

DESIGN OF ASTRONOMICAL OBSERVATION BUILDING

Prepared by: Teoh Tean Leong

ABSTRACT

This building is act as an observatory and a research centre. This means that the designer plans and designs out the whole structure of this building related to its primary and secondary function. The designer plans out the architectural layout and the most important, analyze the building structure within limit state design.

In this project, all the main critical sub-structures are taking into account. To make these structures simplify, most of the dimension of these substructures (column, slab, and beam) share a same dimension within themselves.

Simplification does not mean have only narrow functions but prepare most places can share the same function.

The loads on the structure are the main concern. While looking forward into this design, there are a few sub-structures that are seemed to be “over-design”. The answer is no. this is because when this building reach its maturity, it will be upgrade into a planetarium. There are spaces where it can build another floor for future use.

Therefore, most of the designs are on economical save basic. In this project, the aim of maximum loads the structure can withstand with the minimum materials provided or cost needed will be fulfilled.