



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P1

NOVEMBER 2013

MEMORANDUM

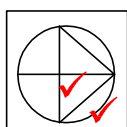
MARKS: 100

This memorandum consists of 7 pages.

| ANSWERS | | |
|---------|--|---|
| 1 | 2 | 1 |
| 2 | 2 | 1 |
| 3 | 114 | 1 |
| 4 | 3,5 m | 1 |
| 5 | MANHOLE | 1 |
| 6 | 2,4 m | 1 |
| 7 | ADJACENT BUILDING/STRUCTURE | 1 |
| 8 | OUTBUILDING TO BE DEMOLISHED | 1 |
| 9 | DRIVEWAY | 1 |
| 10 | BOUNDARY LINE LENGTH | 1 |
| 11 | BUILDING LINE | 1 |
| 12 | 7521 | 1 |
| 13 | ES7245 | 1 |
| 14 | AVOCADO | 1 |
| 15 | MILLIMETRES or mm | 1 |
| 16 | HIGHER | 2 |
| 17 | 3,5 m | 2 |
| 18 | (See below.) | 4 |
| 19 | (See below.) | 4 |
| 20 | 52 m [calculation 1, answer 1, metres 1] | 3 |

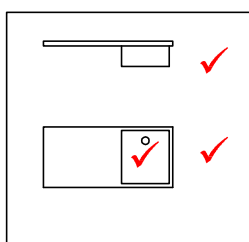
TOTAL: 30

18

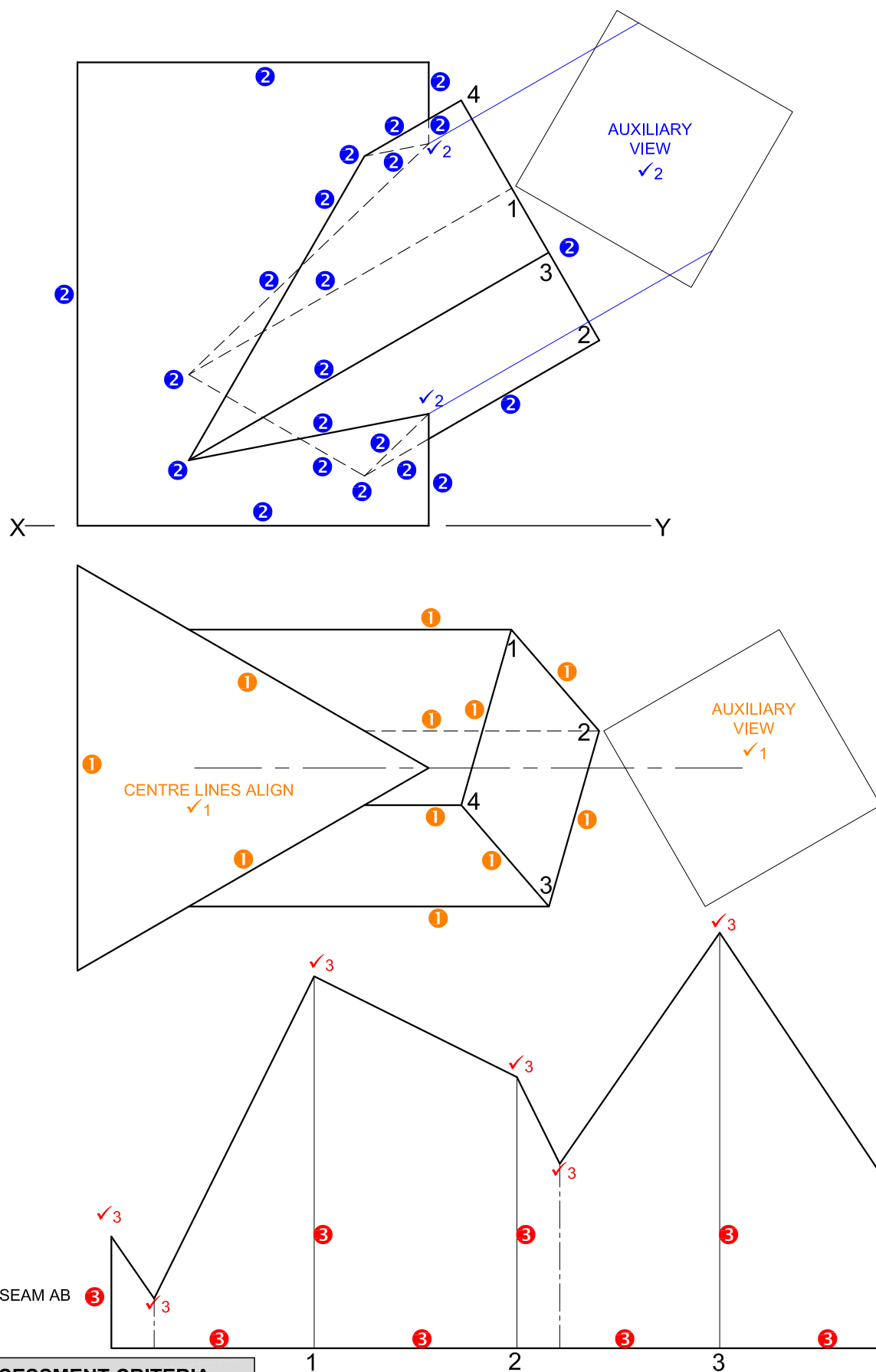
DIRECTION
FREEHAND

19

FREEHAND

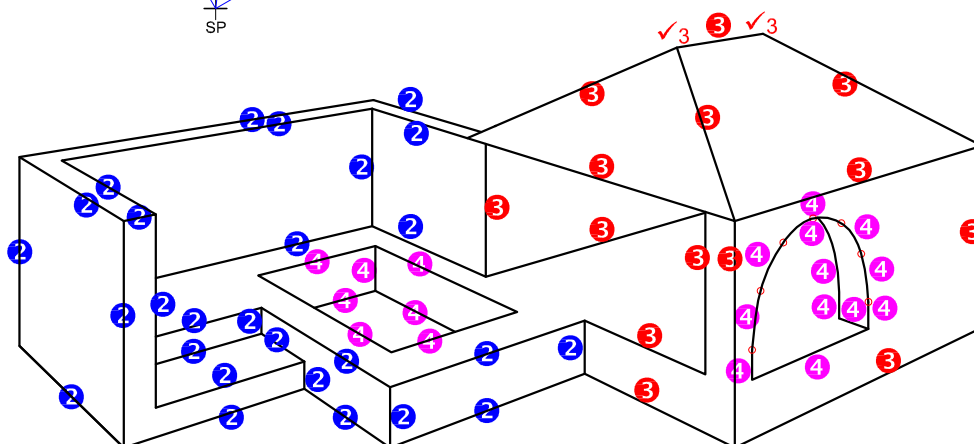
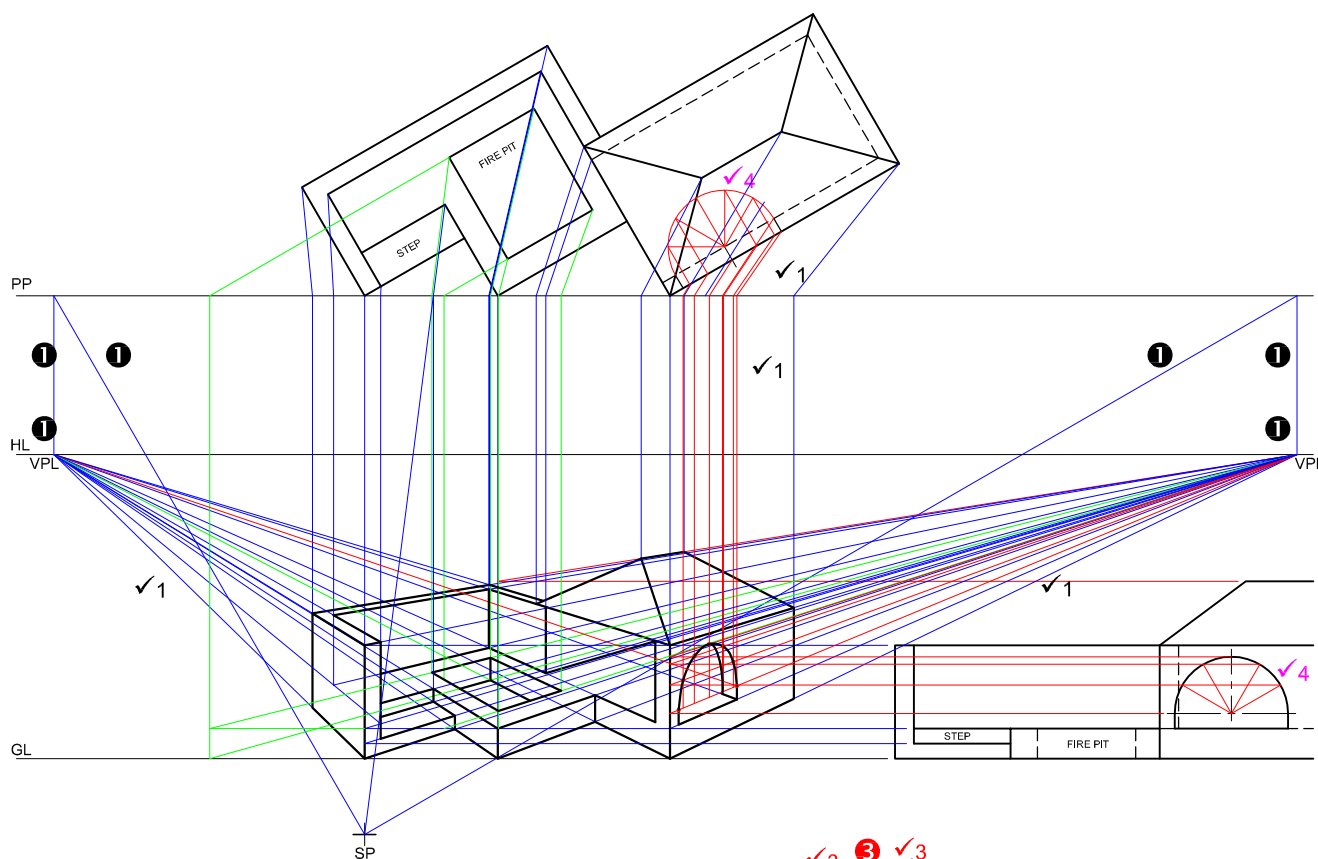


