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STUDY OF THE STRUCTURAL COMPOSITION OF GABIONS IN LANDSCAPE DECORATION OF AUTOMOBILE ROADS AND CITY STREETS

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Annotation
When choosing the size, shape and material of gabions, it is determined depending on the area of the place to be improved. Gabions can be used not only for design, but also for protection against erosion. Gabions not only decorate the suburban area, but also protect riverbeds from erosion, strengthen slopes, and prevent soil erosion.

Keywords: Gabions, size, shape, materials, selection, landscaping, site area, design, erosion, use, city, river beds, protection.

INTRODUCTION

Today, one of the main problems in urban planning is the organization of greening works on a scientific basis. . Implementation of the decree of the President of the Republic of Uzbekistan dated October 30, 2019 "Concept of environmental protection of the Republic of Uzbekistan until 2030", December 30, 2021 "Measures to accelerate greening in the Republic, more effective organization of tree protection" is set to be done. At the moment, global warming is going on around the world.

This is having an impact on the environment. Landscaping of residential areas - cities, districts, villages and settlements - is one of the main means of beautification of these places. The scale of greening indicates the culture of the population. It is the use of gabions in landscaping that adds beauty to the city. Demographic studies show that people settle in green areas, and migration from these areas is rarely observed. Globally, gabions are mainly used in European countries such as Germany, France, Italy, and Belarus as barriers and in greening of cities.

Expanding the types of ornamental trees and shrubs used in landscaping, searching for and expanding the varieties and types of shrubs that can adapt to the conditions of our country, applying care according to scientifically based technology are among the most pressing issues of today. its implementation has also been studied at the level of the CIS countries. It was mainly used in landscaping from gabions in Almaty, Kazakhstan.

Greening of residential areas and improvement of microclimate are among the advanced ideas of today. In order to continue the reforms implemented in all spheres,

the development strategy of the Republic of Uzbekistan for the period of 2022-2026 known as "New Uzbekistan" was developed and a "roadmap" project was created for its implementation.

This strategy includes seven priority directions. To implement the reforms, parks were established in the city and old ones were reconstructed. Gabions were used in beautification, in particular, gabions were used in the landscaping of streets. The demand for a large number of ornamental tree species in landscaping the cities and villages of our republic is increasing. This puts important tasks before the seedling growers, such as the reproduction of high-quality and inexpensive ornamental seedlings that meet standard requirements, as well as the development of rapid cultivation technology. The relevance of the topic is to model the correct approach to the design and calculation of gabion walls, to observe the technology of their placement and storage, to understand the possibilities of solving environmental and urban planning problems that can be avoided with the use of gabion structures. 'lami gabion wall in the possible landscape design, taking into account various factors such as stability, flexibility, environmental impact and serviceability, following design parameters such as overturning moment, resistance is to scientifically base its use. Currently, new construction methodologies have appeared, along with designing using various software, to facilitate the practical application of the structure.

Scientific implementation of tasks in the Cabinet of Ministers of the Republic of Uzbekistan "Rules for the organization of improvement works of settlements taking into account the requirements of modern architecture and urban planning" dated March 9, 2009 No. 59 and other legal documents This dissertation research serves to a certain extent in increasing. In addition, the Cabinet of Ministers of the Republic of Uzbekistan The 2013 decision on "Further development of landscape design in the Republic of Uzbekistan, improvement of the architectural and artistic appearance of settlements and rural areas, improvement of the system of training and retraining of landscape design specialists" and this study serve to a certain extent.

MATERIAL AND RESEARCH METHODS

Phenological observations I.N. Baideman "Metodokiya izucheniya fenologii rastenii", "Vegetative reproduction of plants" developed by M. Browse for the purpose of vegetative reproduction of trees and shrubs, evaluation of the scenic quality was carried out based on the method of N.I. Shtonda.

RESULTS OF RESEARCH

Scientific research work began with the review of literature. The works of German, French and Russian scientists were studied. The main attention was paid to the following structure of gabions. The advantage of gabions is that they have a very simple structure: stones and metal mesh. In this case, gabions can be made in various forms. Gabions can be made in ordinary home conditions. Gabions are widely used in landscape design because they are adaptable to any weather conditions. When choosing

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the size, shape and material of gabions, it is determined depending on the area of the place to be improved. Gabions can be used not only for design, but also for protection against erosion. Gabions not only decorate the suburban area, but also protect riverbeds from erosion, strengthen slopes, and prevent soil erosion.

Structurally, gabions can be divided into four types. Each type has its own form and function:

Flat gabions are rarely used for decoration. It is more suitable for strengthening the mountain slope or river bed. They can serve as a support for various large structures.

Boxes are the most common type of gabions. It is often used to create walls, fences, partitions, etc. In the design of parks, they are also used as supports for flowers and trees.

Cylindrical gabions act as pillars or supports. They are used for support, anti-erosion and decorative purposes.

Shaped gabions - gabions of complex shape. They can depict people, animals, abstract figures, etc. They are used for decoration.

