

**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 2020
MARKING GUIDELINE / NASIENRIGLYN**

MARKS / PUNTE: 200

TIME / TYD: 3 hours / uur

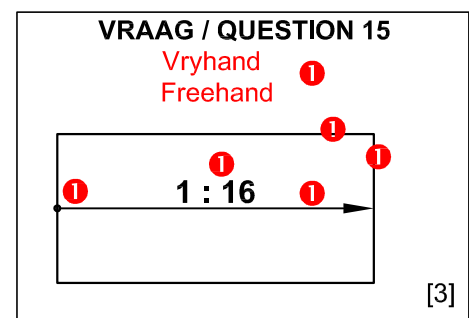
**This marking guideline consists of 7 pages.
Hierdie nasienriglyn bestaan uit 7 bladsye.**

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QUESTION 1 ANSWERS		
1	20-2020	1
2	JADE RENSHAW	1
3	MR. MOLEFE MARABE	1
4	HOLIDAY APARTMENTS	1
5	SIX	1
6	BOAT LAUNCH AREA	1
7	YELLOW	1
8	LOCHABER LAKE	2
9	MYRTLE STREET	2
10	MUST BE DEMOLISHED	1
11	TO MAKE SPACE FOR A PARKING AREA	1
12	YES, THE DISABLED PARKING IS INDICATED	2
13	65 m (Show all calculations)	4
14	140.44 m ² (Show all calculations)	4
15	(Sketch below)	3
TOTAL		26

VRAAG 1 ANTWOORDE		
1	20-2020	1
2	JADE RENSHAW	1
3	MNR. MOLEFE MARABE	1
4	VAKANSIE WOONEENHEDE	1
5	SES	1
6	BOOT LANSEER AREA	1
7	GEEL	1
8	LOCHABER MEER	2
9	MYRTLESTRAAT	2
10	MOET AFGEBREEK WORD	1
11	OM RUIMTE TE MAAK VIR 'N PARKEERAREA	1
12	JA, GESTREMDES PARKERING IS AANGEDUI	2
13	65 m (Toon alle berekeninge)	4
14	140.44 m ² (Toon alle berekeninge)	4
15	(Skets onder)	3
TOTAAL		26

VRAAG / QUESTION 13		
Toon alle berekeninge / Show all calculations		
calculation: (+)(-)	(2 x 16.8) = 33.6	berekening: (+)(-)
correct values	(2 x 18.1) = 36.2	korrekte waardes
correct answer	(2 x 5) = 10	korrekte antwoord
correct unit	= 79.8 m	korrekte eenheid
[4]		
VRAAG / QUESTION 14		
Toon alle berekeninge / Show all calculations		
18.1 x 16.8 =	304.08 m ²	calculation (X),(+) optel berekening (X),(+)
15.7 x 5 =	78.5 m ²	correct values
304.08 - 78.5 =	225.58 m ²	correct answer
		correct unit m ²
[4]		



VRAESTEL 1
VRAAG 1: ANALITIES
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PAPER 1
QUESTION 1: ANALYTICAL
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PAPER 1 - QUESTION 2: SOLID GEOMETRY

