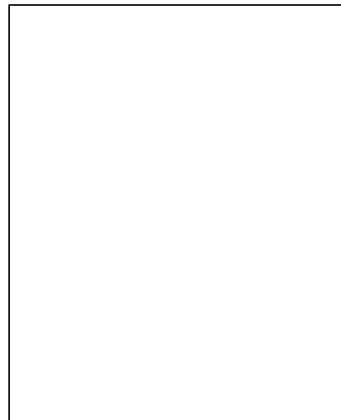


SITE PLAN
SCALE 1 : 200

NOTE:

Contractors must verify all dimensions and levels on site before commencing work. Architects to be immediately notified of any discrepancies.

14. In the space below, draw, in neat freehand, the front view and top view of the SABS 0143 convention for a SHOWER.



ARCHITECT'S SIGNATURE

CLIENT'S SIGNATURE

REVISION	DATE	DESCRIPTION

NEW WAVE ARCHITECTS

5 ARGILE DRIVE
DURBAN
Tel: 031 303 8459

PRINTED BY ZAPPY PRINTERS	DATE OF PRINT 2012-01-10
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DRAWING TITLE
SITE PLAN

PROJECT
NEW CLUSTER HOMES FOR
DUBE TRUST ON STAND 3 AT
58 STRELITZIA ROAD
GINGINDLOVU.

PROJECT NUMBER 18	DRAWING NUMBER 002-A	
REFERENCE CODE Q1P1-SUP-2012	DRAWN BY SANELE	CHECKED BY LEBO
DATE 2011-02-30	SCALE 1 : 200	



QUESTION 1: ANALYTICAL (CIVIL)

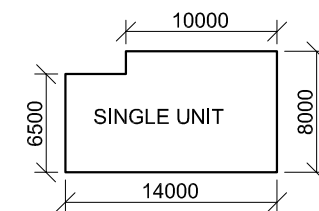
Given:

A detailed drawing of a section through the substructure of a non-load-bearing wall, the site plan for a new complex with 10 cluster homes, a title panel and a table of questions. The drawings have not been prepared to the indicated scale.

Instructions:

Complete the table below by neatly answering the questions, which all refer to the accompanying drawings and title panel. **[30]**

QUESTIONS		ANSWERS	
1	With reference to the detailed drawing of a section through the substructure of a non-load-bearing wall, link the number on the drawing with the correct component in the column to the right of this question.	FOUNDATION	10
		DAMP-PROOF COURSE	
		GROUND LEVEL	
		INTERNAL WALL	
		CONCRETE SLAB	
		COMPACTED HARDCORE	
		UNDISTURBED EARTH	
		SCREED	
		PLASTER	
		FINISHED FLOOR LEVEL	
2	What is the reference code for the drawing?		1
3	Who was responsible for the printing of the site plan?		1
4	What is the distance from the building line to the palisade fence?		1
5	In which road is the access to the property located?		1
6	What does the feature at 1 indicate?		1
7	Name the feature at 2.		1
8	Name the feature at 3.		1
9	Name the feature at 4.		1
10	Name the feature at 5.		1
11	How many buildings are on the stand?		1
12	What is the surface finish of the driveways in the complex?		1
13	Determine the total length of the metal palisade security fence line in metres. Show ALL calculations.		3
14	In the space provided in the title panel, draw, in neat freehand, the front view and top view of the SABS 0143 convention for a shower.		3
15	In the space below, determine the total area of a single unit in square metres.		3
ANSWER 15 Show ALL calculations.		TOTAL	30



