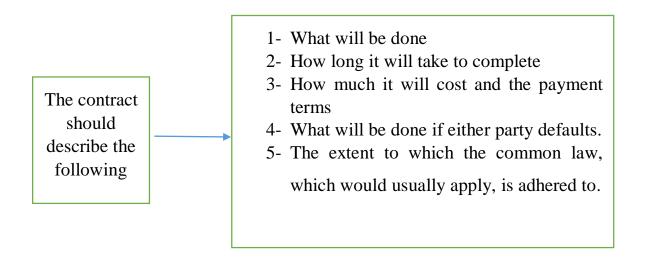
Course: construction Management Class: 3

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Prepared by: Assist. Prof. Dr. Faris Waleed Jawad

Construction Contracts and Types of Construction Contracts

A construction contract is legally mutual a or binding agreement between two parties based on policies and conditions recorded in document form. The two parties involved are one or more property owners and one or more contractors. The owner, often referred to as the 'employer' or the 'client', has full authority to decide what type of contract should be used for a specific development to be constructed and to set out the legally-binding terms and conditions in a contractual agreement. A construction contract is an important document as it outlines the scope of work, risks, duties and legal rights of both the contractor and the owner. The contract should have described the following bellow.



Notes: Ensure that you have read the entire contract and understand the terms and conditions contained therein before signing. The figure below shows the contract form.

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1 -1 -1 -1 -1 - 15 - 15 -
عقد مقاوله بناء باجر اجمالي
بسم الله الرحمن الرحيم
انه في يوم الموافق
تم تحرير هذا العقد بين كل من :
(1) السيد/ الجنسية مقيم برقم قسم محافظه
يحمل بطاقه عائليه رقم سجل مدني ويشار له فيما بعد ب
" طرف اول "
(2) السيد/ الجنسيه مقيم برقم محافظه يحمل
بطاقه عائليه رقم سجل مدني ويشار له فيما بعد ب
"طرف ٹانی "
يقر الطرفان باهليتهما للتعاقد و اتفاقهما على ما يلى:
"البند الأول"
يلتزم الطرف الثاني باقامة عمارة سكنية للطرف الاول وفقاً للرسومات الهندسيه المقدمه له من الاخير و
للمواصفات و الشروط التي تضمنتها القائمة الملحقة بهذا العقد و التي تعتبر جزءا مكملا له .
االيند الثاني!!
تتكون العمارة سالفة البيان من طابق يستغل الارضى منها كجر اج يعلوه الطابق الاول مشتملا
على شفة , ثم تتكرر الطوابق مماثلة للطابق الاول.
"البند الثالث"
يقر الطرف الاول بانه خصص قطعة الارض المملوكه له و البالغ مساحتها مترا مربعا ، والكائنه
بشارع قسم محافظه لاقامة العمارة ، و قد تم عمل
بمعرفه المهندس المعماري فتبين صلاحيتها لاقامة هذا البناء ، و ذلك وفقا للتقرير الهندسي
المقدمه صورته للطرف التاني.
و مع ذلك يتعين على الاخير معاينة الارض و اخطار الطرف الاول فورا عند اجراء اعمال الحفر للوصول
الى العمق المقرر للأساسات، عن اى حيب قد يظهر لو متعلقا بالارض مع بيان وسائل معالجته على ان يتم
الاخطار كتابة .
"البند الرابع"
يلتزم الطرف التاني بدر اسة التصميم و الرسومات الهندسيه المقدمه له صوره منها و الموقع عليها من
الطرفين على الا يبدأ في الاعمال التنفيذية الا بعد تحققه من موافقتها لكافة الاصول الفنية التي يتمكن معها من
تكملة الإعمال وفقا لها ، و لا يجوز لو ابداء اية اعتر اضات عليها او طلب تعديلها بعد البدء في التنفيذ ما لم
يوافق الطرف الاول على ذلك كتابة.
" البند الخامس "
لا يجوز للطرف الثاني بعد بدء التنفيذ أن يرجع توقّفه عن العمل او تاخره فيه الى عيب في التصميم و الا كان
مسئولًا عن التوقف او التأخير وفقاً للبنود التالية دون اعتداد بهذا الادعاء.
البند السادس"
يتعهد الطرف الثاني باستخراج ترخيص البناء و اشغال الطريق و قد وكله الطرف الاول في ذلك.
"البند السابع"

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Generally, contracts are classified by two principles methods of classification, which as follows:

a- Method of award b- method of pricing



Method of awarding and implementing projects in Iraq

There are methods followed by the concerned authorities in Iraq:

- 1- The general contract method where all interested and qualified contractors asked to submit bids through one or two stages, and also through inviting one specialized or the only qualified contractor.
- 2- Departmental or direct implementation by the owner staff and personal.

