Architectural-Landscape And Artistic-Technical Modernization And Visualization Of The Territories Of The Tashkent-Samarkand Railway

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Abstract. The article highlights some results of scientific and practical research carried out on the modernization of architectural and landscape, artistic and technical visualization of territories along the Tashkent-Samarkand railway, which is one of the important international tourist routes of Uzbekistan.

Keywords: Uzbekistan, railways, the current state of visual appearance along the Tashkent-Samarkand railway, some results of the study on the architectural and landscape, artistic and technical modernization of their territories.

Introduction to the topic and its relevance.

The issues of architectural landscape, artistic-aesthetic and technical organization of the railways connecting cities in the Republic of Uzbekistan and, in particular, the views of the regions of the Tashkent-Samarkand railway line are one of the most important tasks of the sphere of development of international tourism in the Republic. There are still many unresolved problems in this area, one of them is the fact that the surrounding areas of these roads are extremely aesthetically low in most areas of architectural-landscape and design solutions. It prohibits the study and solution of the problematic situation on the basis of modern aesthetic and technical requirements. Are not lowering the mood of passengers and tourists along the way, preventing the appearance of beautiful landscapes and providing architectural-landscape and artistic-technical solutions that give aesthetic mood. Among the actual problems of scientific-practical significance corresponding to the program of Tourism Development in the Republic.

Research method. The solution of the problem is based on international experience and standards, the study of the principles and tasks of architectural – landscape and artistic-technical beautification of the surrounding areas of urban norms and railway tracks, the comparison and the generalization of experiences.

The main part. Uzbekistan Railways occupy a worthy place in the international railway system as the most important link in the transnational transport corridors. In recent years, the number of railway passengers in our country has sharply increased, especially the number of tourists, including international tourists, is also increasing. The government of the Republic of Uzbekistan pays attention to the development and strengthening of railway infrastructure, creation of conditions at the international level for passengers.

In particular, the "Afrosiab" high-speed electric train has a distance of 344 kilometers in the direction of the Tashkent-Samarkand Railway, which passes in two hours. In addition, high-speed electro-trains on the directions of the Tashkent-Karshi, Tashkent-Bukhara and Tashkent-Urgench railways are also put in the Republic.

It is planned that these Railways, along the way, pass through several cities and population punks through the territory of agricultural crops, over canals, rivers, bridges, along highways and near the living quarters of the population.

The climate of Uzbekistan is subtropical, relatively mild, hot dry climate, strong winds are rare, even if they are not continuous. Therefore, in Uzbekistan there is practically no problem of preserving railways from the danger of snow and sand avalanches. The problem lies somewhere else, that is, in many small and large population

punks on these roads, where the visual architectural and landscape conditions of the railway collars around these regions are in a very non – aesthetically unsatisfactory condition.

This unpleasant situation negatively affects the mood of passengers, especially tourists moving by train along this road. Houses built illegally and irregularly near the road, farm buildings and open yards are in neglected condition (**Figure 1**).

Figure 1. Plates from illegal and irregular settlements on the banks of the railway track in the "Bulungur" District of Samarkand City

A quick and cost - effective way to eliminate such a nuisance is the architectural – landscape and artistic-technical reorganization of the territory of construction around the railway tracks in the regions where there are these cases.

It is desirable to divide such territories into several small plots, to develop project proposals for the organization of architectural and landscape, and to carry out these projects with the help of local authorities, entrepreneurs, sponsors in part and under the supervision of the district, city architectural departments living in these territories.

We propose to carry out the modern architectural – landscape and artistic-technical modernization work in the following three directions:

- correction of the walls of residential buildings and buildings located close to the railway, their architectural decorative finishing and coloring;
- visual blocking of such buildings and devices that are not connected to the railway from the side of the railway;
- architectural-landscape and artistic-technical modernization of such devices as bridges along the railway line, pavements above the road, natural slope of the roadside, naming of districts and towns.

In carrying out visual blocking of residential buildings and buildings from the road, it is possible to use methods of planting landscape shrubs and trees with rows on the edge of the roadside or installing water barriers from modern ready-made sheet materials (**Figure 2**). Both these methods are widely used today in the practice of Uzbekistan and in the experience of foreign countries. However, the fastest and most reliable way for Uzbekistan is to close the traffic jam with obstacles in the form of long tape tapes from the eyes of train passengers and tourists. Although this method is expensive for the state, it is a way to achieve the goal quickly. However, this method leads to monotony, a kind of roadblocks, a visual spatial boredom of passengers. Therefore, this method can be used temporarily, in case of impossibility. So the most effective way is to plant decorative shrubs and trees in rows, depending on the need, on the edge of the railway collar.