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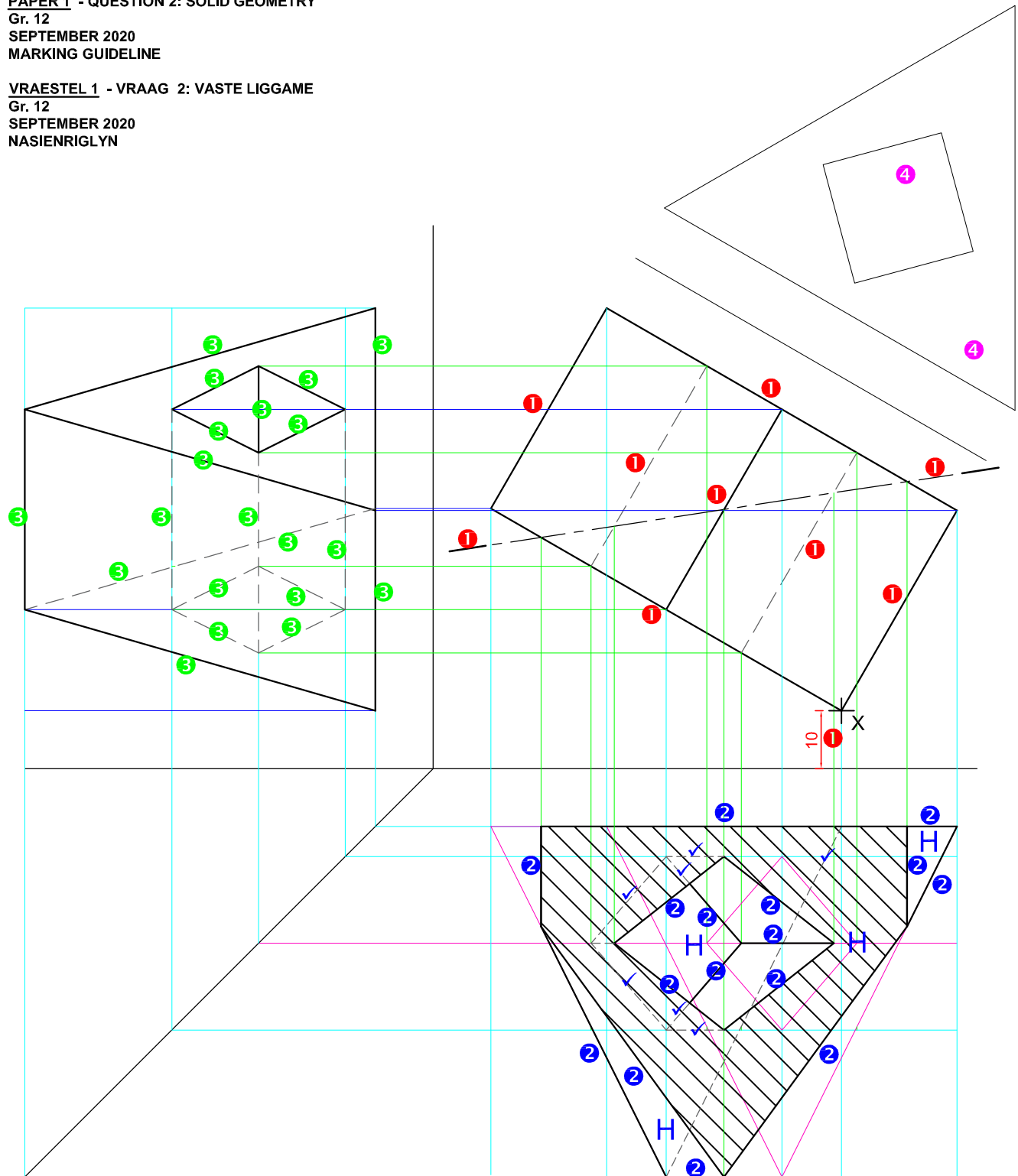
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VRAESTEL 1 - VRAAG 2: VASTE LIGGAME

