



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2019/2020
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN CONSTRUCTION MANAGEMENT

BCM 303: MEASUREMENT AND DESIGN APPRAISAL

DATE: Wednesday, 11th December 2019

TIME: 11.00am - 1.00pm

INSTRUCTIONS:

1. Question ONE in Section I is Compulsory
2. Answer any TWO Questions in Section B (40 Marks)

SECTION ONE (Compulsory) - 30 Marks

QUESTION ONE

- a) Take all quantities shown in the attached drawing (Steel roof). (20 marks)
- b) Explain the meaning of the term "Preliminaries" as used in the Bill of Quantities giving four examples. (6 marks)
- c) Define the term "Unit rate" and state the four items that must be included in any unit rate. (4 marks)

SECTION B

QUESTION TWO

Using the attached drawing (No.24) prepare internal schedule of finishes and take off the quantities. (20 marks)

QUESTION THREE

- a) Briefly explain the meaning of the following terms as used in the measurements. (16 marks)
 - (i) Section of prime cost and provisional sums
 - (ii) Ampersand

- (iii) Squaring dimensions
- (iv) Preambles
- (v) Prime cost and Provisional sums
- (vi) Specifications
- (vii) Form of agreement
- (viii) Liquidated damages

b) Briefly explain and illustrate "measurement sheet" used for taking off. (4 marks)

QUESTION FOUR

a) Take off quantities shown on the attached drawing (concrete flat roof) (16 marks)

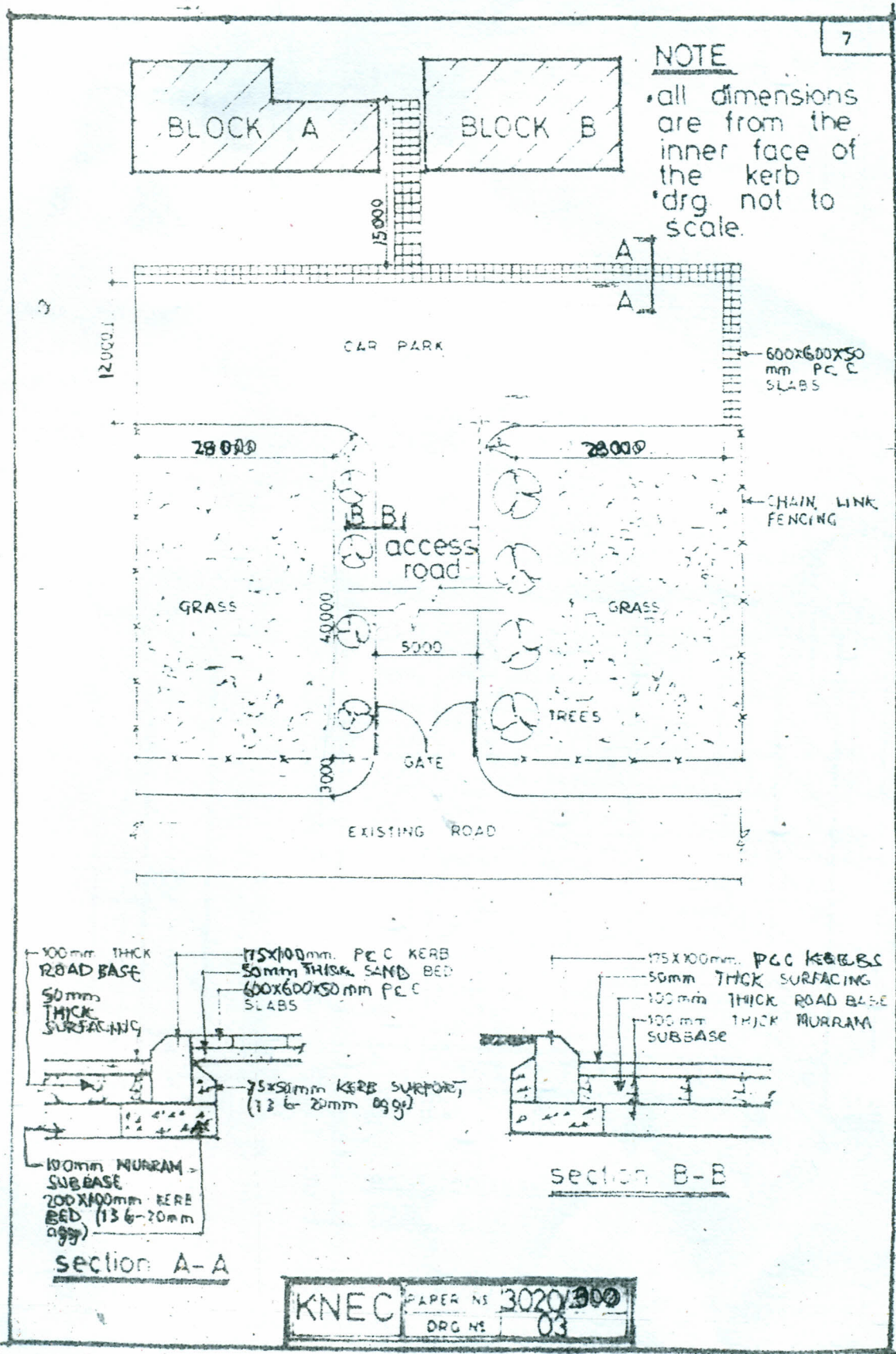
b) Explain the importance of the standard method of measurement (s.m.m) of building works. (4 marks)

