

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

**NATIONALSENIOR CERTIFICATE  
NASIONALE SENIOR SERTIFIKAAT**

**GRADE 11  
GRAAD 11**

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

**NOVEMBER 2017  
MEMORANDUM**

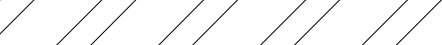







**MARKS / PUNTE: 200**

**TIME / TYD: 3 hours / uur**

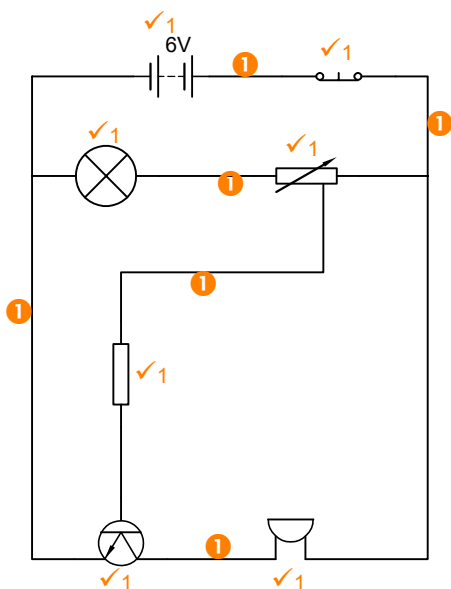
**This memorandum consists of 9 pages.  
Hierdie memorandum bestaan uit 9 bladsye.**

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QUESTION / VRAAG 1A:  
ANALYTICAL (CIVIL) / ANALITIES (SIVIEL)

ANSWERS			ANTWOORDE		
1	FY11-2017	1	1	FY11-2017	1
2	DLABA	1	2	DLABA	1
3	1 : 300	1	3	1 : 300	1
4	4	1	4	4	1
5	TILE	1	5	TEËL	1
6	SLOPE 1:10	1	6	SKUINSTE 1:10	1
7	WC	1	7	TOILET	1
8	BATH	1	8	BAD	1
9	BIC	1	9	IGK	1
10	TWO WAY SWITCH	1	10	TWEE RIGTING SKAKELAAR	1
11	FLUORECENT LIGHT FIXTURE 2 X 40 W	1	11	FLUORESERENDE LIG 2 X 40 W	1
12	SOUTH ELEVATION	1	12	SUID-AANSIG	1
13	FLOOR PLAN	1	13	VLOERPLAN	1
14		1	14		1
15		3	15		3
16		4	16		4
17		6	17		6
<b>TOTAL</b>		<b>27</b>	<b>TOTAAL</b>		<b>27</b>

VRAAG / QUESTION 1B:  
ELEKTRONIKA / ELECTRONICS



ANSWER /  
ANTWOORD 15

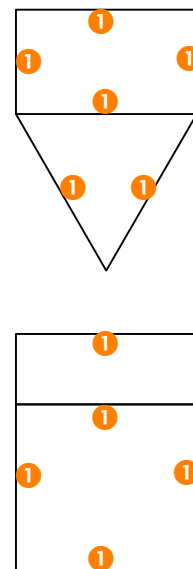
PERIMETER / OMTREK =  $2L+2B$  ✓1  
 =  $16,4 + 4,8 + 6,2 +$   
 $4,1 + 7,3 + 3,7$  ✓1  
 $+ 1,31 + 4,21 +$   
 $1,7 + 3,5$   
 =  $53,22 \text{ m}$  ✓1