EXAMINATION NUMBER	
EXAMINATION NUMBER	2



QUESTION 2: DEVELOPMENT

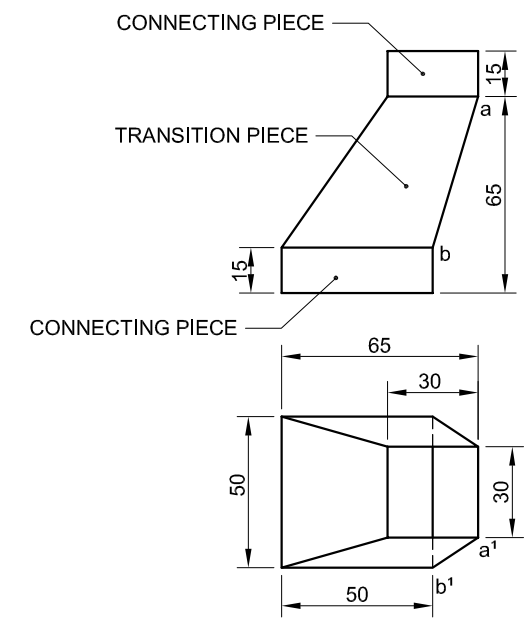
Given:

The front view and top view of a portion of a duct showing a square-to-square transition piece with two connecting pieces.

Instructions:

- 2.1 Draw, to scale 1 : 1, the given front view and top view of the portion of the duct.
- 2.2 Develop the surface of the transition piece ONLY. Make edge AB the seam.

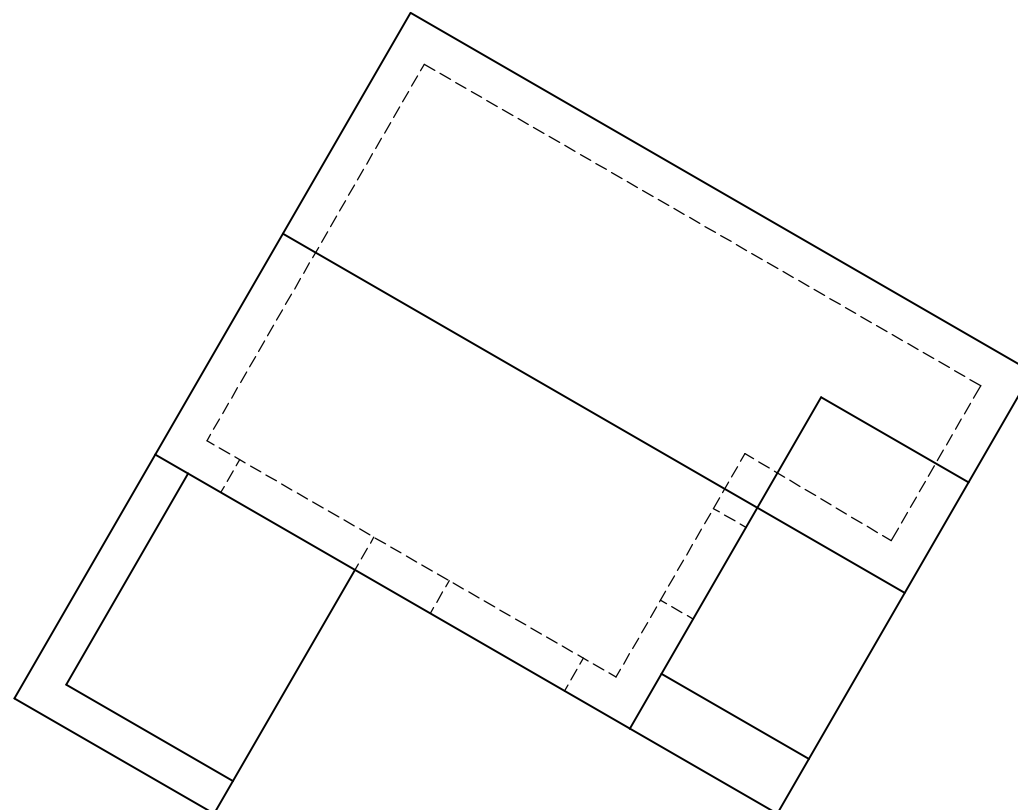
Show ALL necessary construction and fold lines. **[34]**



EDGE **AB** IS THE SEAM.

