Study on Problems and Countermeasures of Civil Engineering Construction Management

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Abstract: Construction organization is the core of civil engineering, which directly determines the success of the whole project, the economic benefits of the whole project, and the long-term development and sustainable development. However, at present, the construction management of civil engineering construction enterprises is still not perfect, entering a new era, we should pay more attention to the management of civil engineering construction, face up to the existing problems and fully understand its role. Through the study of civil engineering construction in China, the problems and deficiencies in its development are analyzed, and the corresponding countermeasures are formulated.

Keywords: civil engineering, construction management, countermeasures

1. Introduction

In the civil engineering, the management level of the construction project is an important factor affecting the project quality. Only by establishing a sound project management system and giving full play to the project management system can we ensure the normal development of the project and lay a good foundation for the high-quality development of the project. With the rapid development of the construction industry, the scale of domestic civil engineering is expanding rapidly, but because of the construction progress lag, personal safety problems, many problems, these problems not only affect the overall quality of the overall construction, and caused adverse effects to people’s property, personal safety, affect the coordinated development of society. Therefore, we should study the problems encountered in the construction with a scientific attitude, and take more effective measures.

2. Main contents of civil engineering construction

The civil engineering construction has gathered each kind of construction project, has the quite science and the technical content, including the construction project needs each kind of material and the equipment and so on. At the same time, in the actual construction, but also a set of detailed construction work, such as in the selected construction site survey, survey, there are special staff to design, and then according to the design drawings to carry out construction, and finally there are special staff to maintain and maintain the construction project.

3. Problems in civil engineering construction management

3.1 Imperfect preliminary planning of project planning

In recent years, due to the diversification of people’s living habits, new elements and new concepts have been integrated into engineering construction. In the process of design, designers always take novelty and individuality as the starting point, pursue unique style, but lack of comprehensive evaluation and planning of new technology and new materials. In order to ensure the safety and tightness of the project, the construction process of the project must follow certain procedures, usually through the preliminary investigation and research, design drawings, field proofreading, field examination, final verification, final approval and other steps, so as to ensure the quality of the project, at the same time, control the overall construction costs and reduce investment costs. However, due to the lack of strict inspection of the construction stages, the lack of scientific management standards, resulting in sharp rise in project costs.

3.2 Weak concept of construction safety

In the project construction, the safety is particularly important, the construction unit should be responsible for the safety of the construction personnel’s life, is also a prerequisite for the successful completion of the project. In order to speed up the construction progress and save the cost, most of the construction units lack strict standards and norms for safety problems, resulting in accidents from time to time. For example, at present, many buildings are built outdoors, and highly hidden, to
the safety of construction workers has brought great hidden danger. According to statistics, more than 80% of construction workers have died in different degrees in the course of construction, which is mainly due to the construction enterprises’ non-compliance with the construction safety standards and illegal operation, which leads to the occurrence of engineering accidents. At the same time, there are also some problems, such as the construction industry does not impose any punishment on the illegal acts, the construction workers do not have strong awareness of safety protection, etc. For example, the fire in Shanghai’s Jing’an County was caused by a lack of safety precautions, an investigation by the state investigation team found that the accident was caused by the illegal operation of two welding workers from a construction company. This could have been avoided, but staff negligence led to the spread of the fire.

3.3 Unsound construction quality standards

At present, there is not a set of perfect construction quality standard control system in our country, and the inspection means of civil engineering construction is lack of specialty, the acceptance standard of construction results is not high, and the construction quality is not rigorous enough. Because there is no clear division of duties, the construction personnel have insufficient sense of responsibility, weak sense of responsibility, and the external legal supervision mechanism is not sound. Civil engineering is a very strict and accident-prone work. Because of its lack of safety protection ability, accidents often occur, which not only seriously damage the personal image of the construction unit, but also cause the continuous decline of construction quality in the construction market. In civil engineering, there are many uncontrollable factors will affect the quality of construction, some projects, because the construction process needs more professional areas, the amount of work is large, it is impossible to carefully check every construction process, in the quality control lack of careful control, therefore, the construction materials do not meet national standards, seriously affecting the quality of the whole project.

4. Countermeasures for perfecting civil engineering construction management

4.1 Perfect implementation of project plan

In the construction process, all the problems are based on the construction contract and design drawings, and the project quality standards are determined according to the specific content of the contract and drawings. The construction contract and design plan are the basis of the construction quality standard. In the process of implementation, the concrete construction quality standard should be formulated and communicated to every employee. In order to further improve the professional quality and quality evaluation ability of the all-day construction team, the construction unit shall strengthen the supervision over the purchase and storage of materials; when selecting the materials suppliers, it is necessary to see whether they have obtained the national certification certificate, high technical level, sufficient funds and good market trend, and the selected materials shall have the qualification certificate and good market reputation. In the procurement, testing, insurance and use of materials, the procurement, testing, insurance and use of materials must be strictly monitored to ensure that the construction unit will not find substandard materials.

4.2 Establish and improve the quality supervision system

In the whole process of the project, in order to guarantee the quality of the project, it is necessary to have a sound quality supervision system, such as strict control of the materials entering the construction site, improvement of the acceptance standards of the construction project, guarantee of the construction quality of the main body, and comprehensive supervision of the quality of various works. Only in this way, can the entry of the construction materials and the conditions of entering the site be effectively controlled, and the rationality of the quality management system be scientifically adjusted according to the specific construction conditions. The construction personnel shall strictly monitor the quality from the drawing design to the acceptance, so that the progress of the project can be comprehensively controlled and the quality of the project can be paid attention to at any time. To ensure the quality of the project, we must establish sound rules and standards to ensure the quality of the project. In order to manage the project quality well, we must have a sound legal system and standards as the basis for its implementation. The enterprise may establish the related construction quality monitoring organization, carries on the regular responsibility education to it, causes it to have the good quality management function. At the same time, the construction unit must make continuous improvements to enhance its implementation capacity in accordance with the latest building standards. Through a perfect system, the construction quality control of civil engineering can be controlled scientifically and reasonably by laws and regulations.

4.3 Improve and implement the construction management responsibility system

The proper use of management responsibility system in civil engineering can disturb the progress of the project fairly and justly, and it is a very effective management means. However, facing the rapid economic development, the construction
manpower system and contract management can not adapt to the various civil engineering projects and the expansion of the project scale. With the development of economy in our country, the scale of civil engineering is changing and the types of projects are also increasing. At the same time, the management becomes more difficult because of the changes of the scale and the types of projects.

5. Conclusion
In the development of the construction industry, it is necessary to reform the management mode of civil engineering construction. Introducing a new scientific construction management thought and mode into the construction industry can promote the sustainable development of the construction industry. Although the governance mode of civil engineering is gradually improving in China, the accumulated experience is not enough to deal with various problems existing in the construction.

References