IMPROVEMENT OF TRANSPORT STATIONS IN THE STYLE OF ODESA EMBROIDERY

Pozdniakova A.Y. and Moshu K.S., students of gr. A-166 Scientific adviser – Dumanska V.V., PhD, Associate Professor (Chair of Descriptive Geometry and Engineering Graphics, Odesa State Academy of Civil Engineering and Architecture)

Annotation. The article is devoted to the search for new concepts for the improvement of transport stops in the city of Odesa. As a result of the analysis of objects in a large number, a discrepancy between the quality of coatings and state standards and the absence of a decorative solution were found. The article analyzes the basic principles for the improvement of transport stops in Ukrainian cities, evaluates their functionality and appearance, and on the basis of the examples considered, as a solution to the problems presented above, updated design sketches of bus stops for the city of Odesa with elements of its regional embroidery were created and proposed as the preservation of national cultural heritage of Ukraine.

The redesign of the coverage of bus stops in the city of Odesa is relevant for several reasons: the redesign of the coverage of stops can significantly increase the comfort of passengers while waiting for transport, high-quality coverage can significantly improve the safety of citizens and, finally, contribute to improving the image of the city – beautifully decorated with Odesa embroidery, stops can become an attractive element urban architecture. The main principles that guide the creation of transport stops are - the comfort and safety of passengers, as well as the efficient use of space. One such key element is coverage. It must first of all be strong, durable, and also provide safe and convenient access to transport [1, 2]. But also often the coating is given, in addition to functional, aesthetic functions, making it in the form of various schematic drawings and the like. The most important principles that guide bus stop coverage include:

1) Anti-slip properties: The coating material must be anti-slip enough to prevent injuries and falls;

2) Drainage properties: the coating must be able to drain water during rains and snowfalls;

3) Wear resistance: The material must be strong and durable enough to withstand everyday wear and tear and retain its shape and integrity;

4) Ease of installation and replacement: The coating must be easy to install and replace, so that maintenance and repair can be carried out quickly and efficiently;

5) Environmental friendliness: the coating materials used must be environmentally friendly and do not harm human health.

Modern technologies make it possible to create a variety of materials for covering stops, such as rubber, concrete, ceramics, natural stone, plastic and others. The final choice of material depends on the requirements for safety, durability, as well as the design and overall concept of the bus stop. As example of a good functional and aesthetic coating, the following design is considered, Fig. 1.



Fig. 1. Bus stop in Bhubaneswar, India

The photo shows that the bus stop was built according to modern technologies and styles with colored ceramic tiles, which are not only an excellent material for various design solutions, but also have anti-slip properties and look aesthetically pleasing.

As a result of the analysis and inspection of local transport stops in Odesa, it was noticed that quite a few objects have an outdated appearance, look gray and boring, and the coatings are worn and frayed, Fig. 2.



Fig. 2. Some of the investigated transport stops of the city of Odessa:
a – Bus stop on the Paustovs`ka street v. Ilychanka, Odesa region;
b – Tram stop «The city fridge» Novomycolayivs`ke highway

The use of regional embroidery in design reflects the strategy of promoting Ukrainian culture. The idea of combining architecture and art is not new, but today it is gaining new meaning. Russian aggression brought awareness of the vulnerabilities of the cultural sector, opened up many important questions that relate to the identity of Ukrainians. One of them is the issue of the heritage of cultural national values. History and art are the basis of the mentality of the people, and the modern Ukrainian city is the core through which the future of the state is focused, not only economic, but, above all, in ethical-moral, spiritual-cultural perspective. Therefore, it is believed that at the current stage of history, trends and phenomena of culture and art that contribute to the preservation, restoration, protection and popularization of the cultural values of art, architecture, in particular, to strengthen the modern Ukrainian identity, the formation of common values of society, require special attention and support [3]. The development of modernized Ukrainian-style infrastructure also contributes to this process. Therefore, as a solution to this issue, the following options for styling bus stops were developed (Fig. 3, Fig. 4, Fig. 5).



