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SOME ASPECTS OF THE PROJECT-BASED ANALYSIS OF PUBLIC FACILITIES

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ABSTRACT

The article is devoted to the study of important aspects of the design of public transport stops in modern cities. The article discusses the existing problems in the implementation of pre-design work and identifies the main aspects of the preliminary analysis of the environmental situation that must be taken into account when developing the terms of reference and designing such facilities.

KEYWORDS: *Public Transport Stops, Climate, Autopavillon, Wind Load, Architectural Environment, Visual Communications*

INTRODUCTION

Shaping the architectural image of modern cities is one of the most pressing tasks of professional architects and designers. The urban area is created due to the interaction of architectural ensembles, residential and public building complexes, city parks, sidewalks and roads, sidewalks. One of the most important elements influencing the formation of the urban environment are small architectural forms, which many professionals include public transport stations in their structure. The network of passenger routes has increased 1.4 times compared to 2006, there are 117 passenger bus stations and bus stations in the country, and measures are being taken to ensure traffic safety. Resolution of the President of the Republic of Uzbekistan dated March 6, 2018 No PP-3589 "On measures to further improve the management system of road transport" Indication of the establishment of independent specialized enterprises in the form of unitary enterprises engaged in road transport and transport and logistics, construction, reconstruction, repair of bus stops and other road transport, in recent years, the economy and population of the republic Improving service delivery, as well as the large-scale work on the design of public transport stations, shows the urgency of this issue**.**

RESEARCH RESULTS

According to the methods of production, all small architectural forms are divided into two groups:

- Specially designed and manufactured on individual projects;

- Manufactured on the basis of standard designs from standard elements and structures**.**

More than 850 bus stations have been relocated in accordance with the general technical requirements of the "Bus Stations on Highways" developed by the Agency "Uzstandard" and regional departments in accordance with the technical regulation "Oz DSt 3196: 2017" in the regions. It has been studied**.** According to the results, 771 stops and 91% as a percentage, the necessary schemes of bus routes and public transport schedule are not available.

Convenience at stations is very important for public transport passengers. The "Bus Stations on Highways" document clearly shows the equipment needed for passengers while waiting for vehicles. Thus, depending on the category of roads, bus stops should consist of the following elements: For roads of categories I-III, the bus stop should consist of the following elements (for roads of categories I-III), crossings , landing area, waiting area (for category I-III roads), crossing lanes, exit pocket (at the intersection or intersection of highways), dividing line (I- For category III roads), pedestrian crossings, car pavilions, benches, containers and bins (only urns for category IV roads), means of traffic organization (road signs, markings, barriers)), lighting (at stations in settlements).

According to the standard, the car pavilion is designed to protect passengers waiting for the arrival of the bus from the adverse effects of weather and climatic factors. The car pavilion can be in the form of an indoor or outdoor type umbrella. The size of the car pavilion is determined on the basis of 4 people / sq.m, taking into account the number of passengers at a time during the bus stop**.**

The list of these elements may vary and be supplemented depending on the environmental conditions or the utilitarian-functional requirements identified as a result of the pre-project analysis and described in the terms of reference. Ignoring environmental conditions can lead to the fact that the intended parking complex does not meet the requirements for it and is aesthetically incomprehensible, functionally inefficient and may even pose a risk to potential consumers. The small size of the stations and the shops and fast food cafes that occupy their space often cause passengers to wait for traffic in the sun or in the rain.

The most important aspect to consider when designing public transport stations is the climatic conditions specific to the region. The formation of the continental climate in the territory of our country is influenced by its geographical location and related solar radiation, atmospheric circulation. It consists of long dry and hot summers, rainy springs and incredible winters.

In this regard, it is necessary to identify some aspects of the environment that should be considered first in the design of public transport stops.

Environmental conditions:

1. Climate

Therefore, it is necessary to take into account the influence of many factors on the design process and the final result of the stations. Among the specific features of the climate can be identified several that are very important in design:

- The change in the average daily temperature typical of this region - this factor can affect the design of pavilions of the open or closed type. It should be noted that the temperature varies from very hot to very cold.

- The angle of incidence of sunlight not only affects the temperature regime, snowmelt or radiation background, but also the angle at which the sunshade should be placed.