PAPER 1 QUESTION 1
GRADE 12
November 2013
MEMORANDUM

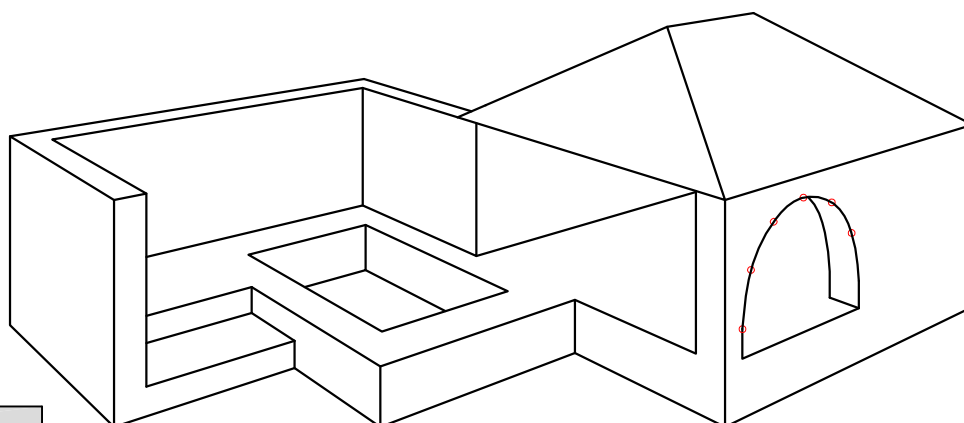


| ASSESSMENT CRITERIA | | |
|---------------------|-------------|-----|
| 1 | TOP VIEW | 7½ |
| 2 | FRONT VIEW | 14 |
| 3 | DEVELOPMENT | 11½ |
| TOTAL | | 33 |