ASSESSMENT CRITERIA			
1	FRONT VIEW + TOP VIEW	11	
2	TRUE LENGTH METHOD	10	
3	DEVELOPMENT	13	
TOTAL		34	
EXAMINATION NUMBER			
EXAMINATION NUMBER			3





QUESTION 3: PERSPECTIVE

Given:

Two views of a cottage and the information needed to draw a two-point perspective drawing.

PP – Picture plane

HL – Horizon line

GL – Ground line

SP – Station point

Instructions:

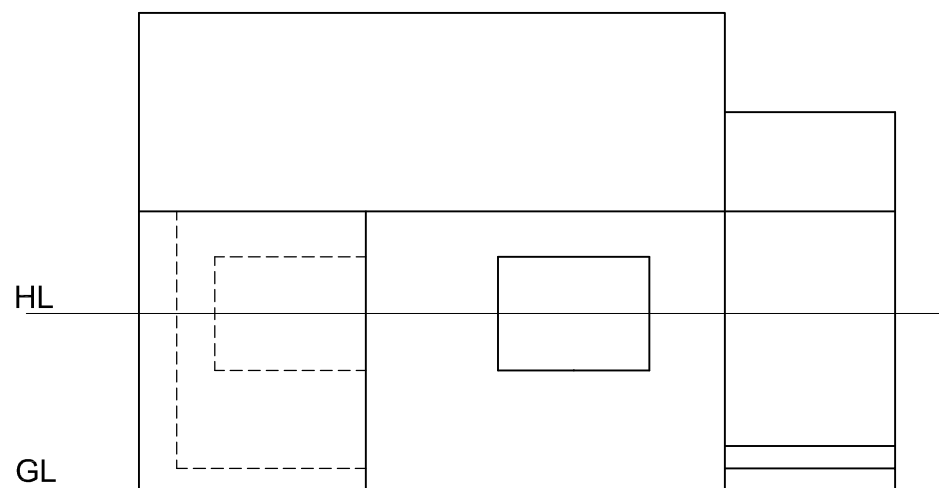
Complete the perspective drawing.

- Align the drawing sheet with the ground line (GL).
- Show ALL necessary construction.
- Show the wall thickness at the door and the windows.
- NO hidden detail is required.

[40]

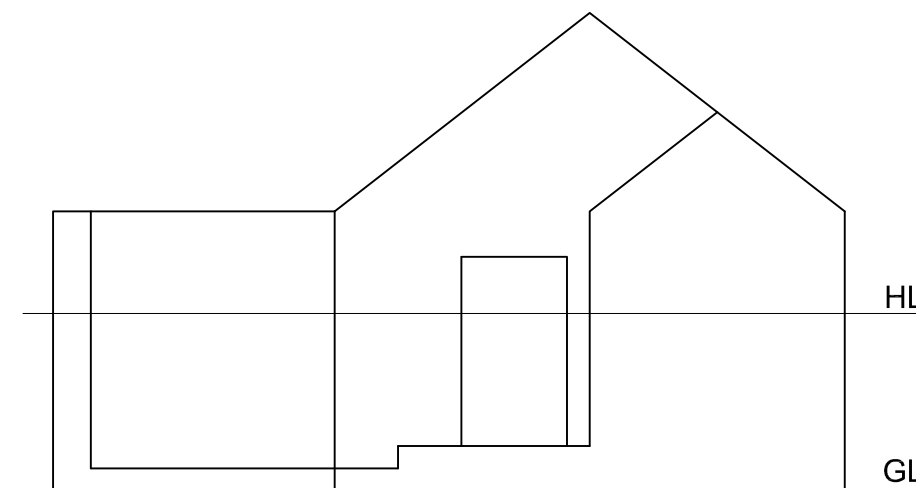
PP

PP



HL

GL



HL

GL

SP

ASSESSMENT CRITERIA			
1	CONSTRUCTION + VPs	7	
2	STAIRS	7	
3	WALLS + DOOR + WINDOWS	17	
4	ROOF	9	
TOTAL		40	
EXAMINATION NUMBER			
EXAMINATION NUMBER			
EXAMINATION NUMBER			4