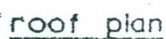
QUESTION FIVE

Define the following terms as used in the form of contract for construction works. (20 marks)

- i) Schedule of rates
- ii) Variations
- iii) Day works
- iv) Contract drawings
- v) Architect instructions
- vi) Fluctuations
- vii) Retention money
- viii) Defects liability periods
- ix) Interim valuations
- x) Bills of quantities

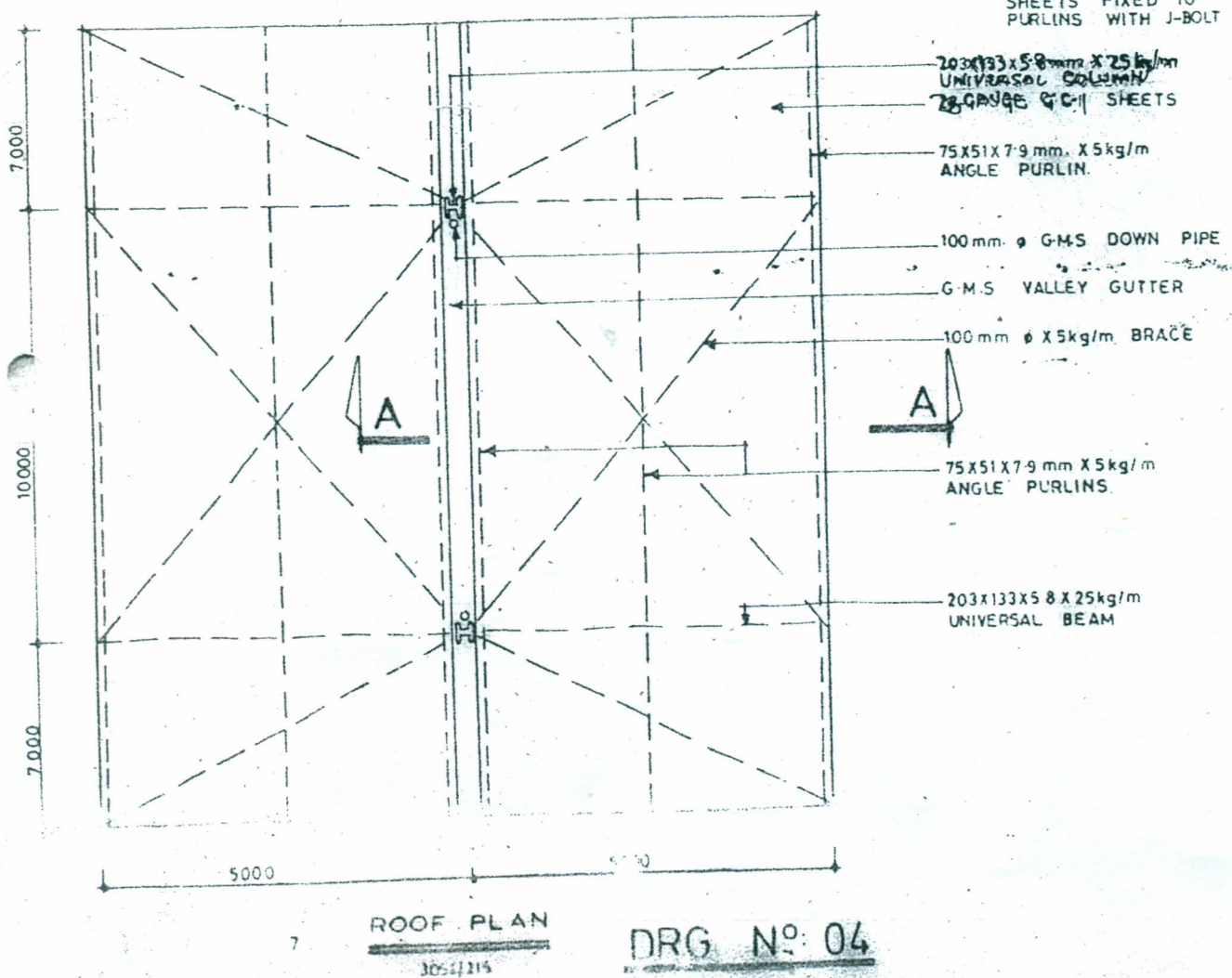
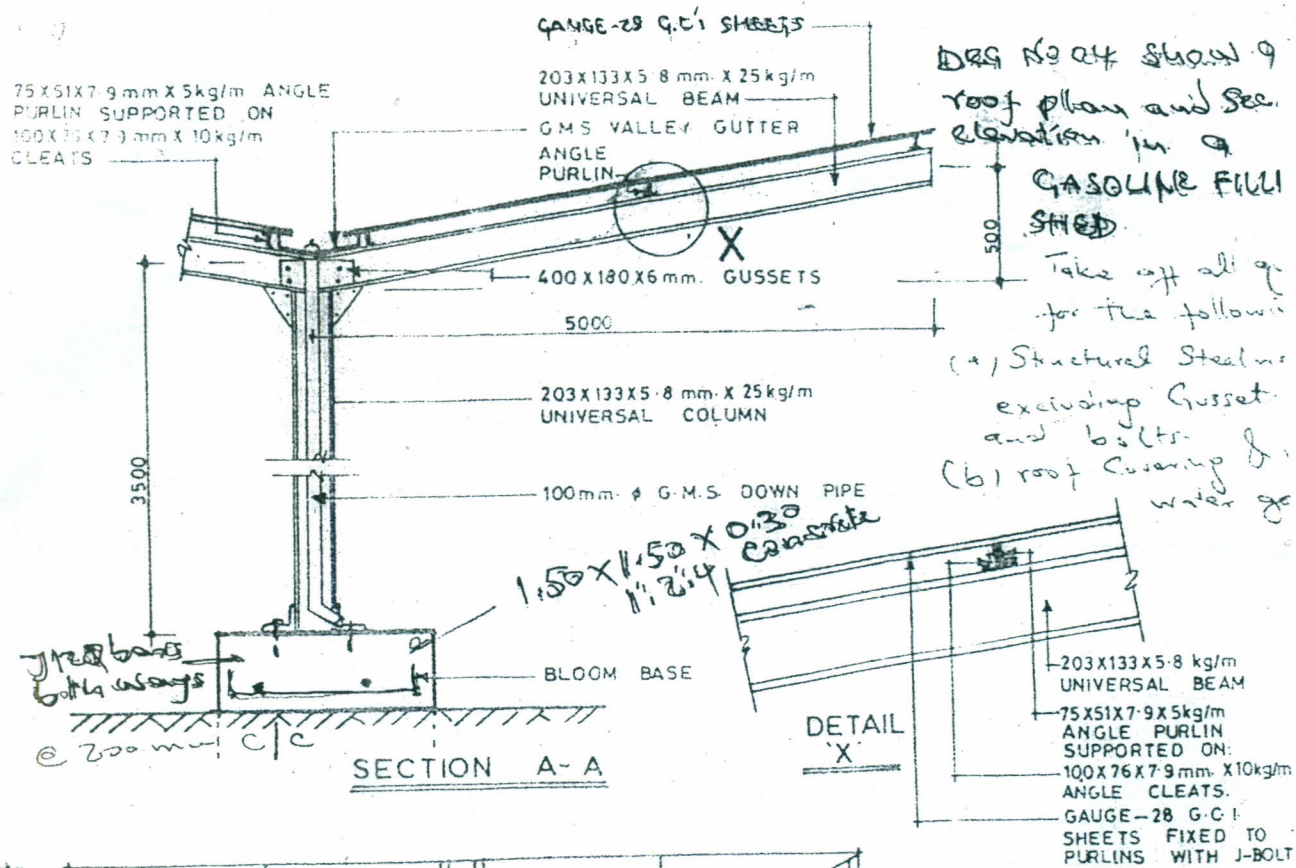
Take off all quantities for External works
 shown on drawing no 03/300





