

Analysis of Civil Engineering Construction Progress Management

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Abstract: With the development of economy and society and the improvement of people's living standards, the quality of many engineering projects has become a key factor for the stability and sustainable development of society. Progress management and quality management are very important in the construction process of civil engineering projects. In the link, optimizing the construction quality and construction progress in the allocation of resources and the rational use of resources have ensured the good development of civil engineering. This article starts from these two aspects and discusses the actual situation of civil engineering projects in china.

1. Introduction

As a systematic project, civil engineering is often built on the basis of management. During the current development of our country's economy, civil engineering projects are also increasing rapidly, which will put more demands on its construction management. High requirements. In order to ensure the standardization and efficiency of civil engineering construction, it is necessary to effectively manage its construction progress and construction quality, so as to achieve optimal allocation of resources and reduce the gap between actual construction and construction planning. Construction efficiency will also play a certain role.

2. Construction Progress Management of Civil Engineering Projects

As the construction of civil engineering projects involves the coordination and cooperation between many departments, the construction process is not only the work of the construction unit, but also has a close relationship with the design department, the supervision department, and the project owner, and the construction progress management is extremely complex. It is necessary to comprehensively carry out construction project management analysis, comprehensively consider the factors and problems that may affect the construction progress, and comprehensively review the construction plan in order to reasonably arrange construction and follow-up in the later stage. The first is the impact of construction participating units on the construction progress. The larger impact is the decision-making of the construction unit, such as financial and technical support will directly determine whether the project construction can be carried out smoothly; the second is the impact of changes in construction environmental conditions on the construction progress Although a comprehensive survey of the natural environment of the project site was conducted in the early stage of project design, changes in geology and hydrology due to construction will affect the smooth implementation of the established construction design plan; the third is the impact of construction organization management on construction progress, Reasonable construction organization and management can achieve "the best use of talents and the best use of materials." Unscientific and irrational construction organizations will inevitably lead to confusion in management. Inadequate control of personnel and strict control of building materials will cause construction progress and quality problems. It is the impact of changes in the policy environment on construction progress. At present, various cities are facing the pressure of environmental protection. Some cities will issue dust-limiting orders in autumn and winter. Many civil engineering projects need to be stopped. These are also considered in the construction project management. A factor.

Civil engineering project construction can be completed in accordance with the expected design without a sound and complete construction schedule management system. At present, civil

engineering project construction is mostly extensive, many systems are not perfect, and the construction schedule management is too dependent on the previous stage of construction. Design schemes, but the management and control measures that are specific to the construction stage are often in the form and have no promotion effect. Therefore, it is necessary to establish and improve the construction progress management system for civil engineering projects. The first is to organize and determine the units and responsibilities involved in the construction progress management according to the construction design plan of the civil engineering project, clearly set up a special supervision organization and its personnel composition, make scientific predictions of the anticipated construction progress risks, and preset the corresponding plan; The second is to formulate a reasonable construction schedule, according to the actual conditions of the project construction, to prepare for construction in various aspects in advance, such as the procurement of building materials and machinery and equipment, construction technology training, etc. ; the third is to supervise the implementation of the construction schedule, The factors that affect the smooth progress of the construction shall be eliminated. If damage to the construction time caused by force majeure is encountered, scientific and reasonable means shall be used to make up for it in order to make up for the loss of time and ensure the construction progress.

3. Necessity of Construction Project Progress Management

The construction process of the building is relatively complicated. During the actual construction process, various emergencies occur. This will slow down the construction progress, prevent the building construction from being completed on time, and cause huge losses to the construction enterprise, which is not conducive to the long-term development of the construction enterprise. . Therefore, it is necessary to grasp the progress management and control the construction progress during the construction of the building, so that all the work on the construction site can be coordinated and unified to ensure that the construction progress on the site and the schedule prepared in advance are consistent, so that the construction project is on time. Completed. Before the construction of the building, the construction party must sign a contract with the construction enterprise, which clearly stipulates their respective responsibilities, and also has clear requirements for the construction period. The construction party can better perform itself only when the construction is completed within the time stipulated in the contract. Responsibility. Once the construction party exceeds the time limit stipulated in the contract, it means that more manpower and material resources must be invested, the cost of the building will increase, it will directly affect the economic benefits of the construction enterprise, and it will easily cause disputes between the construction enterprise and the construction party at the time of settlement. . Therefore, building construction is very necessary for schedule management. To form a schedule control consciousness, determine the progress target according to the contract before construction, and then compile the schedule according to the actual needs of the construction. The building construction must control the schedule. During the construction process, it is also necessary to provide various resources to ensure that the schedule is fully implemented and implemented. During the construction process, it is necessary to supervise the progress and keep the actual construction progress and schedule in sync with each other. Only in this way can it be effective. Control the construction progress, let the construction project be completed on time, and ensure the interests of all parties involved in the construction project.

