



**ISEBE LEMFUNDO LEMPUMA KOLONI
EASTERN CAPE EDUCATION DEPARTMENT
OOS-KAAP ONDERWYSDEPARTEMENT**

**NATIONAL SENIOR CERTIFICATE
NASIONALE SENIOR SERTIFIKAAT**

**GRADE 12
GRAAD 12**

**ENGINEERING GRAPHICS AND DESIGN P1
INGENIEURSGRAFIKA EN -ONTWERP V1**

**SEPTEMBER 2018
MARKING GUIDELINE / NASIENRIGLYN**

MARKS / PUNTE: 200

TIME / TYD: 3 hours / uur

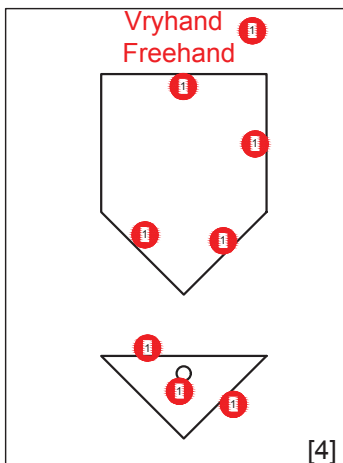
**This memorandum consists of 7 pages.
Hierdie memorandum bestaan uit 7 bladsye.**

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ANSWERS		
1	SITE -2018	1
2	REBECCA	1
3	2018 - 09 - 01	1
4	INDICATE THE TYPE OF FENCING USED	1
5	Mr. M. MULLER	1
6	RAILWAY LINE	2
7	2400 mm (2.4m = ½ mark)	1
8	RODDING EYE	1
9	ELECTRICAL WATT METER	1
10	ONE	1
11	MAN HOLE	1
12	ELECTRICAL FENCE	1
13	RED	1
14	BLACK	1
	TOTAL	25

ANTWOORDE		
1	SITE -2018	1
2	REBECCA	1
3	2018 - 09 - 01	1
4	DUI DIE TIPE HEINING AAN	1
5	Mnr. M. MULLER	1
6	SPOORLYN	2
7	2400 mm (2.4m = ½ punt)	1
8	STEEKOOG	1
9	ELEKTRIESE WATT METER	1
10	EEN	1
11	MANGAT	1
12	ELEKTRIESE HEINING	1
13	ROOI	1
14	SWART	1
	TOTAAL	25

ANTWOORD / QUESTION 17



ANTWOORD / QUESTION 15

Toon alle berekeninge / Show all calculations

calculation: add
correct values
correct answer
correct unit

$$45,8 + 84 + 46 + 87 = 262,8 \text{ m}$$

optel berekening
korrekte waardes
korrekte antwoord
korrekte eenheid

[2]

ANTWOORD / QUESTION 16

Toon alle berekeninge / Show all calculations

calculation (X), (-)
correct values
correct answer
correct unit and
conversion to m