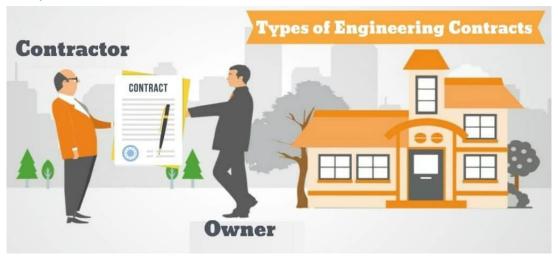
Types of construction contract:

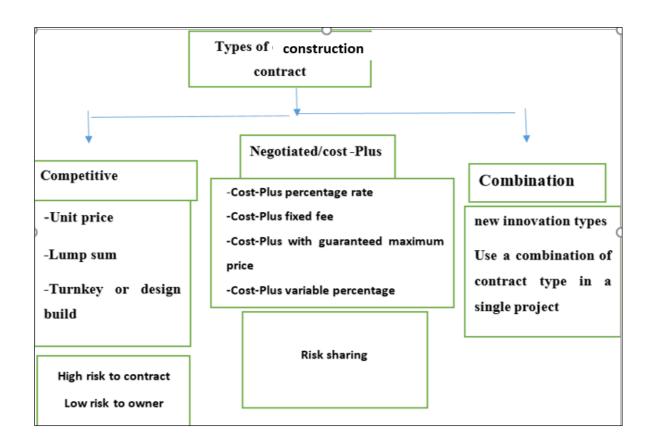
a- Competitive contract b- negotiated contract c- Combination

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A-Types of competitive contract

- a- Unit price contract
- b- Lump sum contract
- c- Turnkey or design-build contract.

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a- Unit price competitive contract

A pricing mechanism in construction contracts based on a series of line items identifying discrete tasks or scopes of work. Under a unit price contract, a contractor is paid for the actual quantity of each line item performed as measured in the field during construction. Each unit price includes all labor, material, equipment, overhead, and profit attributable to that scope of work.

Unit price contracts are commonly used on:

- Public works projects.
- Engineering projects.
- Horizontal construction, such as roads



Advantages

- 1- It makes contractor selection easier (the person with the cheapest unit price is usually chosen)
- 2- It increases the speed of the project as the contractor wants to finish as many units of work.

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3- It allows the client to relate the cost of his project to tangible and measurable results (which are the units of work).

Disadvantages

- 1- The quality of the work may suffer. The faster contractor finishes the job, the faster he'll get paid, and that may result in sub-standard quality, because he just wants to finish the work fast as possible. In order to avoid this, strict quality standards must be enforced by the client.
- 2- Misleading bidding. Let's say two contractors are bidding for a job, and each are using the same pricing units, and one of them is cheaper than the other. The client chooses the cheaper of the two. But the cheaper of the two appears to be slower, or has a lower quality of work, etc.

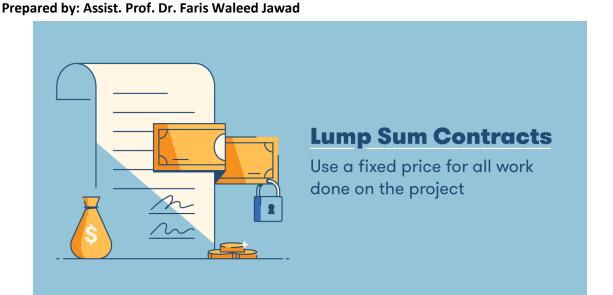
b- Lump-Sum competitive contract

This is one type of construction contract, sometimes referred to as stipulated-sum, where a single price is quoted for an entire project based on plans and specifications and covers the entire project and the owner knows exactly how much the work will cost in advance. This type of contract requires:

- 1- Full and complete set of plans and specifications
- 2- Includes all the indirect costs plus the profit and the contractor will receive progress payments each month minus retention.
- 3- The flexibility of this contract is very minimal and changes in design or deviation from the original plans would require a change order paid by the owner.

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Advantages of a Lump Sum Construction Contract

- 1- The owner's risk is reduced due to the price of the contract being fixed and variations are not as much like other contracts.
- 2- There are fewer change orders and they are reduced.
- 3- The bidding and contractor selection is less complicated.
- 4- Management of the contract is a lot easier for the owner.
- 5- It creates an improved communication and relationship between the design team, contractor, and the owner.

