



# basic education

---

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**ENGINEERING GRAPHICS AND DESIGN P1**

**NOVEMBER 2012**

**MEMORANDUM**

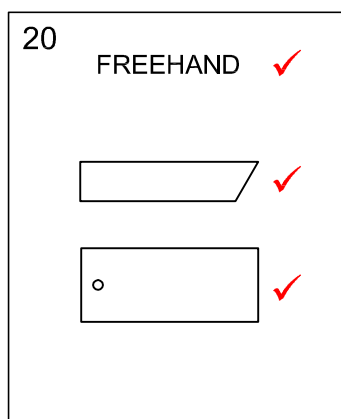
**MARKS: 100**

**This memorandum consists of 7 pages.**

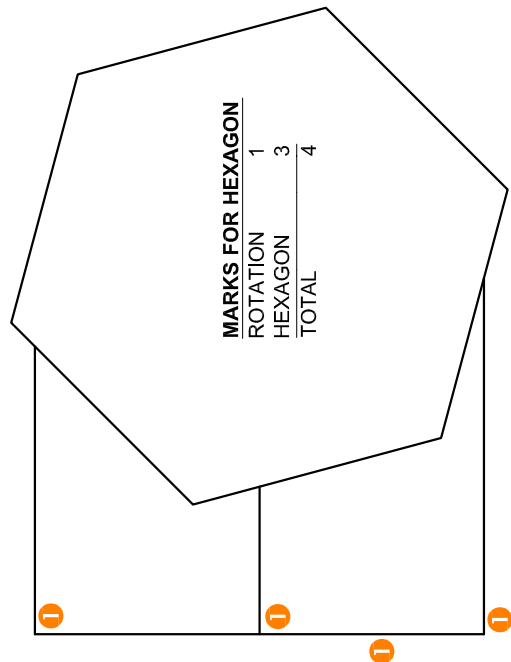
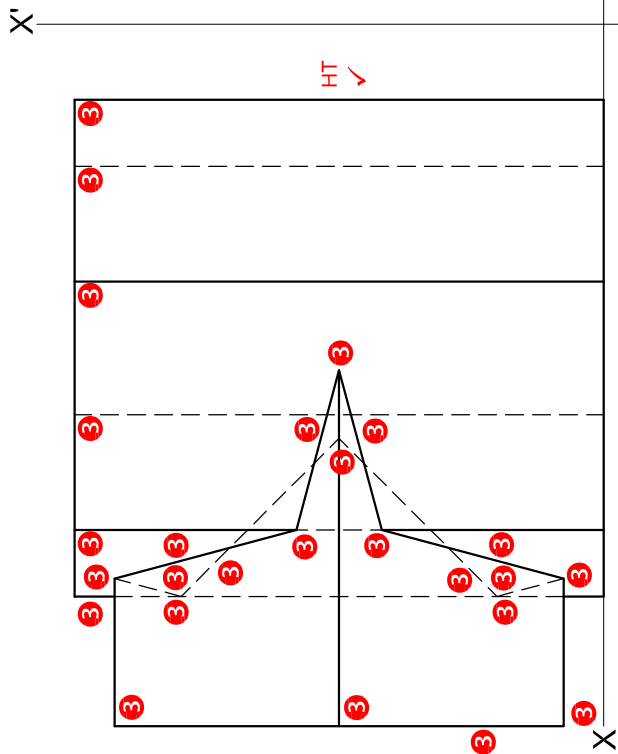
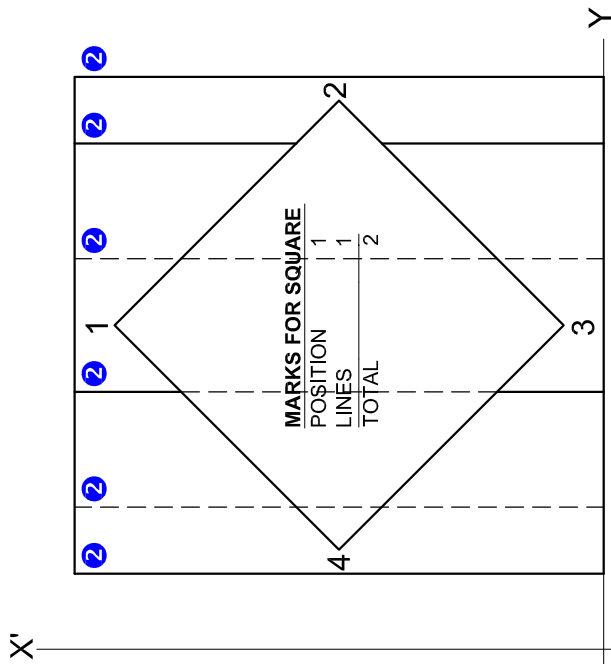
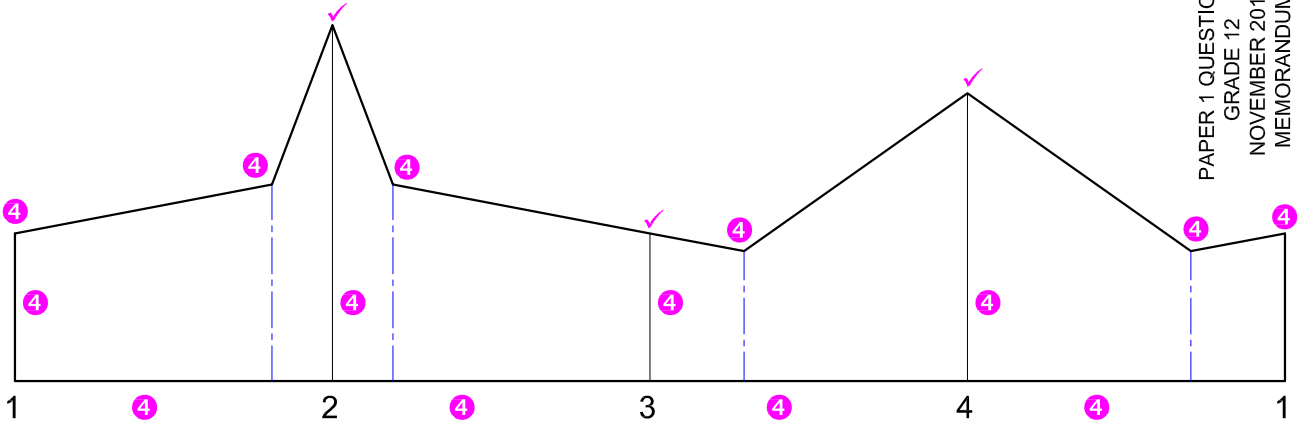
## ANSWERS