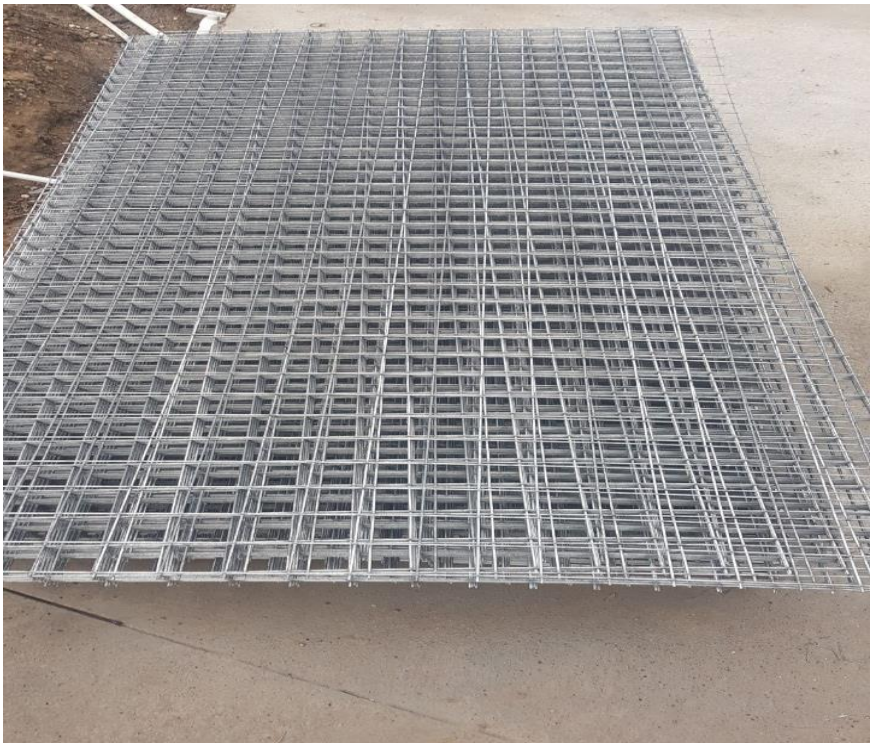

Figure 1. Metal grid (Setka)

Materials and tools needed to create a gabion:

- metal fence
- metal handle
- metal wire
- pliers
- reinforcing parts
- gloves

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Figure 2. Gabion

When creating a gabion, the size of the metal fence is chosen. It depends on the size of the area and the size of the stone to be taken. First, a metal fence is made and a stone is chosen for it. When making a metal fence, the corner parts are welded and brought to the desired shape. Pre-prepared stones are selected.

During the research work, the limited liability company "OOO BAKAN TEX" located in Yashnabad district of Tashkent city was beautified and gabions were created. Large stones were used for this. 5x5 metal grids were made into the required border shape and welded. It was filled with stones brought from several districts of Kashkadarya region. In the previous case, a gabion was created for the object where water was collected, and it was brought to a beautiful and safe state. The situation is being monitored until now.

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Figure 3. Development process of "OOO BAKAN TEX"

Figure 3.4. The finished state of gabions at "OOO BAKAN TEX"

In addition, they participated in the extensive use of gabions in the greening of Sebzor Street, located in the Shaykhontokhur district of Tashkent city. The bottom of the seats

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was filled with shaped gabion stones. Also, 3.2 wire mesh of 5*5 cm thickness was used as a border, and humus soil was filled in between. Shamshod and virgin juniper were planted for landscaping. 5 candlesticks and 5 virgin fir trees were used for this. In addition, trees were shaped. Observation work is still being carried out.

Figure 5. The process of building a gabion on Sebzor street

Figure 6. The process of building a gabion on Sebzor street

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Figure 7. Building a gabion on Sebzor Street

Figure 8. Use of gabions on seats

DISCUSSION OF THE RESULTS

As an experiment, a gabion was made from 5*5 cm metal meshes of 3 different thicknesses, i.e. 2.2, 2.8 and 3.2 mm, in Yashnabad and Shaikhontokhur districts of Tashkent city and observed. As a result of observations, the gabions created with a wire thickness of 2.2 mm in the size of a 5x5 grid were deformed and lost their shape due to the weight of the stones. In the experiment with 2.8 mm wires, deviations were observed

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in the gabion and it lost its shape. In the experiment conducted on a 3.2 mm thick wire, the gabion did not lose its shape, no deviations were observed. The use of wires with a thickness of 3.2 mm with a thickness of 5*5 metal mesh was effective in creating gabions (Table 1).

Table 1 The size of the metal mesh and the thickness of the wire when creating gabions

№	The size of the metal mesh	The thickness of the wire
1.	5*5	2.2
2.	5*5	2.8
3.	5*5	3.2

Scientific research work was carried out on the street of Dormon road, Qibray district, Sebzor, Shaykhontokhur district, Zenit Makro, Yunusood district, Aktash road, Bostanliq district. The weight of stones was measured. 2.05 cubic meters = 0.35 tons of stone were used for a cage with a height of 1 m2, a thickness of 0.25 m, and a length of 1 m for a gabion made on the Do'rmon road in Kibrai district. (Table 2)
The average weight of 1 cubic stone is from 1.1 to 1.4 tons.

2- Table The weight of the stones is 1 piece and per 1 m²

№	The name of the stone	1 piece of stone (gr)	1 m²	Faction
1	Crushed limestone	800-1300	300-350 kg	8-12 sm
2	Flat white stone	500-900	290-330 kg	7-9 sm

The gabion prepared for the Dormon road in Kibrai district has an aesthetic artistic-architectural appearance and uses flat stones. (8 photos) During the preparation of gabions, a 5*5 cm mesh was used. (9 photos)

CONCLUSION

Because gabions are an aesthetically clean product, it is appropriate to use them in landscape design. Small architectural forms made of gabions are often used in landscape design and are a modern solution of designers. Gabions have several advantages: they are environmentally friendly products, durable and plastic, easy to assemble, easy to transport and, of course, aesthetic pleasure.

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