DRG. №: 03

(3020/216)



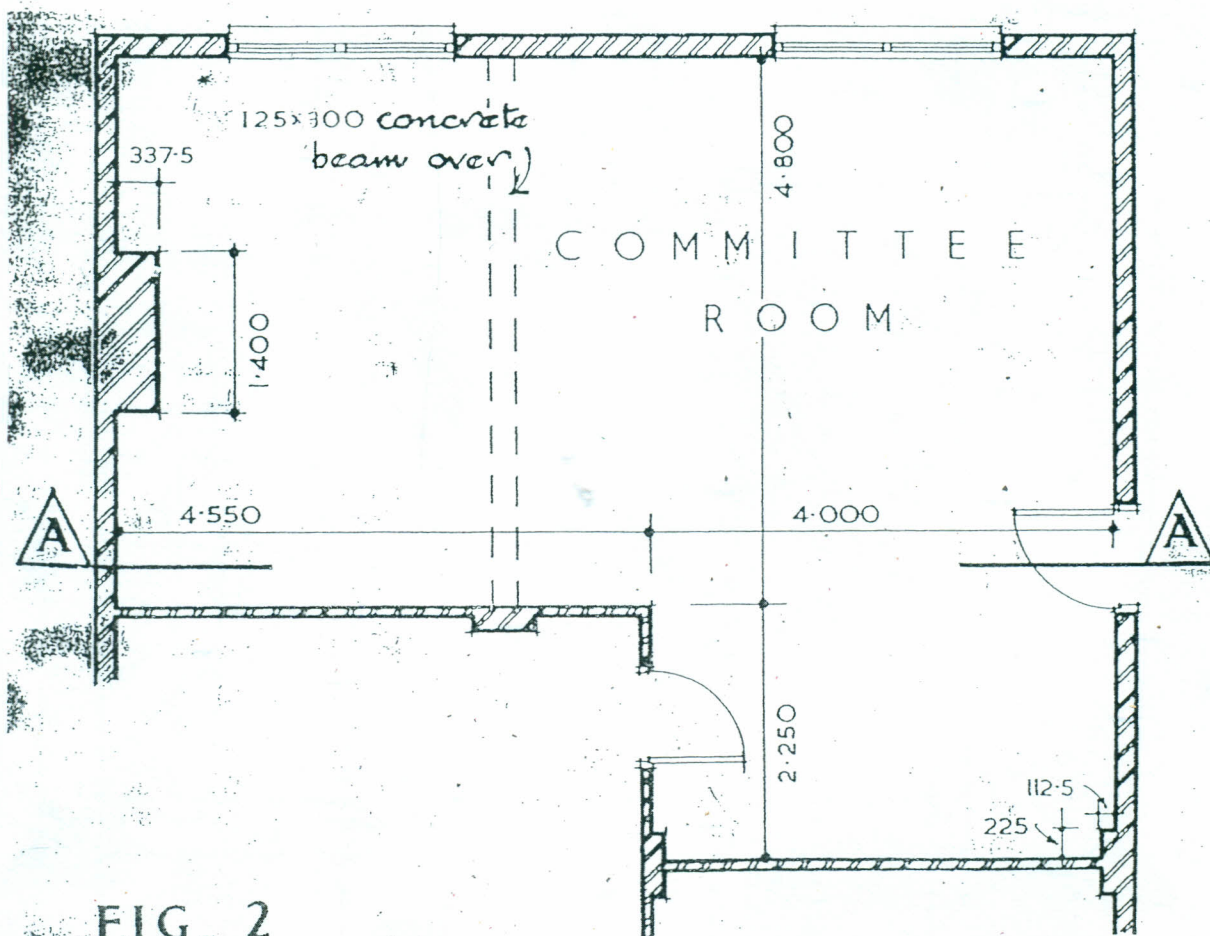