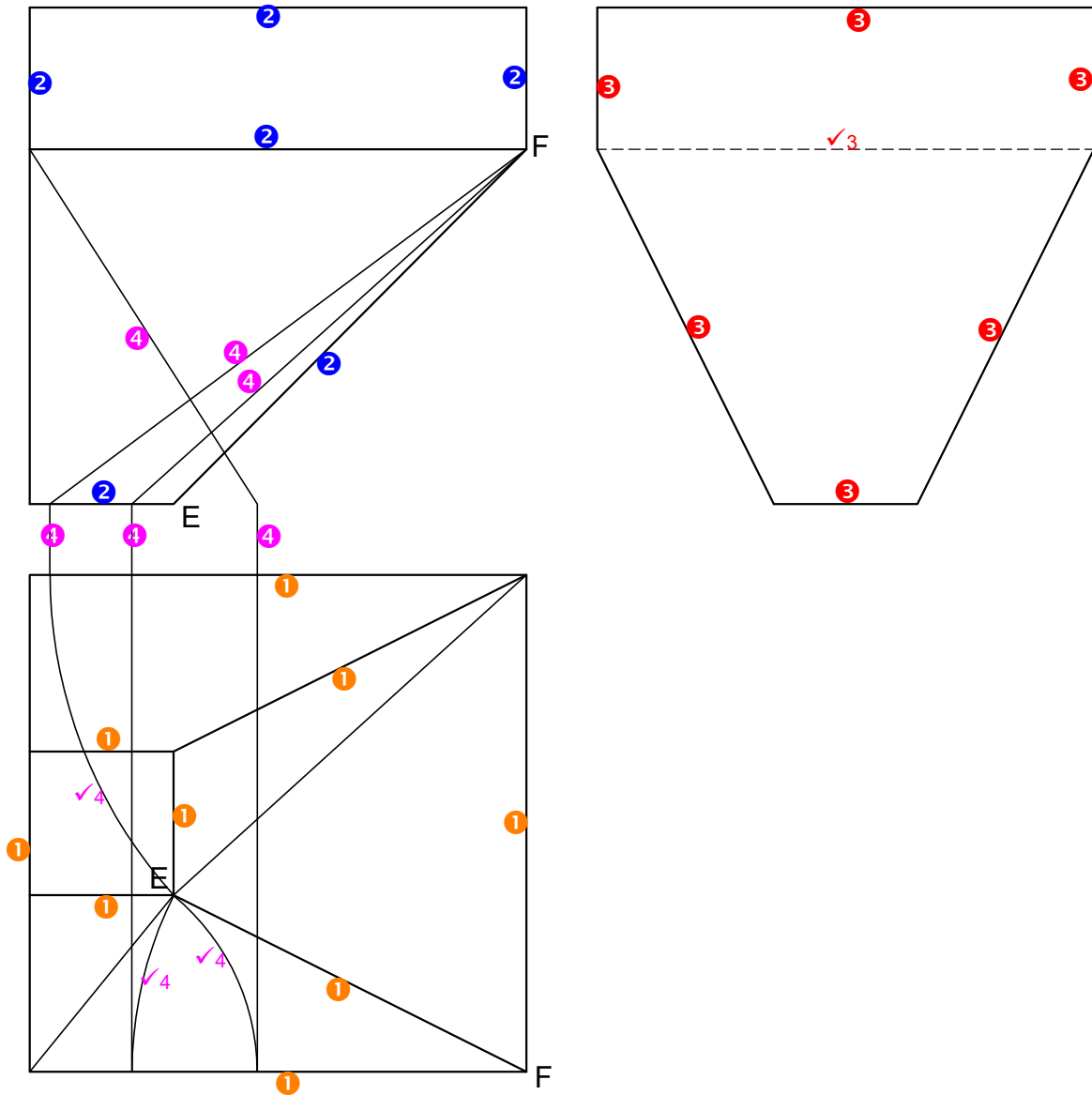
ANSWER /  
ANTWOORD 16

AREA / OPPERVLAK =  $L \times B$  ✓1  
 =  $(7,3 \times 2,7) - 2(1,1 \times 1,5)$  ✓1  
 =  $16,41 \text{ m}^2$  ✓1 ✓1

