

ASSESSMENT # 1

Introduction

Construction involves many field activities requiring the use of resources such as land, construction materials, labour, equipment, and energy. Construction has to be managed productively and efficiently using innovation, creativity, organisational and economic principles.

Construction is one of the most dangerous occupations in the world, incurring more occupational fatalities than any other sector. Proper safety equipment such as harnesses, hard hats and guardrails and procedures such as securing ladders and inspecting scaffolding can curtail the risk of occupational injuries in the construction industry. Other major causes of fatalities in the construction industry include electrocution, transportation accidents, and trench cave-ins. Other safety risks for workers in construction include hearing loss due to high noise exposure, musculoskeletal injury, chemical exposure, and high levels of stress. Construction has been identified by the National Institute for Occupational Safety and Health (NIOSH) as a priority industry sector in the National Occupational Research Agenda (NORA) to identify and provide intervention strategies regarding occupational health and safety issues.

The functions of construction management typically include the following:

Specifying project objectives and plans including delineation of scope, budgeting, scheduling, setting performance requirements, and selecting project participants.

Maximizing the resource efficiency through procurement of labour, materials and equipment.

Implementing various operations through proper coordination and control of planning, design, estimating, contracting and construction in the entire process.

Developing effective-communication and mechanisms for resolving conflicts

A construction manager should have the ability to handle public safety, time management, cost management, quality management, decision making, mathematics, working drawings, and human resources.

Mid management are mostly involved in the procurement of materials, labour and equipment management. They may also be responsible for highly specialised duties such as lift installation and HVAC.

Talking about first line management The responsibilities of the construction supervisor include making sure that all work meet the right quality, cost does not overrun budget due to mistakes and the work is completed on time

Main duties be :

- ☐ The supervisor instructs workers on what to do
- ☐ Motivates workers to accomplish all objectives

- ☐ Encourages teamwork spirit
- ☐ Ensure workers are disciplined
- ☐ Deal with all manner of conflicts arising at the work site
- ☐ Promote a good relationship between the workers and the general public
- ☐ Ensure plans and schedules are adhered to by regular inspection and quality control
- ☐ Trains and develops the workforce to meet new challenge

Construction daily activity

Project meetings take place at scheduled intervals to discuss the progress on the construction site and any concerns or issues. The discussion and any decisions made at the meeting must be documented. Diaries, logs, and daily field reports keep track of the daily activities on a job site each day.

Diaries: Each member of the project team is expected to keep a project diary. The diary contains summaries of the day's events in the member's own words. They are used to keep track of any daily work activity, conversations, observations, or any other relevant information regarding the construction activities. Diaries can be referred to when disputes arise and a diary happens to contain information connected with the disagreement. Diaries that are handwritten can be used as evidence in court.

Logs: Logs keep track of the regular activities on the job site such as phone logs, transmittal logs, delivery logs, and RFI (Request for Information) logs.

Daily field reports: Daily field reports are a more formal way of recording information on the job site. They contain information that includes the day's activities, temperature and weather conditions, delivered equipment or materials, visitors on the site, and equipment used that day.

Labor statements are required on a daily basis. Also list of Labor, PERT CPM are needed for labor planning to complete a project in time.

Each construction project is a unique project

Conceptual/Programming and feasibility: The needs, goals, and objectives must be determined for the building. Decisions must be made on the building size, number of rooms, how the space will be used, and who will be using the space. This must all be considered to begin the actual designing of the building. This phase is normally a written list of each room or space, the critical information about those spaces, and the approximate square footage of each area

Designs, sketches used to identify spaces, shapes, and patterns, materials, sizes, colours, and textures for every project is different it makes every project unique.

Commercial buildings, retail or housing project every unique.

Most unique are retail shops, restaurants projects, every project using completely different materials design and technique. Working on housing, manufactures, offices, hotels or university's and schools design be different but materials and work similar.