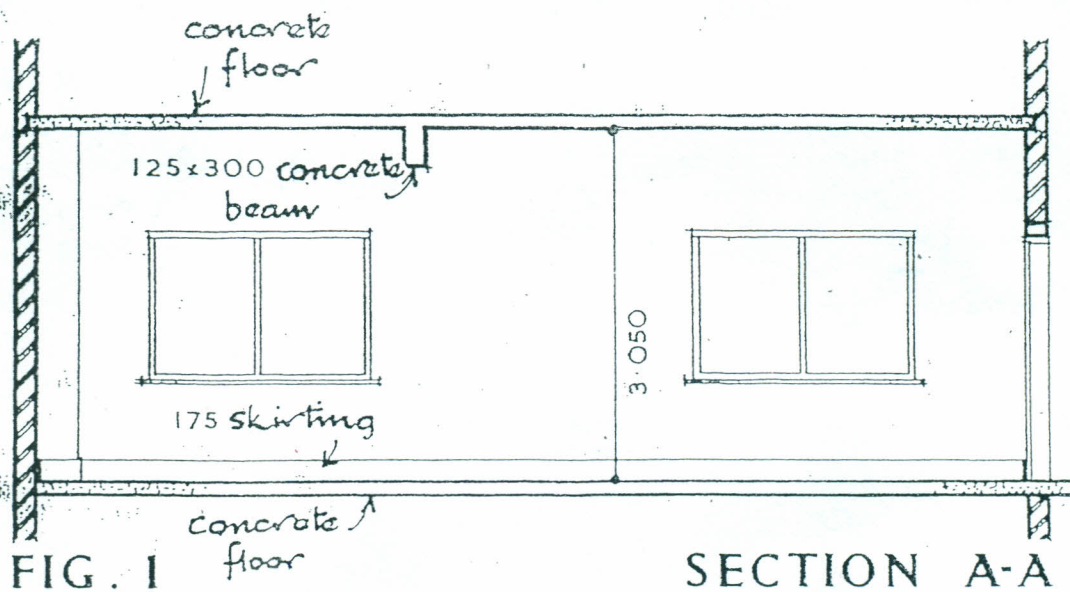


PLATE 24