DEPARTMENT OF BUILDING

FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING

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It is recommended that the report of this practical training provided

by

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entitled

Installation Of Surface Drainage

be accepted in partial fulfillment of the requirement for obtaining the Diploma In Building.

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ABSTRACT

In the construction industry, the civil engineer had planned to collect all the foul water from various sources together and disposed of through pipes laid below the ground level. All rooms such as lavatories, urinals, bathrooms, kitchen which produce foul water are planned, to be grouped together and also located in such way that the walls of one of these rooms formed the periphery of the building. The function of drainage is to evacuate water in excess of vegetation and soil requirements. Drainage created in the soil, the conditions required for good plant development and promotes soil aeration and root penetration. There are many step and method for the drainage construction, as the proper installation will avoid foul water and weakness in drain system. The first and foremost step that are taken to minimize the percentage of improper drainage is setting out process. In conclusion, a proper drainage control can help prevent the worrisome effects of water pollution. Each building has their own choice to whether the drain will be precast or constructed at the site. This will depend upon the type of land, slope and how high the budget is.

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CHAPTER 1

INTRODUCTION

1.1 Background and Scope of Study

Background

Drainage is the natural or artificial removal of a surface's water and sub-surface water from an area. The internal drainage of most agricultural soils is good enough to prevent severe waterlogging, but many soils need artificial drainage to improve production or to manage water supplies. In the construction industry, drainage options for the construction industry include point drainage, which intercepts water at gullies (points), channel drainage, which intercepts water along the entire run of the channel & the surface opening of channel drainage usually comes in the form of gratings or a single slot (slot drain) that runs along the ground surface (Chudley Roy, 1973, *Construction Technology*).

Drainage system also known as river systems are the patterns formed by the streams, rivers and lakes in a particular drainage basin. In agriculture, the artificial removal of water from land; drainage is employed in the reclamation of wetlands, in the prevention of erosion, and as a concomitant of irrigation in the agriculture of arid regions. Subsurface drainage systems consist of small conduits, a submain, a main, and an outlet. The conduits, equivalent to the field drains in a surface system, collect the water in the soil and drain it into the larger arteries. Drainage is important to the successful function of a project site.

Drainage helps guide water flow in order to remove it from the ground surface. Poor drainage can cause hydroplaning, if water begins to fill ruts in a roadway. Poor drainage can cause foundation damage to a building or home. Other than that, drainage systems also prevent the accumulation of stagnant water, which can encourage mosquitoes to breed. The aim of drainage is to evacuate water in excess of vegetation and soil requirements. This shows that the drainage is very important to the soil and not only to the buildings.