

LESSON 4

CONSTRUCTION CONTRACT AND SPECIFICATION

CONTRACT

A construction contract is an agreement between two or more parties to execute the construction works as per certain terms and conditions.

A contract is an agreement that can be enforced by law.

A construction contracts contains general and special conditions of agreement, details of construction project work, their specifications, time limits, payments and penalties for delivery delays etc. and ensures every party's rights and obligations.

A contract comes into existence only when there is consensus or asset of contracting parties.

A construction contract document is a valid document can be enforced under certain authority or law.

Essential Requirement of a contract:

- 1) Lawful subject matter.
- 2) Legally component party.
- 3) Valid consideration.
- 4) Free consent

Types of Contract:

There are many types of contracts used in construction. Each type has its advantages and disadvantages with respect to the owner and the contractor. They are categorized in two major groups as per method of payment to the contractor.

Following are the types of construction contracts generally used in construction projects:

- Lump sum contract
- Unit price contract
- Cost plus contract
- Target cost contract

Price-based Construction Contracts

1. Lump Sum Construction Contract

In this type the contractor bids a single fixed price for overall activities in the project scope. The contractor is responsible for estimating project costs from drawings then adds overhead and his profit to determine the price of the project.

All risks are assigned to the contractor, there isn't any risk carried by the owner. The contractor has incentive in this contract as he is rewarded for early finish and there is penalty for late finish.

This contract is ideal when the project scope is well defined at the design stage because there is limited flexibility for modifying the design during construction period.

2. Unit Price Construction Contract

The total price of the project in unit price contract is based on the price of each item's unit. The contractor is paid as per the rates of items specified in the bill of quantity.

The risk is shared with the contractor and the owner. This type of contract has more flexibility for design changing than the lump sum contract.

The construction of the project can be started before finishing the designs so the total cost of the project will be uncertain at the early stages of the project.

Cost-based Construction Contracts

3. Cost Plus Construction Contract

The contractor is paid based on the actual cost of the project including direct and indirect costs plus specific fee. This fee could be a fixed fee or percentage of costs.

All risks are assigned to the owner and he gets involved with the contractor in the management of the project. The contractor has no risk in case of increasing the cost of the project, also there isn't any incentive for early finish.

This type of contract is ideal when the project scope is uncertain in the early stages of the project. The contractor can start the execution of the project before finishing the design. It is impossible to estimate the cost of the project before the construction has been finished.

4. Target Cost Construction Contract

Target cost contract has mutual features of the lump sum and cost plus contracts. The contractor is paid based on the actual costs plus a certain fee either fixed or percentage of total cost in case of the cost of the project doesn't exceed certain target cost specified by the owner.

There is risk carried by the contractor in case of increase in cost of construction project. The contractor is also rewarded a percentage of any savings between target and actual cost.

Comparison between Different Types of Construction Contracts

Point of Differentiation	Lump Sum Contract	Unit Price Contract	Cost Plus Contract	Target Cost Contract
Advantages with respect to the contractor	Incentives for early finish	Low risk	No risk	Rewards for any savings between actual and target cost
Disadvantages with respect to the contractor	High risk	No incentives for early finish	No incentives for early finish	Share risk with the owner
Advantages with respect to the owner	No risk Total cost is defined at early stages	Share risk with the contractor	Can start project without finishing designs	Target cost is defined at early stages
Disadvantages with respect to the owner	Contractor desire to decrease costs may be to detriment of quality	Total cost is uncertain at early stages	High risk Total cost is uncertain at early stages	Share risk with the contractor
Flexibility of design changing	Limited flexibility	Has flexibility to change design	More flexible to design stages	Limited flexibility

Contract Document: The rights and obligation of owner and contractor are defined in a document called contract document.

Following are the types of documents in a construction contract:

1. General conditions
2. Special conditions
3. Drawings and specifications
4. B.O.Q (bill of quantity)
5. Letter of acceptance
6. Contractor bid

Conditions of Construction Contract

Conditions of contract are terms which rule the relationships between the owner and the contractor, define each party's rights and obligations, specify method of payment and determine actions required when existing any disputes between the owner and the contractor.

Following are the conditions of contract for construction projects:

- General conditions of contract
- Special conditions of contract

General conditions of contract

They are standard terms that suit the majority of projects, they include:

- Definition of the project
- Contract components
- Rights and responsibilities for the owner and the contractor
- Project schedule
- Payment method
- Warranty and delay penalty

Special conditions of contract

They are the modifications required to suit the uniqueness of the project, make the contract flexible for the nature of the project and achieve project objectives.

Selection of Type of Construction Contracts

One of the characteristics of construction projects is uniqueness. Every project has its special circumstances, so it's important to select the contract type which suits the project. The process of selecting the type of contract is developed by the owner.

Factors which affect the selection of construction contract are:

1. Project objectives

The type of contract should meet with project objectives.

2. Project constraints

There isn't any construction project without constraints. Thus, project constraints should be considered while selecting type of construction contracts.

3. Project delivery method

Project delivery method determines the relationships between parties getting involved in the project and how they interact with each other from project initiation to project closure.

Items need to be submitted for a Contract Document:

- 1) Cover page
- 2) Content page
- 3) Notice inviting tender (NIT)
- 4) Tender form
- 5) Schedule of issue of materials
- 6) Drawing
- 7) Specification
- 8) Condition of contract

Questions:

- 1) Define contract. What are the essential requirements of a valid contract?
- 2) Describe the different types of contract?
- 3) Differentiate between different types of contract.
- 4) Describe the Conditions of Construction Contract.
- 5) What are the Factors that affect the selection of construction contract? Describe.
- 6) Define contract document. Write the types of documents in a construction contract.
- 7) Write down the Items need to be submitted for a Contract Document.