1	DESIGN FOR LIVING ARCHITECTS	1
2	LEBO	1
3	18/10/2012	1
4	DBE-2012-01	1
5	VERIFY DIMENSIONS AND CHECK LEVELS	1
6	1,8 m or 1 800 mm	1
7	1	1
8	16	1
9	UP (STEP)	1
10	SEPTIC TANK	1
11	SEWERAGE PIPE/LINE	1
12	ASPHALT	1
13	GATE OPENING DIRECTION	2
14	(FUTURE) RECREATIONAL DEVELOPMENT	2
15	128,55 m	2
16	INSPECTION EYE	1
17	21 880 mm	2
18	437,853 m [calculation 1, answer 1, metre 1]	3
19	1 214 m <sup>2</sup> [calculation 1, answer 1, metre <sup>2</sup> 1]	3
20		3

TOTAL: 30

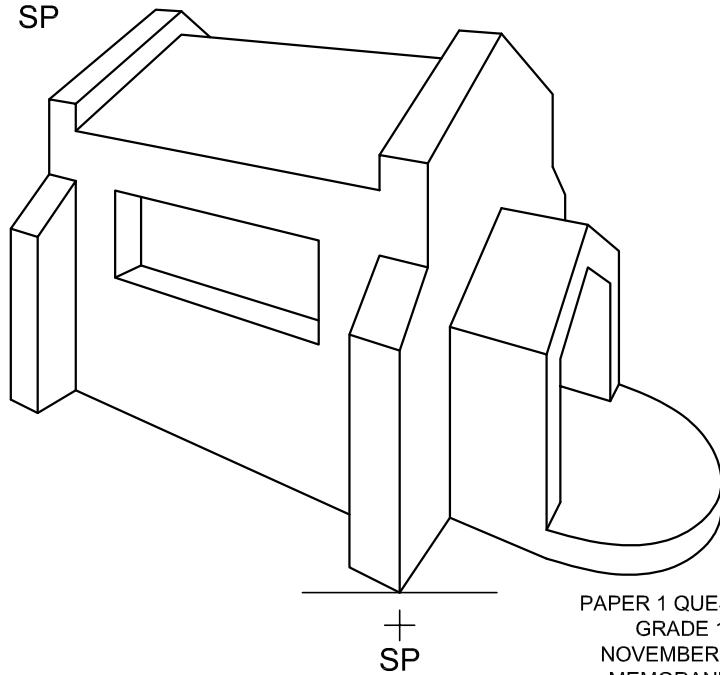
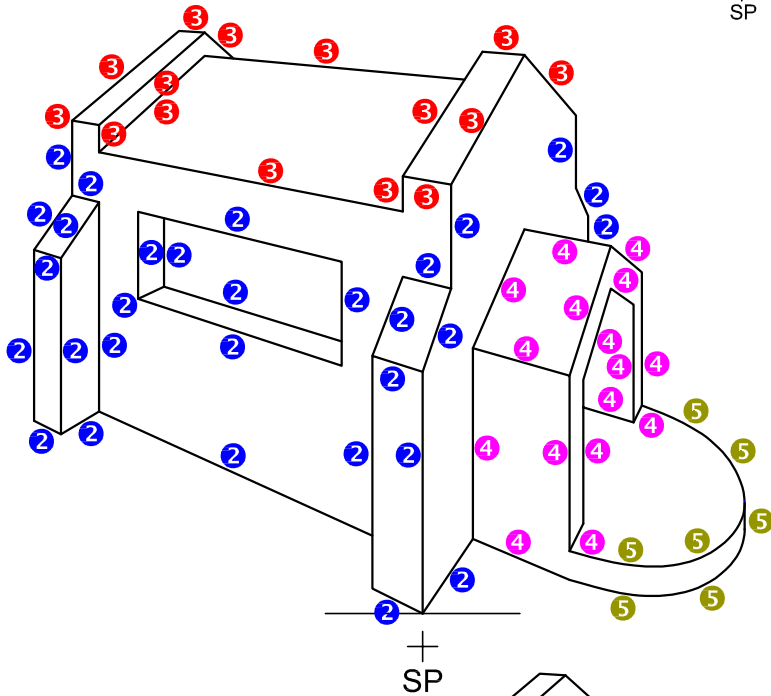
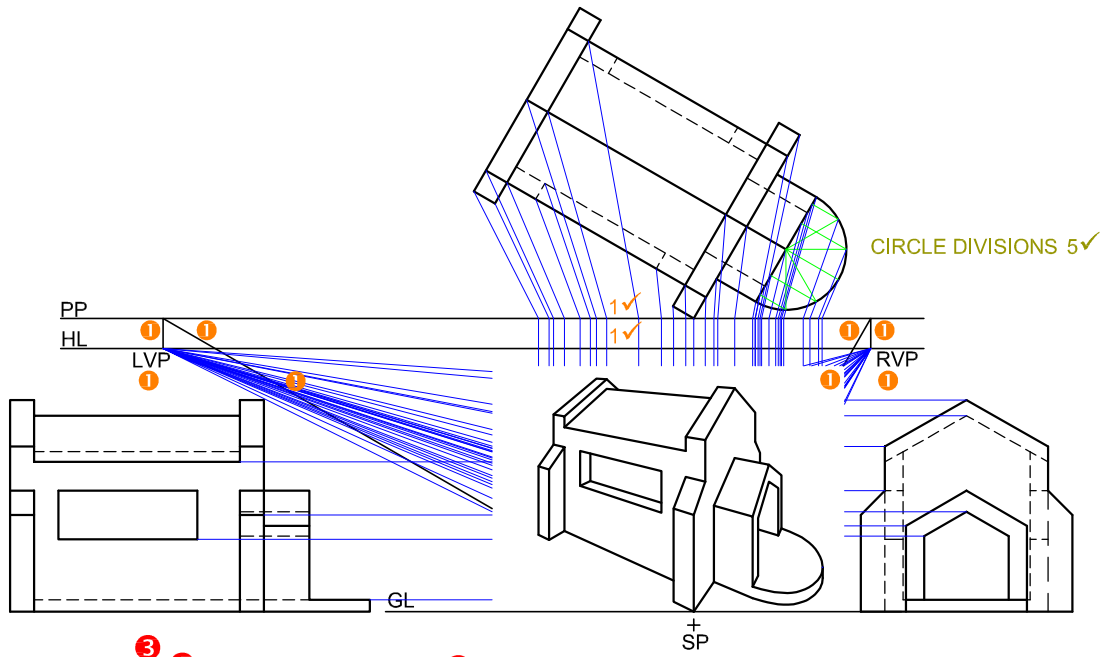