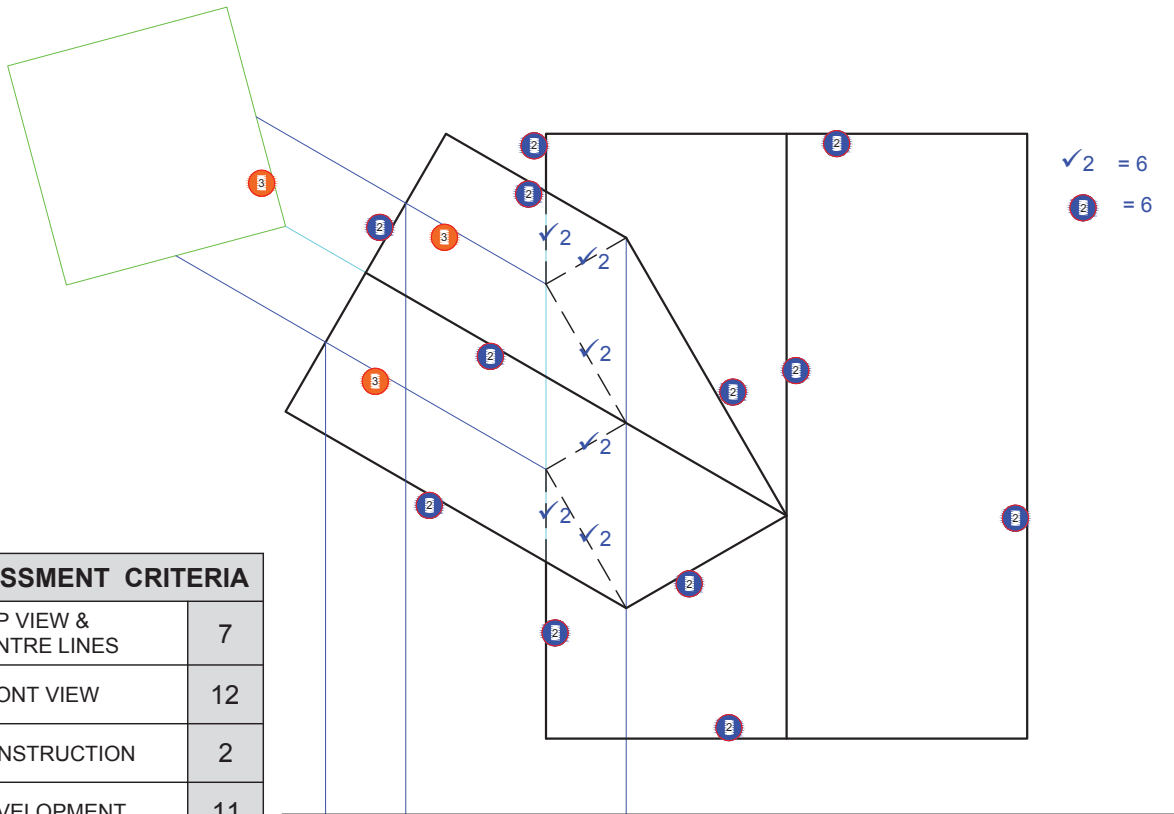
$$15,2 \times 9,5 = 144,4$$

$$12,6 \times 6,2 = 78,12$$

$$144,4 - 78,12 = 66,28 \text{ m}^2$$

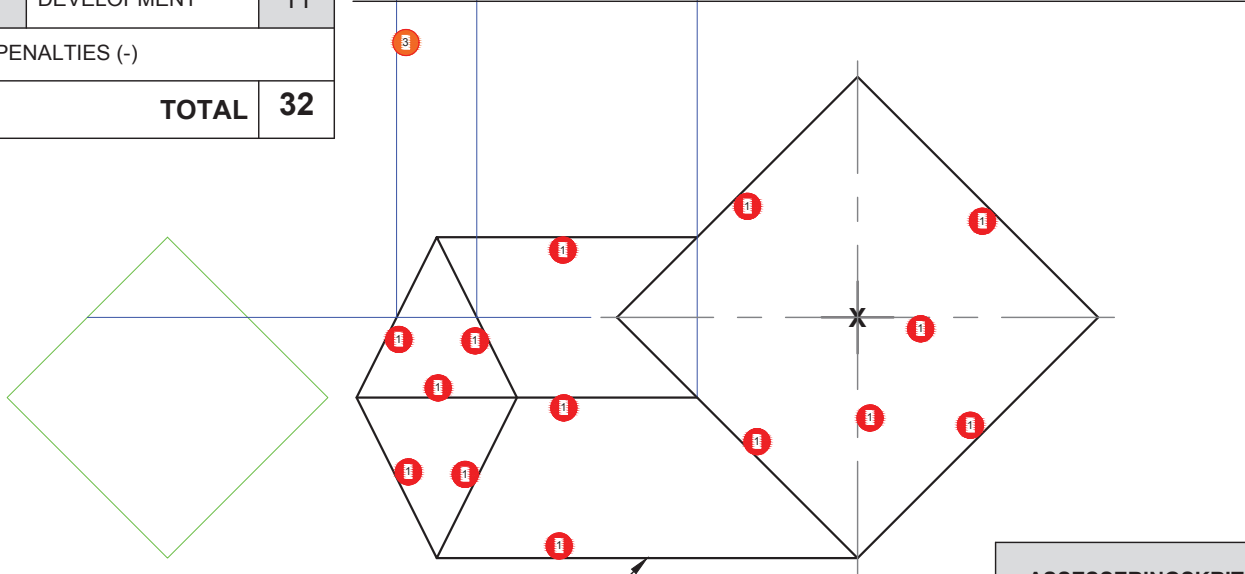
optel berekening (X), (-)
korrekte waardes
korrekte antwoord
korrekte eenheid en
omskakeling na m