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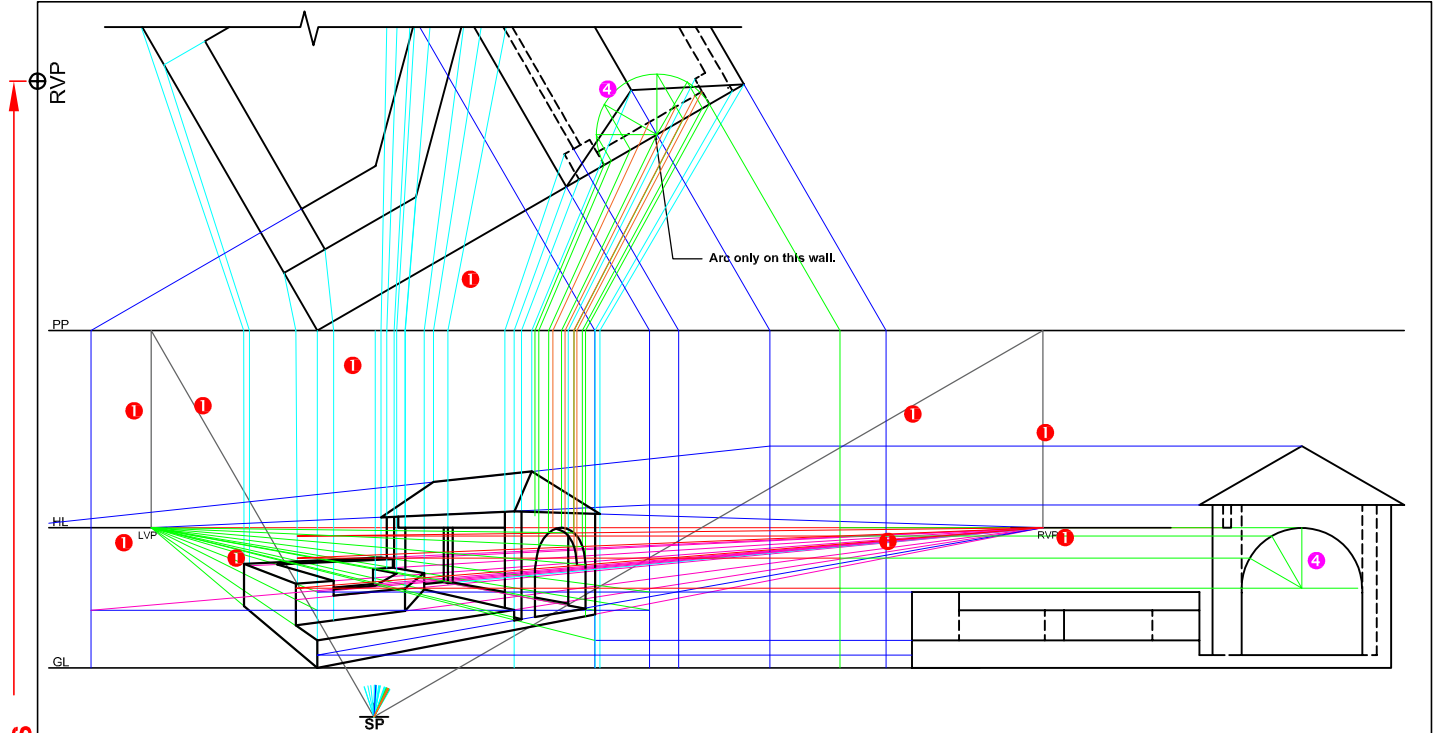
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ASSESSERINGSKRITERIA				
1	VOORAANSIG	5		
2	DEURSNEE BO-AANSIG	17		
3	REGTERAANSIG	10		
4	KONSTRUKSIE	1		
PENALISERING (-)				
TOTAAL		33		

ASSESSMENT CRITERIA				
1	FRONT VIEW	5		
2	SECTIONAL TOP VIEW	17		
3	RIGHT VIEW	10		
4	CONSTRUCTIONS	1		
PENALTIES (-)				
TOTAL		33		

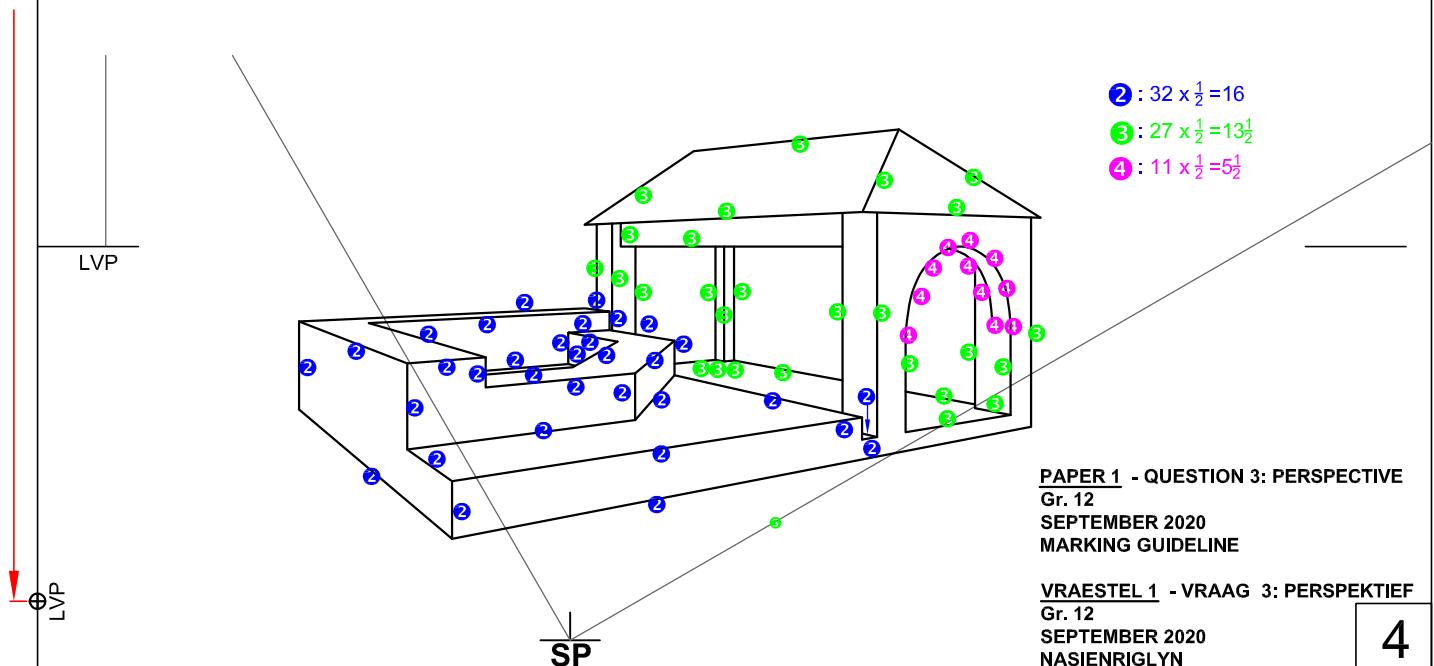
$$\begin{aligned}
 \left\{ \begin{array}{l} 2 \\ \checkmark \\ H \end{array} \right. &= \frac{16}{2} = 8 \\
 &= 7 \text{ Hidden lines} \\
 &= \frac{4}{2} = 2 \\
 &\quad \underline{17}
 \end{aligned}$$



