MAINTENANCE OF CONCENTRATION COOPERATION IN ROAD BASE CONSTRUCTION.

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Annatation. In this article you can learn how to work on the foundation before building a pavement. In order to achieve the strength of the base, we must first make sure that the material used is of good quality and durable. After that, of course, it is necessary to ensure the quality of earthworks.

Keywords. Decree of the President of the Republic of Uzbekistan No. PF-4947, in the action strategy, Resolution No. 3309, the purpose of compaction of roads, bridges, overpasses, artificial structures, construction, soil compaction, compaction mechanism, carrier and carrier, almost dense, not fully compacted.

INTRODUCTION. The President of the Republic of Uzbekistan pays great attention to the development of roads and the improvement of the road network. In the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, approved by the Decree of the President of the Republic of Uzbekistan No. PF-4947, PF-4954 — Measures for further improvement of the road management system Decree No. PQ-3262 on measures to improve the system of landscaping and architectural and landscape construction of highways, PQ-3309-Motor Roads in the decision on improvement of the system of the organization of construction and operation of bridges, overpasses and other artificial structures, No. PQ-4035. The resolution on measures to introduce advanced foreign methods of organization of work in the field of construction and operation of roads identifies the development of the road sector and the improvement of the road network as priorities.

MAIN PART. The purpose of compaction is to increase the strength and durability of the soil. Today, there is a fleet of machines used for soil compaction in the construction of highways. The choice of the type of compaction mechanism for compaction of the roadbed takes into account the physical and mechanical

properties of the soil and the description of the object. The roadbed soil will have a certain density before the compaction process is started by special compaction mechanisms. This is due to the fact that the machinery used for transporting and spreading the soil moves over the deposited layer of soil, but it is compacted to a certain extent, but unevenly. This can be seen from the data in Table 1 below.

Influence of soil-carrying and transporting machines on the level of soil compaction.

Table 1

Machine type	Ground compaction condition	Density coefficient	
Grader-elevator	Very empty and empty	0,70-0,80	
Bulldozer	Incompletely compacted	0,80-0,85	
Car-dump truck	Not fully compacted and almost dense	0,85-0,90	
Scraper	Almost dense	0,90-0,92	

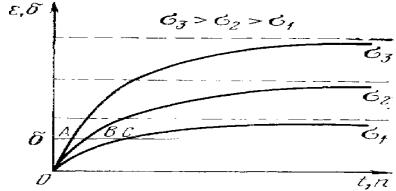
From the data in Table 1, we can see that the density of the soil layer under the influence of machinery used in the construction of the footpath varies. This indicator serves as the initial compaction coefficient when compacting the soil with special compaction mechanisms and has an impact on determining the overall performance of the compaction mechanisms and the number of transitions.

A similar pattern can be found in our current standards. SHNQ 3.06.03-08 is a method of throwing stones under a roller coaster, as described in paragraph 7.36.



View of the state of the layer density on the monitor of the integrated density system.

For example, smooth cylindrical waltz rollers cannot be used on loose soils. In this case, it is better to use double-track rollers. When compacting the soil, the contact pressure between the working body of the compaction mechanism and the soil must also be taken into account. This is because during the compaction process, when the contact pressure exceeds the strength limit of the soil, the top of the compacted soil layer becomes loose (with the exception of double-track rollers). When the contact pressure is less than a certain value, the soil density cannot be normalized. For this reason, the type of compaction mechanism should be selected based on the required compaction coefficient and the physical and mechanical properties of the soil. The best efficiency in the compaction process is achieved when the value of the contact pressure between the compaction mechanism and the soil is equal to 0.9-1 of the soil strength limit. 'Imaydi. In this case, if the density reaches a certain value and the contact pressure is not increased, its value remains unchanged, ie the required density coefficient cannot be achieved.



Graph of soil density or deformation at different contact pressures depending on compaction time t or number of passes n

ACHIEVED RESULTS. In Table 2 below, we can see the relationship between the coefficient of soil compaction and the contact pressure.

Soil density coefficient	0,90	0,95	0,98	1
Maximum contact pressure (in	0,2-	0,3-	0,6-	0,8-
proportions to the strength	0,3	0,4	0,7	0,8
limit of the soil)				

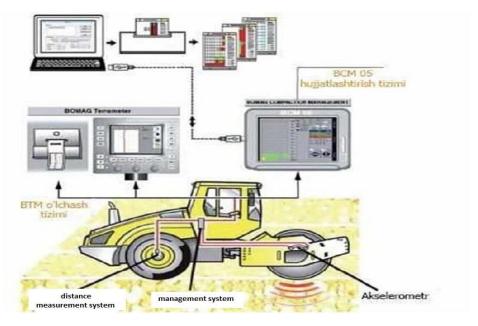
From the data in Table 2 above, it can be seen that as the density of the soil increases, the value of the contact pressure between the compaction mechanism and the soil required to re-compact it also needs to be increased. Proof of this law

is the use of light, medium and heavy rollers in compaction work today. The results of the study show that this technology reduces the total number of passes of the compaction mechanisms by 20-25% and saves 30% on compaction costs.

Today, vibrating rollers are widely used in the construction of roads in the world, including in Uzbekistan. The fact that vibrating compaction mechanisms have the same compaction effect with less weight than the rest, and the ability to control the contact pressure value applied to the soil, ensures the widespread use of such mechanisms in the construction process.

SUGGESTIONS AND CONCLUSIONS. In conclusion, it should be noted that the quality control of road construction is not only carried out after the completion of compaction, but also the application of compaction technology. Not only does this have an impact on the density level, but it also has a significant economic impact on the contractor performing the construction work.

Intelligent compaction is the most widely used method of quality control in compaction in the developed countries of the world today. "Smart compaction" is a real-time GPS system, a cathode-integrated measurement system (usually based on an accelerometer), a control system and a vibrating monitor with real-time display of all intelligent compaction test results on board. is the technology of compaction of building materials, including soils, building mixes and asphalt concrete mixes, using compacting rollers. Using this technology, which integrates a system of measurement, design and control, it is possible to monitor the compaction process in real time and correct deficiencies. The main advantage of this method over the existing density quality determination and evaluation methods is that with an integrated system it is possible to obtain complete information on the density state on the surface of the compacted layer. There is no such possibility in the use of traditional methods, ie the current normative documents specify the minimum number of cross-sectional and longitudinal sections of density tests based on the width of the footpath, the height of the lift.



Components of a smart compaction system.

. This is a reliable estimate for almost 1% of the total compacted surface. The density state of the rest of the bedrock remains abstract. Neither the contractor nor the testing laboratory shall be liable for defects that occur during operation in an area where the density level has not been determined.

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