[4]

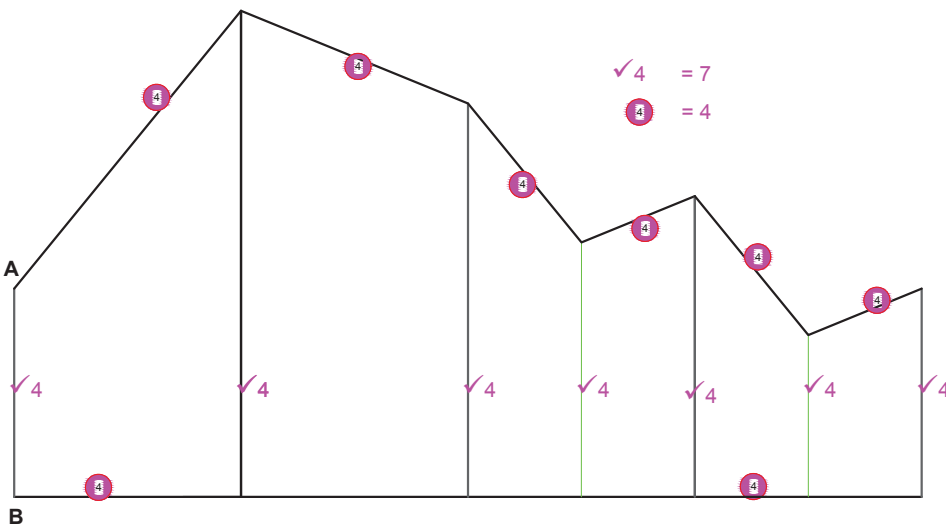


✓ 2 = 6
 2 = 6

ASSESSMENT CRITERIA		
1	TOP VIEW & CENTRE LINES	7
2	FRONT VIEW	12
3	CONSTRUCTION	2
4	DEVELOPMENT	11
PENALTIES (-)		
TOTAL		32