DISTANCE BETWEEN THE VANISHING POINTS

ASSESSERINGSKRITERIA				
1	KONSTRUKSIE EN VPte	5		
2	SWEMBADAREA	16		
3	DAKAREA	13 $\frac{1}{2}$		
4	BOOG EN KONSTRUKSIE	6 $\frac{1}{2}$		
TOTAAL		41		

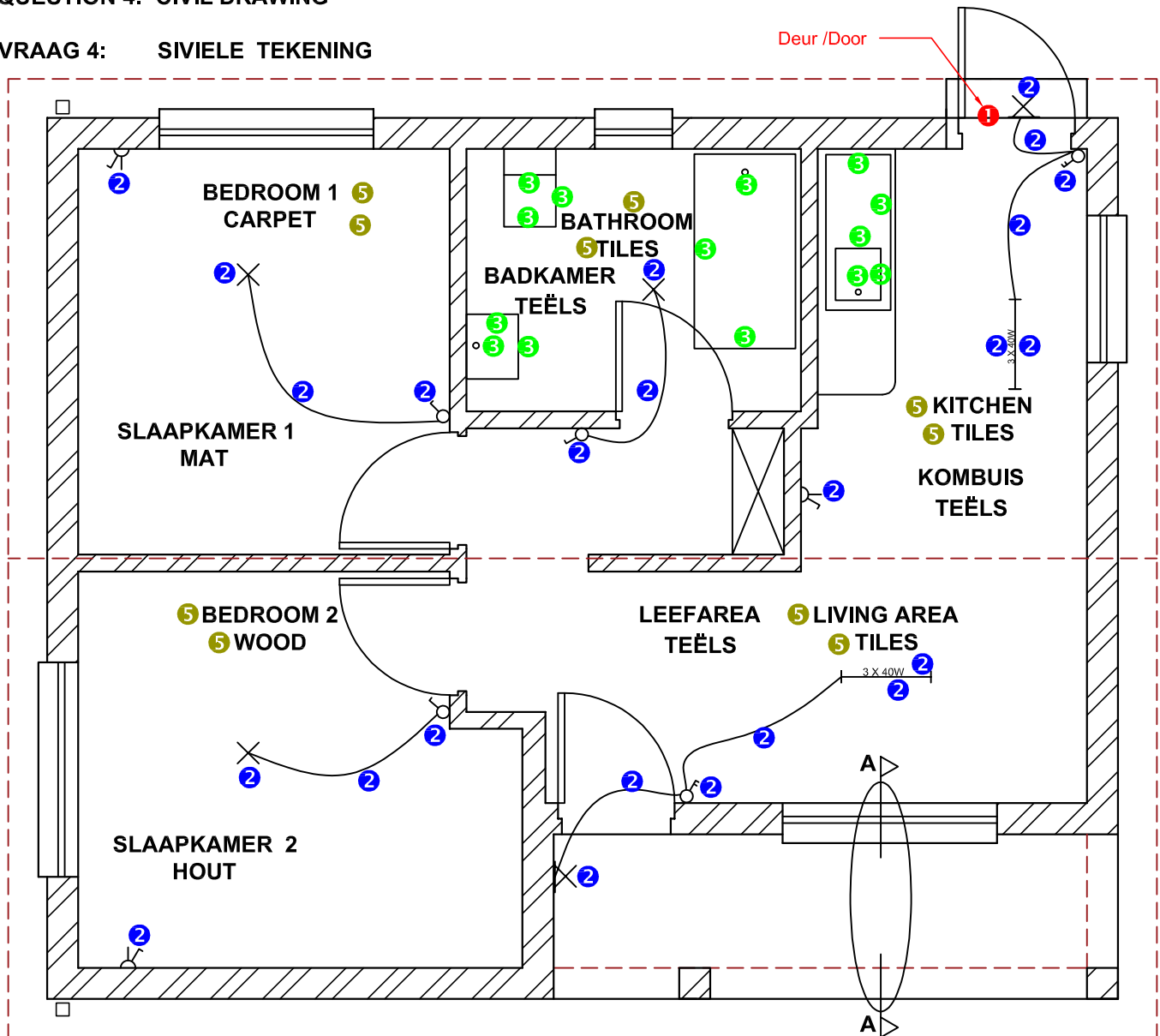
ASSESSMENT CRITERIA				
1	CONSTRUCTION AND VPs	5		
2	POOL AREA	14 $\frac{1}{2}$		
3	ROOF AREA	15		
4	ARCH AND CONSTRUCTION	6 $\frac{1}{2}$		
TOTAL		41		



