

Chapter 1

Refurbishment of Goris Old Bath Building as Tool for Historic Urban Environment Green Traditions Rehabilitation



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First references about Goris old settlement go back to the thirteenth century. The old settlement was founded on the left bank of the Vararakh River, in a picturesque area surrounded with hills, rocks, caves, and ravines. For defensive purposes, dwellers used to build their homes—the Goris city, administrative center of the Marz (region) of Syunik—by carving the nearby cone-shaped rocks and in the caves. The neighborhoods were formed along the natural paths connecting the caves (Fig. 1.1).

Nowadays the city is located on the direction of the “North-South” transcontinental highway (currently under construction).

Also, Goris city is one of the rarely preserved historical cities still keeping its historical value via its urban identity: row construction, equally developed quarters of completely two-story houses of the authentic masonry construction, local basalt stone with edges softened by curved plaster decoration called “barqash,” and two arched gates, one big for the cart and a small one for the people. Wooden hanging balconies decorate the road-facing side of the buildings and larger household ones on the rare-side internal yards—protected from the dominating winds. The city regular roadnet, equipped with irrigation channels along the roads, divides the city into equal quarters with approximately 100–120 m rectangular parts. All transversal road axes directed to the old cave rural settlement Kyores on the other bank of the river [1]. The central historical core of the city—almost completely consisting of historic buildings, immovable tangible cultural heritage—is involved in the historical heritage list adopted by the Government (Fig. 1.2).

The historic buildings’ performance coupled with the regular roadnet has a significant cultural value in identifying the shape and sense of identity of the city. Due to the mentioned values, Goris city has the potential to be developed into a regional hub of culture and education, forming a sustainable economic region, and to ensure a high quality of life for the inhabitants. This considers also protection, revitalization,

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Fig. 1.1 Panoramic view of old (cave) and new (valley) Goris settlements

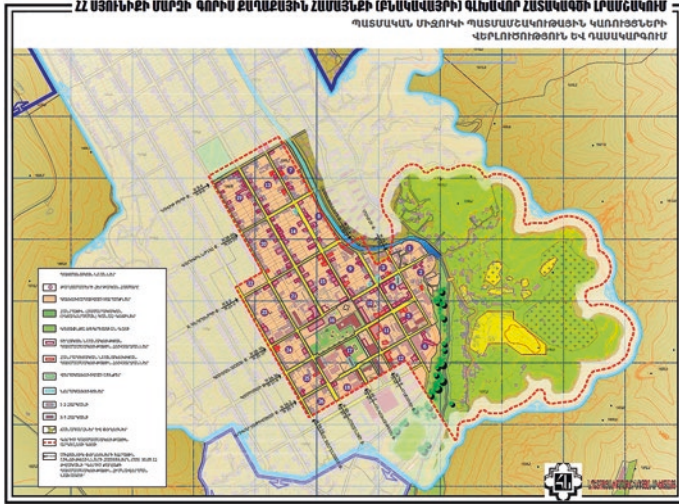


Fig. 1.2 Goris historic preservation (historical core)

rehabilitation, and refurbishment of the buildings of the historical core, thus keeping the urban identity. This considers evaluation of the buildings via their technical conditions, architectural value, and role in the city structure. A special role is given to the former bath building—a footprint and the only three-story preserved building of old Goris. Nowadays, the preservation via refurbishment of this historic building becomes urgent, as the level of damage caused by fire, which had taken away the roof of the building, is worsened by the precipitation and natural weathering of the materials, which finally can cause gradual and complete demolishment, thus partial loss of urban identity. The whole building itself is at risk. As a result the city can lose the only preserved of 2 three-story buildings and historical performance of the streetscape and silhouette of the city, thus the cultural value of the city as well. Old buildings of the city contain information about the history that happened before—in different times, different societies, and different cultures. So, preservation and rehabilitation play a cultural role and provide cultural continuity. The adaptive reuse of the old bath building is the ultimate form of recycling, which helps reduce construction waste from demolishing and save the energy that is usually spent on manufacturing and transporting building materials and tools (Fig. 1.3). The historical



Fig. 1.3 Old bath building current condition

core buildings make the heritage of Goris unique and recognizable in the world. The former bath house is situated in the middle of the street of Makich, mainly in the historically built district, registered in the monuments list. The building has suffered a major fire. Two main functions—bath and gymnasium—have been applied to the structure at different times, then in different levels of the building in the meantime. The architecture of the building differs greatly from the vast majority of the residential development of the center as by height, as well as by external decoration and material. The difference between the two-storied main buildings of the city's historical core is, firstly, the only three-story building in that segment, the difference in appearance is the combination of sandblast basalt and sandstone, using Goris's special arcade, original shapes of details—the three-centered circle arches of the windows and the special local design fences of the windows—also remained (Fig. 1.4). Currently, the structure is gradually declining with continuous weathering and rainfall, with a high degree of accidental breakdown. Thus, the issue of the resuscitation of the structure becomes urgent.

