

Multifunctional public space Timișului

FC Cluj-Napoca

Project indicative: CJ3.3
Project type: complex project
Project starting point: 0-5 y
Project ending point: 0-5 y
Linkages: CJ3.4

Estimated costs: can vary a lot, from 50K to 200K EUR



NBS 3



NBS 6

Type of NBS intervention

NBS3 + NBS6 The area is proposed to be converted into a multifunctional public space, combining urban orchards, raised box gardens, and community areas for leisure and social interaction. The design of NBS 6 integrates the green corridor area with the landscape design of NBS3, harnessing synergetic effects for establishing stronger connections between residents and the natural landscape while serving as a crucial segment of the future soft mobility corridor.

Description of the planned NBS interventions

The area is valuable for the neighbourhood given its potential to serve as a community public space. The adaptation of NBS should be aligned with landscape requirements, incorporating ecological improvements, and fulfilling its ornamental role. Additionally, compliance with specific regulations imposed by the General Urban Plan is essential. This necessitates organic design compositions that seamlessly integrate diverse functionalities, including recreational zones, versatile public spaces, and a designated area for dogs, including NBS components: urban orchards, raised-box gardens, and pollinator areas. Furthermore, establishing a connection to the river that contributes to the ecological restoration of the blue-green network. Consequently, acting as a valuable green corridor within the city-level green infrastructure.

Vision



Source: <http://ontheplatform.org/en/article/roots-growing-movement>



Source: proGleg, FRC Turin, Orto Wow garden



Source: proGleg, FRC Dortmund, Food forest and permaculture



Current state – open area with little vegetation crossed by electrical lines

Scenarios

Do-it-all (extract)

Similar to the Nădășel site, this project foresees the transformation of used terrain into a multifunctional public space. It will blend social interaction, leisure, and relaxation with community gardening, specifically focusing on cultivating vegetables and fruit trees.

The transformation aims to enhance the local landscape while utilizing valuable land. Furthermore, the NBS project will provide essential ecosystem services for residents and contributes to the ecological aspects of the blue-green corridor. The riverbank will be accessible and landscaped while preserving its unique natural ambiance.

Do-something-meaningful (extract)

Funds have been allocated for the renewal of the public space, including smaller-scale garden boxes and fruit trees to create an urban orchard. The area will be cleaned and secured towards the riverbank.



Study area

Approximate area of 2.7 hectares, representing a valuable open space near the Someș river, adjacent to social housing units (2 to 3 storeys high).

Similar to the Nădășel site, the area is intersected by high voltage power lines. The visual and functional relationship of the area with the river corridor is limited by a fence and invasive vegetation.

Residents have implemented informal interventions such as benches as a socializing area, and vegetable gardens.

The initiatives need to be formalized and integrated into a cohesive public space design.

Local planning frameworks

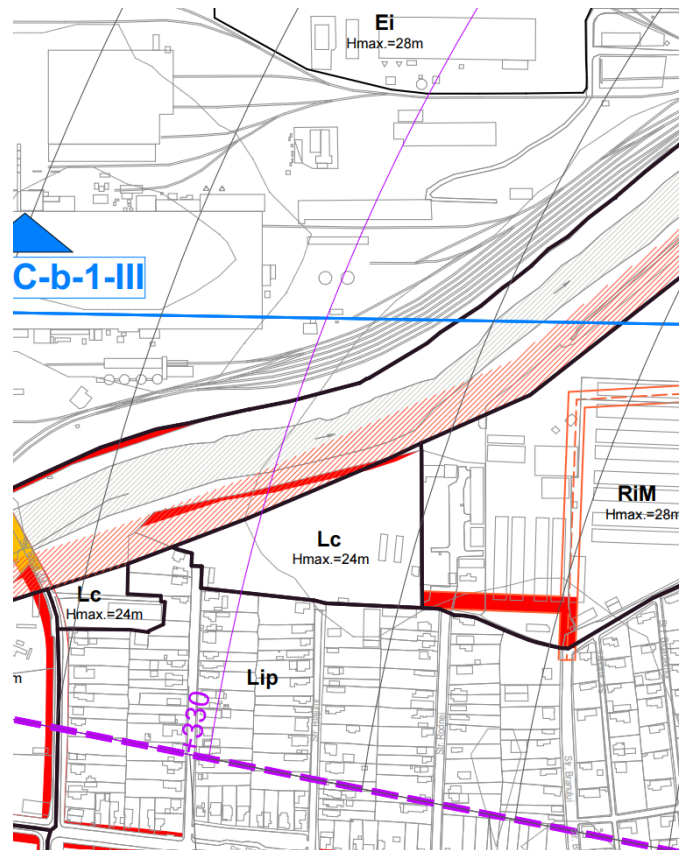
Three key documents need to be considered:

1. **The General Urban Plan.** The site is included in Lc, referring to social housing units built after 1990. Under the Zonal Urban Plan (PUZ) for urban regeneration, it is possible to reorganize and regulate sub-areas such as S_Va, designated as green areas with the purpose of serving as squares, gardens, and parks with unrestricted public access. However, it is important to demonstrate that any landscape design implemented in these areas does not interfere with the existing protective elements, including the high-voltage line. The section of the area facing the river is regulated as Ve, designated as green water protection areas or ecological corridors. It is strictly prohibited to change the designated purpose of the area; any interventions must be carried out through the development of detailed urban plans (PUD).

2. **Law approved by the Local Council (Hotărâre nr. 311/1998):** This law prohibits parking vehicles and animals on green areas. Furthermore, it restricts any changes in the designated purpose of green spaces, disallowing conversion into parking lots, vegetable gardens, or other landscaping forms.

