Research on the Current Situation and Countermeasures of Civil Construction Site Management

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Abstract. With the rapid development of modern society and national economy, China's construction industry has achieved remarkable development, and various management problems have gradually emerged. As the core work of the construction industry, civil construction site management has become a topic of widespread concern in modern society. The civil construction site is a comprehensive management work, which will directly affect the safety of the civil construction site and the normal implementation of the project. It mainly includes the control of cost, material, process and completion. Only the effective interaction of multiple departments can promote the construction of civil construction activities, lay a supporting role for the long-term development of construction enterprises, and improve the timeliness and stability of management work. However, from the current point of view, there are still corresponding problems in the management of some civil construction sites in China, and such problems will greatly affect the overall construction quality. This article will mainly analyze the corresponding status quo and countermeasures in order to provide reference for relevant units.

1. Introduction
In recent years, the speed of social and economic development has accelerated, and at the same time, it has provided sufficient opportunities and support for the development of modern construction industry. The development of the construction industry has become more mature and has reached saturation. However, the rapid development of the construction industry has also caused corresponding management problems. As the core work of construction activities, civil construction site management must be widely concerned by workers in the industry. As the civil construction site management has obvious comprehensive characteristics, it requires multiple departments to work together. We should comprehensively analyze the problems of civil construction site management at this stage and the corresponding countermeasures, which is extremely important.

2. The Necessity of Civil Construction Site Management

2.1. Help Companies Save Costs and Improve Economic Efficiency
Good construction management activities can help companies better save the economic costs invested and improve economic efficiency. At present, the scale of civil construction sites is gradually expanding, the number of personnel is gradually increasing, and the types of materials are becoming more abundant. The intensity of any work is higher. The above-mentioned various factors make civil construction enterprises often inevitably encounter the problem of material waste. The construction site environment is generally not good enough and the overall environment is poor, which will seriously affect the improvement of civil construction efficiency. If the supervision and management of the civil
construction site can be effectively enhanced, it will not only ensure that the workers are more actively involved in it, and promote the orderly progress of the construction work, but also avoid the emergence of resource waste. This can make the best use of engineering materials and save human resources and material resources.

2.2. Help Companies Actively Face Market Competition
If a construction company wants to stay low in the fierce market competition, it is necessary to continuously provide the market with products of excellent quality, reasonable cost and duration, and such products are built on the construction site. Therefore, we must rely on the scientific management of the civil construction site, which is extremely important. The level of construction site management will directly determine the ability of construction companies to respond to market changes and their own competitiveness. At present, the construction market has reached a saturated state, and competition among enterprises is becoming increasingly serious. The main consideration for users in the bidding process is whether the construction enterprises have good performance capabilities. Construction site management will be related to the corporate image. Only a comprehensive management of the civil construction site can enhance the competitiveness of enterprises and reap sufficient economic benefits in the huge market. This is also conducive to construction companies occupy a more important position in the market, so as to better respond to various challenges given in the market environment.

2.3. The Inevitable Requirement of Liberating Productivity
The civil construction site is an environment where construction personnel directly carry out construction activities and create value, and is the core carrier of productivity. The construction products required by the society and the market can only be completed under the support of the civil construction site. That is to say, the various elements put into production by the enterprise can only be transformed into corresponding productivity after strengthening the combination on the construction site, and actively meet the needs of social change and market development. The construction progress of building products, the difference in quality, and the level of cost input are all closely related to civil construction site management. Some construction units did not pay sufficient attention to civil construction site management, which resulted in unplanned construction, irregular operations, and piled up materials and tools everywhere. Such situations will seriously affect the future development of construction enterprises. Practice shows that only by comprehensively strengthening the emphasis on on-site management can an enterprise improve its economic level and provide a pavement for its long-term construction and development.

2.4. The Inner Needs of Modern Mass Production
With the rapid improvement of modern science and technology, high-span, complex buildings are not uncommon. The application of new technologies, new techniques and new materials in civil construction is of extremely important significance and is closely related to the future development of modern society. Architecture is gradually developing in the direction of industrialization, and the overall standard is gradually improving. How to effectively meet the needs of modern market development for on-site construction operations has become an important support for construction companies to carry out in-depth reforms. Construction companies need to fully meet the relevant needs of modern production and construction, and make effective management and control. Its characteristics are: good professionalism, sufficient collaboration and complete modernity. We need to strictly adhere to modern concepts throughout the production process. Only in this way can we achieve strict control, rigorous treatment of some inaccurate patterns, and improve modern production standards.

