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CONTEMPORARY CHALLENGES BEFORE THE PARK FACILITY IN THE CITY OF SOFIA

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ABSTRACT

On June 27, 2023, an Ordinance was adopted amending and supplementing the Ordinance on the construction, maintenance and protection of the green system of the Metropolitan Municipality. Unfortunately, the general impression in the professional community is that a rare chance to synchronize the regulatory framework in line with globally established practices was wasted. The adopted changes in the regulation significantly deepen the problems of the green system in the city of Sofia and distance the urban development of the capital from world practice.

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1. Introduction.

According to the Constitution of the Republic of Bulgaria, "Citizens have the right to a healthy and favorable environment" (Article 55 of the Constitution of the Republic of Bulgaria)! Green areas are one of the main elements of the urban environment and provide [1] "favorable conditions for living, working and recreation of the population" (Article 1, Paragraph 1 of the Law on Territorial Planning (territorial planning law) [2]. They form a "green system, as a means of improving the microclimate and hygienic conditions and for organizing the recreation of the population" (Article 62, Paragraph 1 of territorial planning law) [2].

2. Discussion.

The park planning measures and the activities for the construction and maintenance of the Green System of the city of Sofia are defined by the Law on the Organization and Development of the Metropolitan Municipality, in force from 01.28.2007, and in particular by the provisions regulated by it in Art. 3 (1) General development plan of the Metropolitan Municipality and in Art. 3 (2) [3] rules and norms for the organization and development of the territory of the Metropolitan Municipality, specified in a separate appendix. The rules and regulations for the implementation of the plan determine the structural and functional purpose, the building restrictions and the building indicators of the individual types of territories, development zones and independent plots [3]. Here are also defined the park planning indicators "amount of landscaped areas" for the relevant development zones, expressed as a percentage of the total area of the regulated land property and "tree vegetation" as a percentage of the landscaped areas. It immediately makes the impression that the indicators are only quantitative and the quality of the landscaped areas is not regulated anywhere. It is likely that the legislator expected that greater specificity could be achieved with the regulation in Art. 19 (1) Ordinance on the construction and protection of the green system on the territory of the Metropolitan Municipality [4], in force from 13.03.2013, but this did not happen.

All this, combined with the construction boom and continuous migration to the city, as well as the ambition of the mayor and the current chief architect of the Metropolitan Municipality, not to allow the physical boundaries of the city to expand at the expense of densification and unregulated parking in the green areas, leads to a complete compromise of the meaning of the urban green system and quite logically places the city at the top of the negative rankings in recent years. Today we are leaders in Europe in terms of air pollution above permissible standards, respiratory problems, cardiovascular diseases, etc.

The lack of specifics in the regulations and the replacement with verbal instructions from the mayor, municipal councilors and especially from the administration of the chief architect of the Metropolitan Municipality, lead to unpredictability and the impossibility of following a single concept for building the city's green system. These oral instructions and instructions, for the most part, are not based on a professional basis and are imposed on investors, designers and contractors without conducting public discussions and without a clear justification of the reasons that impose them. Additionally, in the 24 district administrations they are interpreted differently and this further increases the administrative burden. Over time, and especially the last 5-6 years, this creates a feeling of corrupt practices and fear in the end user, which in turn led to a legal attack on the text of the ordinance by the builders' association. [5]

Looking carefully at the above, and taking into account some more global causes, such as climate change and combating heat islands forming in urban environments, which the 2008 regulation did not address at all. As well as the fact that the regulation has not been changed and updated over the years, creating a false sense of sustainability, bearing in mind the international experience and the direction in which the big cities are going, today we can confidently say that Sofia needs a completely new regulatory framework a sustainable and complex approach in the construction and development of the urban environment with particular attention to the Green System element with a long-term horizon in the context of global climate change and escalating urbanization worldwide.

On June 27, 2023, an Ordinance was adopted amending and supplementing the Ordinance on the construction, maintenance and protection of the green system of the Metropolitan Municipality. Unfortunately, the general impression in the professional community is that a rare chance to synchronize the regulatory framework in line with globally established practices was wasted. This happened in a rather campaign-like manner, after the municipal administration usurped the working group, disrespecting the opinions of the professionals in it, without discussing the final version in the working group and disagreement of the members with the texts proposed by the representatives of the NAG, as well as without real discussion of the received opinions and proposals, subsequently, during the so-called "public discussion".

