

DESIGN OF A BASEMENT CAR PARK IN INTI COLLEGE MALAYSIA, NILAI

Prepared by: Too See Chean

ABSTRACT

As we know Inti's reputation is growing, so as the number of students. This is already posing a problem for the existing parking in Inti College Malaysia. Therefore, to address this problem, the author has decided to design a basement car park in the campus. This design will be more economical in the long run, and provide sufficient parking for students, lectures, staffs and visitors in future.

Actually, this parking structure that the author designed is not an actual basement car park. It is a basement mixed with multi-storey car park design. It consists 3 levels, below the ground. It will be located on the land that is used for Inti future development, which illustrated in Figure 1 and Figure 2. This structure design will provide around 300 parking spaces. Staircases will be constructed at the both sides of the structure.

Flat roof is used in the design. Brick parapet with precast concrete coping is designed enclosing the flat roof. Asphalt and insulating screed are used as waterproof substance and non-conducting materials to prevent loss of heat. Gutter is fixed at the side of the flat roof to carry off rainwater. Stairwell is also designed on the flat roof allowing people going up to the roof.

Car ramps that are designed for the passage of vehicles are constructed in this design. Transverse grooves formed on the surface of the ramps to increase slip-resistance giving a good hold for car tyres.