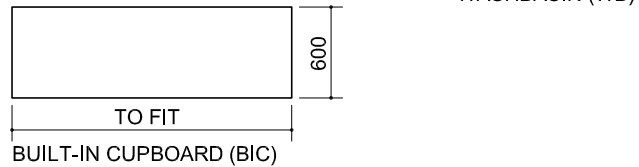
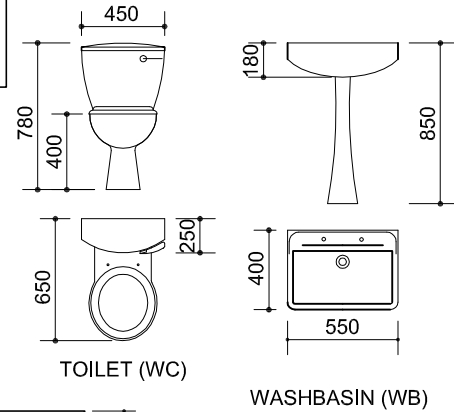
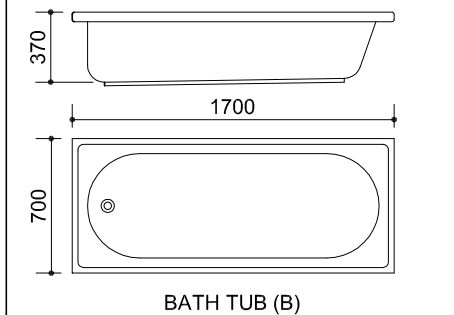


ELECTRICAL SYMBOLS

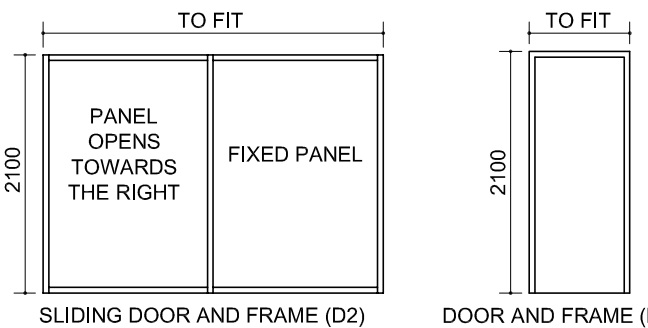
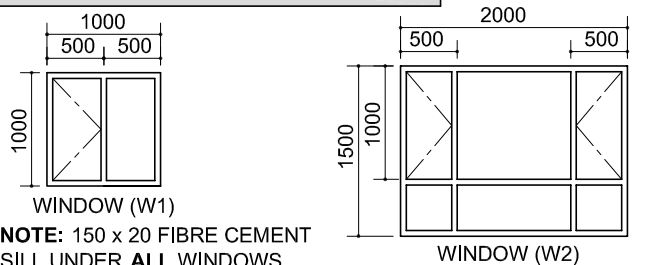
ROOF COMPONENTS

