SCIENTIFIC FUNDAMENTALS OF GROWING BITUME ON THE LOCAL AND SECONDARY RAW MATERIALS FOR ROADS.

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Annotation: In this article, it is noted that the repair of roads and the commissioning of our roads will soon be in a state of disrepair. suggested the need for teeth. The process of building the pavement before the construction of our roads. At the same time, the fact that we have to process it at the time of construction, leads to an increase in service life and economic efficiency.
Keywords: GOST 23558-94 standard, gravel-sand, reinforced soil, processed materials, cement consumption, slag portland cement, brand, motor grader, compacted condition, road defects, road surface, quality indicators, strength parameters, compaction works, primer.

INTRODUCTION

Roads are an important asset to the country and a key driver of economic growth. In order to increase the efficiency of vehicles, speed of delivery and passenger traffic, traffic safety and comfort, as well as reduce the cost of transportation, first of all, increase the transport and operational performance of roads, repair and maintenance of roads. it is necessary to radically improve their work. This will require the improvement of road repair and maintenance technologies and the use of advanced foreign technologies in the field. Today, one of the most important tasks in the country is to improve the transport infrastructure, in particular, to improve the quality of roads, the construction of new roads and the reconstruction of existing ones.

Density of road network in the republic Regions km / 100 km2 QQR 2,5 Navoi 3,8 Tashkent 24,6 Andijan 58,5 Namangan 42,5 Fergana 56,0 Bukhara 10,2 Samarkand 25,2 Khorezm 35.9 Jizzakh 12.4 Surkhandarya 13.1 The Republic of Uzbekistan 9.5 Kashkadarya 12.2 Syrdarya 27.9.

MAIN PART

Use of local materials and industrial waste to build foundations. In the structure of the road surface, the base layer (layers) has the largest thickness and therefore its

construction is associated with a large consumption of building materials. At the same time, the base layers work under more favorable conditions than the coatings, which allows the extensive use of local materials and industrial waste to build them. The expediency of their use is based on technical and economic calculations, taking into account the possible reduction of the service life of the coating as a result of the refusal to use standard imported materials.

The use of industrial waste and secondary resources in the construction of highways, in addition to the feasibility study, will help solve the environmental problems of the region by freeing up large areas of waste, including agricultural land. The diversity of technical and technological solutions specific to the road sector allows the use of almost all industrial waste in the construction, repair and operation of roads. A characteristic feature of these materials is heterogeneity, which manifests itself in the instability of physical, mechanical and chemical properties. These properties vary widely depending on the type of raw material used, the processing technology, and the storage conditions of the waste. In this regard, the possibility of using a particular type of waste or secondary product should be determined by laboratory studies and inspection of experimental sites constructed using them.

Soil, gravel and gravel mixtures, low-strength stone materials are most commonly used among local materials to build the road foundation. Possible options for using soil, gravel and crushed stone mixtures in the construction of road foundations have already been discussed in this chapter.

Low-strength limestones from these materials are often used. In the European part of Russia, limestone is very common and is found in deposits of almost all geological ages.

Limestone as a sedimentary carbonate rock is very diverse, mainly formed from deposits of remnants of organisms on the bottom of ancient seas. The variable capacity of limestone is typical of most deposits. In this regard, the maximum volume of crushed stone is limited (up to 15 ... 30 mm) and various additives are added to the crushed stone to give the required physical and mechanical properties to the base layer of low-strength limestone. rock compounds.

Base layers of crushed stone untreated with binders are installed using the wedge method and from mixtures that are optimal in terms of granulometric composition. Under the influence of vehicle movement and weather and climatic factors, the crushing and compaction of the rock material occurs in the gravel layer, which leads to a decrease in contact forces until these forces are reduced to the limit corresponding to the strength of the material. residual deformations.

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ACHIEVED RESULTS

Today, modern technologies are widely used in the construction of highways, and a clear example of this is the formation of an automated database of highways and their composition in the construction process.

One of the main disadvantages of road construction is the thickness of the layer and the main structure of the structure.

Table 1.1

Materials for paving and other layers	**Layer thickness, cm**
Large-grained asphalt concrete	6-7
Small-grained asphalt concrete	3-5
Sandy asphalt concrete	3-4
Pebbles treated with organic binders	8
Pebbles treated with organic binders by soaking	8
Untreated gravel, gravel and crushed stone materials with binder: on a sandy basis on a solid foundation (rocky or fortified soil)	15 8
Materials and soils treated with organic or inorganic binders	10

Here, large thicknesses of asphalt pavements should be accepted for Category I and II roads, and small thicknesses for Category III and IV roads.

In all cases, the thickness of the structural layer shall be at least 1.5 times the size of the largest rock used in the mineral material layers.

Figure 1

The process of delivery and compaction of the mixture on the objects (plates taken by the author)

Stone materials treated with asphalt concrete mixes and organic binders should be accepted as normative documents.

Figure 2

Methods of calculation and construction of notices at the construction site (photographed by the author)

Asphalt concrete mixes for foundations and stone materials treated with organic binders should be the normative documents for the foundation.

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