



اَوْنِيُوْرْسِيْتِيْ تِيْكْنُوْلُوْجِيْ مَآرَا
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MARA

**ECS 358
CIVIL ENGINEERING DESIGN PROJECT**

**REINFORCED CONCRETE BUILDING
DESIGN PROJECT**

**PROJECT BASED LEARNING
(CASE STUDY)**

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ACKNOWLEDGEMENT

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1.1.1 Requirements of building-by-law, fire safety regulations

The acronym UBBL stands for Uniform Building by Law. When we build a structure, we must first obtain permission, and the structure must meet its own set of safety requirements. The fire department establishes fire-fighting service requirements.

1.1.1.1 SUBMISSION PLAN FOR APPROVAL

1. Submission of plan for approval.
 - 1) All plans for building submitted to the local authority for approval to the requirement of section 70 of the Act shall:
 - a) Deposited triplicate plans at the office of the local authority together with the fees. (If disapproved, one set shall be returned with explanation)
 - b) Bring a statement showing for what purpose the building
 - c) Bear a certificate of the qualified persons
 - d) Attached a stamped copy of the relevant site plan approved by the competent planning authority complete with the duration, drawing and calculation.
2. Return of plan.
 - 1) Every plan, drawing or calculation in respect of any building shall be submitted by a qualified person.
 - 2) A local authority shall accept any return of plan if the plan resubmits together with a certificate from the relevant competent authority.
3. Supervision of work
 - 1) Drawing or calculation in relation to any building is required to be submitted by qualified person, no erection or continued erection of that building shall take place unless that qualified person or any person duly authorized by him undertakes the supervision of the erection and the setting out, where applicable of that building.
4. Plans to be signed
 - 1) All plans submitted shall be signed by the qualified person and by the owner or his agent and shall bear the full address of the owner.
 - 2) The local authority may, it satisfied that the owner of the premises has refused to or has failed to execute.
5. Withdrawal or change of qualified person.
 - 1) The qualified person submitting the plans shall be responsible until the completion of the works unless:
 - a. With the agreement of the local authority another qualified person is appointed to take over
 - b. The local authority agrees to accept his withdrawal or replacement at the request of the owner provided that the

3.1 Summary of design works

Design work is not an easy job and should not be underestimated by any civil engineer because incorrect calculations can result in unfavorable outcomes for the building we design. So, after receiving knowledge about design work from my lecturer, Sir Ahmad Idzwan, I gained a better understanding of design work as well as the proper and correct calculation for each structure element in each house construction. Furthermore, I can determine the effect of the effect if a situation such as this is lacking, as well as what will be in the design work. Design work is critical in any construction project, whether it's a house, apartment, or retail space, because it allows us as civil engineers to determine the maximum capacity of the structure in order to prevent it from collapsing while serving the community. Later on, I was able to learn about some of the appendices used in actual construction in Malaysia, such as Eurocode and British Standard, thanks to this design work.