PAPER 1 - QUESTION 3: PERSPECTIVE
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VRAESTEL 1 - VRAAG 3: PERSPEKTIEF
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QUESTION 4: CIVIL DRAWING**VRAAG 4: SIVIELE TEKENING**

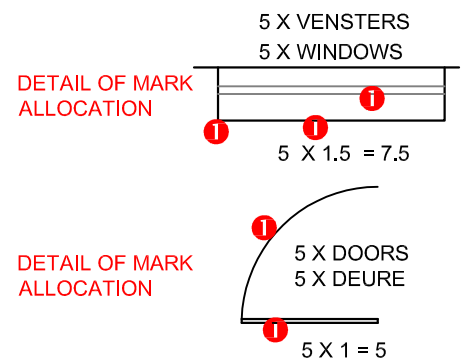
Arsering: Alles gearseer ✓4 ✓4
Volgens SANS riglyne ✓4
Moet instrumente gebruik

FLOORPLAN
SCALE 1 : 50
VLOERPLAN
SKAAL 1 : 50

Hatching: All hatched ✓4 ✓4
SANS compliant ✓4
Instruments must be used

ASSESSMENT CRITERIA		
FLOOR PLAN		
1	DOORS AND WINDOWS	13
2	ELECTRICAL	12
3	FIXTURES	7
4	HATCHING	3
5	LABELS	5
SUB TOTAL		40