But the idea is not to keep the historic bath building as a museum, but rather to reuse to meet the nowadays needs of the population. To save a valuable part of the history of the city and to benefit local people, it is necessary to:

- Combine the state, co-financing, and private investments, even through stage-by-stage projects, to find solution for reuse of the structure (observing all possible options—guesthouse (retaining and reusing the separate rooms of the gymnasium, with formerly functioning decoration and furnishing, adapting to the given period and the given device), conference hall, IT technology center, craft training center, etc.). The solution to the problem solves one more important urban development problem in the immediate proximity of the main public center of the city within the framework of a historically active environment, in essence, the solution will increase the value and attractiveness of the entire neighborhood by activating the life of this segment and creating a better and safer environment thanks to the lighting and human flows, raising the value of real estate in this segment and ensuring security.

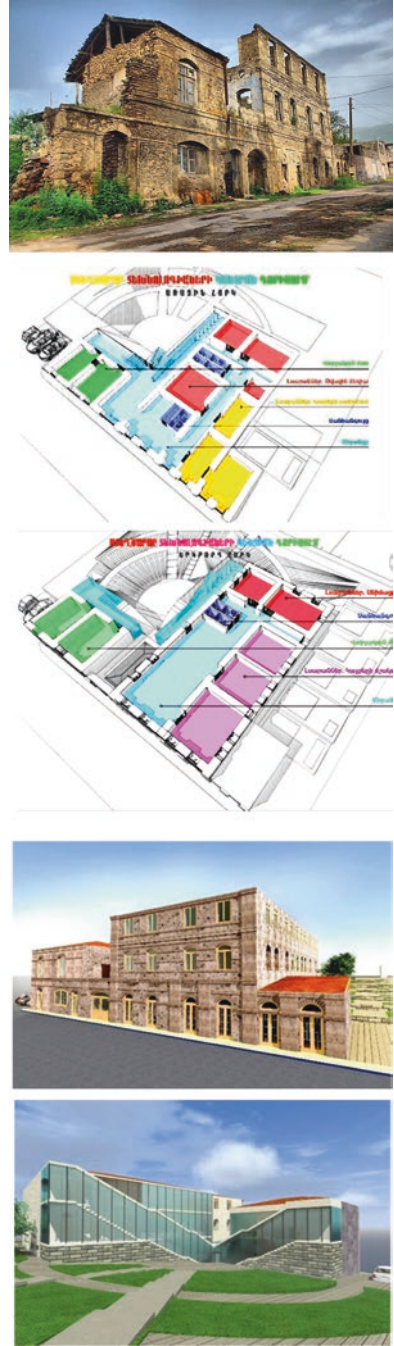
For the heritage identity protection, and in order to avoid the irreversible loss or decrease of the historical value via the intervention actions, during the sustainable refurbishment process of the historic building of public bath and gymnasium in Goris, a holistic approach to the building and its historic urban environment as united and integral system is needed. Below, one of the proposed options—IT technology center refurbishment—is presented (Fig. 1.5). The streetscape appearance, elevation, materials, details, and building technologies of the protected part are decided completely as the originals. Backyard parts, with damaged and demolished parts, are proposed to be rebuilt in a modern pattern, emphasizing the modern additions to the historic parts.

The tools of different sustainability certification apply a rating method to compare different options of the refurbished building to assess the improvements in energy efficiency and materials achievable through refurbishment. The optimal solution considers a junction between the environmental sustainability and the heritage

Fig. 1.4 Authentic details
(fences, arch, fire place)



Fig. 1.5 IT center proposal



protection, as the historic bath building plays an important role in the preservation of Goris historical core identity and in the case of its refurbishment consideration of not only the aspects of savings through refurbishment but also a broader range of benefits from historic, artistic, cultural, and social values to the preservation of authenticity and use of materials compatible with the originals (Fig. 1.5). The outcome of the operation is both sustainable development and identity protection of historic urban development and also benefits for the citizens via working place formation and educational facility improvement.

In this case, some of the properties as of the buildings and also of the street and the built-up environment have been so defaced that they have altogether lost not only their character and beauty but also their significance. All the measures proposed are set to preserve the rich heritage of the historical core, particularly Makich Street architectural character, and to prevent further destruction and devaluation of these historic properties and rehabilitate the building and neighborhoods as green lively centers with tastefully preserved energy-efficient buildings and landscaping, promoting the development of creative technologies (refurbish the former bath and school building to green building of the IT center) [2, 3].

Conclusion

The properties identified of historical value include regulations that are established to protect and preserve the historic old bath building, such as:

1. Protecting and preserving architectural character and integrity of properties of the existing building and its environment that are considered of historical value.
2. Narrowing the Makich Street to slow down vehicular traffic and widening one-sided sidewalk to encourage pedestrian and bicycle traffic.
3. Introducing stone paving of street, with the restoration of the water channel, to further set the historic identity and atmosphere.
4. Beautification and landscaping by rich flora of local famous mulberry trees.
5. Proper green street lighting using urban design furnishing that fits the scale and historic character of the street.

References

1. Lisitsyan S. Zangezuri hayer. Arm. Rep. (1969). Novosibirsk: Institute of Archeology and Ethnography at the Academy of Sciences Press.
2. Petrosyan, N. G., Gyulkhanjyan, S. Kh. et al. (2014). Goris town master plan: Project.
3. Petrosyan, N. G., Babayan L. S. et al. (2018). The RA Syuniq region joint urban planning project, Armproject OJSC.