ANSWER / ANTWOORD 17

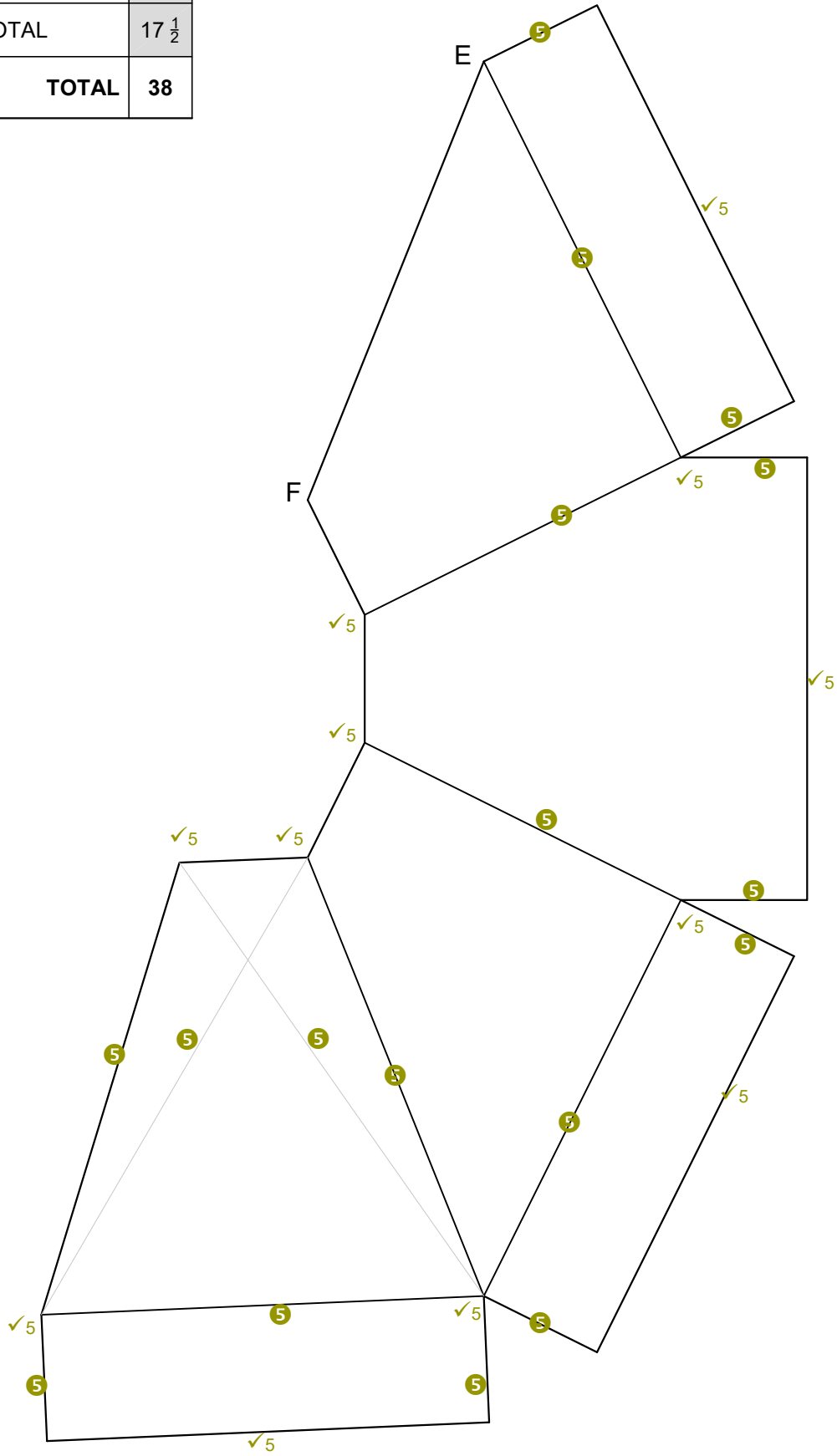
FREEHAND / VRYHAND 1

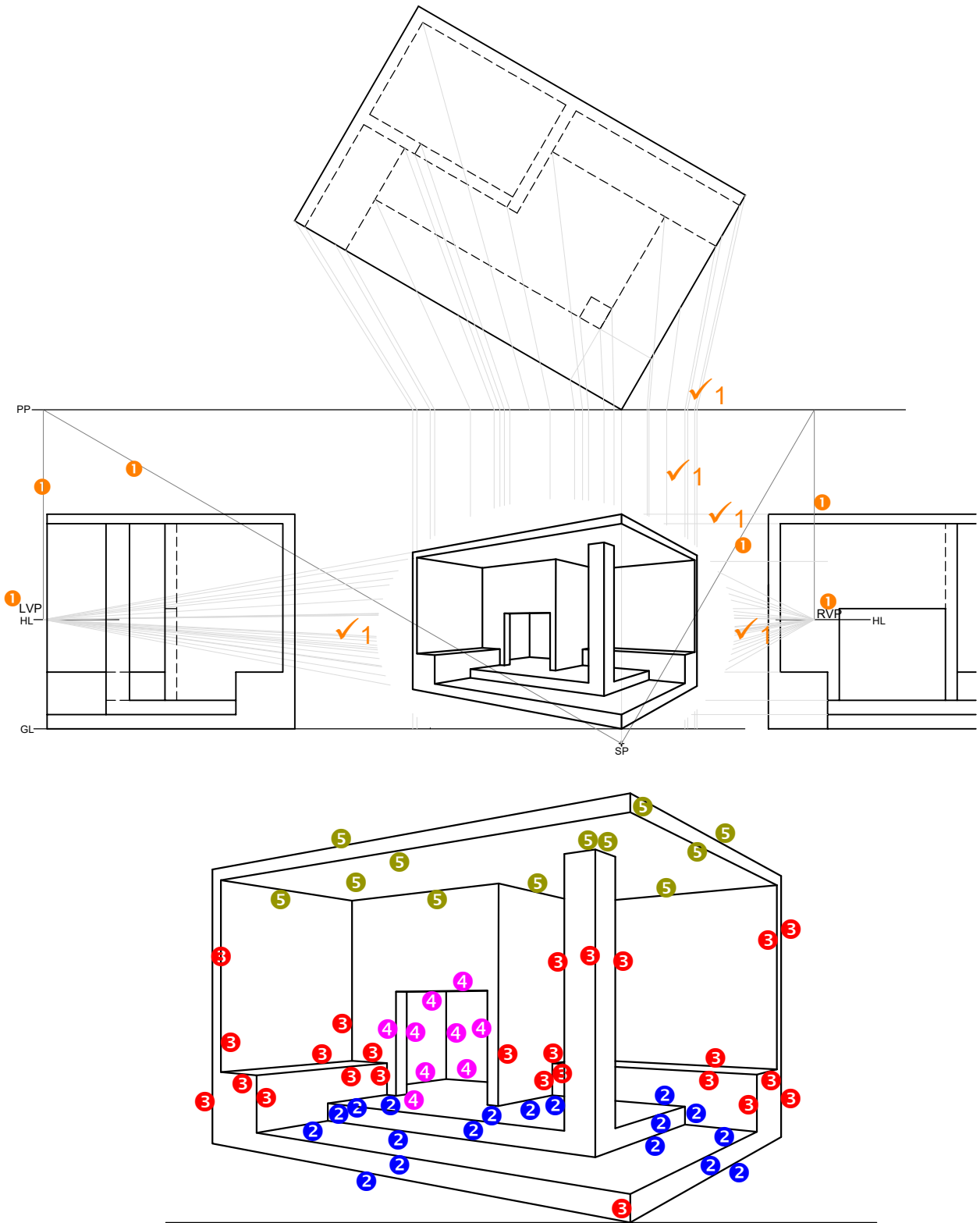




ASSESSMENT CRITERIA			ASSESERINGSKRITERIA		
1	FRONT VIEW	3	1	VOORAANSIG	3
2	LEFT VIEW	4	2	LINKERAANSIG	4
