

CONTEMPORARY ARCHITECTURE AND DESIGN: BUS STOP СОВРЕМЕННАЯ АРХИТЕКТУРА И ДИЗАЙН: АВТОБУСНАЯ ОСТАНОВКА

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Small architectural forms include a large number of elements of landscaping and equipment of streets, roads, squares, boulevards, courtyards, i.e. all that intermediate zone, which is located between the objects of "volumetric" architecture. As a rule, the interpretation of these elements as small architecture is rather broad: their nomenclature includes objects ranging from drinking fountains and benches to arches of entrances or pavilions with enclosed spaces. All these elements, being part of the "intermediate zone", serve strictly utilitarian purposes and at the same time are the compositional details of the environment, constituting the "connecting element" in the large-scale comparison of man and building.

In the road environment, objects of small architectural forms are: equipment of recreation areas; bus stop equipment; freestanding small architectural forms.

Bus stops can be equipped with benches, awnings, pavilions for waiting for vehicles of various types and capacities, waste bins, toilets. Small forms can also be arranged on road sections in the form of free-standing objects that play a compositional role. Unlike urban ones, small architectural forms in the road environment are not an intermediate link between people and buildings. As a rule, they are located in a natural landscape situation. The problem is to connect these objects with the landscape, to give them a "landscape" character, providing the best possible fulfillment of the functional requirements. This can be achieved by design and planning solutions, using natural building materials. In general, considering small architectural forms near roads as a kind of architectural genre, two stylistic directions can be distinguished. One direction is the use of rich folklore national traditions in their architecture. As a rule, constructive and artistic techniques of rural architecture are used. These elements easily blend into the surrounding landscape, are made from local materials and are warmly received by those passing along the road. The disadvantage of "folklore objects" is the need for their individual production using traditional building techniques.

The use of modern building materials (reinforced concrete, steel, aluminum, plastic) and the design principles of assembly require an appropriate artistic interpretation. A completely special stylistic design solution appears which lays its imprint on the road environment. Interestingly, such properties fit better in an urbanized or partially urbanized environment. The architecture of the bus

pavilions presents a particular challenge. This small structure is very important in the architectural appearance of the road. Firstly, this structure, as a rule, is not visually isolated from the road. On the contrary, arranged on the widening of the carriageway, by its appearance, it informs about the presence of a bus stop. Secondly, there are dozens of pavilions even along a medium-length road. Here quantity turns into quality. The repeated visual accents of the bus pavilions create the aesthetic ambience of the road. Thirdly, for a small village by the road, the bus pavilion itself is an important architectural object that affects the “internal” environment of the village. A small architectural object, built thousands of times on our roads, is, of course, an independent aesthetic problem. Bus pavilions are differentiated in terms of capacity and layout. There are types by capacity: 5-10 people (small capacity); 10-20 people (medium capacity); over 20 people (large capacity).

According to the layout characteristics, the pavilions are subdivided into: open type (without barriers); semi-closed type (with walls, without a closed room); closed type with cash register (closed room - class); closed type with a cash desk and a waiting room.

A closed pavilion with a cash desk and a waiting room with a capacity of over 20 people. can be thought of as a bus station. The need for such differentiation is caused by the different need for pavilions, depending on the number of passengers served simultaneously. To establish this number, calculations are made of the daily number of passengers using a given bus stop, the average number of buses passing per day and the average number of passengers per trip. In practice, the capacity of the pavilions will largely determine the choice of options for their layout. For bus stops with a minimum number of passengers, the pavilion can generally be replaced with a light canopy with a bench. A large number of passengers require the construction of a semi-closed pavilion, and, if necessary, a checkout room. The general approach to the selection of places for the construction of bus pavilions should be based on the requirements of the road transport service, as well as on the landscape design principles. The pavilion is an active visual accent in the road environment; therefore it is necessary to consciously reveal its architecture while driving on the road. The standards recommend a minimum distance from the edge of the stopping site to the nearest edge of the pavilion of 3 m. A greater distance (5-10 m) is preferable, which creates an additional depth of perspective, facilitates the perception of the spatial form. In practice, various construction materials are used in the construction of bus pavilions. The use of prefabricated reinforced concrete structures is an industrial trend that allows a large number of small architectural forms to be erected in a limited time. The most important task in the construction of bus pavilions from prefabricated reinforced concrete structures with a limited nomenclature of constituent elements is to create objects with different planning