PAPER 1 QUESTION 2  
GRADE 12  
NOVEMBER 2012  
MEMORANDUM



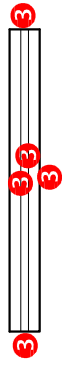
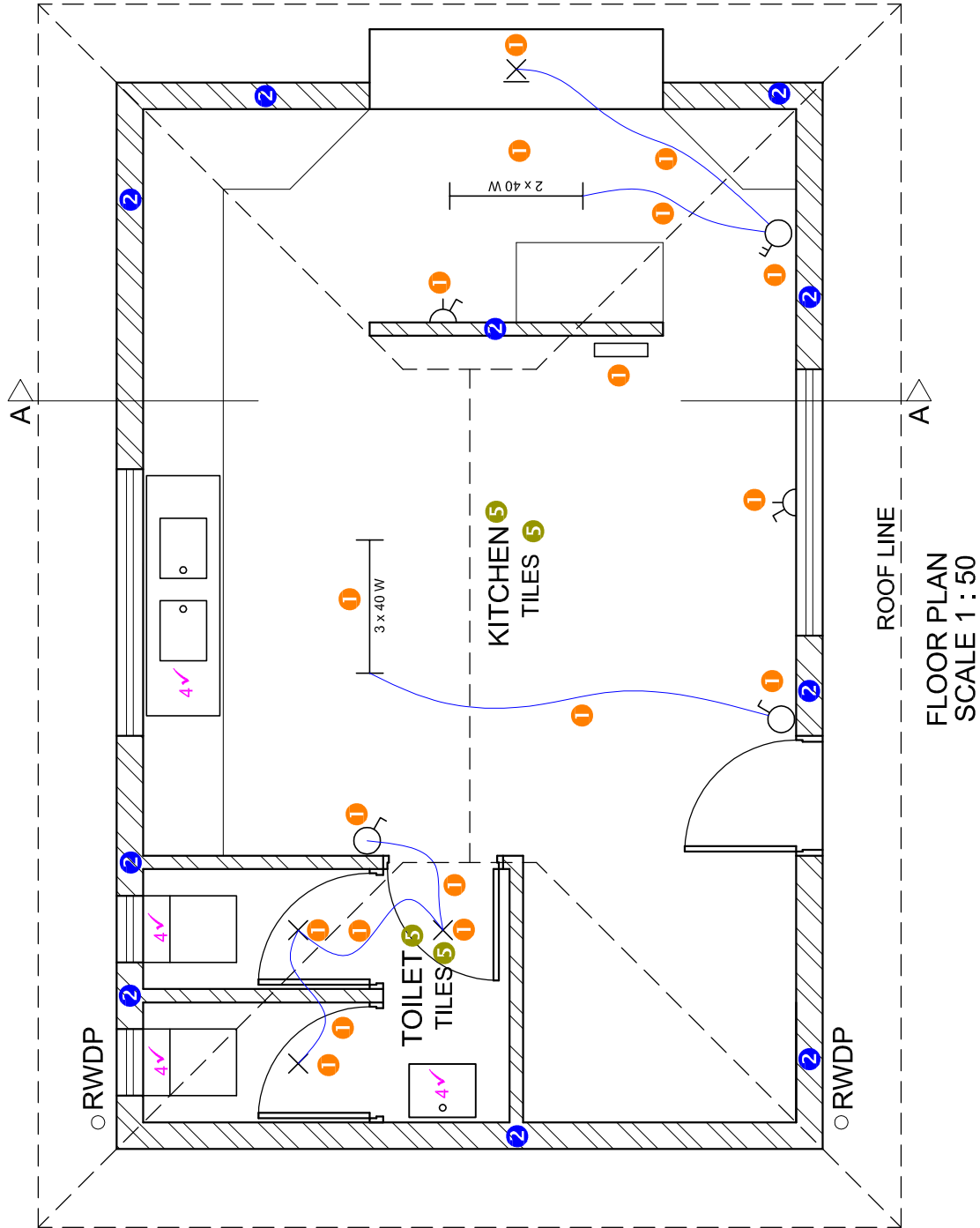
ASSESSMENT CRITERIA	
1	TOP VIEW
2	LEFT VIEW
3	FRONT VIEW
4	DEVELOPMENT
<b>TOTAL</b>	

6
5
14
10
<b>35</b>

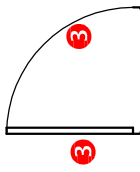


ASSESSMENT CRITERIA		
1	CONSTRUCTION + VPs	6
2	BUILDING + WINDOW	15
3	ROOF	7½
4	ENTRANCE	8
5	SEMICIRCLE	4½
<b>TOTAL</b>		<b>41</b>