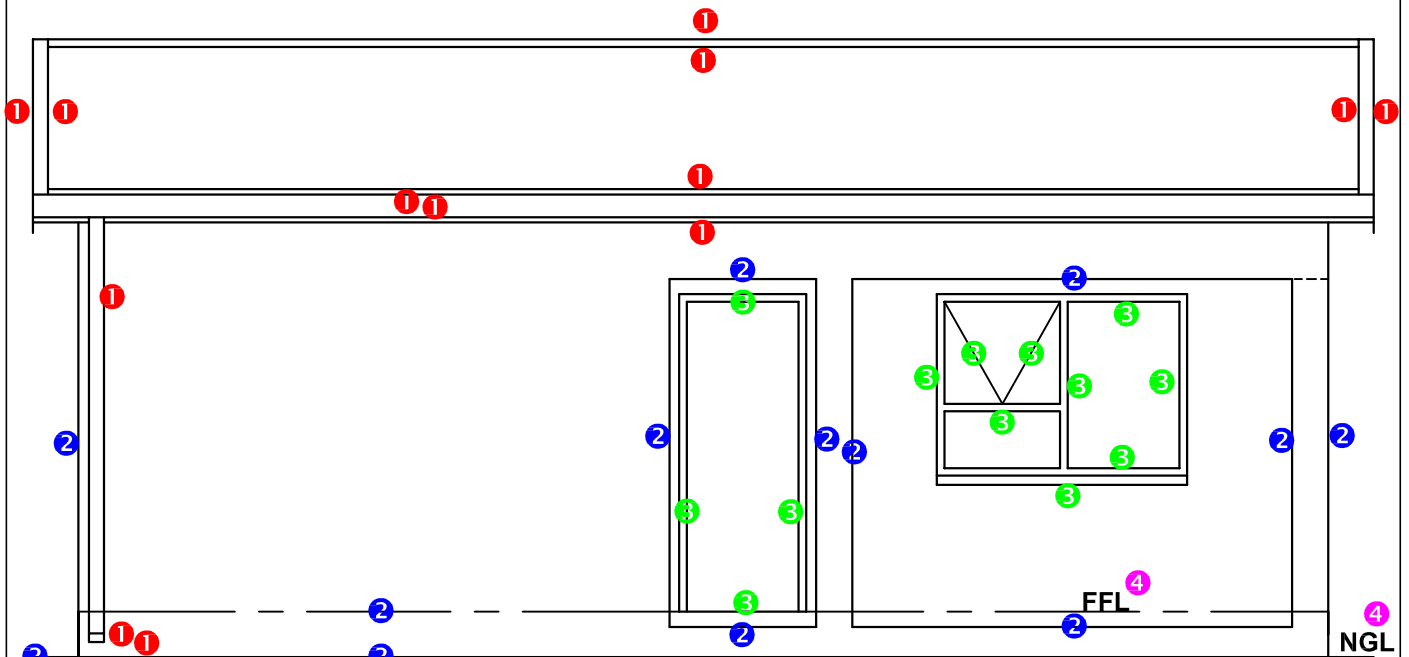
ASSESSERINGSKRITERIA		
VLOERPLAN		
1	DEURE EN VENSTERS	13
2	ELEKTRIES	12
3	TOEBEHORE	7
4	ARSERING	3
5	BYSKRIFTE	5
SUBTOTAAL		40



PAPER 1 - QUESTION 4: FLOOR PLAN
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VRAESTEL 1 - VRAAG 4: VLOERPLAN
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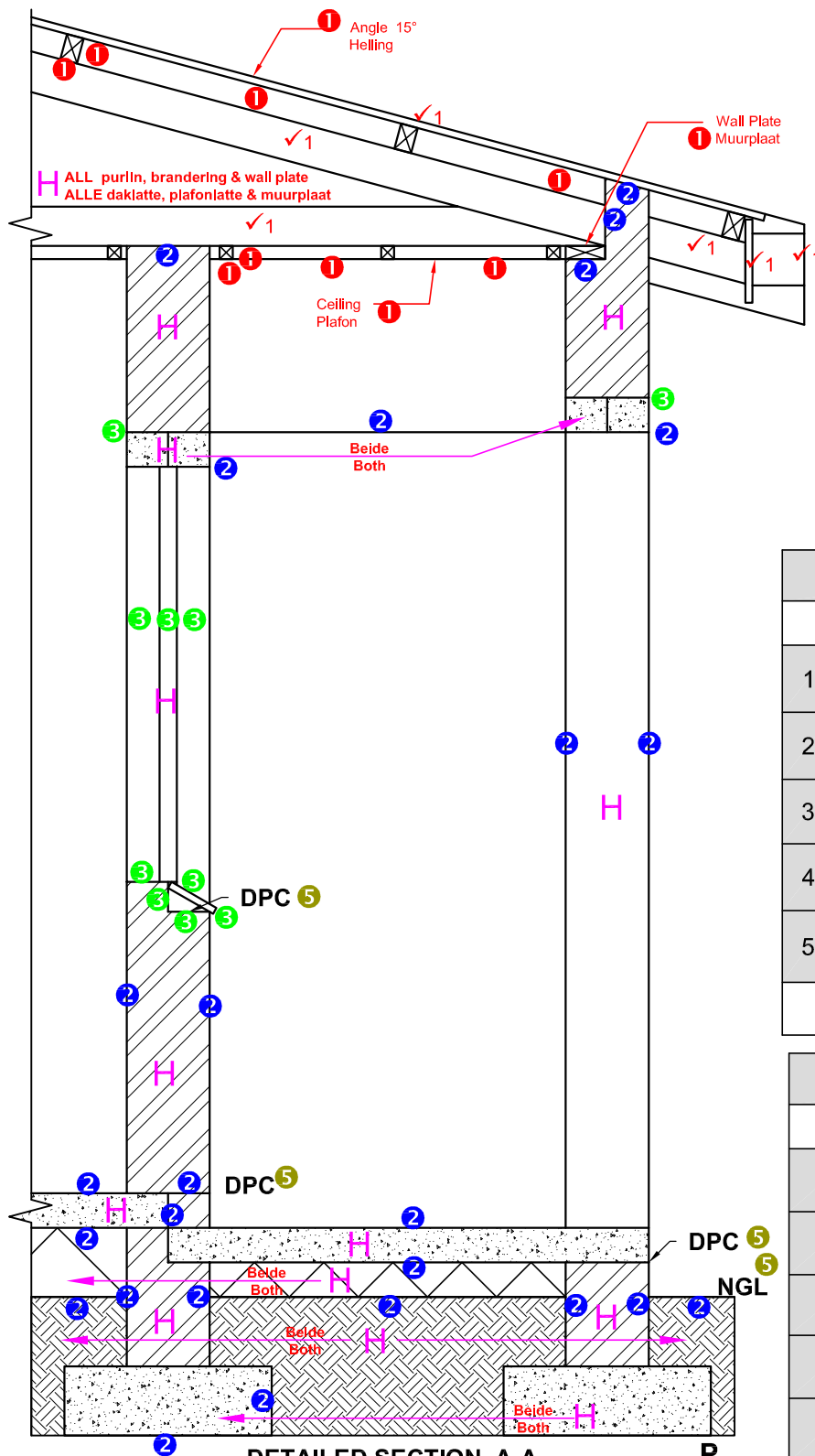
QUESTION 4: CIVIL DRAWING**VRAAG 4: SIVIELE TEKENING****SUIDAANSIG** 4**SOUTH VIEW**

