

Competition design for overall concept of development, improvement and urban design of the central part of Dobrich

Idea 1 Decluttering of inappropriate elements layered over time such as advertisements, outdated street furniture, telephone booths, info-tables, kiosks, etc.

"Declutter" is a necessary and mandatory first step in the renovation of central streets and urban spaces. The informal and uncontrolled layering of elements in the low plan and on the facades in the central part of Dobrich confines the accessibility and the comfort of walking, and creates a feeling of chaos and stress. Getting used to the abundance of "visual pollutants" nourishes their constant increase to further compromise of the urban environment. Decluttering is an unpopular but necessary action and must be preceded by information campaign, administrative decisions, and direct communication with the "owners" of the relevant elements. The declutter should precede the renewal operation and will create positive attitudes to the forthcoming realization.

Idea 2 Preservation and enhancement of important features of the spaces and of the low plan such as: the sequence of street and square spaces; the diagonal pattern, color of the pavements, and surface drainage system; some elements of urban furniture.

Not only the limited financial framework is the basis of the clear intention to preserve and restore available spatial features and design elements. The modern urban history of Dobrich is characterized by a sequence of drastic transformations without connection between the new interventions and the historical urban fabric. The fundamental idea of the concept is the maximum preservation and restoration of givens - from the higher urban level, such as the characteristic sequence of squares and linear street spaces through the green areas and the characteristic pavement "katanitza" to specific elements of urban furniture, such as the historical benches. On a more abstract level preserved and interpreted are the specific diagonal composition of the existing pavements with rotated square accents at key locations, as well as the partial application of the current characteristic colours to the newly paved areas.

Idea 3 Significant increase and improvement of the green areas, including tall vegetation. Restoration of existing and construction of new water features and fountains

The relatively rich green areas in the center of Dobrich and especially the perennial and large-sized trees define the feeling of coziness and the frame of the pedestrian spaces. The green spaces and trees in the center seem like a natural continuation of the pride of the city - the "St. George" Green Park. During the hot summers the trees provide the much-needed shade to the large public spaces. An axiom of the concept is the complete preservation of the existing green areas and their maximum increase. A pragmatic and economical solution was adopted - the new green areas incorporate the existing ones.

The competition brief provides a total of 732 trees register summarized below:

ТАБЛИЦА 1 / TABLE 1

**Качествена оценка според физиологично състояние
Qualitative assessment according to physiological state**

	Общ брой / Total	Съотношение в % Ratio in %
Много добро / Very good	41	5,60 %
Добро / Good	386	52,73 %
Задоволително / Satisfactory	221	30,20 %
Влошено / Deteriorated	70	9,56 %
Лошо / Bad	14	1,91 %
Пънове / Stumps	32	

The existing vegetation has an average age of over 50 years and 88% of it is in good and satisfactory condition. The majority of registered species are deciduous. Coniferous vegetation is presented individually and participates as accents in decorative groups. The most commonly used deciduous species are: Silver-leaved linden, Horse chestnut, Birch, representatives of the genus Sycamore, Ash and Sycamore. According to the expert assessment, the following species are currently proposed for removal, as some of them pose a real danger to by-passers:

ТАБЛИЦА 2 / TABLE 2

**Видове за премахване
Types to remove**

	Общ брой / Total
Добро / Good	2
Задоволително / Satisfactory	4
Влошено / Deteriorated	6
Лошо / Bad	14
Общ брой дървета / Total trees	26

Of these, a total of 14 are replaced based on the recommendation of the expert assessment, 3 of which are in the places of stumps. These are the following types:

ТАБЛИЦА 3 / TABLE 2

**Видове, които се подменят
Types that are replaced**

	Общ брой Total	Съществуващ вид An existing species	Предложен за промяна вид Suggested change type
Задоволително / Satisfactory	1	№477 – Platanus orientalis	Platanus orientalis

