SUMMARY

Construction Management has become a major area of study within the overall framework of development project management due to the increasing size and complexity of projects. By performing systematic and well-coordinated construction management which covers cost, time, safety, quality and the ever demanding security, project objectives and goal can be achieved.

In any management environment, the human factor always plays an important part in the implementation of the management system. Within the construction management context, an effective construction management team is absolutely critical to all aspects of the project activities. A construction team led by a strong and decisive Project Manager, backed by motivated and capable members, can function effectively to complete the project.

The success of any construction project will depend on every aspect of the project function executed by the construction team. The fundamental construction management functions considered in this research report include:

1) Plan: prepare all necessary project schedules, including Master Schedule, Project Budget and Equipment and Material Schedules;
2) Do: execute site activities with discipline and close coordination, keeping in mind the project objectives and goals;
3) Check: monitor closely all site activities, maintain efficient communication between all parties involved in the project; and
4) Act: control and remedy all site activities which deviate from the original project plans.
Today, within the Singapore construction industry, the demands of clients, the requirements of local authorities, and the expectations of the general society require contractors to conduct the construction activities professionally, and competitively. Cases studied by this dissertation have shown that the construction project management team must exercise great care in the following areas:

1) Pre-construction planning which effectively covers the whole duration of the project. Preparing a realistic master program, and subsequent short-term schedules.

2) Proposing feasible estimates and functional budgets. Efficiently allocating project resources, and conducting economical procurements.

3) Organizing site staff with appropriate duties and responsibilities. Conducting efficient meetings for close project communication.

4) Supervising project quality with appropriate work standards, and systematic checking. Implementing project safety and security to meet regulatory requirements.

Modern construction management is no longer a short-term, hands on arrangement with few participants. Due to the size and complexity of the large projects, appropriateness of the construction management system and procedures utilized, will decide the project’s outcomes. These outcomes will also determine the long-term market position of at least some of the participants.

Finally, based on the investigations by this research, a construction management system for any contractor is developed over time and becomes the company’s operation system. This system is best implemented by those who understand, and commit themselves to it. Unlike manufacturing, construction projects do not come with a standard operations manual. Each project is unique, and a dynamic approach by the project team is the key to project success.