This version of the regulation cannot even be called "palliative", since it does not offer even temporary solutions to the serious problems of the green system in the city of Sofia.

The changes in the ordinance can be mainly divided into two groups unfavorable for the development of the urban environment:

- Transferring responsibilities and obligations of the municipality to the end user;
- Restrictive - stopping the application of globally established, modern park planning practices in an urban environment.

What's more: to the first group, in addition to the fact that the obligation of the Capital Municipality, regulated by the law on the organization and development of a metropolitan municipality, to prepare and maintain a register of long-lived vegetation on the territory of the Capital Municipality is transferred to the citizens, the designers-landscape architects are charged to provide services outside their competence, such as geodetic coordinates, for which they will subsequently be responsible with the project documentation stamped and signed by them. We observe a similar development with regard to the objects of the 5th category, for which the newly adopted Ordinance allows that the park planning indicators can be proven with a "Situation" drawing by specialists who do not have competencies in the field of park planning. The question immediately arises, what is the difference in the park planning indicators in the 5th category with the other categories and how will the lack of relevant competencies in the individual specialties lead to the construction of a better urban environment?

With regard to the second group of changes, creating mainly restrictions imposed by the administration and caused by incompetence in the field of landscape architecture, as well as lack of

knowledge of the biological aspects of plantings in an urban environment by the administration, composed of specialists with other educational and qualification levels, at total disregard for expert opinion and subsequent opinions from professional organizations, we can mention: the introduction of a minimum soil layer of 40 cm for roof landscaping (grassing), given that modern systems allow it to be 7-12 cm. As well as a minimum a soil layer of 120 cm for tree vegetation located above the basement or on green roofs, provided that there are suitable plant species with shallow root systems, which, combined with modern technologies and substrates, can also develop excellently on 30-40 cm. This burdens and makes the construction of the building significantly more expensive, and we can quite reasonably call it an administrative burden, which will reflect on the final price of the construction and will put a financial burden on the end user. We can say that this condition further demotivates the builder to build green roofs, and this, together with the other limitation introduced by this regulation, vertical landscaping not to be more than 10 percent of the property area, significantly distances Sofia from modern trends and practices in the area of landscape architecture and urban planning.

In opposition to this regulation, in 2017 the city government of Madrid prepared and adopted normative documents, with which it intends to increase the green areas in the city by 2050, through vertical and roof greening by 30%. Experts claim that in this way they will reduce the annual temperature amplitude by 4 to 6 degrees and this, in turn, will lead to a reduction in heating and ventilation costs by about 4 billion euros. Of course, reduced heating and ventilation costs also lead to a reduction in harmful emissions in the urban environment. Vertical landscaping on these scales will increase air humidity and create conditions for local cloudiness and precipitation, as vegetation on building roofs will reduce surface runoff and convert it into subsoil. The vegetative volume from the vertical greening will create conditions to retain water volumes during heavy rainfall, preventing the sewer network from being overloaded, as forest plantations do. It is known that one hectare of forest plantations retains up to 80 tons of water in its above-ground parts. And last but not least, urban surfaces "upholstered" with vegetation will significantly reduce the effect of the so-called heat islands.

3. Conclusion.

In general, a similar synergistic approach has been adopted by all modern cities. Vancouver, with a special ordinance from 2008, made roof landscaping mandatory for public and industrial buildings, with a minimum of 50% of the roof area being covered with landscaping or photovoltaic panels. In 2010, similar regulations were adopted by many American and European cities, including Bonn, Bern, Paris, etc. In our country, unfortunately, the adopted texts are in the opposite direction. They do not define a concept for the development of the green system of the city of Sofia, they do not identify measures to improve the quality of the plantations and, accordingly, they have no relation to the improvement of the urban environment. The document does not consider the green areas in the capital as part of a single system and relies on random development of the green system without planning and setting goals and priorities for it.

In general, the adopted changes in the regulation significantly deepen the problems of the green system in the city of Sofia and distance the urban development of the capital from world practice.

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