3	TOP VIEW	4 1/2	3	BOAANSIG	4 1/2
4	TRUE LENGHTS	6	4	WARE LENGTES	6
<b>SUBTOTAL</b>		17 1/2	<b>SUBTOTAAL</b>		17 1/2

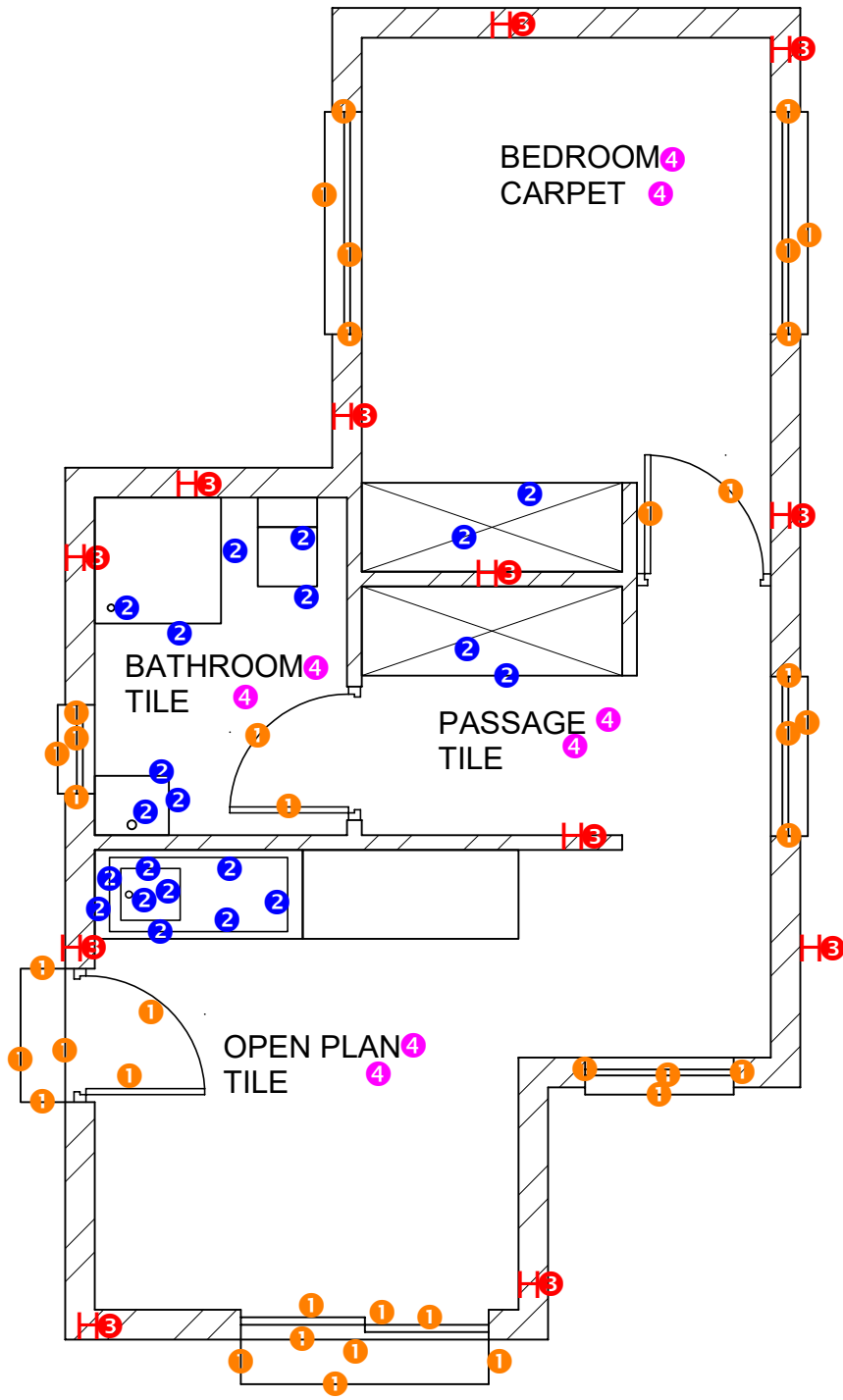
ASSESSMENT CRITERIA		
5	DEVELOPMENT	20 $\frac{1}{2}$
SUBTOTAL		17 $\frac{1}{2}$
TOTAL		38