4. Factors Affecting Construction Progress

At this stage, construction progress management still faces many obstacles. The actual effect of progress management is not optimistic, and there are still many problems to be solved. When the construction company compiles the schedule, it does not fully consider various factors that affect the construction schedule. The schedule is not closely related to the actual situation. The construction schedule is directly related to the configuration of the construction personnel and the deployment of the construction equipment. It must also ensure that The supply of construction

materials, these factors involved in the schedule, and the actual construction are quite different, which means that the arrangement of personnel and equipment in the schedule is not very reasonable, and the difficulty of construction will increase. Large, in the actual construction, if scientific adjustment cannot be made, it will slow down the construction progress and waste a lot of manpower and financial resources. This is a situation that all parties in the construction project are unwilling to appear.

During the construction process, environmental factors have a relatively large impact on the construction progress. The same construction project faces different construction environments, and the construction progress will also vary greatly. The southern climate of our country is relatively humid, and there are more rainy days. Building construction will be forced to stop construction on rainy days, which will slow down the construction progress in virtually, which cannot be resisted by manpower. In addition, during the construction process, various unexpected accidents, such as earthquakes, blizzards, and floods, are encountered. These natural disasters are uncertain and irregular, and cannot be predicted and prevented in advance. The construction progress and construction time will be greatly delayed.

Construction companies generally attach more importance to progress management because they have a direct relationship with their own interests, but they do not pay attention to the process of progress management. In the process of progress management, a perfect mechanism has not been formed. The prepared schedule is superficial and cannot be fully implemented. And implementation, there is a large deviation between the actual construction and the schedule, and the problem of out-of-control problems often occurs in project progress control. The schedule management did not combine the characteristics of each link of the construction, and formulated the construction plan in a targeted manner. The arrangement of various resources was unreasonable, which greatly affected the construction progress.

5. Strategies for Building Construction Progress Management

In order to improve the effectiveness of building construction progress management, it is necessary to scientifically prepare a schedule. When preparing, it cannot be based on its own experience or the construction content in the contract. Instead, it must go deep into the construction site and do a good job of preparing the construction schedule. According to the survey work in combination with relevant data of the place, comprehensively grasp the geological conditions and natural environment of the building construction site, analyze the factors that may affect the construction progress and formulate countermeasures. In addition, the preparation of the schedule shall verify the amount of construction, the input of the construction personnel and the number of equipment, comprehensively consider various construction factors, and prepare the best schedule to ensure that the construction project is successfully completed within the agreed construction period.

Building construction involves many links, and the types of work are relatively complicated. Often, multiple types of work are performed simultaneously. To ensure that the progress of the project is not affected, the construction of each link must be coordinated to form a whole and coordinate work. , Maximize the construction efficiency, and keep the actual construction schedule and schedule consistent. In the process of progress management, it is necessary to strengthen the communication of personnel from various departments and use information technology to establish communication channels. The heads of each department shall report the construction progress every day. The material managers shall summarize the remaining materials and then supplement them in time according to the actual needs of the construction. Construction materials are inseparable from materials. Only by ensuring the supply of materials can the construction efficiency be improved and the construction of the building completed smoothly. The connection between the various procedures should be done well, and the two parties in the cross-construction process should coordinate in advance to ensure that the construction will not be interfered by the other party. If the construction site is too chaotic and construction personnel and equipment are not properly arranged, hidden safety hazards will be buried. Coordinated management can minimize the occurrence of accidents and allow various tasks to be carried out in an orderly manner.

Construction enterprises should strengthen the training of progress management personnel to allow them to receive systematic progress management learning. During the training process, not only must update management concepts and master advanced management methods, but also strengthen professional ethics education, so that managers have a sense of responsibility. Improve their enthusiasm for work, implement a dynamic management model for schedule management, and announce construction schedules to construction personnel, so that all personnel can establish a sense of progress. In the process of progress management, make overall arrangements for materials, equipment and construction personnel to allow the construction to proceed in an orderly manner, without stopping due to improper arrangements in one aspect, and fundamentally guarantee the construction progress. A special progress monitor should be arranged at the construction site, and daily construction progress should be reported. When the actual progress cannot keep up with the schedule, the cause should be carefully analyzed, and then resolved in a targeted manner to avoid the extension of the construction period.

Safety accidents often occur in building construction, which is also an important factor affecting the construction progress. Construction progress management must do a good job of safety publicity. Before construction, a general meeting of all construction personnel must be held to familiarize them with construction technology, clarify the construction process and Attentions, strengthen safety publicity and education, list possible safety accidents during construction, print brochures for everyone to learn, ensure the standardization of building construction, and improve the safety awareness of construction workers and reduce the incidence of accidents To improve the effectiveness of progress management. In addition, the degree of mastery of construction techniques by construction personnel is closely related to the construction progress. The construction party must provide technical knowledge to the construction personnel so that they can learn advanced construction techniques.

6. Conclusion

Management and control of construction progress are necessary. Strategies for scientifically preparing construction plans, coordinating various links, improving progress management capabilities, and promoting safety are needed to ensure that construction work is carried out in an orderly manner and that the project can be completed on time.

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