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Влошено / Deteriorated	4	№032 – Tilia tomentosa №092 – Betula pendula №300 – Tilia tomentosa №699 – Fraxinus ornus	Acer pseudoplatanus Acer pseudoplatanus Acer pseudoplatanus Acer pseudoplatanus
Лошо / Bad	6	№160 – Prunus cerasifera №161 – Prunus cerasifera №293 – Fraxinus americana №294 – Fraxinus americana №431 – Platanus x acerifolia №630 – Acer pseudoplatanus	Acer platanoides 'Schwedleri' Acer platanoides 'Schwedleri' Acer pseudoplatanus Acer pseudoplatanus Platanus x acerifolia Acer pseudoplatanus
Пънове / Stumps	3	№002 – №073 – №165 –	Acer platanoides 'Schwedleri' Tilia tomentosa Aesculus hippocastanum

The concept design specifies planting of 52 new trees, which are mainly concentrated in the square spaces and the central green area in front of the cooperatives. The enrichment of the square spaces and the dendrological groups will contribute to a more favorable microclimate for recreation and walking by and will create a sense of human scale on the currently bare pedestrian spaces.

In the central green area in front of the “cooperatives”, an interactive children's playground with self-leveling rubber flooring in different colors is proposed. The playground is designated for the up-to-12-years group and will contain slides, seesaws, stairs, climbing walls, a trampoline and a water fountain.

The following specific steps are required for the successful implementation for the project:

- Deposition of the humus layer;
- Protection of the existing vegetation during the construction and installation activities - the grading should be in accordance with the point of the root neck of each tree;
- Protecting the bark of trees from injury.
- Preparation of management plans for the maintenance of green areas.

Stages of landscaping:

- Removal of trees according to the expert assessment;
- Sanitary and formative pruning for all trees, according to the recommendations of the expert assessment;
- Cleaning the green areas from tree shoots and shrub vegetation;

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- Deposition of the humus layer;
- Laying of deposited humus and newly introduced humus;
- Planting of new tree species and their strengthening;
- Planting of shrub vegetation;
- Weeding of the green areas.

Given the considerable size of the territory, the water areas and fountains are extremely insufficient. The concept recommends the restoration and modernization of all existing water features, elements and fountains, as well as the construction of four new fountains: a "dry" fountain in front of the Cyril and Methodius monument; a group of three water features in the extension of 25 September Street at Slavyanska Street; a square fountain with seating on Dimitar Petkov St at the entry point to the Old Dobrich and a landmark fountain on the new roundabout crossroad between 25 September St. and the St. Georgi Park.

Idea 4 Construction of a system of urban design elements, helping to define and articulate the square and street spaces, as well as their animation and sun protection

A central element in the urban design system proposal are tree-like pergolas. They provide the much-needed sunshade for the passers-by, and also determine sitting spots, as well define the locations for kiosks and stands for city events. In a modified form, the pergola trees provide shading to the stands of the new amphitheater, as well as to the terrace of the building with restaurants in place of the coops. Singular pergola trees will be located as accents in important points of central area. Given the strict financial framework of the first stage of the project, the foundations for all pergolas will be constructed, but only those in the space between Svoboda and Revival Squares will be installed.

The concept also offers a complete system for street furniture, characterized by a comfortable modern, simple and at the same time wear-resistant and easy-to-maintain design. Among these are benches, trash bins; modular public toilets; streetlights; signage; information columns; visual communication. Two public toilets are proposed: one in the new food-court building in the place of the "coops", the second one in the area of the Dobrich Cinema.

A non-standard element of the furniture are the free-standing iron tables and chairs located in the most lively places, a low-budget practice that has become extremely successful in many world cities.

