

HIGHER TECHNICAL INSTITUTE

CIVIC ENGINEERING DEPARTMENT

DIPLOMA PROJECT

PREPARATION OF BILL OF QUANTITIES USING
COMPUTER

by

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JUNE 1995

PREPARATION OF BILL OF QUANTITIES
USING COMPUTER METHODS

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Project Report
submitted to
the Department of Civil Engineering
of the Higher Technical Institute
Nicosia Cyprus

JUNE 1995

HIGHER TECHNICAL INSTITUTE	PROJECT NO 2410
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ACKNOWLEDGEMENTS

My sincere appreciateion to Mr. A. Kkolos, civil engineer, senior lecturer of H.T.I, my project supervisor, for his invaluable help before and after the selection of my project.

Likewise, my special to Mr. S. Andreou, quantity surveyor, manager of M.D.A and for F. Alvani the assistance and guidance through all steps of my work.

1. The Bill of Quantities theory.

Some theory about types of bill of quantities, methods of taking off, purposes of bill of quantities and the format of bill of quantities.

2. Taking off measurements.

As to be able to do the bill of quantities you have to take some measurements from your drawings about quantities, taking off measurements.

3-4 Abstracting and billing using computer.

After taking off measurements were completed then you have to give the taking off quantities to the computer as to do the abstracting and then the billing.

5-6 Abstracting and billing manually.

Some job (abstracting & billing) was done manually as to see the differences of doing the abstracting and billing manually and by using computer.

7. Conclusions.

Conclusions come out of my work a bill of quantities using computer.

8. Drawings

The drawings have been used for taking off measurements.

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THE BILL OF QUANTITIES

INTRODUCTION

DEFINITION

Bill of quantities is the means where by the majority of building work is described and measured.

It sets out the various items of work in a recognised manner and in a logical sequence.

TYPES OF BILLS OF QUANTITIES

There are two main types of Bills of Quantities:

- 1.1. Trade bills.
- 1.2. Elemental bills.

1.1. TRADE BILLS

Trade bills are divided in sections in accordance with the various trades as listed in the Standard Methods of Measurement (SMM).

A typical division of a "trade" bill for quantities would be:

1. Preliminaries
2. Excavation and earthwork
3. Concrete Work
4. Brickwork and blockwork
5. Roofing
6. Woodwork
7. Plumbing installations
8. Floor, wall and ceiling finishing
9. Glazing
10. Painting and decorating
11. Drainage
12. Prime cost and provisional sums.