Figure 2. Experience using tree and shrubs on the edge of the roadside or using modern ready-made sheet materials made by water barrier installation techniques in carrying out visual blocking of the roadside of residential buildings.

There are other ways to make the roadside such an greenery, one of them is to constantly create ribbon walls from green shrub vegetation. They are living walls of different height, of different shapes, constantly lush, flat shavings (**Figure 3**).

This "dead" shit above has a much more attractive, aesthetic appearance to the eye than boring artificial fences and is very environmentally friendly to the local hot climate. So just give the water in time and get well cared for.

In areas where it is not possible to plant and grow such green, living walls, bushes or trees in rows, it is possible to use other methods, that is, the method of fixing residential areas, buildings, architectural and decorative finishing, giving them color and beautifying their surroundings.

Figure 3. Proposals on the creation of ribbon walls from evergreen shrub plants (According to U.N. Karimov).

In order to regulate the existing negative visual situations on the side of the studied Tashkent–Samarkand–Tashkent railway route and to beautify the architectural landscape and design, we offer the following:

1. Marking with design emblems the city, station, passing points, road conductors while entering a specific address by train route. Development of projects for the installation of luxury monumental devices on the entrance and exit points to the address, based on the specific custom and tradition of each region (**Figure 4**).

Figure 4. The panno project, which will be installed on the side of the train at the entrance to Bulungur district and the monumental building that will mark the territory of the district proposed at the entrance to Samarkand (According to Kh.D. Abdiev).

2. When it comes to the issue of buildings, houses, walls and existing obstacles located on this route, it is necessary to keep them as possible. Organization of construction and installation work on the renovation of external parts (facades)of buildings and walls and landscaping of their sides. It is necessary to use local building materials such as: cement, sand, alabaster, lime, paint, varnish, etc. In addition to the use of national methods for knitting walls, the use of modern "graffiti" and "sgraffito" techniques, the use of volumetric letters and additional lighting beams.

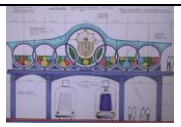
3. The open spaces around the road are made up of fields, agricultural crops and electric baseboards, along the entire route it is necessary to install road conductors (slagbaums), signs and road signs in them. It is desirable to install advertising devices in open spaces around the road. Mobile advertising devices (billboards)can be used in day and night mode. For example, advertising of products and services of large enterprises and organizations around the railway, advertising of ijtimoy, etc.the G. For advertising and construction of devices should be applied modern high-quality and inexpensive materials (metal, plastic, aluminum, concrete, etc.).the G.). Particular attention should be paid to the landscape decoration of the outer part of the buildings and advertising devices located directly on the railway line.

4. High-speed "Afrosiab" electric train is the pride of Uzbekistan, taking into account its fast-moving regime, it is necessary to pay special attention to the features of open spaces, road and environmental relief, and to define the installation of various architectural forms on both sides of the railway along the entire route. In this regard, the forms "bio-Art" and "eco-Art", which are used in the modern architecture and bionics of foreign countries, can also be used.

Based on the historical and national traditions of the peoples of Central Asia, it is also worthwhile to establish a composition of luxurious devices and sculptures along the entire road, taking into account the fact that the Great Silk Road passes through these lands.

Summing up our thoughts and comments above, we expressed our proposal projects developed on architectural-landscape and artistic-technical modernization of the regions of the Tashkent-Samarkand railway in the form of the following table. The types of building materials and plants used in the implementation of the proposed projects are also presented to it.

