

# Design management

Design



Discuss the planning phase of construction projects including legal restraints; planning constraints; building regulations; building control; disabled access; current legislation. (PI) The planning phase of construction projects can be divided into three stages as appraisal, strategy briefing and feasibility. In the appraisal stage, we know that the client wants to build a speculative office which has high quality and use green materials with low CO emissions and less wastes, particularly can make profits.

We need to find out the possible constraints for the project due to the site location we known. Then we tell the client all the situation and wait for his decision whether the proposal goes on. Once the client agrees to continue, we can go to the strategy briefing stage. In this stage, we need to find out the regulation, legal restraints and planning constraints. According to Hong Kong regulation, all proposals for new buildings In private sector require approval by the Buildings Department authorities.

According to Building (Planning) Regulations chapter OFF, there are two staircases in the new building in our design. The staircases have a clear height of not less than 2 m and width of not less than 900 mm. The staircases would be constructed with treads not less than 225 mm In width and with risers not exceeding 175 mm In height. For means of escape of office, the longest travel distance should not be over 30 meters. Every person should occupy at least 9 mm on each storey. There should be two exits for each storey and every exit should have a lighting with 30 lug.

The height of exit should not be less than mamma. The width of the exit door and exit route should not be less than mm and mamma respectively.

According to the Design Manual - Barrier Free Access 2008, a ramp of disabled access shall not be less than 1050 mm in width. No ramp shall be steeper than 1 in 12 gradient. A clear space of not less than 1500 mm x 1500 mm shall be provided at the head and foot of every ramp. Current legislation involves environmental legislation, health and safety. We may study the legislation through the competent person by training and seminar.

A range of issues should be considered. As we know the project site is in the city centre on the main road. The east and west sides can be constructed glass curtain wall for lighting that energy may be saved. There is a primary school shopping mall complaint. Gathering more information about the services and utilities such as water pipes, broadband fibers, electrical cables, gas pipes, etc. After taking the site investigation, we found that there are no ground unusual problems of the proposed site.

Then make the time planning and estimated cost, consider which materials are suitable for basement construction. There is an existing building with four storeys there. The client wants to build a new building with three storeys plus a basement under linked up with it by an atrium. Due to the Town Planning Ordinance, the building zoning plan of that district including the proposed site is mainly used to build commercial office buildings and shopping malls. Our site plan is that an atrium being a link between the existing building and the new building as well as the site area is 65 meters long and 35 meters wide. The existing building is about 13.7 meters long and 18.3 meters wide. The atrium is about 13.7 meters long and 10 meters wide. The new office building is about 27 meters long and 20 meters wide and is lower than the existing building. So our site plan follows the legal requirement and <https://assignbuster.com/design-management/>

is in compliance with the building zoning plan according to height restriction, the restraint of the site coverage and the plot ratio are below 0% and 5 separately. We have done a research about the market potential nearby the site.

The result is shown that although there are many commercial buildings surrounded, the supply is not adequate to the demand. So we believe that the project will make profits. Except the commercial buildings, shopping mall is another choice because people who work there especially professionals have strong consumption demand and purchasing power. In the design phase, building control has four essential issue. We should make a programmer including critical activities and milestones. Then find some cases similar o this project for doing a estimated cost.

Utilize the quality management system SISSIES to monitor the quality including quality control and quality assurance. Lastly, list out the procurement methods of traditional, design and build and management contracting and then consider which is suitable for out design. The client's requirement was clearly established. Possible constraints and a range of issue have been gathered. Budget is a key point affecting the execution of the project. At the end of the planning phase, discuss with the client whether the planning is feasible and determine to go on.