Disadvantages of a Lump Sum Construction Contract

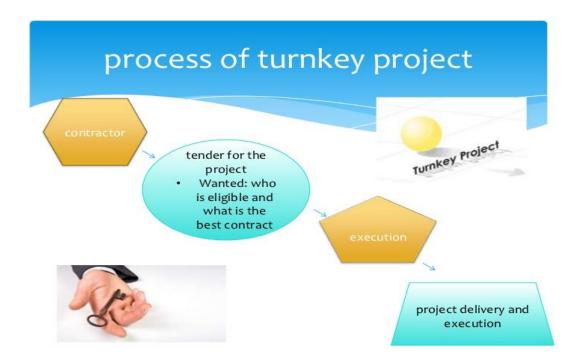
- 1- A lump sum agreement presents a higher risk to a contractor.
- 2- Measuring the number of changes is difficult. Such contracts require paperwork and records of change orders from each phase, and this means further documentation is needed.
- 3- Building plans and drawings have to be finished in plenty of time before the work begins.
- 4- Overall, the construction could take more time to finish than other contractual options.

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c- Turnkey or design-build contract.

A Turnkey Contract is one under which the contractor is responsible for both the design and construction of a facility. The basic concept is that in a Turnkey Contract the contractor shall provide the works ready for use at the agreed price and by a fixed date. The reality is that the employer wants to be and should be actively involved in the project at all stages. The term is used with expressions as "package contract", "design and build" or "design constructor".



Advantage:

1- The turnkey option has been used for a long time, mainly in building civil infrastructure projects, or with public and governmental bids, or when the project has a high level of complexity and there is a well-defined scope on behalf of the owner.

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2- Reduced total time during the contractual process by having just one process instead of two separate ones. This does not necessarily imply less construction time.

- 3- "lower cost" when integrating "all" the elements under one provider.
- 4- Minimizing orders of change (those of which generate more costs against the contractor) during the implementation of the project because the changes and adjustments fall under responsibility of the only contractor.

Disadvantage:

- 1- A higher cost is assumed due to the higher risk that comes with total responsibility.
- 2- There is a greater disparity when comparing offers, both economically, because each provider has different criteria for assessing the risk, as technically, because of the different assumptions and varied criteria when presenting solutions.
- 3- Usually designs are oversized due to lack of information available at the time when the offer is being prepared, several tolerance factors are taken into consideration when referring to the capacity of the equipment and are factored into the assumed risks, causing higher dimensions, because of this higher prices in the equipment are presented in the offer.

B- Types of Negotiated Contracts

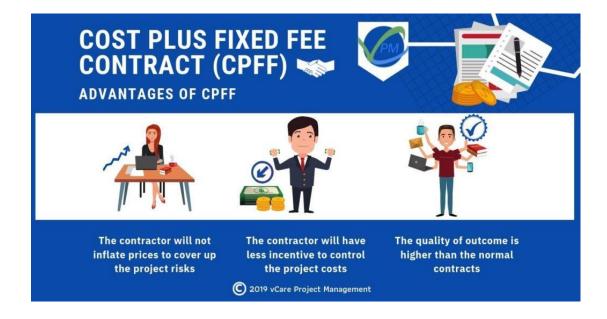
It is the type in which the contract of the project is awarded to a construction firm after a negotiation with the owner. Most of the negotiated contracts are Cost-Plus types. These types of contracts involve payment of the actual costs, purchases or other expenses generated directly from the

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construction activity. Cost-Plus contracts must contain specific information about certain pre-negotiated amount (some percentage of the material and labor cost) covering contractor's overhead and profit. Costs must be detailed and should be classified as direct or indirect costs. There are multiple variations for Cost-Plus contracts and the most common are:

- 1- Cost-Plus percentage rate contract: It is the method of payment to a contractor in which an additional amount of money, expressed as a percentage, is paid by the owner that is designated to cover the contractor's overhead costs. When paid as a predetermined profit, the client will usually require a strict accounting of expenses.
- 2- <u>Cost-Plus fixed fee contract</u>: it is a specific type of contract wherein the contractor is paid for the normal expenses for a project, plus an additional fixed fee for their services. These allow the contractor to collect a profit on the project, and they encourage economic production in various industries.



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- 3- Cost-Plus with guaranteed maximum price contract: This type is a Cost-Plus contract where the contractor is paid for actual costs plus a fixed fee subject to a ceiling price. The contractor is responsible for cost overruns, unless the contract has been increased via formal change order (only as a result of additional scope from the client, not price overruns, errors, or omissions).
- 4- <u>Cost-Plus variable percentage contract:</u> For this type of contract, the contractor agrees to a penalty if the actual cost exceeds the estimated job cost, or a reward if the actual cost is below the estimated job cost. In return for taking the risk on its own estimate, the contractor is allowed a variable percentage rate of price.

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