PAPER 1 QUESTION 3  
 GRADE 12  
 NOVEMBER 2012  
 MEMORANDUM



DETAIL OF MARK ALLOCATION FOR A WINDOW ( $2\frac{1}{2} \times 4$  windows = 10)

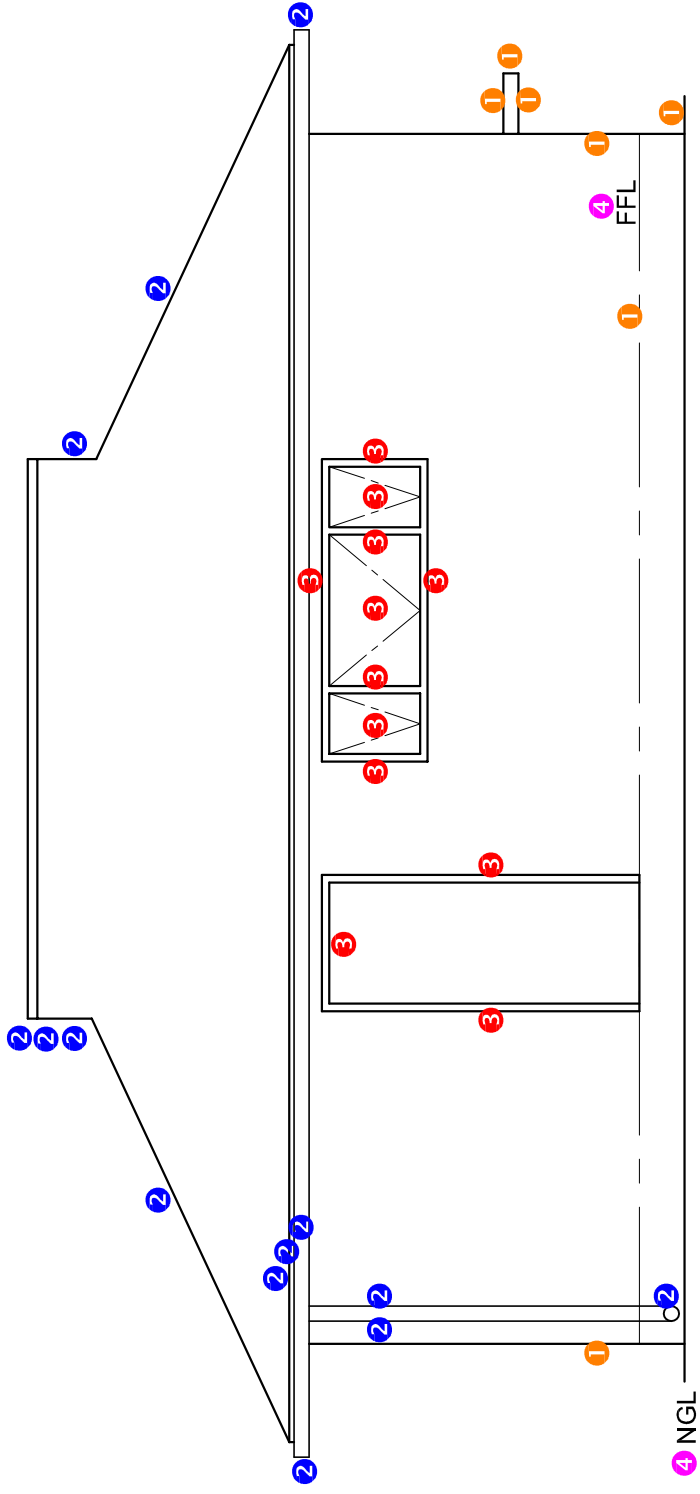


DETAIL OF MARK ALLOCATION FOR A DOOR ( $1 \times 4$  doors = 4)