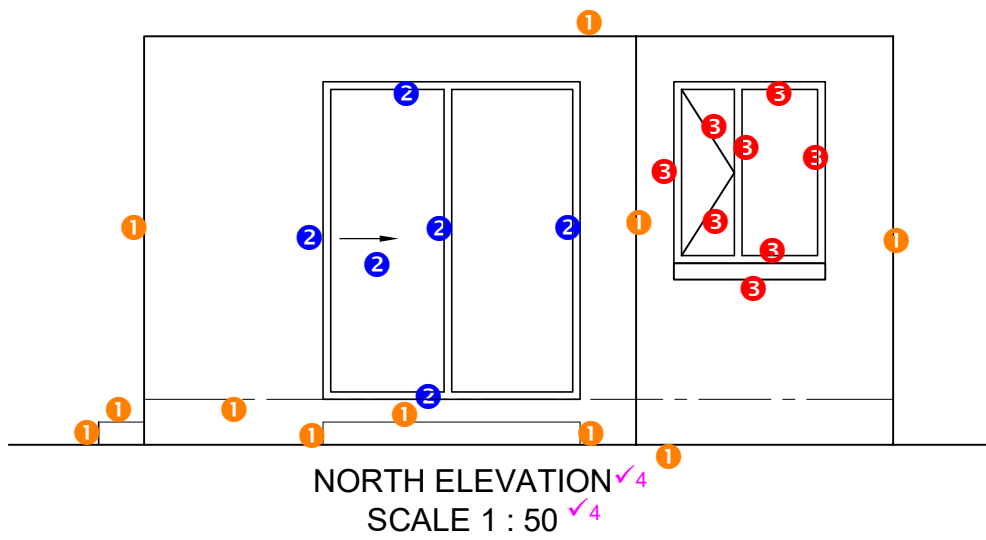


ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
1	CONSTRUCTION + VPs	8	1	KONSTRUKSIE + VPs	8
2	STEPS	9	2	TRAPPE	9
3	WALLS	13	3	MURE	13
4	OPENINGS	4	4	OPENINGE	4
5	ROOF	6	5	DAK	6
<b>TOTAL</b>		<b>40</b>	<b>TOTAAL</b>		<b>40</b>

