

UDC 711

**N.A. Unagaeva***Siberian Federal University, 79 Svobodny Pr., Krasnoyarsk, Russian Federation  
e-mail: Nataliav45@mail.ru*

## REDEVELOPMENT OF HISTORICALLY VALUABLE TERRITORIES OF KRASNOYARSK

**Abstract:** *The article contains the results of the research of “adaptive” and “conflict-free” redevelopment methods for the unique single family housing areas based on a differentiated assessment of the territory in order to identify potential reserves for gradual functional transformation in accordance with the changed needs of society taking into account the urban morphology and preserving the individuality of the artistic appearance of the cultural and historical environment.*

**Keywords:** *adaptive and conflict-free redevelopment, historically valuable territories, single-family housing areas.*

### Introduction

Single-family housing areas of Nikolaevskaya and Pokrovskaya Sloboda in Krasnoyarsk, which are historically valuable areas formed at the turn of the 20<sup>th</sup> century, create a specific artistic image (Fig.1). Within their boundaries, one can find separate residential and public buildings of architectural value. In addition, these areas are valuable city-forming sites related to a certain period of the city’s development. Therefore, they represent a special value in the face of their layout, composition, scale of development, relationship between different urban spaces (free, built-up, landscaped), and between natural and manmade environment.

In the Krasnoyarsk 2033 comprehensive plan, these territories have been altered into a high-rise residential development zone [1]. There has begun a mass demolition of objects with cultural, historical and architectural value. Krasnoyarsk loses small-scale development, which emphasizes and fits into the unique natural landscapes of Afontovo Hill and Karaulnaya Hill. Moreover, the city is surrendered by a unique historical and cultural environment, the spirit of the place.

Unfortunately, the territory of the historic settlements of Krasnoyarsk undergoes a fast-paced full-scale redevelopment into complex road junctions and high-density multi-story residential areas. Pokrovskaya Sloboda has been almost completely destroyed. Nikolayevskaya Sloboda is “reshaped” to a lesser extent, but not for long.

### Methodology

Traditionally, the development of the surrounding area over time requires a functional, landscape, and social adaptation of historical objects to the new conditions of their functioning whether it concerns residential development or open public spaces. Any settlement with a history of development faces these problems.

There are several approaches to the reconstruction of the historic environment in the international practice of urban planning (Kukina, 2018):

1) *Total protection and museification of the territory.* It is characterized by almost absent economic relationships, depressive environment, prohibition of any urban planning and economic activities, and conservation of all material objects in the given territory.

2) *Recognition of the dominant (aesthetic) value of the historical environment.* It is characterized by the dominant value of the historical environment (if objects of historical and cultural heritage amount to at least 50 units), visual proximity of heritage sites, and a group

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monument protection zone. The construction of new buildings is conducted in such a way that the new architecture stays in the shade of the old one. Developers apply a combination of urban planning composition techniques that are implemented in the form of modules, scale, and rhythm (perimeter - composition frame - nodes - links - dominant elements).



Figure 1. Nikolaevskaya Sloboda and Pokrovskaya Sloboda on superposition of two maps of Krasnoyarsk – 1906 and 2009

3) *Recognition of the dominant value of individual objects of historical and cultural heritage (architectural monuments).* In new construction, attention is paid to heritage sites, which, as a rule, are emphasized through the use of contrast. The new architecture is designed in a composition with a historical object, within the framework of the contextualism technique that encompasses preservation of the module/ scale/ rhythm.

4) *Recognition of the dominant value of the new architecture in the historical environment.* It is characterized by the use of techniques of deconstructivism, contrasting epochs, visual shock. This is a risky, although fascinating method. In European practice, there is plenty of such cases. It gives society new emotions: people begin to notice and appreciate the past. With the radical contrast between the new and the old, the old looks more convex and presentable.

5) *Critical redevelopment method.* It is used in the territories where objects are valuable only because of the date of their creation and cannot withstand any professional criticism. It is characterized by the preservation of historical city layouts, attention to the classical height of buildings, expressiveness of dissected facades aimed at the restoration of recognizable views of the city.

6) *Disguised redevelopment.* It represents methods of transformation and functional saturation of inner urban open areas (courtyards, wastelands, etc.) with the preservation of the appearance of the historically developed environment of streets and squares.

The international experience of historical territories' redevelopment has accumulated many examples of the adaptive approach or conflict-free redevelopment aimed at the differential assessment of the territory. It is conducted to identify potential reserves for gradual functional transformation in accordance with the changing needs of society taking into account the morphology of the development, preservation of the individuality of the artistic image of the

cultural and historical environment. The process often requires the addition of new buildings to the old ones.