	75 x 50 PURLINS
	228 x 20 FASCIA BOARD
	114 x 38 WALL PLATE

FIXTURES

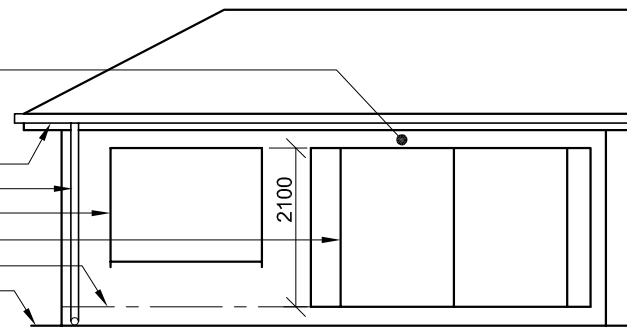


DOOR AND WINDOW SCHEDULE



200 x 150 CONCRETE SUPPORT BEAM

100 x 100 BOX GUTTER
 Ø100 mm RWDP
 W2 WINDOW
 SLIDING DOOR
 FLOOR LEVEL
 GROUND LINE



INCOMPLETE NORTH-EAST ELEVATION

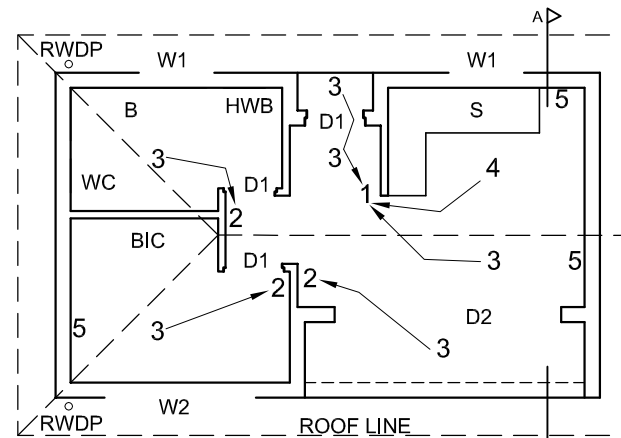
FIXTURES

- D1 HINGED DOOR OPENINGS
- D2 SLIDING DOOR OPENING
- W1, W2 WINDOW OPENINGS
- B BATH
- S SINK
- WC TOILET
- WB WASHBASIN
- BIC BUILT-IN CUPBOARD

ELECTRICAL FIXTURES

- 1. THREE-POLE LIGHT SWITCH
- 2. SINGLE-POLE LIGHT SWITCHES
- 3. CEILING LIGHT
- 4. 2 x 40 W FLUORESCENT TUBES
- 5. SWITCH SOCKET OUTLETS

NOTE:
 THE ARROW SHOWS THE LIGHT CONNECTION TO THE SWITCH.



INCOMPLETE FLOOR PLAN

ROOF NOTES:

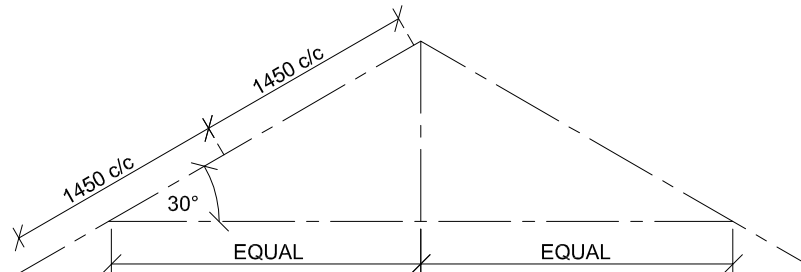
ROOF COVER 15 mm CORRUGATED IRON ON 75 x 50 mm PURLINS @ 1450 c/c.

114 x 38 mm ROOF TRUSSES ON 114 x 38 mm WALL PLATES.

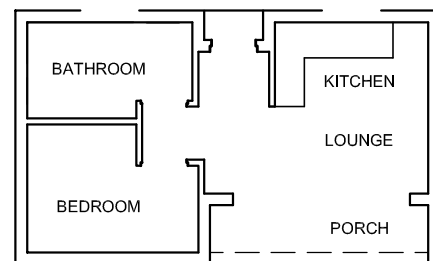
ROOF PITCH 30° WITH 228 x 20 mm FASCIA BOARD ON BOTH ENDS.