3. **SIDU (Integrated Sustainable Urban Development Strategy).** The document recommends creating new green public spaces at neighbourhood level, completing with new vegetation alignments. Through proGleg, possible synergies can be achieved: the current project requirements relate to the indicators of SIDU for greening initiatives.

General Urban Plan extract



SIDU 2030 extract



PUBLIC SPACE

- Realised interventions
- - - Interventions ongoing/finished
- New proposed interventions

Challenges of the site

- The area is crossed by voltage lines, representing a challenge for NBS transformation. Safety measures and specific landscaping design is needed.
- NBS 6 green corridor area prioritises security, accessibility, and coherence with future bike paths along the Someş riverbank. Future intervention may be subject to vandalization given the peripheric location and poor accessibility of the site and riverbank. Therefore, increasing security and improving the overall landscape and ambiance may counteract.

Key considerations

Organization, rehabilitation, or modernization of the site will be approached in an integrated approach and executed exclusively through comprehensive specialized projects. These projects aim at enhancing functionality and improving the urban image and quality, focusing on pedestrian and bicycle mobility. Developing specific infrastructure, regulating motor vehicle traffic, and parking, and organising urban furniture and vegetation. Permissible elements within the site include high-rise, medium, and low vegetation, pedestrian and bike paths, urban furniture (e.g., playgrounds, sports facilities, leisure areas), landscaping and hydrotechnical works.



Locals have been improvising urban furniture for social activities. There is a present and relevant need to create formal community public spaces.



Objectives

- Improve the local landscape and increase level of security of the area.
 - River corridor is accessible and coherent within the local public space structure (and soft mobility)
 - Orchards and gardens link other public spaces.
 - Timișului site intervention sets new standards for multifunctional community public space in social housing and collective housing neighbourhoods.
- Targets**
- Urban orchards area: 1000 sqm
 - Raised box gardens: 12-24 units.
 - Biodiversity: 1000 sqm of pollinator friendly plantations
 - No. of users involved in co-implementation: 100
 - Pedestrian pathways: 3 pervious pathways
 - Area arranged with the role of community public space: min. 800 sqm, but no more than 1500 sqm.

Partners

Beneficiaries: Municipality in collaboration with local community members, incl. social housing residents (engage NGOs involved in relocation processes if possible).

Additional Investors / "Shareholders": NGOs, Local Municipality, Association of Intercommunal Development Cluj (ADIZMC), OAR Transylvania, Universities (UBB, USAMV)

Users: Residents, disadvantaged groups – families living of welfare and/or with reduced financial resources.

Actions

Remove concrete wall that separates the green space area from the river corridor.

Ensure security and ecological conditions of the riverbank.

Landscaping works consider future bike paths and connections with other public space interventions along the riverbank.

Initiate discussions with relevant public bodies regarding the electrical line and associated conditions.

Restrict the planting of high vegetation in the area adjacent to the electrical line.

Collaborate with local communities to co-create NBS interventions.

Design requirements

Accessibility:

- Ensure accessibility of all vulnerable groups
- Properly mark the entrances in the community public space
- Pedestrian tracks are recommended to be minimal and connected with existing pathway.

Landscaping:

- Keep interventions minimal with high % of pervious surfaces, incorporating coherent low and medium height vegetation that maintains a strong connection with the river corridor.
- Use locally adapted, low maintenance vegetation of low and medium height, avoiding tall trees except in the area connected to the blue-green corridor.
- Collaborate with future users to select urban orchard species and provide training sessions on planting, maintenance, and harvesting.
- Ensure balanced distribution of functions, including orchards, leisure spaces, multi-functional community areas, a dog park, green corridor, and pedestrian/bike pathways. Involve residents in the co-development of the site's final design.
- Incorporate pollinator-friendly species, comprising 5-10% of the planted area, including trees and shrubs.
- Max 10% pervious surfaces.

Safety:

- Ensure the security of the space by considering both the riverbank and the electrical pole, allowing for maintenance access to the electrical pole.
- Keep interventions under the power line below a maximum height of 2.5m. Consider using trellises for fruit trees in the urban orchard to adhere to height limit and increase productivity.
- Note: automatic irrigation systems may be prohibited by the electrical company. If so, manual irrigation of raised box gardens should be done to enhance ownership and community interaction. Natural irrigation can be enhanced through retention basin and well-designed canals redirecting the pluvial waters.

Aesthetics/ambience:

- Ensure the integration of the river corridor into new public space design by preserving the natural landscape and ambience.

Sustainability/Maintenance:

- Collaborate with local users to establish an annual calendar for maintenance, harvest, distribution of harvest, and processing of fruits in the urban orchard.

Urban furniture and equipment:

- Benches and relaxation spaces. To increase comfort, interaction spaces can be delimited by creating "hills" – terrain systematization.



Recommended vegetation

Urban orchard



Prunus avium



Prunus armeniaca



Prunus domestica



Malus domestica

Riverbank restoration – use of riparian adapted native vegetation



Salix alba



Prunus padus



Juglans regia



Alnus glutinosa



Sambucus nigra



Corylus avellana



Berberis vulgaris



Rhamnus cathartica

High humidity

Medium humidity

Plantations for creating a buffer zone for the electric line



Vinca minor



Berberis vulgaris



Rhamnus cathartica



Prunus spinosa



Ligustrum vulgare



Cornus sanguinea



Rosa canina



Euonymus europeus

Pollinator friendly plantations used for open areas



Geranium pratense



Echium vulgare



Centaurea cyanus



Consolida regalis



Vicia craca



Prunella vulgaris



Campanula rap.



Achillea sp.



Melilotus officinalis

Humidity

Medium humidity



Cichorium intybus



Dianthus carth.



Centaurea jacea



Malva sylvestris



Papaver rhoeas



Hypericum perforatum



Lotus corn.



Trifolium pratense



Althea officinalis

Medium humidity

Harsh light