Here are some examples of the redevelopment of a residential area from the Russian practice:

1) “Kvartal 130” (city block 130) in Irkutsk city - an example of how fragments of the historic environment can be involved in modern economic and commercial activities (the authors are M. Meerovich, E. Grigorieva and others, 2009) (Fig.2).



Figure 2. “Kvartal 130” in Irkutsk city: before and after redevelopment

The authors of the concept aimed to link the three mainframes of the historic part of the city: stone historical buildings, fragments of dense low-rise wooden development, and pedestrian walkways. They moved beyond the museification and saturated the territory with the city functions that would help the owners to keep monuments of architecture within the financial self-sufficiency. The project has restored not individual buildings, but ensembles with outbuildings, trees, traditions, and historical environment. This project supports the main idea that the typical wooden urban development that is also the “architectural gene pool” of Russia should cease to be considered only as a territorial reserve for new construction.

2) *The method of conflict-free redevelopment of historical blocks* developed by V.E. Stadnikov in co-authorship with the architects of the Ostozhenka bureau (Repin, 2014) (Fig.3). This project became possible only after the publication of the book “Samara: Heritage under Threat”. It was published in 2009 under the auspices of the Moscow Society for the Protection of the Heritage (MAPS) and the influential European movement for the heritage sites’ preservation called ‘SAVE Europe’s Heritage’. The organization calls for the authorities to think about how they “exterminate a multilayered historical substrate”. Unfortunately, many city officials,



including ones in Krasnoyarsk, do not consider preserving the historically valuable small-scale development of the city (Fig. 4-5). The newly built environment is characterized by architectural and typological monotony, lack of organization, urban amenities and greenery, hypertrophied scale of building, undeveloped social infrastructure, incoherence of engineering communications, inability to build in queues. Residents seriously burden the developer. Nevertheless, the international experience demonstrates that a denser average-height development allows getting 40,000 m<sup>2</sup> per hectare versus 25,000 m<sup>2</sup> with high-rise buildings.



**quarter after reconstruction: number of storeys - 4-5,  
building density: 25 000 sq.m. per hectare**

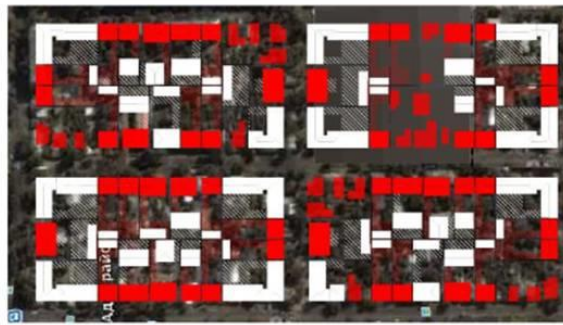


Figure 3. The method of conflict-free redevelopment of historical blocks developed by V.E. Stadnikov in co-authorship with the architects of the Ostozhenka bureau

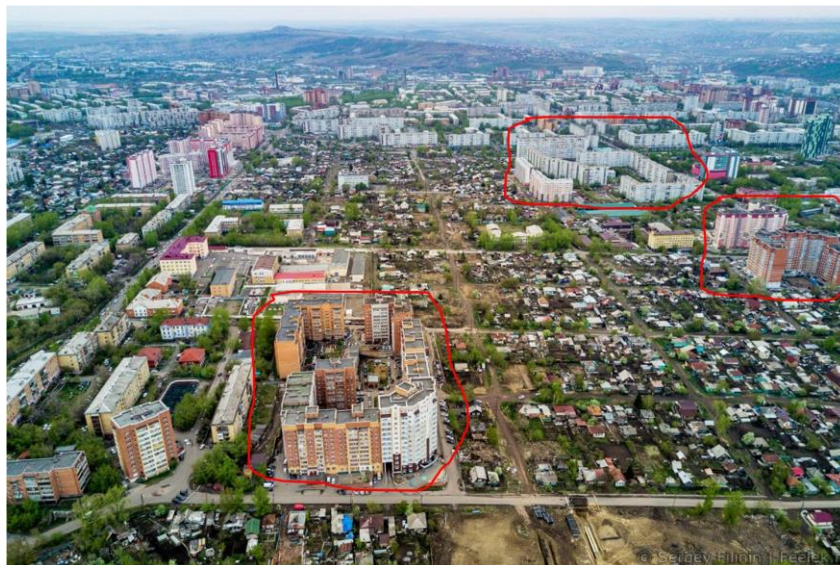


Figure 4. Nikolaevskaya Sloboda: nowadays. Construction of high-density multi-story residential areas. /Photo from archive by Sergey Filinin | Feelek.ru/

