



# **SNS COLLEGE OF TECHNOLOGY**

Vazhiyampalayam, Coimbatore, Tamil Nadu, 641035

**An Autonomous Institution**

**Approved by AICTE New Delhi & Affiliated to Anna University Chennai**

**Accredited by NBA & Accredited by NAAC with “A+” Grade, Recognized by UGC**

**DEPARTMENT CIVIL ENGINEERING**

**19CEB302 - CONSTRUCTION MANAGEMENT**

**III YEAR / V SEMESTER**

**Unit 2 : CONSTRUCTION PLANNING**

**Topic 2 : Defining Work Tasks**





# Defining Work Tasks



Along with choice of technology and general method

- A parallel step in the planning process is to define the various work tasks that must be accomplished.
- These work tasks represent the necessary framework to permit scheduling of construction activities, along with estimating the resources required by the individual work tasks, and any necessary precedences or required sequence among the tasks.



# Defining Work Tasks

- The terms work "tasks" or "activities" are often used interchangeably in construction plans to refer to specific, defined items of work.
- In job shop or manufacturing terminology, a project would be called a "job" and an activity called an "operation", but the sense of the terms is equivalent.
- The scheduling problem is to determine an appropriate set of activity start time, resource allocations and completion times that will result in completion of the project in a timely and efficient fashion.



# Defining Work Tasks

- Construction planning is the necessary fore-runner to scheduling.
- In this planning, defining work tasks, technology and construction method is typically done either simultaneously or in a series of iterations.
- Work tasks - laborious and tedious process
- Construction projects will have thousands of individual work tasks,
- This phase is expensive and time consuming
- Many tasks may be repeated , Ex: Flooring
- Standard definitions and nomenclatures for all tasks



# Defining Work Tasks

- Past Experiences reduces the Work
- Databases and information systems can assist in the storage and recall of the activities associated with past projects
- For the scheduling process - numerous computer programs are required.
- Skill, judgment and experience of the construction planner – Needed
- Any subdivision of project tasks – **Activity**
- The time required to perform an activity is called the **duration** of the activity
- The beginning and the end of activities are signposts or milestones, indicating the progress of the project.



# Defining Work Tasks

## For example,

- The problem of placing concrete on site would have sub-activities associated with placing forms, installing reinforcing steel, pouring concrete, finishing the concrete, removing forms and others.
- Even more specifically, sub-tasks such as removal and cleaning of forms after concrete placement can be defined.
- Even further, the sub-task "clean concrete forms" could be subdivided into the various operations



## Defining Work Tasks

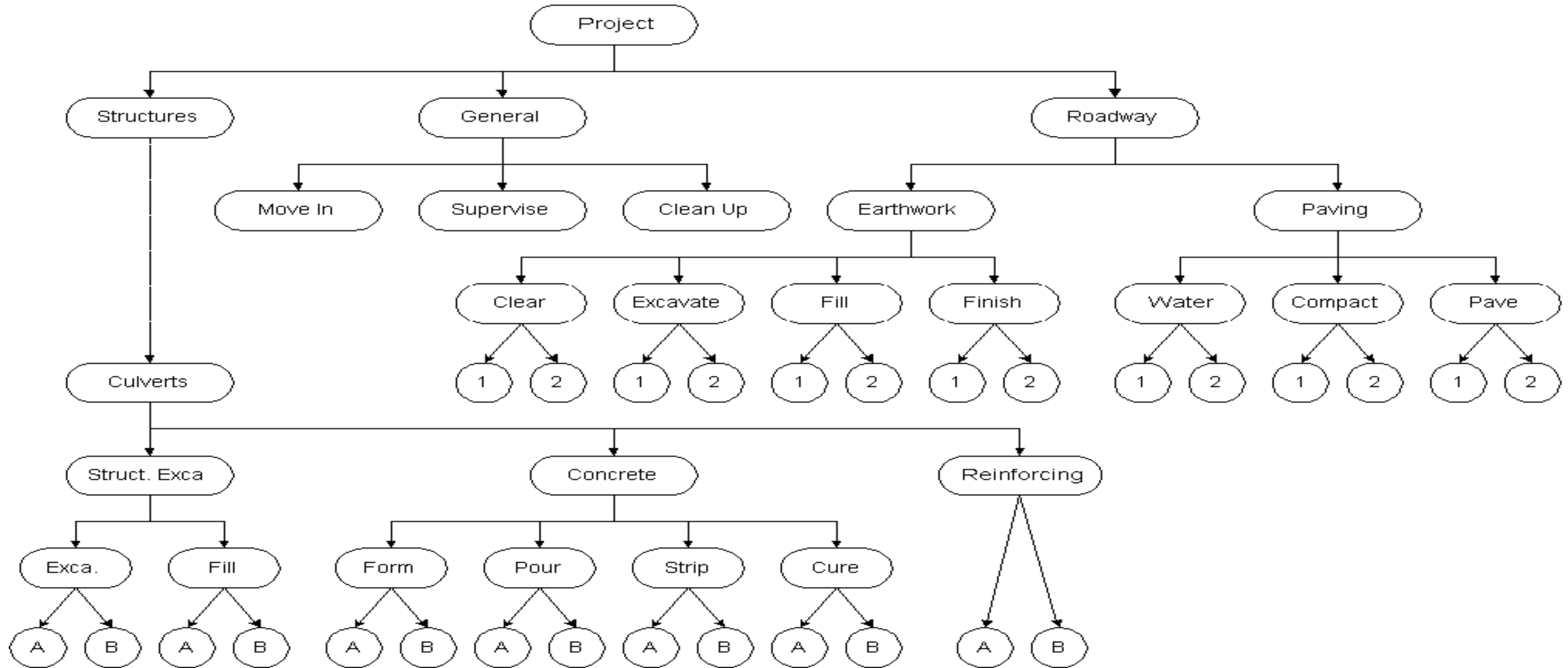


- Transport forms from on-site storage and unload onto the cleaning station.
- Position forms on the cleaning station.
- Wash forms with water.
- Clean concrete debris from the form's surface.
- Coat the form surface with an oil release agent for the next use.
- Unload the form from the cleaning station and transport to the storage location.



# Defining Work Tasks

## Example, Task Definition for a Road Building Project







**Thank you....**