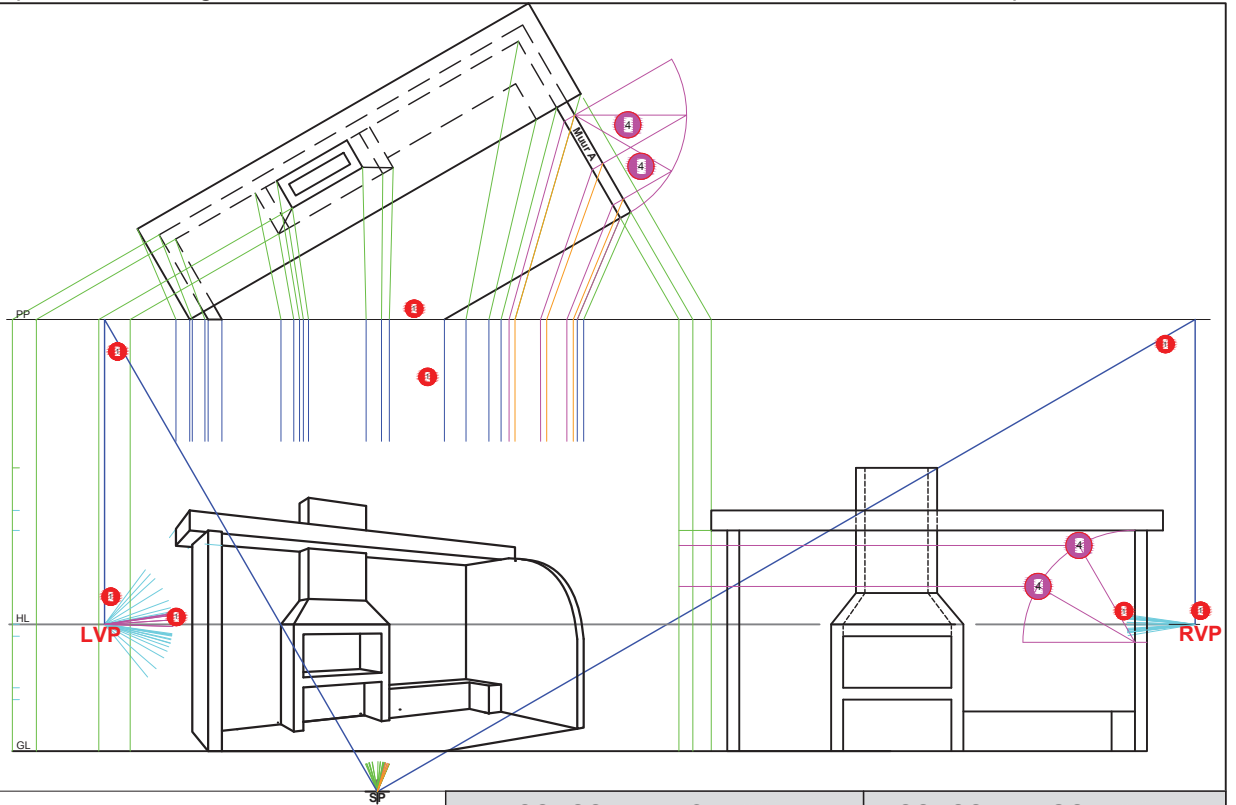


CUTTING EDGE

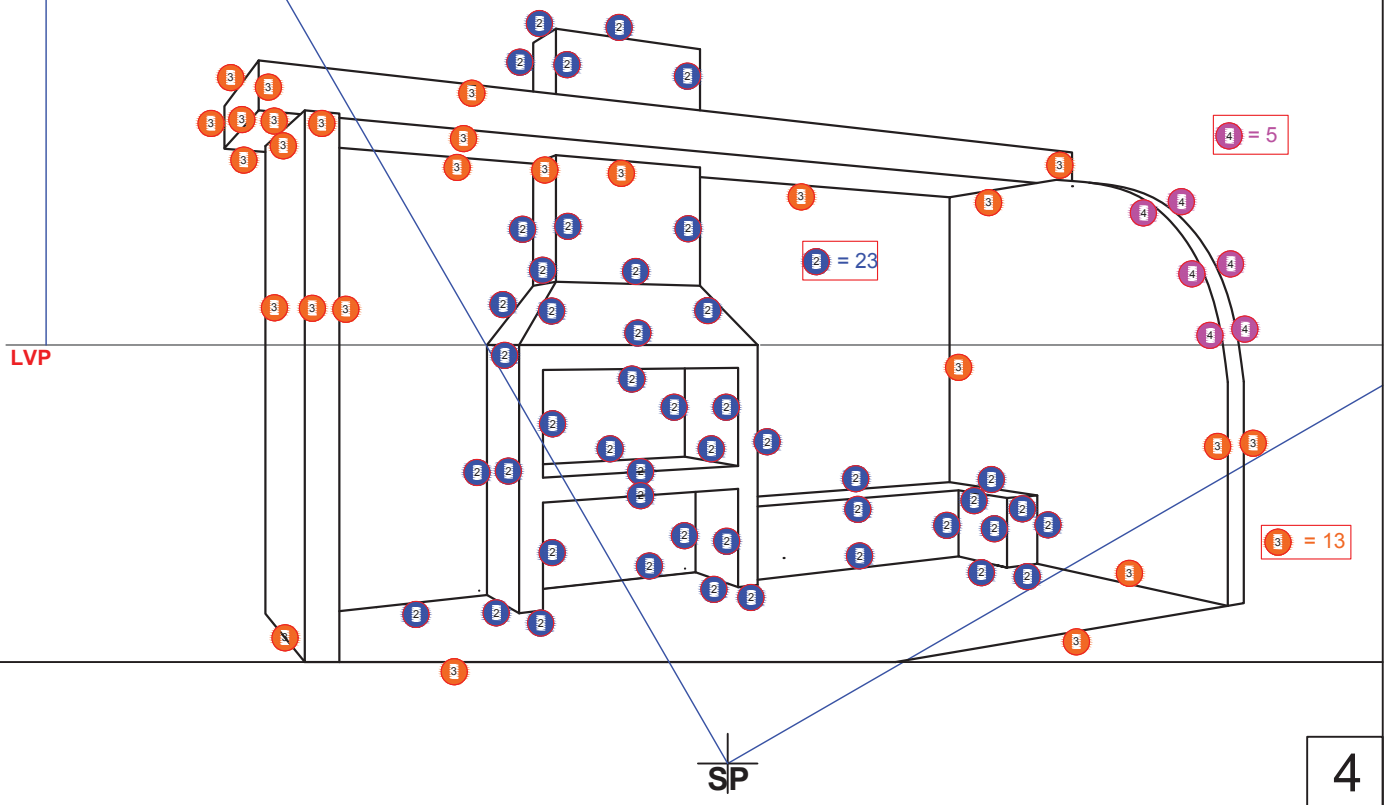


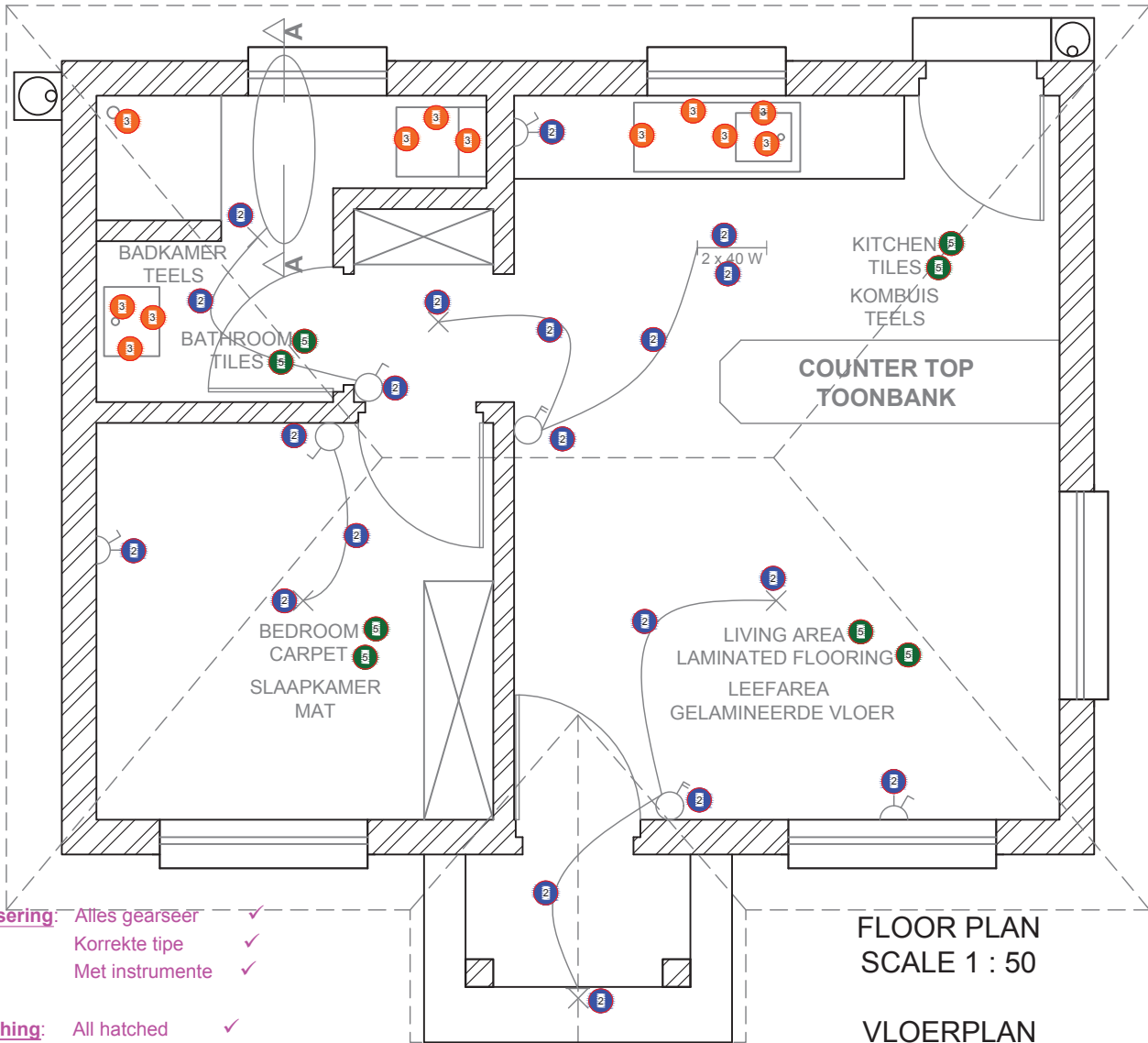
ASSESSERINGSKRITERIA		
1	BOAANSIG & HARTLYNE	7
2	VOORAANSIG	12
3	KONSTRUKSIE	2
4	ONTWIKKELING	11
PENALISERING (-)		
TOTAAL		32