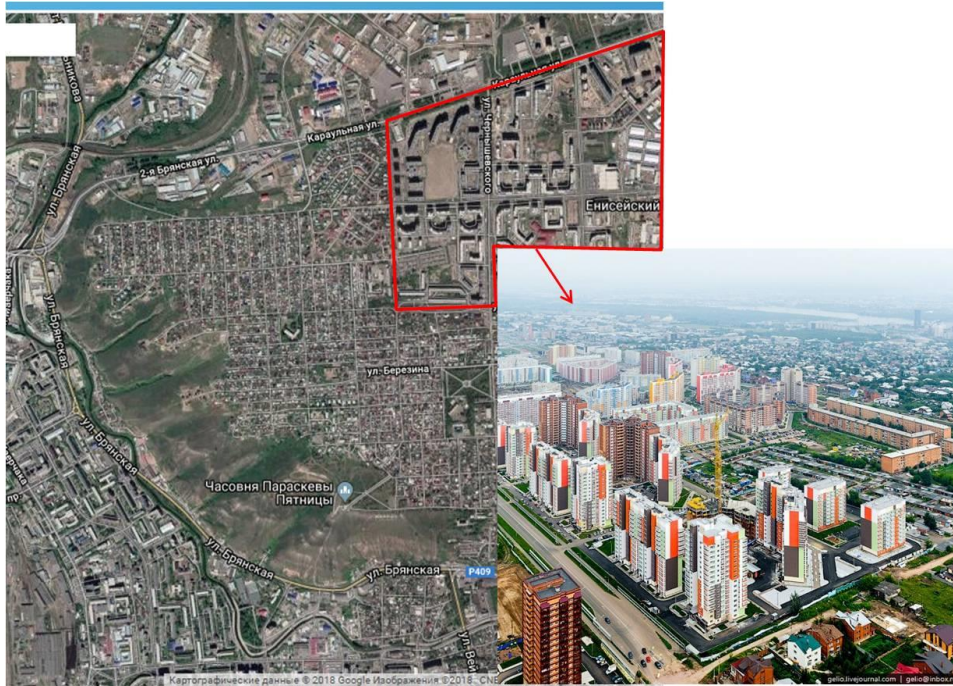


Figure 5. Pokrovskaya Sloboda: nowadays. Construction of high-density multi-story residential areas. /2018 Google Images; gelio.livejournal.com/

The method of conflict-free redevelopment consists in taking into account the morphology of the historical environment, which allows preserving the scale, cultural identity, and dignity. It also allows avoiding conflicts among the population, owners, and developers in the process of development and consolidation of historical centers in Russian cities. At the same time, it allows to use the territory to the maximum. The small scale of investment projects and their independence grant the opportunity of creating conditions for the natural evolution of block development.

The method of conflict-free redevelopment suggests regulating the density of construction and the use of land use and development laws, which were based on the principles of neighborly relations adopted in pre-revolutionary Russia.

The experience of communicating with the inhabitants demonstrates that there are people who are ready to redevelop the environment and maintain historic monuments and sights, which they consider valuable with small means and with their own resources.

### Measurement and analysis

The students of the Urban Development Bachelor's program at the Institute of Architecture and Design under the scientific supervision of Professor Tsarev V.I., Associate Professors Unagayeva N.A. and Fedchenko I.G. and Assistant of Professor Ryaposov I.A., conducted a number of studies and proposed their own concept of a valuable historical development in Krasnoyarsk city, based on its historical, cultural, and natural potential (Ryaposov et al., 2017). Three approaches to residential areas transformation were chosen as measurement, each of which is applied in a certain functional-planning zone (Fig.6):

1) *Preservation of valuable historical buildings* (marked red at Fig. 6). This approach is applied to territories with a high density of objects which are culturally, historically and architecturally valuable. Most of these objects can be proposed for registration as objects of cultural heritage after appropriate research is carried out.

2) *Preservation of the morphology of development and the structure of land use* (marked orange at Fig. 6). In this zone, it is proposed to preserve the general character of the single family housing areas development without dramatically changing the functional use of the territory and



the boundaries of property plots. At the same time, the development objects themselves are not subject to protection and compulsory preservation and can be reconstructed or rebuilt within the general parameters of permitted use (maximum number of stories, land-to-building ratio). The main focus of this approach is to encourage local residents to improve their living conditions themselves. On separate fragments, the development can be consolidated by dividing the plots and building blocked residential houses (townhouses).

