



education
 Department:
 Education
 KwaZulu - Natal

INSTRUCTIONS AND INFORMATION

1. The question paper consists of FOUR questions.
2. Answer ALL the questions.
3. All drawings are in first angle orthographic projection unless otherwise stated.
4. All drawings must be drawn to scale 1:1, unless otherwise stated.
5. The questions must be answered on the answer sheets provided.
6. All the answer sheets must be re-stapled in numerical sequence and handed in irrespective of whether the question was attempted or not.
7. Careful time management is essential in order to complete all the questions.
8. Print your examination number in the block provided on every answer sheet.
9. All answers must be drawn accurately and neatly.
10. Any details or dimensions not given must be assumed in good proportion.

GRADE 12

MEMO

**ENGINEERING GRAPHICS AND DESIGN P1
 TRIAL EXAMINATION - 2010**

FOR OFFICIAL USE ONLY			
	MAXIMUM MARK	LEARNERS MARK	MODERATED MARK
Q1	25		
Q2	30		
Q3	45		
Q4	100		
TOTAL	200		

EXAMINER : R. MOHUNLAL (SSS)
 MODERATOR : V. GOUNDEN (WHSS)
 AFRIKAANS : VAN VUUREN (WHS)

FINAL CONVERTED MARK	CHECKED BY
100	

MARKS : 100
 TIME : 3 HOURS
 This question paper consists of 6 pages.

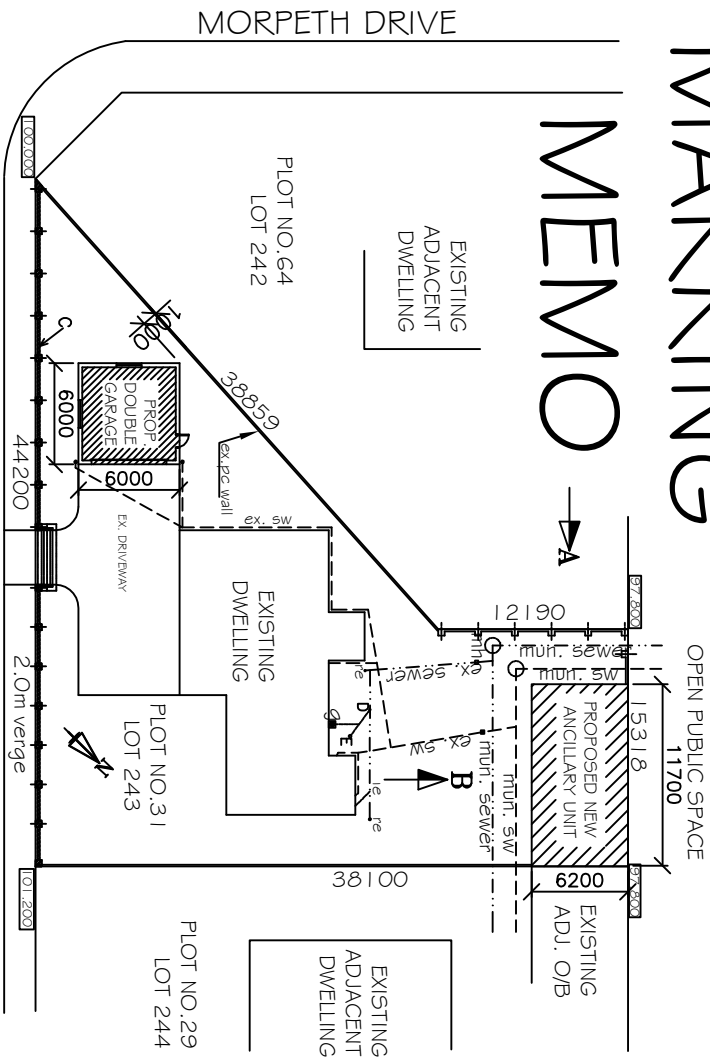
EKSAMENNOMMER :

EXAMINATION NUMBER :

SCHEDULE OF AREAS	
SITE AREA	926m ²
EXISTING DWELLING	168m ²
PROP. ANCILLARY UNIT	72.54m ²
PROP. GARAGE	36m ²
TOTAL NEW AREA	108.54m ²
EXISTING COVERAGE(%)	$\frac{168}{926} \times 100 = 18.14\%$
NEW COVERAGE(%)	$\frac{108.54 + 168}{926} \times 100 = 29.86\%$