ASSESSMENT CRITERIA		
SOUTH VIEW		
1	ROOF, GUTTER, RWDP, FACIA, BARGE BOARD, ROOF CAP	6 $\frac{1}{2}$
2	WALLS, PORCH, FFL	6 $\frac{1}{2}$
3	DOORS AND WINDOWS	6 $\frac{1}{2}$
4	LABELS	1 $\frac{1}{2}$
SUB TOTAL		21

ASSESSERINGSKRITERIA		
SUIDAANSIG		
1	DAK, GEUT, RWAP, FASSIE, WINDVEER, NOK	6 $\frac{1}{2}$
2	MURE, STOEP, VVV	6 $\frac{1}{2}$
3	DEURE EN VENSTERS	6 $\frac{1}{2}$
4	BYSKRIFTE	1 $\frac{1}{2}$
SUBTOTAAL		21

PAPER 1 - QUESTION 4: ELEVATION
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VRAESTEL 1 - VRAAG 4: ELEVASIE
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QUESTION 4: CIVIL DRAWING**VRAAG 4: SIVIELE TEKENING**

ROOF DETAIL: MARK ALLOCATION DAKBESONDERHEDE: PUNTETOEKENNING		
1	ROOF ANGLE DAKHELLING	1/2
2	ROOF SHEET DAKPLAAT	1
3	ROOF TRUSS DAKKAP	3
4	PURLIN + SPACING PLAFONLAT + SPASIE	2
5	BARGE BOARD WINDVEER	1
6	BRANDERNG + SPACING PLAFONLAT EN SPASIE	2
7	CEILING BOARD PLAFON	1/2
8	WALL PLATE MUURPLAAT	1/2
9	FACIA BOARD FASSIEBORD	1/2
10	GUTTER GEUT	1
TOTAL / TOTAAL		12

ASSESSERINGSKRITERIA**DEURSNEE-AANSIG**

1	DAKBESONDERHEDE	12
2	FONDASIES, MURE, VLOER	13
3	VENSTER, STOEPOOPENING, LATEIE	5
4	ARSERING	7
5	BYSKRIFTE	2
SUBTOTAAL		39

ASSESSMENT CRITERIA**DETAILED SECTION**

1	ROOF DETAIL	12
2	FOUNDATIONS, WALLS, FLOOR	13
3	WINDOW, PORCH OPENING, LINTELS	5
4	HATCHING	7
5	LABELS	2
SUB TOTAL		39

PAPER 1 - QUESTION 4: SECTION
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VRAESTEL 1 - VRAAG 4: DEURSNEE
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