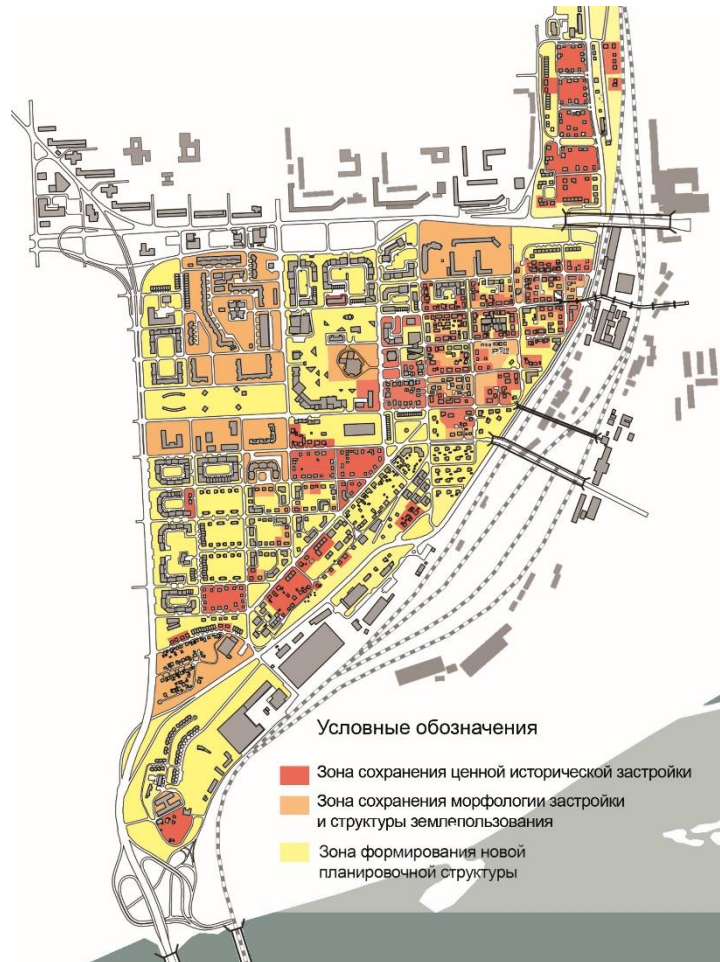


Figure 6. Nikolaevskaya Sloboda: concept of development.  
Basic plan for design project

### 3.) *The formation of a new planning structure* (marked yellow at Fig. 6).

In the plots of this zone, the typology and (or) the functional purpose is supposed to be altered. The emergence of the plots to which this approach is applied is mainly due to today's urban development situation. For example, the construction of a new transportation highway, a complex road junction, and a multi-story residential complex that has already been built. Thus, it is proposed to create a transitional scale to small-scale development through denser multi-apartment building of medium- and high-rise development, as well as objects for public and business purpose.

### Conclusion

Based on the on-site investigation, analysis of archival documents, relevant design documents for the given territory, as well as international theoretical and practical experience of working with unique mansion development in the urban environment, the project identified tasks and found adaptive ways to solve them. They are aimed at the development of historical and

cultural potential of Nikolaevskaya Sloboda (Fig.7). The following architectural and planning principles were developed as the main conclusions of the research work:



Figure 7. Fragment of the general plan. The zone of the craft and tourist complex in the streets of Marksa str., Lenina str. and Gogolya str. and the right of way

- identification and preservation of objects with historical and cultural value (more than 100 unique objects were identified during the research);
- preservation of the land use structure (maximum preservation of building density, but an increase in the number of green plants due to the recommended dilapidated housing);
- integration of the designed territory into the city's transportation and pedestrian infrastructure (the project takes into account the existing and planned changes in the road);
- network for the better integration of Nikolaevskaya Sloboda settlement with other districts of the city, clear organization of the pedestrian network and boulevards with access to neighboring areas are provided);
- integration of the designed territory into the system of the city's landscaping and recreation (project design for a system of green and recreational spaces aimed at their even distribution in residential areas, the creation of protective multi-tiered landscaping along the transport highways, safe walking, recreation and integration into the city's general system);
- development of cultural-historical and tourist potential (organization of tourist routes around the historically valuable buildings, museum sites, agricultural tourism - will make it possible to study the uniqueness of Nikolaevskaya Sloboda and the traditional way of life of the population);
- maximum preservation of low-rise buildings (introduction of various types of residential development) for better integration with the natural landscape. The construction of medium-rise residential buildings is planned fragmentarily as a kind of transitional type (scale) to the existing multi-story residential complex.

Similar research was conducted by students and teachers in the Pokrovskaya Sloboda (Dyadechkin N.V. et al., 2015).

The described method presupposes identifying zones with different urban planning, landscape, cultural, historical characteristics and applying different approaches to their renovation

with varying degrees of intervention. It allows to achieve significant architectural diversity, preserve the cultural landscape vital to the history of the city and reach a higher quality of the environment as a whole.

The territory of Nikolaevskaya Sloboda is seen as a territory that harmoniously combines elements of modern and historical buildings. Its use grants the chance to satisfy the cultural needs of the population of the big city and honor the traditions of the past centuries while preserving the objects of the architectural and historical heritage.

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