Fig. 3. The 1st option of layout for paving slabs



Fig. 4. The 2nd option of layout for paving slabs



Fig. 5. The 3rd option of layout for paving slabs

The use of traditional Ukrainian ornament is becoming a fashionable trend in many areas of art, since it is indeed an interesting work of art and is successfully assembled (transformed) into both traditional and modern architecture. The importance of using regional embroidery in a semantic context is also important. The special veneration of ornamental art by our ancestors is explained not only by artistic and aesthetic qualities, but also by the power of a talisman that can protect from evil and adversity. For the development of sketches, such embroidery patterns of the Odesa region were used (Fig. 6) [4].



Fig. 6. Embroidery patterns of the Odesa region

Examples of such a coverage solution already exist in Ukrainian cities today, Fig. 7. The embroidery, painted on the Freedom Square was considered the biggest one in the world (for 2014). On the occasion of Vyshyvanka (Embroidery) Day, celebrated in Ukraine, in Kharkiv the square have been painted. The organizers decided to recreate the Slobozhan ornament. To do this, white paint was first applied to the asphalt as a background, then it was conditionally divided into squares with the help of bricks and threads, and after that they began to create a drawing. Although it was quite good-looking, this coverage painting was not durable and functional as it is must be in case it is a bus stop coverage.

Therefore, unlike the excellent coating created in Kyiv [5], painted tiles, such as those in Mariupol and Kharkiv, as demonstrated, are not the best option, since the paint quickly loses its bright color, becomes much more dirty and, accordingly, needs to be updated more often, which is quite costly. That is why in the above design options for bus stops (Fig. 3-5) it is not planned to paint the paving slabs, but to use multi-colored paving elements made of concrete, based on the existing experience of such embodied designs. A square-shaped paving slabs (in plan) of different parameters can be applied, depending on the area of the built-up territory. For example, for the proposed coating options, it is assumed to use paving slabs 100 x 100 mm, where 1 stitch of cross embroidery appears as one concrete element of the coating.

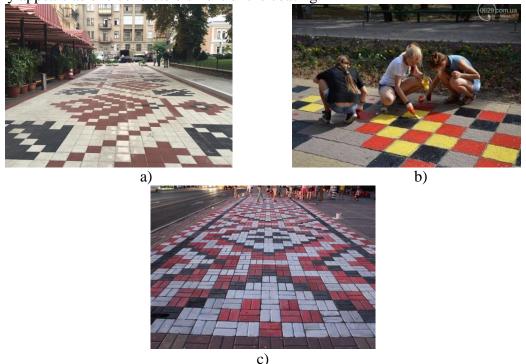


Fig. 7. Examples of such a coverage solution: a – Kyiv, Golden Gate station; b – Mariupol, City Garden; c – Kharkiv, The Freedom square

Conclusions and results. According to the results of a visual study of a large number of transport stops in both the city of Odesa and its suburbs, various kinds of shortcomings in the coatings were found. The main criteria for the quality improvement of waiting areas for transport and the most necessary properties of their coating materials are described. Several options have been developed for covering stops in the style of Ukrainian embroidery, which is inherent directly in the Odesa region, which can act as a solution to the issue of preserving cultural heritage. Based on reviewed experience in other cities of Ukraine, it was determined that for the developed designs it would be better to use colored concrete paving slabs than to paint the coating after it was installed.

References:

1. ГБН В.2.3-37641918-550:2018. Автомобільні дороги. Зупинки маршрутного транспорту. Загальні вимоги проектування. [Чинний від 07.03.2018]. Вид. офіц. Київ : Міністерство інфраструктури України, 2018. 19 с.

2. Про затвердження Правил розміщення та обладнання зупинок міського електро- та автомобільного транспорту Наказ; Держжитлокомунгосп України від 15.05.1995 № 21. Прийняття від 15.05.1995. URL: <u>https://zakon.rada.gov.ua/laws/show/z0160-95#top</u>

3. Чумарна М. Тайнопис вишивки. Лівів : Апріорі, 2018. 96 с.

4. Гасюк О.О., Степан М.Г. Художнє вишивання. Київ : Вища школа, 1982. 240 с.

5. Тротуар біля Золотих Воріт у Києві прикрасили величезною вишиванкою. Публікація на ZN.UA від 31.08.2016. URL: https://zn.ua/ukr/UKRAINE/trotuar-bilya-zolotih-vorit-u-kiyevi-prikrasili-velicheznoyu-vishivankoyu-217625_.html