3. Management Status of Civil Construction Site

3.1. Housing Quality Safety Accidents in Recent Years
At 10:06 on November 20, 2019, at the construction site of Building No. 2 of Yuehu Mansion Project, Xifeng District, Qingyang City, developed by Qingyang Julong Real Estate Development Co., Ltd., a tower crane collapsed during installation and 3 people died. Heavy lifting injury accidents. At around 11:10 on May 16, 2019, the factory building at No. 148 Zhaohua Road, Changning District, Shanghai suffered a partial collapse, causing 12 deaths, 10 serious injuries, and 3 minor injuries. The collapsed area was about 1000m². May 2019 At around 0:40 on the 20th, a steel structure roof collapsed at 0776 Bar, Dongzhou Avenue, Youjiang District, Baise City, Guangxi, causing 6 deaths and 87 injuries. At about 6:40 on October 14, 2019, a collapse occurred during the maintenance of the building of the Baoping Branch of the Baicheng Rural Commercial Bank, about 10 meters west of the intersection of Xingfu Street and Sanhe Road, Baicheng City, killing 5 people. Similar accidents occur almost from time to time. It can be seen that the management of civil construction sites is extremely important. In the process of construction of existing projects, sampling methods are usually adopted. This method is likely to miss many problems, coupled with the lack of attention to on-site management, will cause construction safety issues to appear almost frequently. This is affecting the country's future construction and development to a considerable extent.

3.2. Lack of Scientific and Reasonable Enterprise Management System

The development of any enterprise needs to be based on the premise of maximizing profits. This is also true for civil construction enterprises. Profitability is obviously the core goal of the development of construction enterprises. It is precisely because of this influence that some construction companies pay too much attention to the economic benefits they can obtain, and take the method of reducing project cost input to capture illegal benefits. This move will greatly affect the long-term construction and development of construction companies. Although companies can obtain short-term benefits, the overall project quality is difficult to improve. This is obviously not applicable to the construction industry where market competition is becoming more and more fierce. If things go on like this, the reputation of the company will suffer a huge blow, which will affect the future construction and development of the company to a considerable extent. At this stage, China's regulations on such issues are still not specific enough, and there are significant deficiencies in the control of construction projects. There are still many shortcomings in the civil construction management site in the entire industry, which will seriously affect the long-term construction and development of civil construction activities.

3.3. Lack of Integrity in Civil Construction Site Management

First of all, civil construction site management is a systematic project involving the supervision and management of a large number of engineering materials. As a result, it is necessary for us to do a good job of pre-material management, which will directly affect the quality of civil engineering. Specifically, the construction unit needs to use the classified storage method as the core support, do a good job of classification and processing, ensure that various materials can be used scientifically and reasonably, and avoid the problem of material waste. In the meantime, the content of civil construction site management also includes construction equipment and capital production. It cannot be simply limited to a certain level in construction activities, otherwise it is likely to cause management loopholes and affect the construction of subsequent engineering activities.

Secondly, civil construction site management includes not only the management and control of materials and equipment, but also the management and control of the entire construction process, including pre-design, mid-term implementation, and post-maintenance. Construction management workers need to effectively increase the construction speed, do a good job of effective management of the civil construction site, and fully optimize the construction process. This is the first problem that needs to be solved in modern civil construction management.
3.4. Lack of Safety in Civil Construction Site Management

Some construction companies pay too much attention to the economic benefits they can obtain, but neglect the management and control of construction projects, construction equipment, construction materials, and personnel capabilities in construction activities. It and its related budget results also lack sufficient scientificity and rationality, which will greatly affect the progress of civil construction activities. Excessive compression of production costs will cause various degrees of engineering quality problems, for one thing, it will seriously affect the normal implementation of civil engineering. For another, it will threaten the future development of construction enterprises. From the current point of view, some construction companies still have insufficient attention to safety issues, and the standardization of various operations in construction activities is still less. Accumulation over a long period of time is likely to cause serious safety hazards, affected by various conditions, and even threaten the normal construction of the project. The consequences of such problems are also very serious. In the light, it will seriously affect the overall quality of the project and the safety of the enterprise, and in the worst case, it will affect the life safety of construction workers. It can be clear from this that ensuring the safety of civil construction is the core starting point for good management and the basic support for creating an open and stable engineering environment, which should not be ignored.

4. Optimized Measures of Civil Construction Site Management

4.1. Comprehensively Strengthen Construction Quality Control

The quality of construction projects is extremely important. It is not only the basic guarantee for the current construction, but also related to the direct use of future buildings. In the current situation of increasingly fierce competition in the construction industry, although the management and control of engineering efficiency is an extremely important content, in fact, quality control is the most fundamental. Constructors need to analyze various factors that will affect the quality of civil construction at this stage, and use this as a basis to formulate corresponding construction plans. In the process of carrying out construction activities, we should arrange dedicated workers to supervise and control, to ensure that each process can meet actual quality needs. The smooth development of a project often needs to fully rely on the support of the engineering design drawings. In consequence, the drawing design link in the early stage of construction needs to be focused on. Relevant personnel need to make in-depth analysis and discussion on the design drawings, find the problems and improve them. Design drawings often need to involve a variety of data and information. At this time, it needs to be scientifically and rationally reviewed, so that quality control can be done in essence. In the meantime, the technical solutions adopted in civil construction activities need to fully conform to the content of the drawings and the requirements of construction specifications. Supervisors need to avoid mere formal problems in their work and take every aspect of their work seriously. Meanwhile, civil construction is a highly complex project content,
often involving many departments. Adequate communication and interaction among multiple departments is extremely important. This move can lay a good support for the sharing and application of information resources, and strengthen relevant workers' understanding of civil construction site management. In this way, it can be ensured that every construction worker can improve and optimize their own behavior and enhance their sense of responsibility. In turn, the basic quality and efficiency of the project are guaranteed, and it is used to more effectively meet the needs of actual project construction.