MARKING

MEMO



AGLISH AVENUE
SITE PLAN
1:500

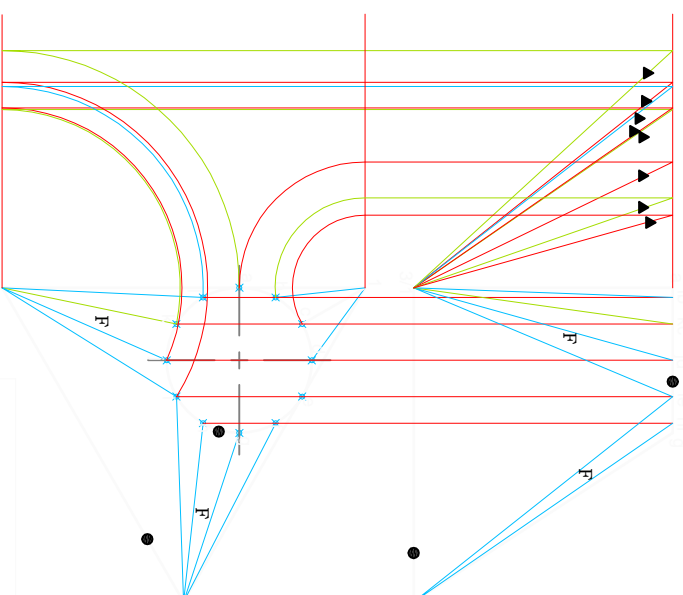
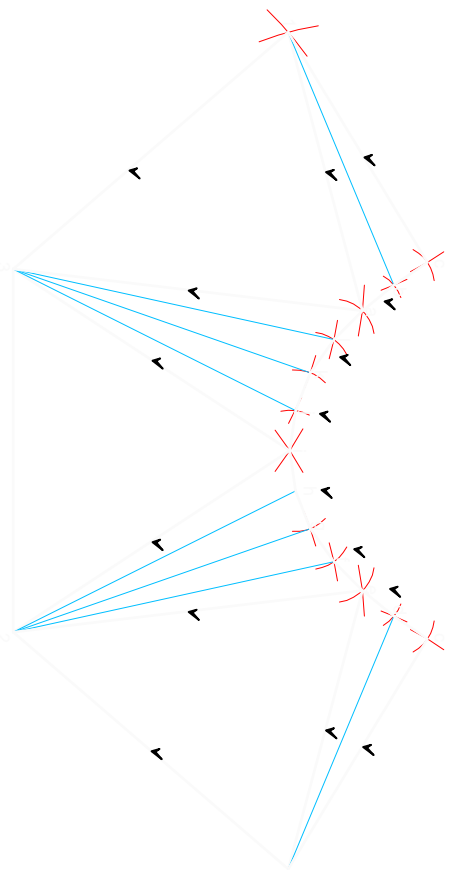
QUESTION ONE
 Given:
 • A site plan with proposed improvements.
 Instructions:
 • Observe the given site plan and answer the questions in the spaces provided. [25]

1. WHAT IS THE SCALE OF THE DRAWING?	1	1 : 500
2. WHAT IS THE STREET ADDRESS OF THE PROPOSED DEVELOPMENT?	1	31 AGLISH AVENUE
3. WHAT IS THE ERF NUMBER OF THE PROPERTY ON THE EAST SIDE?	1	LOT 244
4. WHAT IS THE ADDRESS OF THE PROPERTY ON THE LEFT?	1	64 MORPETH DRIVE
5. WHAT BUILDING IS SITUATED NEXT TO THE PROP. ANCILLARY UNIT?	1	EX. ADJ. OUTBUILDING
6. WHAT ELEVATION CAN BE VIEWED FROM DIRECTION OF ARROW A?	1	SOUTHWEST
7. WHAT ELEVATION CAN BE VIEWED FROM DIRECTION OF ARROW B?	1	SOUTHEAST
8. HOW WIDE IS THE VERGE?	1	2 METRES
9. WHAT DO THE FOLLOWING ABBREVIATIONS STAND FOR?		
9.1. re	1	RODDING EYE
9.2. mun. sw	1	MUNICIPAL STORMWATER
9.3. mh	1	MANHOLE
9.4. ie	1	INSPECTION EYE
9.5. g	1	GULLEY
10. WHAT FEATURES ARE REPRESENTED BY:		
10.1. C	1	BOUNDARY WALL
10.2. D	1	INSPECTION EYE
10.3. E	1	RODDING EYE
11. WHAT DOES 'pc' IN 'ex. pc wall' STAND FOR?	1	PRE-CAST CONCRETE
12. WHAT IS THE AREA OF THE PROP. ANCILLARY UNIT?	2	72.54m ²
13. WHAT IS THE AREA OF THE PROP. GARAGE?	2	36m ²
14. WHAT TOTAL PERCENTAGE OF THE SITE WILL BE COVERED AFTER DEVELOPMENT? (show calculations)	3	29.86%
15. WHAT IS THE LENGTH OF THE FRONT BOUNDARY (in metres)?	1	44.2 metres
TOTAL		

LEARNER'S NAME: _____

GR. 12

MARKING MEMO



ASSESSMENT CRITERIA

	MAX. MARK	LEARNERS MARK
● DRAW/ GIVEN VIEWS	4	
F FOLD LINES	4	
▲ CONSTRUCTIONS/CALC	6	
▼ DEVELOPMENT	16	
TOTAL	30	

CIRCUMFERENCE = D
 $= \frac{22}{7} \times 28$
 $= 94$
 $\frac{1}{2}$ CIRC.
 $= 7.83$

QUESTION 3

THE DIAGRAM BELOW SHOWS THE FRONT, TOP AND SIDE VIEWS OF A DWELLING IN RELATION TO THE GROUNDLINE(GL), PICTURE PLANE(PP) AND HORIZON LINE(HL).