3



ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
1	CONSTRUCTION + VPs	4	1	KONSTRUKSIE & VPte	4
2	BRAAI & SEAT	23	2	BRAAI & BANKIE	23
3	WALLS & ROOF SLAB	13	3	MURE & DAKKIE	13
4	CIRCLE	5	4	SIRKEL	5
TOTAL		45	TOTAAL		45





Arsering: Alles gearseer ✓
 Korrekte tipe ✓
 Met instrumente ✓

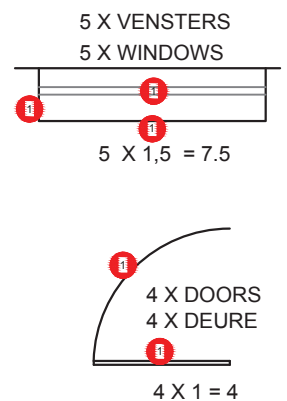
Hathing: All hatched ✓
 Correct type ✓
 Instruments used ✓

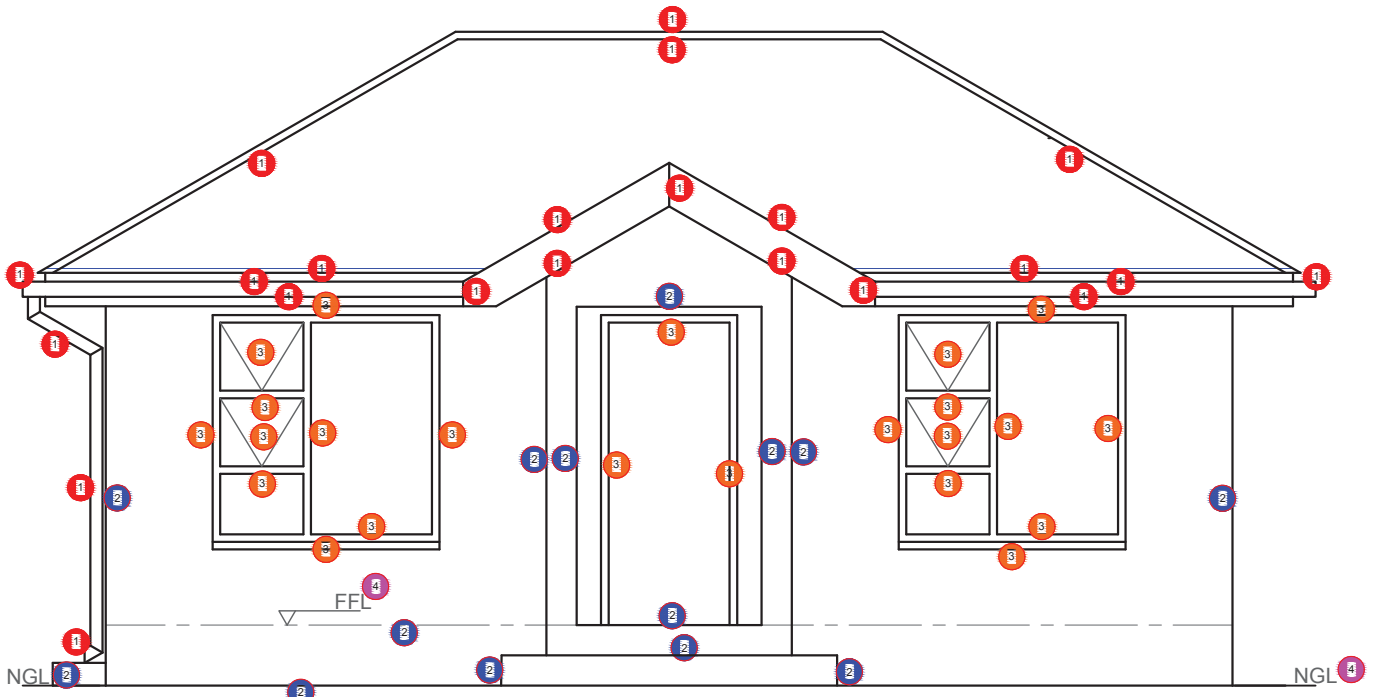