4.2. Enhance Construction Organization and Coordination Management

Construction organization is not an independent content, and multiple departments should actively realize exchanges and cooperation to fundamentally improve engineering efficiency and quality. Only in this way can the construction quality under all links be guaranteed to meet the actual needs of project construction. The construction unit not only needs to work together, but also needs to avoid the problem of overlapping functions and show its own role to the greatest extent. The leaders of each department need to play their leading role and shoulder their own responsibilities to make accurate review and analysis of various construction documents involved in the project. In addition, leaders of various departments should often go to the grassroots level to understand the progress of construction activities in order to avoid various problems. Civil construction is a systematic project, and each process should maintain sufficient relevance. This also means that the responsibilities of related workers are interoperable. Consciously improving work coordination can avoid quality problems to a considerable extent and fundamentally ensure the normal progress of construction activities.

There are usually many potential safety factors at the civil construction site, and there are obvious unpredictability. In order to effectively guarantee the quality of the project and meet the requirements of relevant project construction regulations, it is necessary for us to do a good job in the preliminary design. Only after having a complete construction plan can the work quality and on-site management efficiency be effectively improved. Simultaneously, the construction unit also needs to formulate a reasonable work plan, fully consider the various problems that may occur in the project, and fundamentally ensure the normal progress of the project. In construction activities, along with the overall plan changes, the resulting construction results will also have corresponding changes, so the construction plan will become the core factor that determines the quality of civil construction. The construction plan needs to have sufficient flexibility, and the construction schedule is the core reference object. The pre-made construction plan and the construction schedule need to maintain sufficient consistency. This is also the basic support to ensure the normal progress of construction activities. Obviously, the construction plan is not completely unchanged. When encountering a certain engineering problem, we can make targeted adjustments and optimizations based on specific circumstances, so as to strengthen the adaptability of the plan and the actual construction situation.

4.3. Strengthen the Safety Management of Civil Construction Site

Civil construction activities are basically a large number of work types, which are usually open-air high-altitude operations. In this environment, there are many uncertainties and instabilities in construction activities. Such factors will directly affect the quality of construction activities and the safety of related personnel, so the ILO clearly believes that the construction industry is a high-risk industry.

Civil engineering has the characteristics of long construction period, high investment and susceptibility to external influences. Moreover, construction site management will involve all levels of managers and operators in the construction enterprise. This will directly determine the higher degree of difficulty in site management. However, the emergence of safety accidents often brings extremely serious economic and property losses to the people, and at the same time also seriously threatens the normal construction of modern society. Therefore, it is necessary for relevant units to form a good sense of innovation and get rid of the limitations of various traditional concepts. First of all, relevant units need to strictly implement relevant Chinese laws and regulations, fully integrate the characteristics of the enterprise itself, and analyze the safety management strategy that is in line with the development of the enterprise and has sufficient guidance.
4.4. Strengthen the Coordination and Control of Construction Organization

The professional coverage of civil construction activities on the construction site is relatively wide. In the process of carrying out construction activities, we should fully control the process flow, and combine the characteristics of the process flow to make in-depth analysis and exploration of the professional design and process characteristics. Besides, we need to comprehensively consider the coordination of multiple work types to ensure that construction activities can be carried out effectively. Otherwise, we should determine the corresponding responsibility management system, and ensure that the responsibility belongs to each person under a clear division of labor and precise management. Various departments within the enterprise need to comprehensively strengthen the supervision and management of the construction site, resolutely eliminate various construction quality threats, and fundamentally improve work quality and efficiency.

5. Conclusion

In short, accurate and effective management of civil construction sites is an extremely important link in construction projects. The efficiency and quality of civil construction site management will directly affect whether the enterprise can achieve sustained and stable development. Moreover, it is also an important manifestation of the comprehensive capabilities of construction enterprises. A successful civil construction site not only requires the construction company to have sufficient professional capabilities, but also requires the introduction of many outstanding professionals to improve management standards in order to strengthen the supervision and control of the civil construction site. The management of content in this direction will not only provide help for the long-term development of the enterprise, but also greatly promote the healthy development of the national economy.

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