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TYPES OF GEODETIC WORKS IN THE CONSTRUCTION OF HIGH-RISE BUILDINGS AND STRUCTURES

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ANNOTATION
This article provides information on the order and types of geodetic works in the construction of multi-storey buildings.

Keywords: building, structure, geodetic, work, topographic, survey, survey, project.

INTRODUCTION

The fundamental essence of the reforms implemented in the economy of our republic is to increase the well-being of the population and fundamentally improve their social and economic situation.

Therefore, the creation of various buildings and structures, which are the basis of the social life of the population, the registration of various rights to them in the state register, quantitative and qualitative accounting and value assessment, as well as generally accepted information It is important to clarify the information in the specified documents, to provide this information to the real estate market that is being formed in the country today. In order to solve these problems, the state cadastre of buildings and structures is kept as part of the unified system of state cadastres [1-5].

Indeed, in the "Regulation on the procedure for maintaining the state cadastre of buildings and structures" adopted in accordance with the decision of the Cabinet of Ministers of the Republic of Uzbekistan No. 278 of June 2, 1997, it is recognized that "The state cadastre of buildings and structures is more effective than buildings and structures" it is carried out in order to ensure their use and protection, the rights of property owners and other users of these objects, as well as the transfer of ownership rights to individually constructed buildings and structures and other material rights to the state register.

It is known that the built buildings and structures were built in the cities, urban-type settlements and villages of our Republic, and they differ depending on their essence, importance and other characteristics. According to the information provided by the "Ergeodezkadastr" State Committee, the "Architectural Construction" State Committee and other official agencies, today there are 120 cities, 113 urban-type and more than 10-11 thousand rural settlements in the territory of our country. lib, they have various residential buildings, non-residential buildings and structures. These buildings and structures are considered the national wealth of the country and are

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owned and used by legal entities and individuals, foreign legal entities and individuals on the basis of various property and material rights. It is important to maintain the state cadastre of buildings and structures in order to rationally and effectively organize this use, improve the tax system, positively solve mortgage issues, insurance and other market problems [6-9].

In the conditions of today's rapid development, doing these things in the current order requires a lot of work and time. On the other hand, maintaining the cadastre based on the current procedure will not allow to register all the individually constructed buildings and structures existing in the country in the next 10-15 years in a modern manner and provide them with cadastral documents. This, in turn, creates certain difficulties in providing the real estate market and the tax system with necessary information in a timely manner.

Taking into account the above, the issue of organizing the formation and management of state cadastres in the Republic of Uzbekistan is an urgent issue today.

This, in turn, creates the need to create scientific proposals and practical recommendations, scientific developments aimed at improving the procedure for maintaining the cadastre of buildings and structures.

LITERATURE REVIEW

It should be noted that the use of geoinformation systems in geodesy or cartography is a relatively young field, so it is appropriate to analyze the researches of foreign scientists in this direction. In particular, A.M. Berlyant, I.K. Lure, S.N. Serbanyuk, N.V. Konovalova, E.G. Kapralov, Yu.F. Kiyajnikov, Ya.E. Smirnov, and V.V. Artyomenko dealt with the problems of applying geoinformation systems in cartography and got a number of positive results. formed scientific-practical conclusions.

a) E.Yu., one of the Uzbek scientists on the use of geoinformation systems in cartography. Safarov and M.S. The Ghulomovas are also doing some scientific work. However, there are not enough scientific developments and practical recommendations based on the use of such modern systems in the cadastral system, specifically the cadastral system of buildings and structures [1-3].

DISCUSSION AND RESULTS

Before the construction of any structure, including a pit, a survey and topographical surveying are carried out in the place where the structure is intended to be built. The necessary structure is designed on the topographic plan drawn according to the results of the survey. The structure in the project is moved to its place by means of geodetic measurement, this is called moving the project to its place, then construction of the pit is carried out, geodetic monitoring is also carried out during the construction period and during the operation of the structure [10-15]

Accordingly, geodetic work can be divided into 5 types (Fig. 1):