FLOOR PLAN	
1	ELECTRICAL 9
2	HATCHING 5
3	DOORS + WINDOWS 14
4	FIXTURES 4
5	LABELS 2
<b>SUBTOTAL 34</b>	

ROOF LINE  
FLOOR PLAN  
SCALE 1 : 50

PAPER 1 QUESTION 4  
GRADE 12  
NOVEMBER 2012  
MEMORANDUM

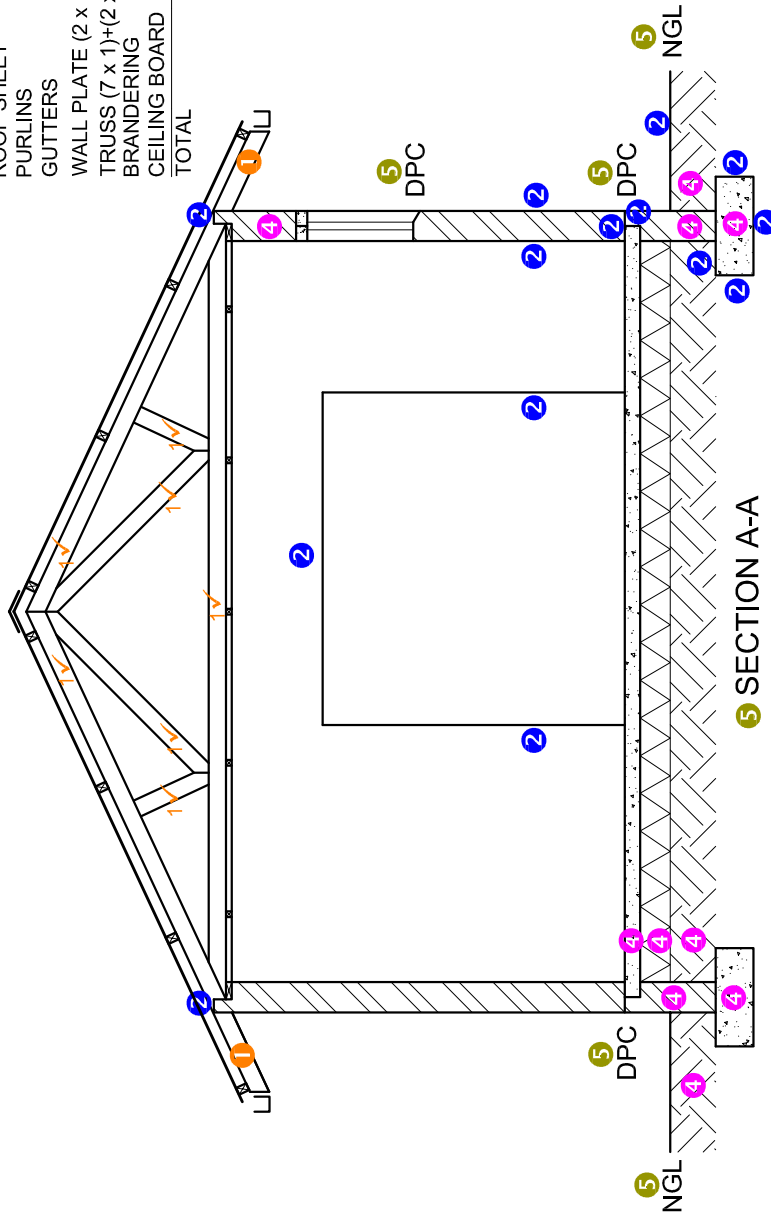


4 WEST ELEVATION

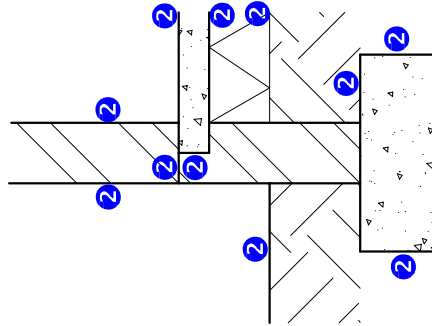
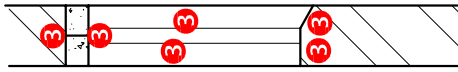
WEST ELEVATION	
1	WALLS + FFL + SERV' HATCH 3½
2	ROOF + GUTTER + RWDP 7
3	DOOR + WINDOW 6
4	LABELS 1½
<b>SUBTOTAL 18</b>	

**MARK ALLOCATION**

ROOF CAP	1
ROOF SHEET	2
PURLINS	2
GUTTERS	2
WALL PLATE (2 x 1/2)	1
TRUSS (7 x 1)+(2 x 1/2)	8
BRANDING	1
CEILING BOARD	1
<b>TOTAL</b>	<b>18</b>



DETAIL OF MARK ALLOCATION FOR A WINDOW



DETAIL OF MARK ALLOCATION FOR A LOAD-BEARING WALL

SECTIONAL ELEVATION	
1	ROOF + CEILING 18
2	WALLS + FLOOR + FOUNDATION 13
3	WINDOW 3
4	HATCHING 5
5	LABELS 3
<b>SUBTOTAL 42</b>	