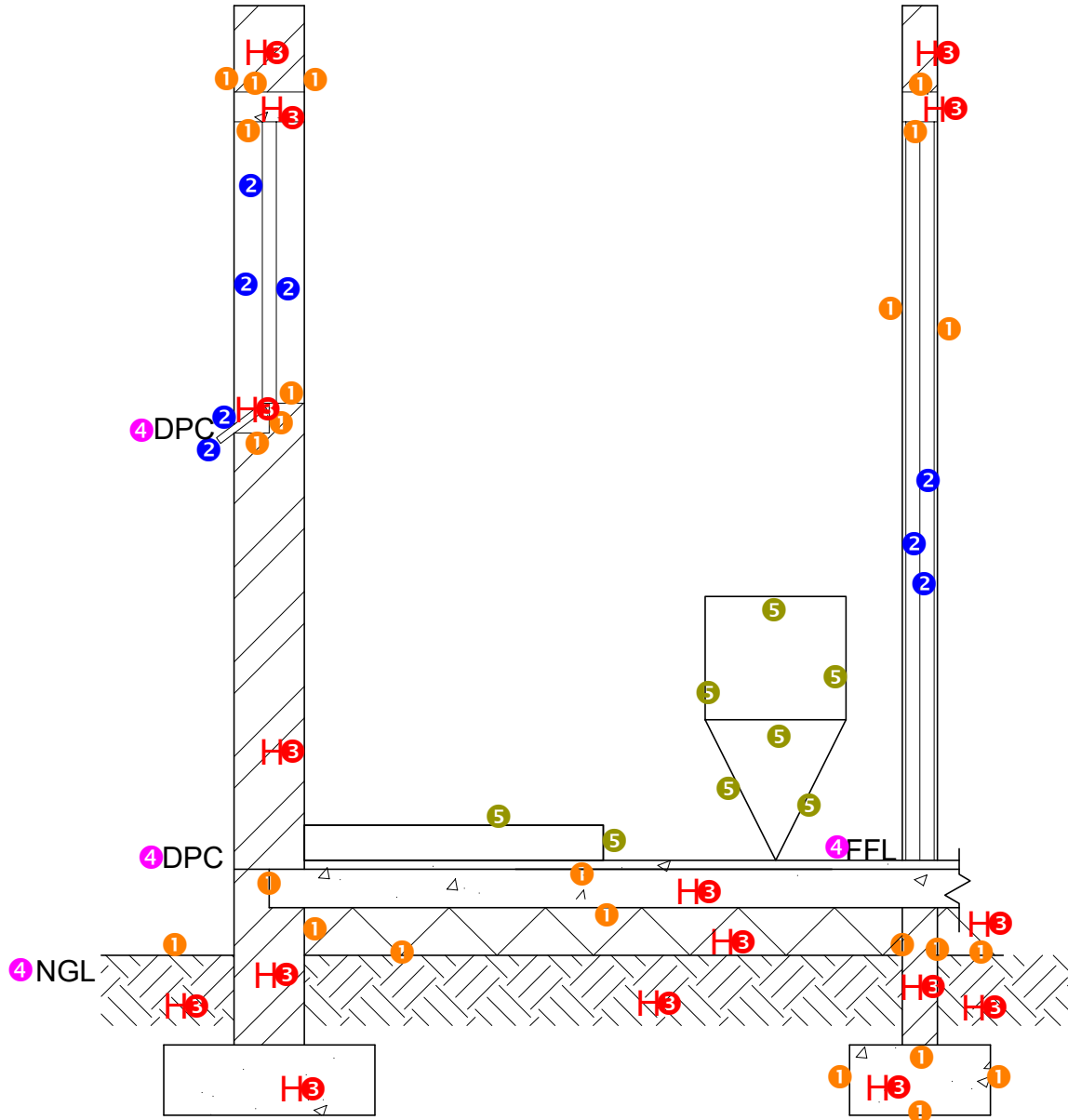
+ SP



ASSESSMENT CRITERIA		ASSESSERINGSKRITERIA	
FLOORPLAN		VLOERPLAN	
1	DOORS + WINDOWS + STEPS	19	1 DEURE + VENSTERS + TRAPPE
2	FIXTURES	11 ½	2 TOEBEHORE
3	HATCHING	6	3 ARSERING
4	LABELS	4	4 BYSKRIFTE
<b>SUBTOTAL</b>		40 ½	<b>SUBTOTAAL</b>

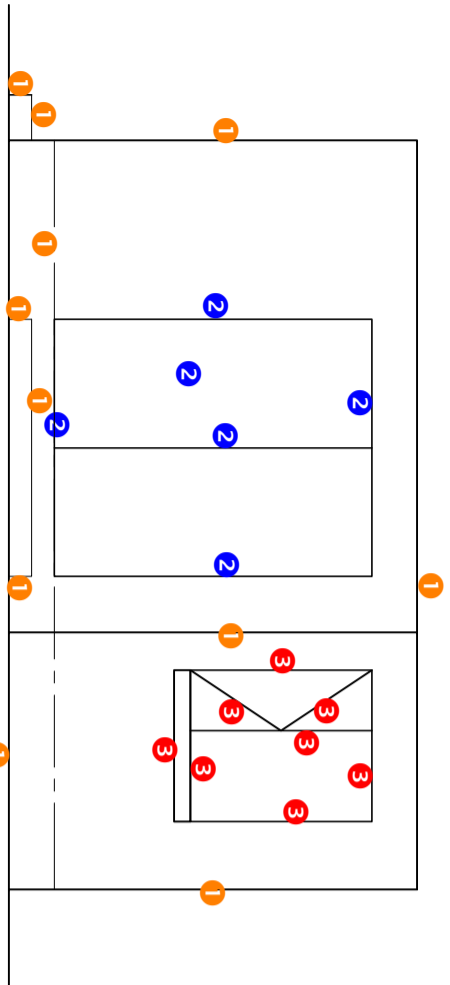


ASSESSMENT CRITERIA			ASSESSERINGSKRITERIA		
NORTH ELEVATION			NOORDAANSIG		
1	WALLS + STEPS + FFL	5 ½	1	MURE + TRAPPE + VVV	5 ½
2	DOOR	3	2	DEUR	3
3	WINDOW	4	3	VENSTER	4
4	LABELS	2	4	BYSKRIFTE	2
<b>SUBTOTAL</b>		<b>14 ½</b>	<b>SUBTOTAAL</b>		<b>14 ½</b>