100 mm SQUARE BOX GUTTER

PLASTER CEILING BOARD ON 4 STRIPS OF 38 x 38 mm BRANDING, EVENLY SPACED



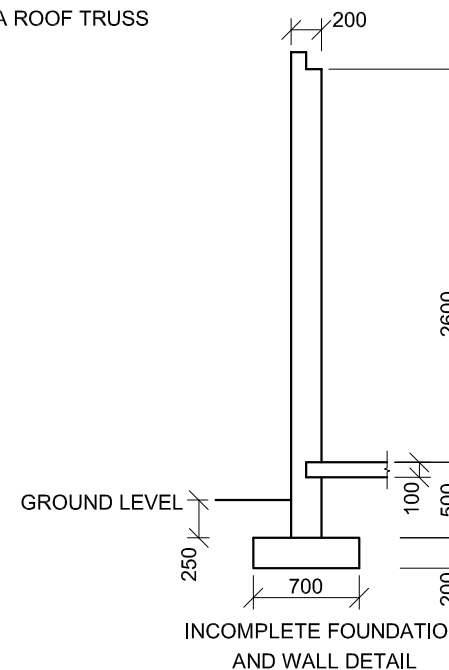
SCHEMATIC DIAGRAM OF A ROOF TRUSS



FLOOR FINISH

- KITCHEN: TILES
- LOUNGE: TILES
- PORCH: TILES
- BEDROOM: CARPET
- BATHROOM: TILES

ROOM DESIGNATIONS WITH FLOOR FINISH



INCOMPLETE FOUNDATION AND WALL DETAIL

QUESTION 4: CIVIL DRAWING

Given:

- The incomplete north-east elevation of a new **cottage** showing the walls, the position of the windows, sliding door, the roof and notes
- The incomplete floor plan showing the walls, position of the windows, doors, fixtures and the electrical fixtures
- Roof notes and a schematic diagram of a roof truss
- A diagram showing the room designations and floor finishes
- The incomplete foundation and wall detail
- A table of electrical symbols
- A table of roof components
- A table of fixtures
- A door and window schedule
- The incomplete floor plan of the new **cottage**, drawn to scale 1 : 50, on page 6

Instructions:

- Answer this question on page 6.
- Using the given incomplete floor plan, draw, to scale 1 : 50 and to the specifications, the following views of the new **cottage**:
 - 4.1 The complete floor plan
 - 4.2 The north-east elevation
 - 4.3 A sectional elevation on cutting plane A-A
- ALL drawings must comply with the guidelines and conventions contained in the *SABS 0143*.

SPECIFICATIONS:

THE FLOOR PLAN

Add the following features to the drawing:

- ALL doors and windows. Show the direction of opening for the sliding door.
- ALL fixtures as indicated by the abbreviations
- ALL the electrical fixtures as indicated by the numbers
- ALL hatching detail

THE NORTH-EAST ELEVATION

Show the following features on the drawing:

- The outside walls
- The roof detail including the gutter, fascia board and rainwater downpipe
- The window and sliding door detail including all the directions of opening

THE SECTIONAL ELEVATION

Show the following features on the drawing:

- The complete foundation, wall, slab, roof and ceiling detail
- The sliding door detail
- ALL hatching detail