PAPER 1 QUESTION 2
GRADE 12
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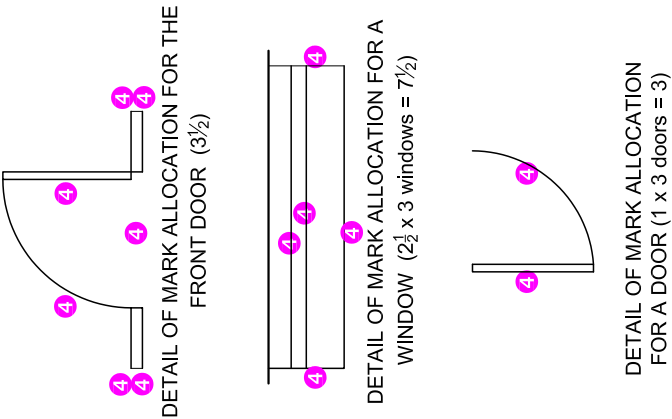
SP



SP

| ASSESSMENT CRITERIA | | |
|---------------------|----------------------|-----------|
| 1 | CONSTRUCTION + VPs | 7 |
| 2 | WALLS | 13½ |
| 3 | BUILDING + ROOF | 9 |
| 4 | ARCH + CONSTR' + PIT | 11½ |
| TOTAL | | 41 |

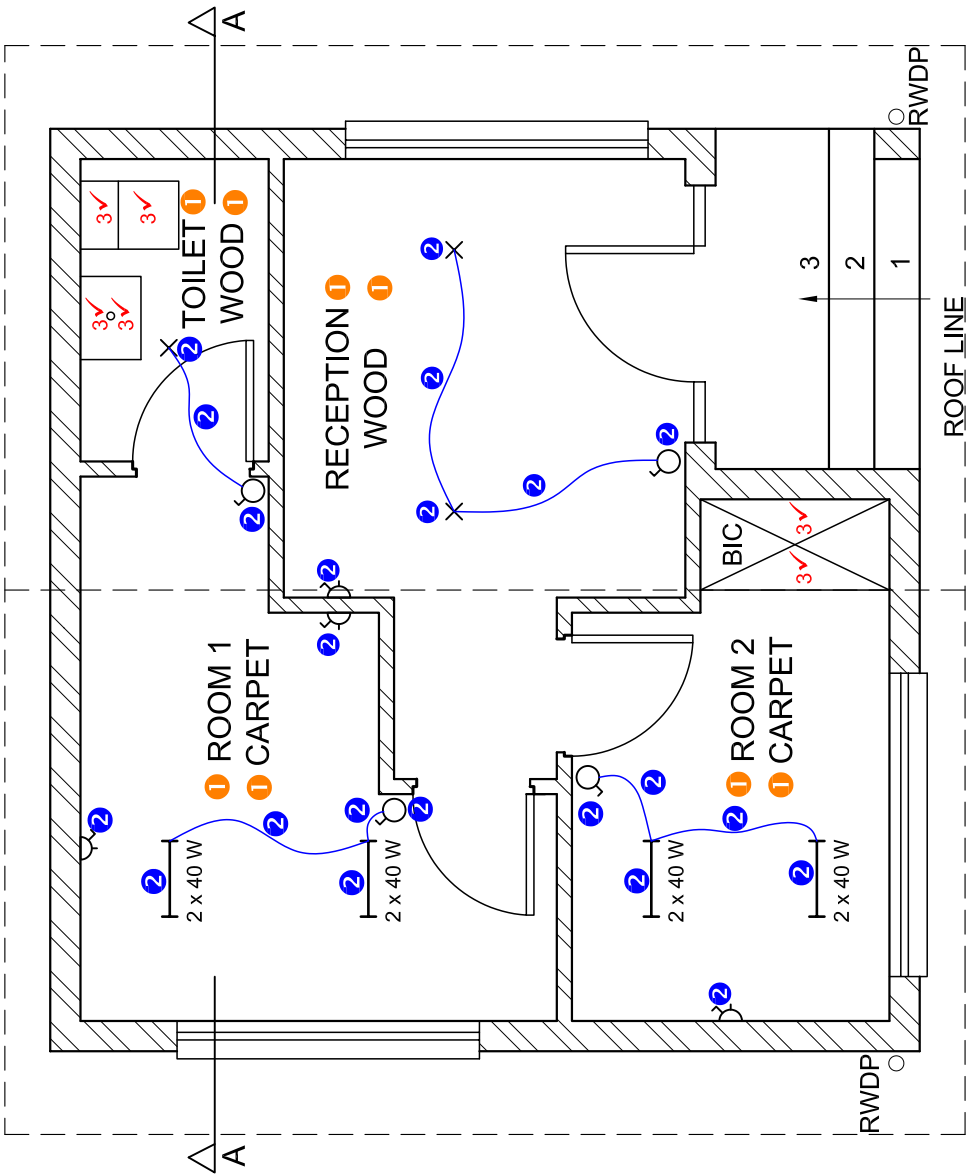
PAPER 1 QUESTION 3
GRADE 12
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5 HATCHING MARK ALLOCATION