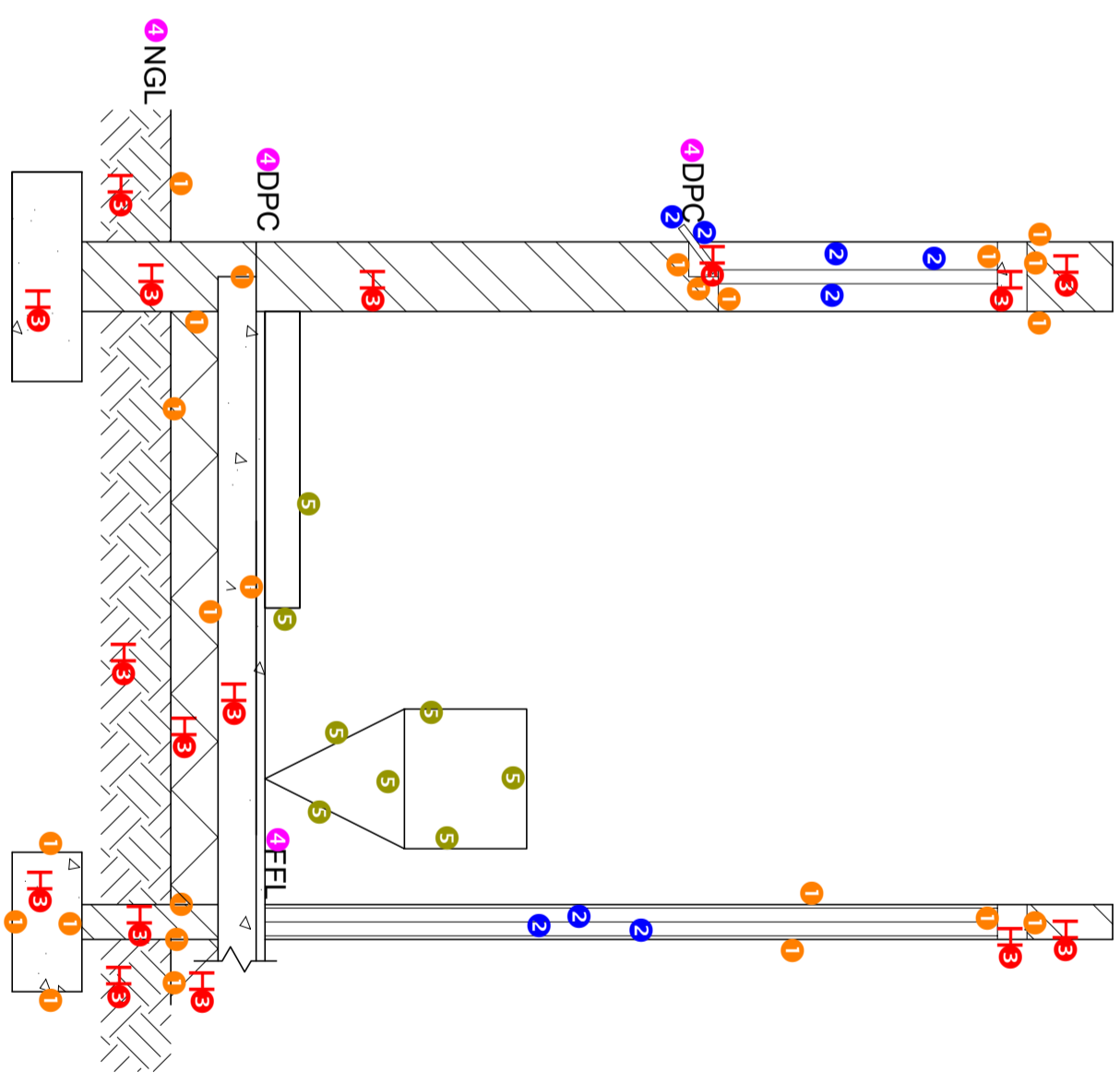
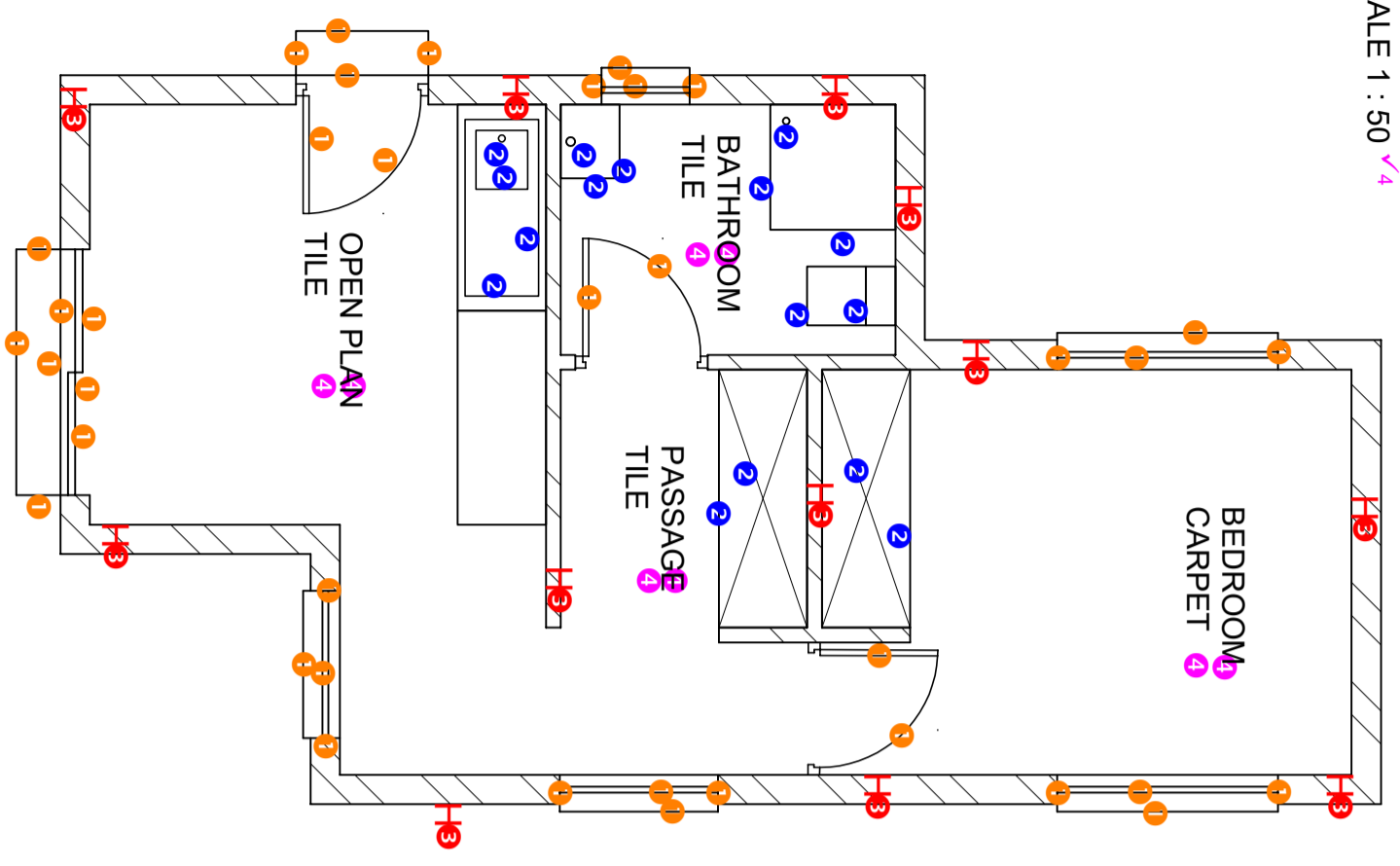