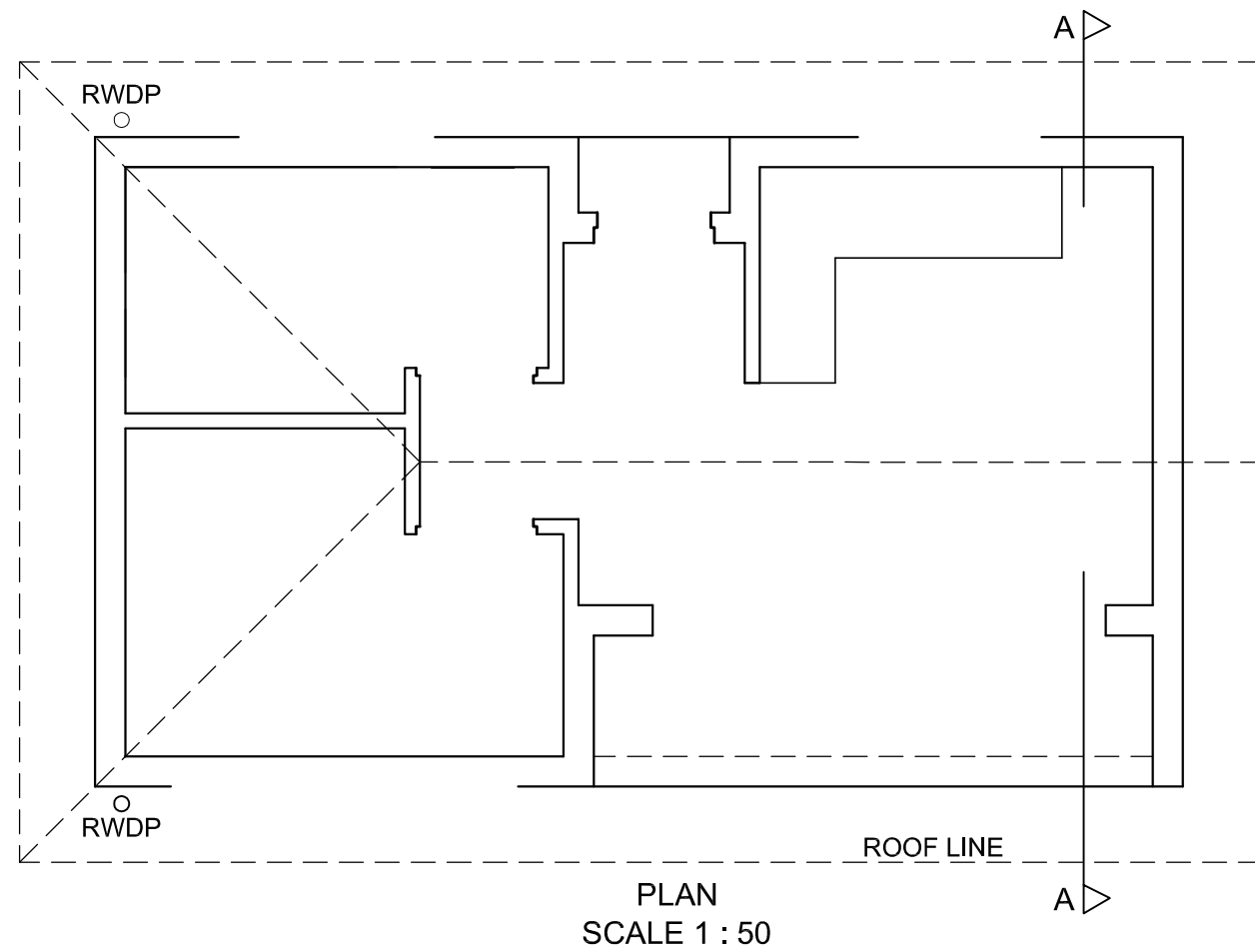
Label the following:

- The north-east elevation and the sectional elevation
- The room designations with floor finishes
- Using the correct abbreviations, label the following features in the correct view: ground level and damp-proof course.

NOTE:

- ALL substructure hatching may be drawn in freehand. [96]





ASSESSMENT CRITERIA				
FLOOR PLAN				
1	LABELS	5		
2	ELECTRICAL	8		
3	FITTINGS	6		
4	DOORS + WINDOWS	12		
5	HATCHING	6		
SUBTOTAL		37		
NORTH-EAST ELEVATION				
1	WALLS + FFL	4		
2	ROOF + GUTTER + RWDP	6 $\frac{1}{2}$		
3	WINDOWS + DOOR	9		
4	LABELS	1 $\frac{1}{2}$		
SUBTOTAL		21		
SECTIONAL ELEVATION				
1	ROOF	13		
2	WALLS + FLOOR + FOUNDATIONS	15 $\frac{1}{2}$		
3	SLIDING DOOR	1		
4	LABELS	1 $\frac{1}{2}$		
5	HATCHING	7		
SUBTOTAL		38		
TOTAL		96		
EXAMINATION NUMBER				
EXAMINATION NUMBER				6