| | |
|----------------------------|---|
| SANS COMPLIANT (TYPE) | 1 |
| HATCHING CORRECTLY APPLIED | 2 |
| TOTAL | 3 |

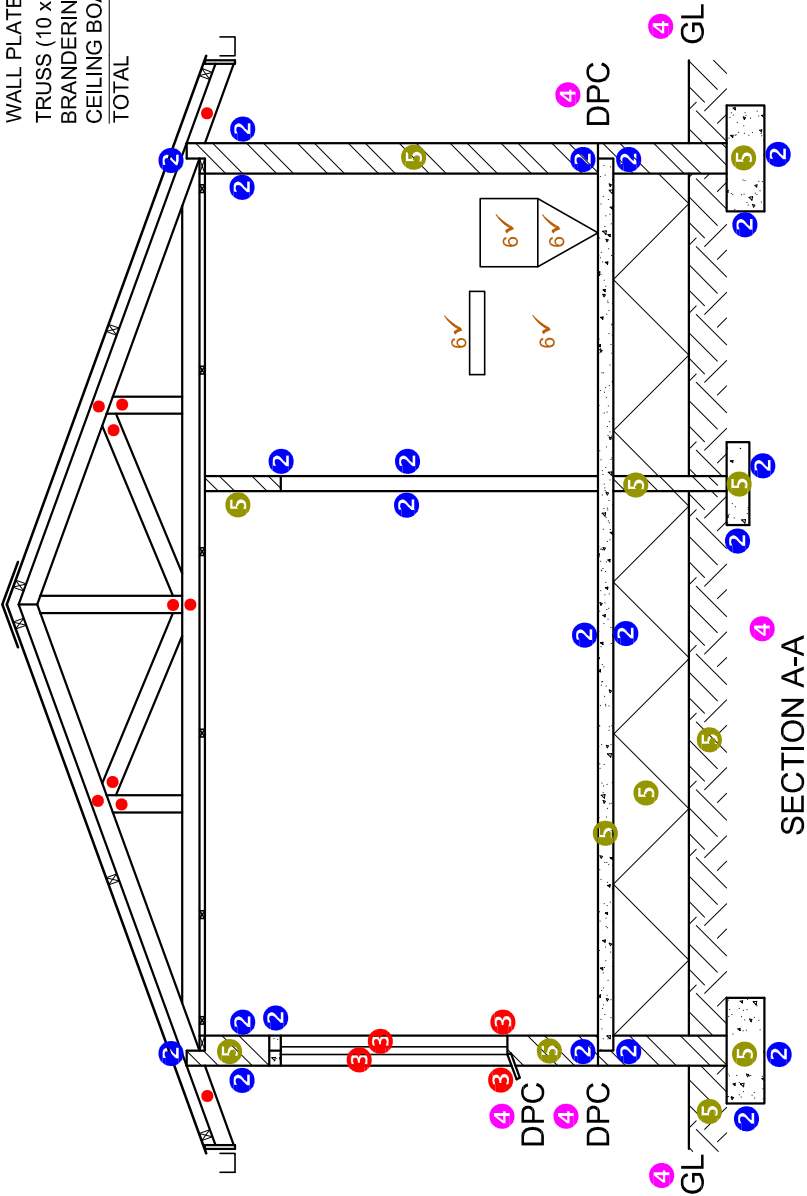
| ASSESSMENT CRITERIA | |
|---------------------|--------------------|
| FLOOR PLAN | |
| 1 | LABELS 4 |
| 2 | ELECTRICAL 11 |
| 3 | FITTINGS 6 |
| 4 | DOORS + WINDOWS 14 |
| 5 | HATCHING 3 |
| SUBTOTAL 38 | |