Idea 5 Solution to the main problem – the deteriorated pavement through the restoration of the distinguished ceramic pavement from the 80s and through a modern new pavement, including elements of barrier-free environment

Composition At the base of the composition of the low plan is a square diagonal grid with a basic module of 6/6 m, which allows the integration of the part of the pavements designated for preservation and restoration (*the squares in front of the Municipality and in front of the Art Gallery, as well as along "Nezavisimost" St. and "Bulgaria" St.*) The diagonal composition creates a feeling of connectedness on the two street fronts and unites the square spaces. Diagonals enhance the sense of perspective. Given the budget constraints, the pavement solution is based on three

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combinations: granite slabs and concrete pavers with a thickness of 8 cm for the most representative pedestrian areas; 10 cm thick concrete pavers for the areas accessible by service transport and 6 cm thick concrete pavers in peripheral pedestrian areas and areas contacting the buildings. An important aspect of the composition is the color. Four colors are envisaged: light and dark grey, beige and red (*the last two colors are close to those of the existing clinker slab pavement with the "katanitza rope" type pattern*).

Technology The design development for the pavement will start with analysis of the base course and the soil characteristics for the area, and a critical analysis of their current condition. Methods will be defined for unhindered drainage of atmospheric water through a dense surface drainage system and drainage layers. The severe climatic factors are to be considered and solutions guaranteeing reliable absorption of temperature deformations will be implemented. The negative impact of anti-icing salts, the root system of plants and uneven deformations from local shading will be taken into account. The choice of technologies and materials will ensure the necessary durability and operational reliability.

With the technology of cold recycling, the layer of stabilized base course will be performed "in situ" with the addition of hydraulic bonding elements - cement or others, depending on the base. With this technology, the old layers of concrete, asphalt, stone, and lumps are simultaneously broken, mixed, stabilized, leveled and compacted to a depth of up to 500 mm.

Advantages of the technology:

- reduced costs by 10 - 20%
- reduced execution time (4 000 – 5 000 m²/day)
- increased reliability
- universality - wide area of application
- environmental protection by reducing construction waste.

The joints between the individual sections of the pavement will be provided with the necessary linear compensators and filled with permanently elastic insulating materials with a relative expansion of more than 400%.

Idea 6 Proposal for a building with restaurants and a two-story underground parking lot on the site of the "coops"

The area of the "coops" is particularly degraded and is in an inappropriate frame for the most significant square of Dobrich – the Svoboda Square. In addition to being temporary, the "cooperative" pavilions are in particularly poor condition. The space behind them is used for extensive informal parking. At the other side, the "coops" play an important role for a central square, providing a variety of dining options. The "coops" also define the square on its eastern side. Parking behind the "coops" is also a necessity - it is one of two buffer parking lots on the border of the pedestrian area. The concept proposal abstracts these important qualities in order to integrate them into a volumetric architectonic solution of a two-story hall-type building, a market with a concentration of dining shops around a central food court space. A single-story wing with a terrace towards the central garden completes the new frame of the square. The building is located on a two-story underground parking for 132 cars. The one-story wing contains an easily accessible public toilet.

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Idea 7 Proposal for a complete replacement of the kiosks in the northern section of "25-Septemvri" Blvd.

The pavilions in the northern part of "25 September" Blvd., once allowed as temporary structures, are a particularly difficult legacy from the 90s. Besides being underused and neglected, they are in extreme contradiction with modern urban design and present a visual and physical obstacle in the central area of the otherwise impressive space, a product of modernist socialist urban planning. Since the pavilions are privately owned, it is necessary for the Municipality to enforce straightforward urban policies, including financial incentives and sanctions, in order to remove the pavilions and replace them with new ones, a product of quality design and technology. The architecture of the new pavilions must ensure activity along their entire perimeter, so that the pavilions turn into connecting elements of the two sides of the street space.

Idea 8 Proposal for the organization of movable structures and elements (*kiosks, stands and pavilions*), including temporary ones for public celebrations and events

The concept pays attention to the particularly important topic about the renovation of the central part of Dobrich. This issue can be solved by the implementation of a comprehensive municipal policy for movable and temporary structures. A part of this policy is the preparation of a Scheme for the structures that can be positioned temporarily, including those for specific city-wide events, such as Christmas, Easter, and the city holiday. The policy for movable structures must include the priority preparation and implementation of the "ORDINANCE on guidelines and conditions for the placement and removal of movable structures on the territory of the Dobrich Municipality. Only a strict local regulation and its enforcement may prevent the continuous "piecemeal" appearance of kiosks and stands under the pressure of private initiative.

