

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

PREPARATION OF BILL OF QUANTITIES
USING THE TRADITIONAL METHOD

BY: KASINOS MARINOS

JUNE 2002

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PROJECT REPORT

**Submitted to the department of civil engineering of the
Higher Technical Institute
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**Preparation of bills of quantities
using the traditional method**

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SUMMARY

Bill of quantities is the means whereby the majority of building work is described and measured, it sets out the various items of work in recognized manner and in a logical sequence.

In addition to this bill of quantities assists building contractors to estimate the cost of a building project before any work commences.

There are three methods of preparing the bill of quantities:

1. Traditional method
2. Cut and Shuffle method.
3. By Computer.

In this project the Traditional Method is used and the objective are as follows:

- To write a report on the different method of "taking off" used in Cyprus.
- To compare them with Smm7
- To carry out the "taking off" measurements of the drawings provides using the traditional method.

INTRODUCTION

The ancient Greeks and Romans engaged in building Projects were not interested in the final cost as their manpower was free of charge, being slave labour.

During the 17th and 18th centuries the great ‘architect builders’ appeared. A project would be designed and the architect acted as organising contractor ordering materials and hiring local labour.

Gradually hired craftsmen caused to paid at an hourly rate the work was measured, (by architect’s employ called measures) during the construction and on completion was valued at customary rates paid in the locality. The actual valuing of he work at the local was done by the architect.

Gradually artisans became dissatisfied with this practice as a result of this they began to employ measurers to settle their with the architect and the architect ceased to operate as building organiser.

One or two builders surveyor set up in business on their account and specialised inhe preparation of B.O.Q. for all the contractors tendering for a contract ready for them to price, the agreement was that each contractor included the surveyors fee in his price. The result of his system was that appeared many surveyors in many parts specialising in this type of work.

Many architects realised that they could make use of the contractor’s B.O.Q. with the prices inserted for the settlement of any variations and the final account. They knew that the building owner was indirectly paying for the preparation of this documents, and so persuaded building owners to employ the surveyor to prepare the B.O.Q. for their scheme, ready for issuing to tendering contractors B.O.Q became a document. Incorporated in the contract and the independent Quantity Surveyor measured variations and settled the final account for both parties.

Nowadays there appears to be a tendency to revert the system to the system ‘architect builder’ where building owners are contracting with building firms who design estimate and build.

THE CONTENT OF A BILL OF QUANTITIES

The bill of quantities is divided up into sections, each section being based on the traditional trades. Each section is then sub-divided for easy reference, and a typical division of a bill of quantities would be as follows:

- Preliminaries (items that cannot be attributed to any particular section such as insurance, form of contract etc.)
- Excavation and earthworks
- Concrete work
- Brickwork and blockwork
- Roofing
- Plumbing installation
- Floor, wall and ceiling finishings
- Glazing
- Painting and decorating
- Drainage
- Prime cost and provisional sums.

Provisions are usually made for the carrying of each page total to a section summary and each section to final summary.