FLOOR PLAN
SCALE 1 : 50

VLOERPLAN
SKAAL 1 : 50

ASSESSMENT CRITERIA		
FLOOR PLAN		
1	DOORS + WINDOWS	11 1/2
2	ELECTRICAL	10
3	FIXTURES	6
4	HATHING	3
5	LABELS	4
SUBTOTAL		34 1/2

ASSESSERINGSKRITERIA		
VLOERPLAN		
1	DEURE & VENSTERS	11 1/2
2	ELEKTRIES	10
3	TOEBEHORE	6
4	ARSERING	3
5	BYSKRIFTE	4
SUBTOTAAL		34 1/2





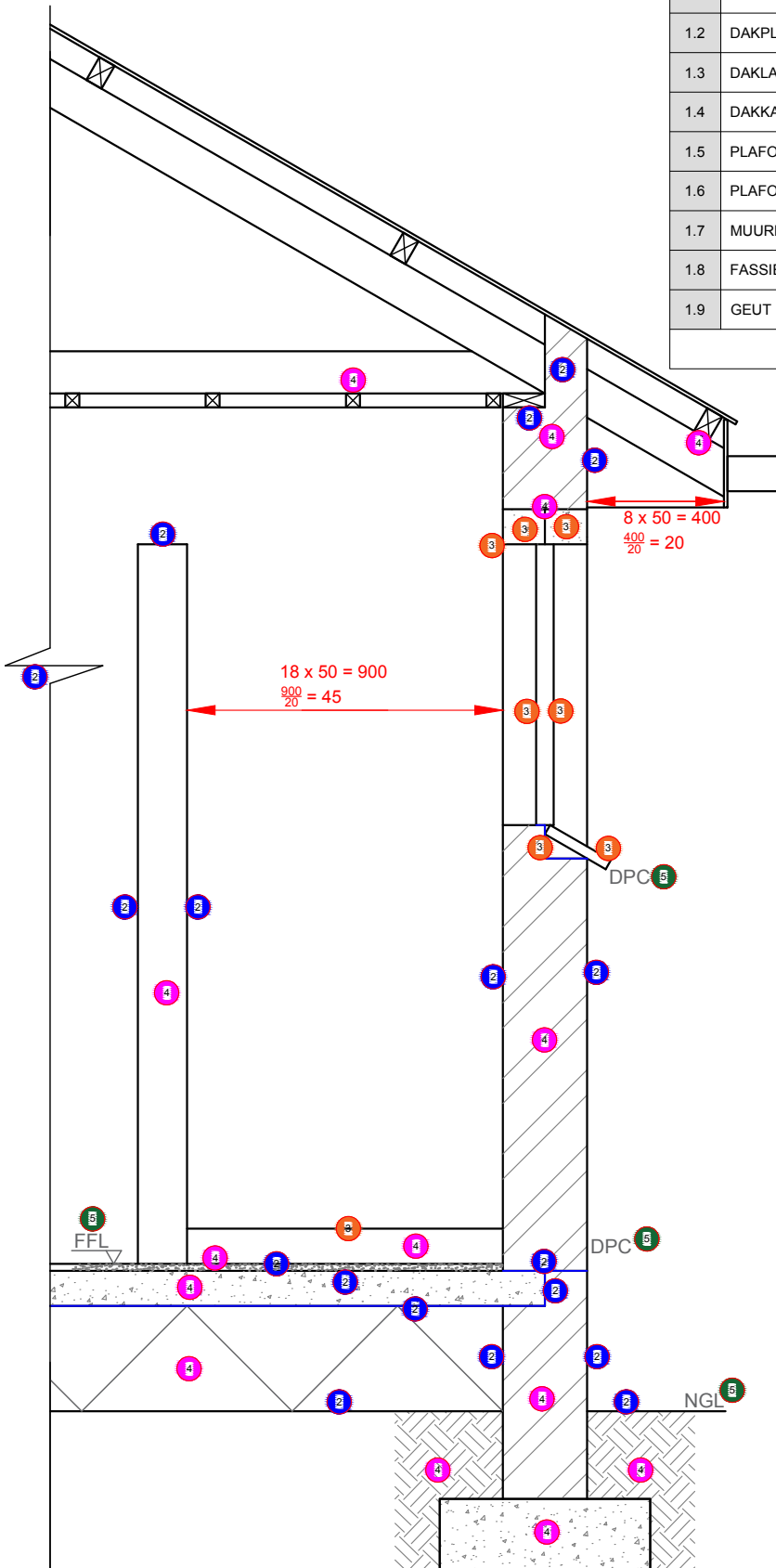
NOORD ELEVASIE 4
 SKAAL 1 : 50 4
 NORTH ELEVATION
 SCALE 1 : 50

