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GREEN AREA RESTORATION AND LANDSCAPING PEDESTRIAN PATHS IN MOLDOVA NOUĂ

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Abstract: Seen strictly in terms of scenic beauty, landscape is a part of nature that forms an artistic whole. Natural landscapes untouched by man (virgin) are becoming increasingly rare. The characteristic values of the physico-mechanical parameters of the studied soils, which were determined analytically, have been corroborated with values taken from relevant documents (projects in the area, containing information from geotechnical investigations of similar geological formations, tables of recommended values in technical regulations). The proposed objectives are social objectives that do not generate income for the manager and administrator of the green areas represented by the Town Hall. The benefits of the objectives are social (responding to urgent needs of the locality in terms of quality of life, comfort, improvement of the quality of the environment, creation of additional jobs both in the implementation and operation phases, etc.). The areas under study represent a significant percentage of the city's total green areas, and their rehabilitation will give the city the aesthetic aspect it deserves and needs, given its geographical location on the left bank of the Danube, in a special landscape. The rehabilitation of these green areas will be of social and economic benefit to the city's inhabitants, creating jobs for a limited period during their construction and an indefinite period during their maintenance.

• Introduction

Over the last 20 years, the landscape of Romania's cities has changed considerably. With the development of cities, increasing industrialisation and growing road traffic, the creation of green spaces has become a requirement of modern urban planning. The modernisation of towns and cities, rural areas and tourist and recreational areas aims to integrate green spaces into the built environment in a sensible way: every year new parks, gardens, street plantings and green areas are created next to residential complexes, institutions and businesses, and the natural environment along the routes is beautified.

The existence of green spaces in the urban environment fulfils a number of important functions for human society:

- aesthetic (landscape) function;
- recreational function;
- land and soil protection function;
- protection against harmful climatic and industrial factors;
- Aesthetic (landscape) function

The existing green spaces were built and landscaped more than 30 years ago and have not undergone any major changes in recent years in terms of their possible redevelopment, which is why this paper proposes the rehabilitation of the most important green spaces of the city.

• Material and method

The studied sites are part of Moldova Nouă, consisting of the park at the entrance of the city from Oravita and the area of blocks of flats located in the centre, both in the new district of the city, built decades ago with the beginning of mining activity in the area. Another objective studied in this paper is the park next to the House of Culture, built in Baroque style in the old centre of Moldova Nouă.

The area of land studied is 24,467.88 sq.m., and is in the administration and property of the Municipality of Moldova Nouă.

Table 1. the situation of green spaces in the city of Moldova Nouă

City	Existing green spaces			Green spaces proposed in urban plans (sketches 1980)	
	Surface area hectares	m ² / resident	% of the intra-village	Surface area hectares	% of total city
Moldova Nouă	45	23,3	13,6	8	1,3

The general objective of the present work is to increase the quality of life and the living standards of the inhabitants of Moldova Nouă in Caras-Severin County through the rehabilitation of green spaces, as well as to ensure the prerequisites for a harmonious long-term development of this town with fair relations with its neighbours and with the development of the whole county, based on the principles of sustainable development.

The specific objectives are:

- improving the quality of the environment;
- increasing the attractiveness and accessibility of Moldova Noua;
- improving the aesthetic function of Moldova Noua, the aesthetics of urban design;
- increasing the ecological function of green spaces in Moldova Noua;
- improvement of the conditions of leisure time for the inhabitants of Moldova Noua;
- satisfying the need of relaxation in a pleasant environment;
- creation of new jobs for the maintenance of green spaces;

• Results and discussions

Table 2 Estimate of Main Park facilities

No. crt.	Name of work	measurement unit	quantity	Unit price	Total - lei -
1.	Dalaj	square meters	3.193	92,00	293.760
2.	Borders	metre	2.105	30,00	63.150
3.	Banks	pieces	140	900,00	126.000
4.	Litter bins	pieces	40	500,00	20.000
5.	Pergolas	pieces	14	10.300,00	144.200
6.	Kiosks	pieces	2	6.500,00	13.000
7.	Water fountain	pieces	1	40.000,00	40.000
8.	Manual digging	cubic metres	1.040	50,00	52.000
9.	Transport	tons	140	18,00	2.520
10.	Related concrete	cubic metres	63	200,00	12.600
	Total				767.230

Spending on pedestrian walkway architecture:

1.Estimate of pedestrian alleys in the area of blocks = 4.886.700 lei
Total = 4.886.700 lei

Expenditure on necessary works:

1.Estimate for works in the Main Park = 247,300 lei
2.Estimate for works on green space no. 1 = 45.500 lei
3.Estimate for works on green area 2 = 53.800 lei
4.Estimated cost of works on green area 3 = 46,400 lei
5.Estimate for the work on the Cultural Centre park = 28.400 lei
Total = 421,400 lei.

Expenditure on irrigation installations:

1.Estimate for irrigation installations Main Park = 30.400,00 lei
2.Estimate for irrigation installations in green area no. 1 = 2.000,00 lei
3.Estimate for irrigation installations in green area no.2 = 2.200,00 lei
4.Estimate for irrigation installations in green area no.3 = 2.200,00 lei
5.Estimate for the irrigation installations in the park of the House of Culture = 38.356,00 lei
Total = 75.156 lei

GRAND TOTAL = 7.218.156 lei.

ANALYSIS OF MAINTENANCE COSTS OF REHABILITATED GREEN SPACES

Operating expenses are divided into the following categories:

- Utilities and maintenance expenses;
- Staff remuneration costs;
- Other operating expenses;

• Conclusions

Given the precarious situation of the green spaces in Moldova Nouă, their rehabilitation is essential from an urban and social point of view. The rehabilitation of these green spaces would lead to several conclusions, some of which can be found below:

The areas under study occupy a significant percentage of the total green areas of the city, and their rehabilitation would give the city the necessary aesthetic aspect, given its geographical position on the left bank of the Danube in a special landscape. The rehabilitation of these green spaces will be beneficial from a social and economic point of view for the inhabitants of the city, creating jobs for a fixed period during their execution and for an indefinite period during their maintenance.

With the rehabilitation of these spaces, it will be necessary to rehabilitate the other green spaces, but these are of primary importance given their location in different districts of the city (the park of the House of Culture in Moldova Nouă, the area of blocks, Orașul Nou) and the entrance area to the city, an area that now gives a desolate image to the visitor's eye and that after rehabilitation will create the image the city deserves. The rehabilitation of the alleys of the blocks will give safety to the passers-by, especially in winter periods, and will give a special aesthetic aspect compared to what currently exists for all the areas where they will be rehabilitated.