- The type and amount of precipitation is important not only in terms of shaping the person from their aggressive effects, but also to calculate the design characteristics of the load-bearing elements of the structure. For example, in the plains of Uzbekistan it rains 35-40 days a year, while in the mountains it is 70-90 days**.**

- Wind load and prevailing winds. The winds blow from the north-west, north and west of Uzbekistan throughout the year. In winter, the wind direction is influenced by the Siberian anticyclone and cyclones south of the Turan plain. Therefore, the winds in the northern part of Uzbekistan are northwest. blows in a northerly and northeast direction. In the south, cyclones move mostly in a southwesterly direction. The wind load affects how the structure can be shaped to effectively resist lateral wind pressure**].**

- Extreme weather conditions typical of this region. Depending on the region, there are different climatic conditions that can be specific and unique to a particular region. For example, the sudden appearance of thunderstorms is common in high mountainous areas. In some places, large hail is rare. In the event of a sharp deterioration in weather, stations can be the only means to protect a person from extreme weather events.

2. Urban architectural environment

When designing stations, it should be taken into account that they are part of the urban architectural environment, which should be present in the stylistic and functional context of the city. There are several key aspects to designing public transportation stops in an urban environment:

Functional scheme

A city with a complex infrastructure is made up of a skeleton and fabric that form the functional structure of interconnected elements. Therefore, public transport stations should be included in the functional structure of the city and ensure the efficient operation of public transport in the city.

Roads are key elements of the urban area. Urban Framework - The establishment of sustainable, spatially-planned urban systems is done primarily in ways that are defined as the main axes and networks of transport infrastructure with the appropriate areas. In this frame is the urban area of the city covered with fabric, i.e. occupied by residential, public and industrial buildings. There are several standard schemes for locating bus stops on different categories of roads and equipping them with technical means of traffic management**.** The classification of roads is governed by SHNK 2.05.02-07.

Historical style context

In addition to the functional structure of the city, the principles of methodological visual cooperation between the developed object and the surrounding city should be guided in the

development of the appearance of the stations **[1].** The style of the city is usually different. This is especially true for older cities that are in an active growth phase. In such cities, you can observe gradual changes in style and compositional context, depending on major architectural styles and trends, the socio-cultural and economic situation of the country, ideology, and so on. In such cities one can see classical styles (classical, baroque, etc.) and modern trends (functionalism, postmodernism, etc.) **[2; 3].**

Typically, the creation of a new object of spatial-spatial environment is based on one of three compositional principles: identifier, nuance, contrast. Depending on the principle chosen, the station may fit perfectly into the context of the historical style, interpret it, or be the complete opposite. Each of the principles should be based not only on theory, but also on visual-plastic. Depending on the reliability of the introduction of a new object to the existing fabric of the city, its historical stability is ensured **[4; 5; 6].**

Availability of visual information

Public transport stations, in addition to the main function, include a number of additional functions, one of which is its visual presence and informativeness **[7].** In this regard, a number of important factors affecting the efficiency of the station can be listed:

- Spatial accent stations should be clearly visible from a distance and have a unique spatial location that helps to control the space.

- Visual communications — To facilitate human interaction with urban infrastructure, the parking complex should be easily recognizable from a distance, which should also be quickly identified by road and pedestrians. In addition, safe approaches should be provided to inform passengers about their stay in and out of the area **[8].**

- Information support - is an important place for passengers to get additional information, along with the main visual signs of the public transport stop. This can be a timetable, news and weather report, social and entertainment videos, advertising information **[9].** To do this, station complexes can be additionally equipped with electronic information screens and boards for placing information on paper carriers.

The data obtained from the pre-project analysis determine the formula of the project assignment and the design conditions described in the terms of reference. This article first discusses some aspects of pre-project work related to environmental analysis. Pre-project work involves the analysis of many aspects, including the potential consumer, ergonomics, functionality, and more.

CONCLUSION

Thus, the success of designing urban environmental facilities such as public transport stations depends primarily on the quality and scope of pre-project analysis. Inadequate quality analysis of the designed environmental conditions leads to design errors and significantly reduces the quality of the developed object. Today, bus complexes are a long-term destination for many people around the world who do not have private transportation. In this regard, each year the budget allocates funds for the improvement of public parking, replacement of old and obsolete pavilions, installation of new structures, pre-design analysis by architects and designers, and convenient parking complexes for the population. concepts are developed. All of these measures

have a positive feature because they are primarily aimed at ensuring that people are comfortable and safe.

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