Idea 9 Modern energy-efficient street lighting, WiFi, surveillance and sound system

The concept for street and art lighting aims to emphasize the features of the spatial structure of the central area by alternating "islands of light" with subdued lighting. The islands of light are the squares that invite people to gather, and the more dimmed lighting along the street sections assists the effect of the shop and restaurant windows. A combination of high – 10-12 m, medium – 5 m and park – 1.2 m lighting poles are applied. The crowns of some of the most characteristic trees in terms of both species and location are illuminated from below.

It is necessary to develop a master plan for intelligent, dynamic, energy-efficient LED lighting not only for the squares and streets but also for the facades, urban art, monuments, green spaces and gardens.

Idea 10 Proposals for improvement of traffic and parking, including a roundabout with an underpass square between 25 September Blvd. and St. George Park

Streets with vehicular traffic within the scope of the contest are limited. There are three more significant parking lots available – a public one behind the „coops“; a private one behind the Bulgaria Hotel, and a third one under Democracy Square, also private and not used.

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The following are specific proposals for improvement of the traffic communication and parking:

A. Construction of a two-story underground parking lot as part of the new building with food court at the place of the coops.

B. An opinion that the Municipality of Dobrich should buy back the underground private parking lot under the Democracy Square.

C. If the above condition is met, a shortcut can be provided through the underground parking lot under the square.

D. The most significant proposal is the transformation of the T-intersection at the entrance to the St. Georgi Park in a roundabout with an underground square - an underpass provided with access via ramps, stairs, and three elevators. Equipped with a circular opening - an oculus in the center of the roundabout, this underpass-square will provide the necessary and adequate spatial connection between the pedestrian area of the center and Park St. George. The concept also proposes a fountain in the center of the roundabout to not only welcome the arriving in Dobrich but also signifying the beginning of the pedestrian zone.

The concept offers a simple and workable idea for organizing the growing bicycle movement in the central pedestrian zone. A priority is attributed to each of the two opposite "lanes" defined by the central axis of the "25 - September" Blvd. The lanes are divided by the street furniture (*pergolas, water features, seating*) positioned along the street axis. On the one side of the axis, priority is given to pedestrian movement. It is in this lane where the guiding strips of accessible environment are available. The opposite lane is designed as a predominantly bicycle lane with marked with bicycle symbol pavers.

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BoQ Summary

№	Позиция / Item	Площ / брой Area / number	Стойност лв. без ДДС Cost in BGN w/o VAT
1	Подготовка основа настилки/ Base course	31 000 m2	1 550 000
2	Настилка паваж и плочи деб. 6, 8 и 10см Pavement – pavers and slabs 6, 8 and 10 cm thick	31 000 m2	3 224 000
3	Зелени площи и детски площадки Green areas and playgrounds	10 050 m2	125 550
4	Градско обзавеждане Street furniture	общо all	1 315 380
5	Перголи подетап 1.2 и подготовка за останалите Pergolas for sub-phase 1 + foundations for the rest	15 бр.	585 000
6	Амфитеатър Amphitheater	общо all	250 000
7	Инфраструктура – отводняване, крайни елементи Infrastructure – drainage; ending elements	общо all	400 000
8	Инфраструктура – ел. Захранване Infrastructure – electrical feeding	общо all	250 000
9	Осветление Street lighting	общо all	609 460
10	Водни площи Water areas	2 бр.	60 000
	ОБЩО / TOTAL		8 369 390

The cost is based on research and own experience and has current values. In the assumed conditions of eventual inflation and an earliest start of construction in one year, subphases in the first phase are considered - all construction works below the surface level with completed pavements (*all infrastructure and foundations*) will be completed. Subsequently, the urban spaces will be furnished with the rest of the pergolas and additional elements of urban design.