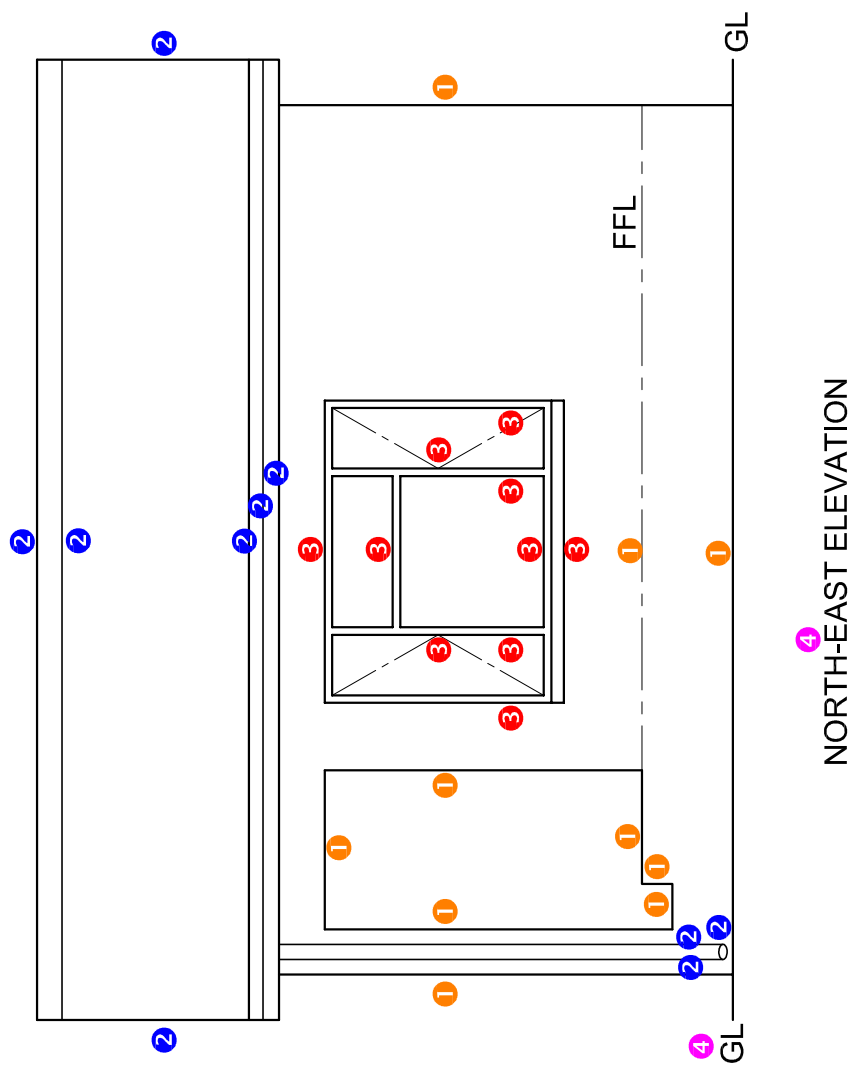
FLOOR PLAN
SCALE 1 : 50

1 ROOF MARK ALLOCATION

| | |
|----------------------|----|
| CORRECT ANGLE | 1 |
| ROOF SHEET | 2 |
| ROOF CAP | 1 |
| PURLINS | 2 |
| FASCIA BOARD (2 x ½) | 1 |
| GUTTER (2 x ½) | 1 |
| WALL PLATE (2 x ½) | 1 |
| TRUSS (10 x ½) | 5 |
| BRANDING | 1 |
| CEILING BOARD | 1 |
| TOTAL | 16 |



| ASSESSMENT CRITERIA | |
|---------------------|-----------------------------|
| SECTIONAL ELEVATION | |
| 1 | ROOF |
| 2 | WALLS + FLOOR + FOUNDATIONS |
| 3 | WINDOW |
| 4 | LABELS |
| 5 | HATCHING |
| 6 | FIXTURES |
| SUBTOTAL | |
| 16 | |
| 11 | |
| 2 | |
| 3 | |
| 6 | |
| 4 | |
| 42 | |



NORTH-EAST ELEVATION

| ASSESSMENT CRITERIA | |
|----------------------|-----------------------|
| NORTH-EAST ELEVATION | |
| 1 | WALLS + FFL5 |
| 2 | ROOF + GUTTER + RWDP5 |
| 3 | WINDOW5 |
| 4 | LABELS1 |
| SUBTOTAL | |
| 16 | |