ASSESSMENT CRITERIA		
NORTH ELEVATION		
1	ROOF, GUTTER, FACIA, BADGE BOARD	11
2	WALLS, GULLEY & STEPS	7
3	DOORS + WINDOWS	11 1/2
4	LABELS	2
SUBTOTAL		31 1/2

ASSESSERINGSKRITERIA		
NOORD ELEVASIE		
1	DAK, GEUT, FASSIE, WINDVEER	11
2	MURE, SYFERPUT & TRAPPE	7
3	DEURS + VENSTERS	11 1/2
4	BYSKRIFTE	2
SUBTOTAAL		31 1/2

1. DAK BESONDERHEDE PUNTE TOEKENNING		
1.1	DAKHELLING	1
1.2	DAKPLAAT	$\frac{1}{2}$
1.3	DAKLAT & SPASIE	2
1.4	DAKKAP	1
1.5	PLAFONLAT + SPASIE	2
1.6	PLAFONBORD	$\frac{1}{2}$
1.7	MUURPLAAT	1
1.8	FASSIEBORD	1
1.9	GEUT	1
TOTAAL		10

1. ROOF DETAIL MARK ALLOCATION		
1.1	ROOF ANGLE	1
1.2	ROOF SHEET	$\frac{1}{2}$
1.3	PURLIN & SPACING	2
1.4	TRUSS	1
1.5	BRANDERNG & SPACING	2
1.6	CEILING BOARD	$\frac{1}{2}$
1.7	WALL PLATE	1
1.8	FACIA BOARD	1
1.9	GUTTER	1
TOTAL		10



GEDETAILEERDE SNIT A-A
SKAAL 1 : 20

ASSESSERINGSKRITERIA		
DEURSNEE-AANSIG		
1	DAKBESONDERHEDE	10
2	FONDASIES + MURE + VLOER	9
3	VERSTERBANK + STORT + LATEIE	4
4	ARSERING	7
5	BYSKRIFTE	2
SUBTOTAAL		32

ASSESSMENT CRITERIA		
DETAILED SECTION		
1	ROOF DETAIL	10
2	FOUNDATIONS + WALLS + SLAB	9
3	SILL + WINDOW + SHOWER + LINTELS	4
4	HATCHING	7
5	LABELS	2
SUBTOTAL		32