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Akhsikent: The Concept Of Creating A Museum Of The Reserve Under The Open Sky Using Modern Technologies Of The "Smart Museum"

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ABSTRACT: The goal and tasks, constructive features of the architectural structure specially designed for the open-air museum are presented in the article. Colorfully presented are the developed individual elements in the form of drawings, the details of the construction of building elements are justified, the parameters and the construction parameters and the sequence of the construction of the museum complex "Akhsikent - open air museum"

KEYWORDS: Akhsikent, architecture, open-air architectural museum, construction, structures, drawings, building elements, smart museum

I. INTRODUCTION

Currently, Uzbekistan is actively working on the protection of monuments, historical and cultural heritage and the development of tourism in the country. The sphere of culture and digital technologies in this regard occupies a special place in the program of the government of the country. On the initiative of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev is taking steps to give Akhsikent the status of an open-air museum-reserve. In accordance with Resolution No. 831 of the Cabinet of Ministers of October 16, 2017, proposals were approved for the establishment of the Akhsikent archaeological heritage site in the Turakurgan District of the Namangan Region, a memorial complex for the protection and research.

Research A.A. Anarbaev [1, 2] made it possible to reveal many important aspects of the life of the ancient city - its town-planning structure, fortification, residential and craft - industrial districts.

"Open-air museum-reserves" preserving the ancient culture are a fact of the presence of civilization in the past. Preservation of historical and cultural heritage is a vital necessity of modern society. UNESCO conducts consistent work in this direction by discussing and solving identified problems of legal regulation of the protection of cultural and natural heritage [8, 9].

The study scientifically substantiates the use in museification of such a form as a museum complex - a "smart museum". The proposed typology of museum-specific archeological monuments takes into account the peculiarities of preservation of the archaeological heritage.

Basics are being created for the integration of cultural studies, history and local history. The methodological arsenal of museological research is being expanded, and the possibility of broadcasting and reviewing guests - tourists.

When creating an architectural project, we used international experience, found methods and methods of modern use of this settlement as a "smart museum". This project, in our opinion, will arouse the interest of the world community in the field of history, culture, art, education, archeology and will ensure the flow of tourists and the active development of tourism in this area. Moreover, this project will be a kind of "beacon of orientation" as a way of modernizing a dozen other similar sites, located both in Uzbekistan and in Central Asia [3, 4, 5, 6].

The archaeological and historical monument is sheltered by an original hemispherical dome with divergent rays - hangars decorated with a national oriental ornament. Nearby there are three buildings with a hemispherical dome, where the elements supporting the historical object are located.

Currently, all elements of the main building and auxiliary facilities are defined. The central place is occupied by the dome, which allows sheltering archaeological sites, with three hangars extending from it. Inside the hangars are

the corresponding review galleries in three tiers, along which tourists will move and from above review the current archaeological excavations and the remains of the ancient settlement. Conditions are provided for people with disabilities and people with disabilities.

The architectural project relates to the field of construction of buildings and structures for special purposes and has a peculiarity in that it is being carried out over a large sheltered space used to shelter archaeological excavations, museum exhibits, and also as a venue for spectacular events number of tourists, lectures and training seminars. In this regard, the building is rectangular in plan with a cylindrical vaulted roof and contains at least three tiers of galleries placed along the walls of the building and mounted on consoles arcs. The latter serve as an overlap, and one part of them rests on the walls of the building, and the other rests on the retaining wall. The compartments are formed by the longitudinal and transverse arrangement of the retaining walls on which the first tier of galleries are stacked. Other galleries are interconnected by flights of stairs and elevating ramps for disabled people.

A special role falls to the share of overlap. Now it is made removable, in the form of a three-layer roll and facilitated by the use of aluminum material.

The presented drawings show the design features of the Architectural project: The proposed building is a rectangular base 1, walls 2 and retaining walls 3 installed on it, forming compartments 4 serving as ancillary rooms (see Fig. 1). In a separate drawing, FIG. 2 and FIG. 3 shows the location of the consoles 10 and the attachment to them of sites 11 subsequent tiers.

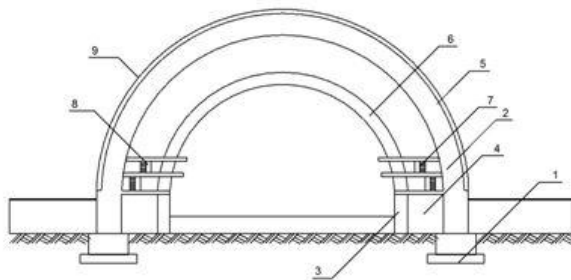


FIG. 1

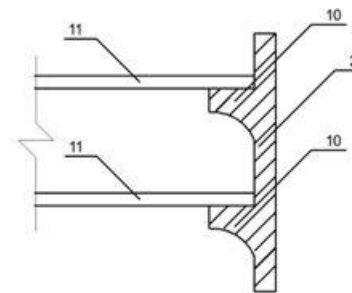


FIG. 2

Since this design solution was conceived as a pavilion above archaeological excavations, the compartments created serve as workshops, exhibition halls, and also perform other museum functions. The overlap of the building is made of arcs 5 and 6 with different configurations. Each arc 5 rests on the walls of the building, and 6 on the supporting walls 3. Between the platforms there are staircases 7 and lifting ramps 8 for lifting people with disabilities. The building's overlap of the easily removable rolled material 9 consists of a three-layer film which includes: plastic film, aluminum foil and cotton fabric, which are interconnected by thermal pressing.

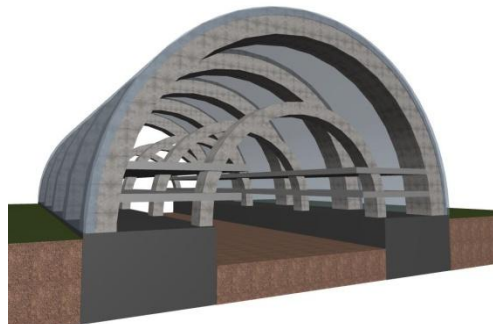


FIG. 3. General view of the construction of the museum's gallery

All elements of the “smart museum” are vividly represented on the general view of the architectural complex (Figure 4).



Fig. 4. General view of the main elements of the “smart museum”

The concept of "smart museum" includes: car parking, wind power plant for autonomous power supply and microclimate creation in different seasons, an electronic library, a visitor center serving visitors, a hotel, a cable car, as well as lecture halls and classrooms. In the classrooms, visitors will be able to try their hand at traditional crafts for the inhabitants of Akhsikent (making pottery, making swords, etc.).

Visitors will also have the opportunity to take part in archaeological excavations carried out on the territory of the museum reserve.

The architectural structure is protected by a patent of the Agency for Intellectual Property of the Republic of Uzbekistan on the utility model and provides patent protection [7].

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