a) Engineering-research and survey works

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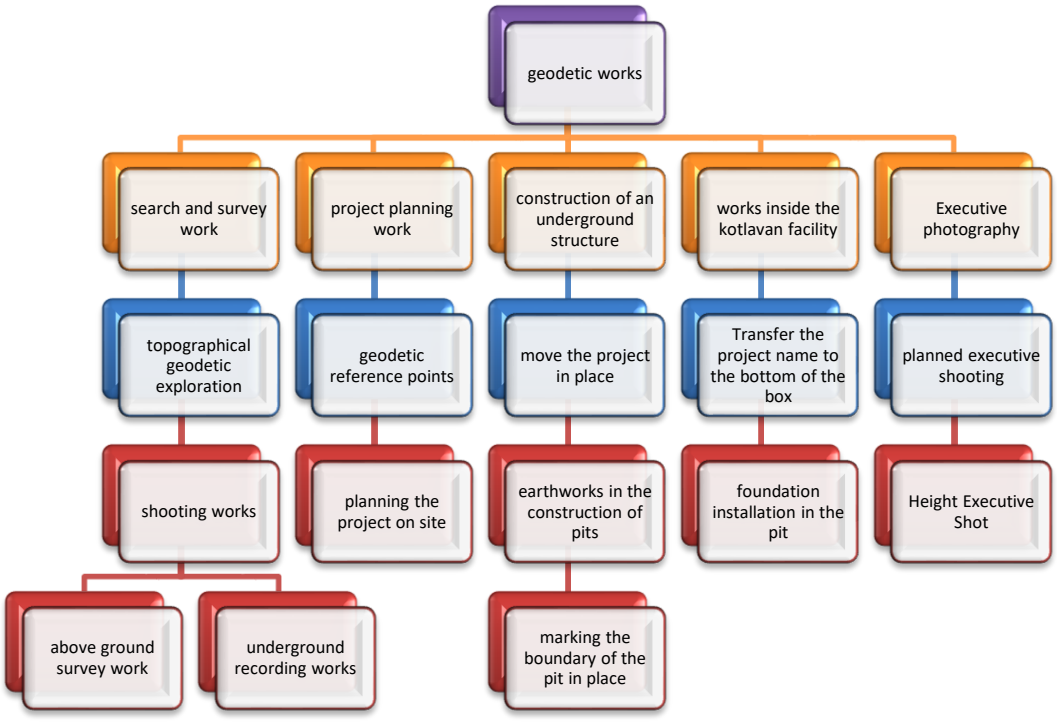
b) Designing and planning works
c) Project relocation construction works
d) Works inside the mining facility
e) Inspection of deformation (change) during the period of use Search works are divided into economic and technical works. During the economic exploration work, it is determined that the necessary materials for the structure will be found in this area, attention is paid to the quick and thorough completion of the structure at a low cost. In the technical search, the soil, relief, geological, hydrogeological condition of the place intended for the construction of the structure, opportunities for organizing geodetic works and other technical aspects are considered.

The set of geodetic measurement works performed to determine the shape and measurement of the location of the engineering structure specified in the project at the construction site is called structure planning. Planning will be plan and elevation. The position of the structure is determined on the horizontal plane in the plan planning; and in height planning, the positions of points and lines in the project are determined in the vertical plane. The following documents are used when moving the project to its place:

1. Topographical plan of the site and general plan of the structure on a scale of 1:5000...1:500
2. Transverse and longitudinal profiles of the structure
3. Vertical planning (vertical design) plan describing the vertical position of the place where the structure is designed
4. List of geodetic base points (vedomost) in construction and their location scheme
5. Working drawings on a scale of 1:500...1:1000.



Topographic-geodetic research and surveying works

As a large scale, 1:500; 1:1000; Refers to topographical plans made on a scale of 1:2000 and 1:5000. Depending on the application, prepared by the enterprises of the "Land, geodesy and cadastre" committee - prepared to solve the main large-scale plans and specific issues of the national economy - specialized: land management, forest structure, surveying, cadastre, engineering - is divided into topographic large-scale plans. [16-20]

The main part of the specialized large-scale plans is the plans and profiles created during the design, construction and use of engineering facilities.

Depending on the application, it is divided into exploration plans, creative plans and cadastral plans. Search plans are used to select the most convenient options for construction sites or routes, executive plans are drawn up during the construction process to check the compatibility of the building under construction with the project, cadastral plans are used to determine their area, dimensions, underground communications, legal, ownership, etc. during the use of buildings and structures. will be compiled for registration.

Currently, most of the plans are cadastral plans, which describe private and state property, forests, land, and water bodies, and provide complete information about their cost and quality.

Depending on the size of the area, taking a vertical-scale plan is carried out using stereotopographic, tachyometric, mensual, theodolite planning and area leveling methods [18-22].

In large-scale plans, regardless of the method of obtaining the plan, the topography of the place is represented by a horizontal line created with the help of marks, railways and highways, electric transmission networks, pipelines, canals, rivers, etc. are fully shown.

CONCLUSION

The following conclusions can be made based on the analysis of the geodetic work in the zero cycle of construction and the results of the measurement work:

First of all, the correct placement of the foundation of the building, that is, the design of the underground part of the building, its relocation, the construction of the excavation, the correct calculation of its footings, and the implementation of the work on the basis of the required measures and norms the basis for the correct construction of the whole building and the relevance of the chosen topic are based on this;

Secondly, the types, sequence and requirements of geodetic works in the zero cycle of construction were clarified, and the scheme of the process of these works was developed.

Third, the methods of planning and moving the design pit are fully illustrated with examples, and detailed examples are provided to determine the construction limit of the design pit structure. The accounting work for determining the limit of construction

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of this pit, that is, the procedure for calculating the point of the pit limit on the pit axes on a microcalculator, has been fully detailed.

Fourth, the methods of determining the bearing at the bottom of the pit and transferring the bearing to the bottom of the pit: leveling from two stations, in which a proposal was made to use a theodolite tool on the bracket as the second ruler, in which the sight axis of the theodolite is fixed at an angle of 30 degrees to the bottom of the pit. it was proposed to determine the project mark by measuring the distance of the slope from the orientation and the theodolite to the observed point;

A more convenient way to determine the level of the bottom of the project pit, that is, a ruler with a known level is installed on the edge of the pit, and then the theodolite is set at a distance where the bottom of the pit can be observed, and taken from the ruler and the point on the bottom of the pit. it was proposed to determine the project mark by counting;

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