solutions. Such qualities of prefabricated elements as geometric accuracy, cleanliness of decoration, uniformity of texture, which are especially acutely perceived in small architectural forms, are of great importance. Monolithic reinforced concrete is very labor intensive, it is used when it is necessary to build individual objects. The most expedient construction of bus pavilions from thin-walled structures of the "shell" type, allowing great compositional possibilities. However, this type of structures is most acceptable in the southern, dry regions of our country. Bus pavilions made of metal structures can be relatively inexpensive and industrially manufactured. Such pavilions are installed, for example, on the Moscow - Minsk - Brest highway. They are a steel frame with corrugated aluminum enclosing structures and corrugated fiberglass covering. The lightness and simplicity of these structures, modern architectural forms have proven to be very acceptable, especially for the urbanized road environment.

Timber structures are especially recommended for local roads in areas with available timber. At a low cost, bus pavilions made of wood fit well into the natural landscape. The disadvantage is the relative fragility without careful processing of wood: impregnation with antiseptics, coating with a protective layer, etc. In practice, in different regions of our country, pavilions are erected from various materials: brick, wood, metal, reinforced concrete, rubble stone, shell rock, etc. Pavilions are erected both according to standard and individual projects. It is possible to give some general practical recommendations for the layout of this structure, which, however, may vary depending on the specific architectural solution. The elevation of the bottom of the slab (roof), as a rule, is set at a height of 2.5 to 3 m, which provides internal comfort and maintains the scale of the entire structure. Windproof walls in semi-closed pavilions are made with a minimum height of 2.2 m. It is also necessary to take into account the conditions of the structure's airflow. Hence the need to place the walls on three sides of the pavilion. At the same time, it must be remembered that it is desirable to provide a visual overview from the inside of the pavilion towards the bus entrance. The compositional solution of the pavilion should be laconic and clear.

The general features of the compositional constructions of the volumetric architecture of the roads extends to the architecture of the bus pavilions. An abundance of decorative and artistic elements is undesirable: mosaics, chasing, forged elements, etc. Such elements should not be independent monumental forms, but rather have the character of architectural details. Practice shows that the pretentious use of the walls of this structure for "monumental" forms reduces the aesthetic impact of both the pavilion and the artistic element. The pavilions will be equipped with benches and litter-bins. Practically for small structures without closed waiting rooms, there is no need to differentiate interior and exterior wall decoration. At the same time, individual elements can emphasize the interior character of a room (even a semi-closed one), creating the necessary

coziness. Benches with backs and headrests, bus timetables mounted on the walls of the showcase, and architectural and decorative details can become a natural part of the interior. A unified style solution for the architecture of bus pavilions should cover the entire route of the highway. At the same time, layout options are desirable, which will change depending on the landscape situation and capacity. In many ways, the architecture of bus pavilions is influenced by national and local traditions of architecture of republics, territories, regions. Pavilions, as part of a natural landscape, a village or a suburb, should be akin to this region, its peculiar cultural and historical traditions, local building techniques and materials. An important role is also played by the general planning solution of bus stops, their improvement and landscaping. In fact, a kind of rest and waiting area is also formed at the bus stop, designed not for drivers, but for passengers. Above is the general nomenclature of the stop improvement facility. In addition to them, the improvement may include various types of paving, retaining walls, flower beds. Landscaping is solved with small groups of trees and shrubs. Landscape compositions with the use of natural or artificial elevation differences and the creation of microrelief can have a positive value.

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