ASSESSMENT CRITERIA		ASSESSERINGSKRITERIA	
DETAILED SECTION		DEURSNEE AANSIG	
1	FOUNDATIONS + WALLS + SLAB	12	12
2	DOOR + WINDOW	4	4
3	HATCHING	8	8
4	LABELS	2	2
5	FIXTURES	4	4
<b>SUBTOTAL</b>		<b>30</b>	<b>30</b>





SOUTH ELEVATION  
SCALE 1 : 50



OFFICIAL USE	
1	INCORRECT OVERALL SCALE
2	INCORRECT POSITIONING OF VIEWS
3	NON-ALIGNMENT OF VIEWS
<b>TOTAL PENALTIES (-)</b>	

ASSESSMENT CRITERIA		
FLOOR PLAN		
1	DOORS + WINDOWS + STEPS	19
2	FIXTURES	11 1/2
3	HATCHING	6
4	LABELS	4
<b>SUBTOTAL</b>		<b>40 1/2</b>

NORTH ELEVATION		
1	WALLS + STEPS	5 1/2
2	SLIDING DOOR	3
3	WINDOW	4
4	LABELS	2
<b>SUBTOTAL</b>		<b>14 1/2</b>

DETAILED SECTION		
1	FOUNDATIONS + WALLS + SLAB + LINTELS	12
2	DOOR + WINDOW	4
3	HATCHING	8
4	LABELS	2
5	FIXTURES	4
<b>SUBTOTAL</b>		<b>30</b>
<b>TOTAL</b>		<b>85</b>
PENALTIES (-)		
<b>FINAL TOTAL</b>		