Developed proposal projects on architectural-landscape and artistic-technical modernization of the regions of the Tashkent-Samarkand railway

№	BUILDING MATERIALS AND PLANTS	CONTENT OF THE PROPOSED PROJECT	GRAPHICAL VIEW OF THE PROPOSED PROJECT
1	NATURAL STONE, FITTINGS AND IRON CONSTRUCTION	THE HEIGHT OF THE "MOSAIC COMPOSITION FROM STONES" CAN BE APPLIED IN HIGH-SLOPE AREAS UP TO 1X8 METERS, AND THE WIDTH-TO THE DESIRED LENGTH	
2	METAL, COLOR STAINED GLASS, IRON CONSTRUCTION	THE HEIGHT OF THE" PEOPLE'S MOBILITY BRIDGE " IS 12 METERS, WIDTH IS 20 METERS AND IS DESIGNED FOR THE PASSAGE OF PEOPLE INTO THE LIVING QUARTERS OF THE POPULATION ON TRAINS MOVING ALONG THE RAILWAY	
3	METAL, COLOR STAINED GLASS, IRON CONSTRUCTION	THE HEIGHT OF "PANNO" IS UP TO 2,5X8 METERS, AND WIDTH IS 3X20 METERS, THE DEVICE THAT SYMBOLIZES IT WHEN ENTERING THE REGIONS	
4	NATURAL STONE, MARBLE, GRANITE, WATER CURLS, POPLAR, YUKKA AND LAWN	"ARCHITECTURAL COMPOSITION" IS DESIGNED ALSO TO STORE WATER RESOURCES IN HIGH-GRADE RELIEF AREAS, IN WHICH MORE CLIMATIC CONDITIONS ARE WARMER. HEIGHT AND WIDTH OPTIONAL	
5	MONUMENTS MADE OF COPPER, ALYUKOPAN, PROFILE, GRANITE	THE HEIGHT OF THE" ENTRANCE TO THE CITY " IS 2,UP TO 5X8 METERS, WIDTH IS 3X20 METERS, THE DEVICE THAT REPRESENTS ITS SYMBOL WHEN ENTERING CITIES	
6	NATURAL STONE AND STONE	"SGRAFITTO" REPRESENTS OUR NATIONAL TRADITIONS, AS WELL AS ATTRACTING FOREIGN TOURISTS THROUGH THIS METHOD SGRAFITTO WALL COMPOSITION, WHERE THE HEIGHT IS UP TO 2X4 METERS	
7	METALOPLASTIC COATING, CARCASS FITTINGS, PLUSH, WILD GRAPES	"BIONIC VERTICAL COMPOSITION" RECOMMENDED PROJECTS FOR APPLICATION IN MORE OPEN ENVIRONMENTS, HEIGHT AND ON A	

		VOLUNTARY BASIS	
8	**METALOPLASTICS, REINFORCED CONCRETE, FITTINGS, TRIPLIX**	**HEIGHT "BIONIC BRIDGE" AND WIDTH OPTIONAL, BIONIC BRIDGE PROJECT FOR TRAINS MOVING ALONG THE RAILWAY**	

In conclusion, it is necessary to pay attention to the following aspects in order to adapt the appearance of the regions of the Tashkent-Samarkand railway to modern tourist and general-purpose requirements:

- modernization of architectural and landscape solutions of railway side regions. Always green doves planted near the roadside give passengers a good mood, and this method does not cost the state;

- design of bridges passing over a moving railway, as well as razors and railway service buildings, to improve landscape solutions around them;

- it should not be forgotten that the railway is an artificial communication device that contrasts from its appearance to the landscape of the place. Therefore, it is desirable to pass the railways through the spectator areas close to the population's punches, with a beautiful natural landscape, close to architectural and cultural and educational monuments.

Literature:

1. **A.S.Uralov, A.E.Jonuzakov, Sh.A.Balgaeva.** Modern directions of development of Landscape Architecture in the villages of Uzbekistan (on the example of Samarkand region). Samarkand 2015.- 196 p.

2. **Uralov A., Mustaev B., Abdiev Kh**. Actual issues of architectural-landscape and design improvement of the territories around the railways and highways of Uzbekistan. // Architecture and construction problems. - Samarkand, 2020, №4. 6-12 pp.

- **Mustayev B.B., Babakandov O.N.** Design Solutions and Innovative Landscape along the Railway Line High-Speed Train "Afrosiab" on the Route "Tashkent-Samarkand" International Journal of Scientific Engineering and Science Volume 4, Issue 6, pp. 51-53, 2020. ISSN (Online): 2456-7361.
- **Gubskaya A. S**. The history of the formation of eco-trends in landscape design. //BBK 30.18. YA43D44. - 2018. - p. 16.
- **Stracey F** (2009) Bio-art: the ethics behind the aesthetics. Nat Rev Mol Cell Bioll 10: 496-500.
- **Building codes and regulations** 2.07.01-03. Urban planning norms and rules. "Development and planning of development of cities and rural settlements and their territories".-T., 2009.