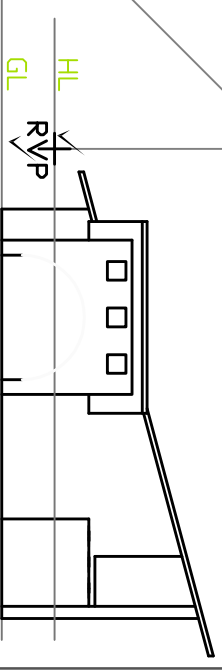
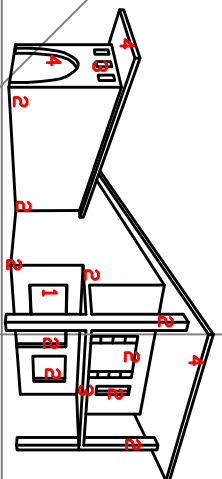
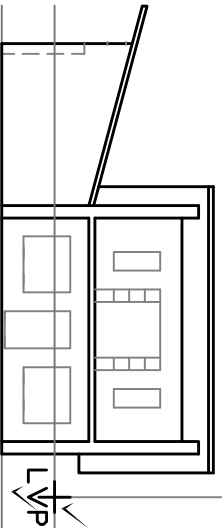
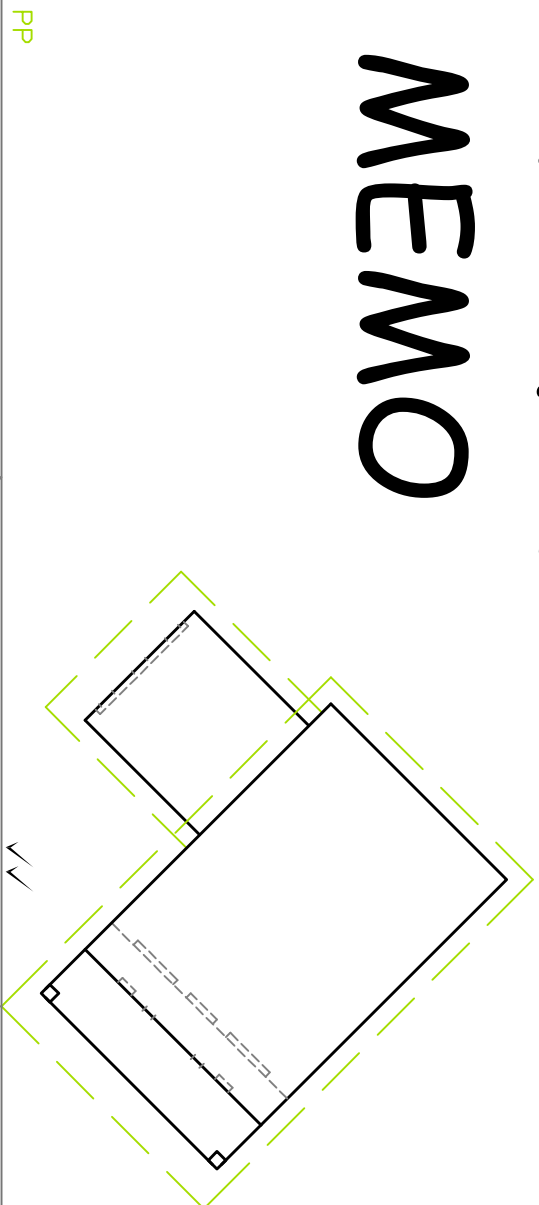
USING THE GIVEN INFORMATION, PROJECT FROM THE STATION POINT(SP) AND DETERMINE THE VANISHING POINTS. SHOW LABELS.

DRAW THE PERSPECTIVE VIEW OF THE DWELLING.

SHOW ALL NECESSARY PROJECTIONS.
SHOW ALL NECESSARY CONSTRUCTIONS.
DO NOT SHOW HIDDEN DETAILS.

[45]

MARKING MEMO



ASSESSMENT CRITERIA

ASPECT	MAX. MARK	LEARNER'S MARK
✓ POINTS & PROJECTIONS	6	
MAIN BUILDING	24	
GARAGE	15	
TOTAL	45	

LEARNER'S NAME:

GR./IV/

12

