

Workshop 2:

TO ORGANIZE THE SUSTAINABLE MANAGEMENT OF THE GREEN SPACES

Current social and economic changes exert on towns increasing pressure on the environment. In contemporary urbanism, sustainable management of urban green represents a new challenge for planners and officials. The green areas in cities are focused on biodiversity, versatility and education. As shown by the examples of Europe's largest metropolis, usually accompanied by the provision of design, recreation and tourism activation, called "leisure industry". It is suitable for a diverse group of future users. Public spaces, in which go the life of the city, are of particular importance to meet the needs of residents, improve their quality of life and promote social networking, due to its location and characteristics of the functional and spatial. In the urban area are usually areas of roads, public squares, parks, cemeteries, public gardens, sports and recreation areas, foot-driving streets, and pedestrian and bicycle tracts. Important is the availability of green areas and recreation within walking reach of place of residence, work, study, as well as functional and spatial relationships between areas.

In Rabka-Zdrój, right in the city center, is located Park, which for over a hundred years, is inextricably linked with the history of the spa. Park now occupies an area of 30 hectares and is one of the largest parks in Malopolska. In the years 2010 - 2012 was its thorough revitalization. The main objective of the revitalization of the Park was to organize and improve the existing state in terms of thematic, functional, qualitative and quantitative, with particular emphasis on improving the visual attractiveness.

The activities undertaken in the project "Comprehensive revitalization of the Spa Park" were related with the modernization of pedestrian and lighting equipment, landscaping elements, revitalization of green spaces, as well as modernization of squares for children. The total value of the project amounted nearly 9 million PLN, and grant was a little more than 6 million PLN.

Park was compositionally divided into two parts: the sun zone (western part) and the shadow zone (eastern part).

Sun Zone is characterized primarily conducted freely alleys, with walking, representative and recreational functions, lower density of trees and increased amount of ornamental shrubs. In the layer of undergrowth was established lawns, with which users can enjoy the park. Sun zone is characterized by a wide range of different themed gardens with different selections of plants (trees, bushes, shrubs, perennials, bulbs and annuals) and rich structure. In the zone of the sun are the following thematic gardens: flower garden, rose garden, azaleas and rhododendrons garden, heaths, garden with vines, ornamental grasses, spring and autumn ribbon of seasonal plants, fruit garden, rock garden, fragrance garden and water lilies garden.

Shadow Zone is a reflective and walking space with places for fun for children that do not require large physical activity, avenues are run in a straight line, this part is dominated by tall trees, part of the lawn in the most shady vegetation has been replaced by undergrowth. In this part of Park is located the cemetery and Square "Pod Grzybkiem". An integral part of the park is Graduation Tower

and Pump Room, two playgrounds, two monuments, two fountains, outdoor gym, skate park, tennis courts, volleyball, naturopaths, a small communication town, two toilets.

Summary redeveloped park greenery

- I. Flower garden 526m²
- II. Rose garden 562m²
- III. Azaleas and rhododendrons garden 2274m²
- IV. Heath 898m²
- V. Garden of vines 71m²
- VI. Garden of ornamental grasses 179m²
- VII. Autumn ribbon 146m²
- VIII. Spring ribbon 217m²
- IX. Fruit garden 391m²
- X. Rock garden 1045m²
- XI. Fragrance garden 628m²
- XII. Water lilies garden 44m²
- XIII. Cover crops in the cemetery 312m²
- XIV. Developing the Square "Pod Grzybkiem" 438m²
- XV. Other trees and shrubs 1442m²
- XVI. Undergrowth 5516m²
- XVII. Lawns 77314m²

In April 2012, established Social Cooperative "Dziwięćsił". The founding members are the Municipality of Rabka-Zdrój and Physical Culture Association "Carlina" in Rabka-Zdrój.

Social Cooperative of two corporations performs task own municipality, i.e. care and maintenance of green areas in urban areas, also being active in the labor market, especially among long-term unemployed, the inhabitants of the municipality. From 16th May 2012 Social Cooperative takes care of the Park.

The scope of works and the areas covered by the agreements:

- sweeping alleys, squares, stairs, street /area of 31 311 m²/
- sweeping two playgrounds /area of 1 930 m²/
- daily emptying of 170 bins in the park and maintain clean toilets
- maintaining the cleanliness of the areas around the Graduation Tower and access road
- review technical efficiency pumping pond "Nerka" and the fountain "Trzy Róże", commissioning and care in the summer and closing in the winter time
- preparation and execution of planted annual flowers in flowerbeds in the Park and roundabouts /approx. 20 thousands of flowers/
- care of cutting and forming trees and shrubs
- mowing lawns which was revitalized /surface 76 180 m²/ and meadow /area of 48 000 m²/
- manual weeding flower gardens, shrubs, undergrowth /area of 11 100 m²/
- mulching by bark /area of 5 400 m²/
- planting trees, cutting ill trees, cleaning up after the storm
- watering the flower garden, spraying plants in gardens

- raking and export leaves from lawns in "Sun Zone" and "Shadow Zone"
- review technical efficiency of park equipment and minor repairs
- winter maintenance of park areas /snow removal, walkways, foot-driving streets, squares, removing slippery, snow removal of the benches, playground equipment, and sports and recreation, garbage collection, the elimination of molehills/
- hire tennis courts and playing fields for volleyball

Social Cooperative "Dziewięćsił" to carry out these tasks has its own equipment:

1. Multifunction municipal vehicle with supporting devices:

- ✓ rotating brush to snow
- ✓ plow
- ✓ snow blower
- ✓ sand spreader
- ✓ vacuum sweeper with a pressure and high-pressure cleaner

2. The self-propelled mower with equipment for summer and winter:

- ✓ cutting system with mulching aparat
- ✓ collector to the grass and leaves
- ✓ snow blade

3. The self-propelled mower with equipment for summer and winter:

- ✓ snow brush 95 cm.
- ✓ blade 120 cm
- ✓ collector 107 cm
- ✓ mulcher
- ✓ cutting system 112 cm

4. Two cargo electric vehicles

5. Mulching mowers, hovercraft mower, scythes and trimmers (combustion and battery ones)

6. The leaf blower, shredders to branches

7. Manual Sweeper

8. Aluminum invasions with a certificate

9. Special tools - saws for tree, pruners, weeders, trolleys

These devices are environmentally friendly: battery, combustion with low noise, lightweight machines, small size, suitable for operation in the Park.

In our Social Cooperative work between 10 and 15 people. Recruitment is done through the Labor Office. Our headquarters is located in the center of the Park, which is very positive impact on the working conditions, use of equipment, does not generate additional transport costs and helps to protect the environment in the center of our spa.