Spatial Regeneration of Cultural Heritage of Latvia’s Coastal Territories in Dundaga Area

Egons Bērziņš, Jānis Briņķis, Ivars Strautmanis,
Riga Technical University

Abstract. This article summarizes results of a field study of the Livonian (Livõ) cultural heritage along the coastline of Latvia. The article focuses on development of tools and methods for consolidation of experience, atmospheric feelings (the non-visual notions of the place) and architectural landscape (the visually spatial elements) into a visual structural plan. The consolidated visual structural plan establishes a context-sensitive approach to local spatial values and provides recommendations for architectural development in the territory of Livõ cultural heritage.

Keywords: cultural environment for development, spatial planning in coastal areas, the Livonians.

From 2006 till 2009, the Faculty of Architecture and Urban Planning of Riga Technical University has performed regular modelling of spatial development of coastal settlements in Latvia. Livonian villages in Dundaga area were identified as one of eight strategically important territories along Latvia’s coastline. It is the only territory in Latvia that has still preserved various structures of historical settlements, types of buildings and environmental elements characteristic of the Livonian culture. The cultural landscape of Livonian villages is a unique feature of the coastal area, however, its impact and opportunities have not been properly assessed in current development of coastal spatial planning, regional architecture and environmental design. As previous experience shows, this natural and cultural scenery can irrevocably lose its unique spatial qualities unless a scientifically based approach is urgently devised to promote sustainable development of this peculiar cultural space. It should be taken into account that the coastline also changes. Cape Kolka is one of the places affected by the most drastic changes shaping its diverse landscape (Figure 1). The lagoon on the side of the Gulf shown in the picture perished back in 2003, and soon the remains of the old lighthouse will also be lost to the sea like several structures of military fortifications that are already gone. Can we do anything else but surrender? Perhaps there are other scenarios how to exploit rather than resist the forces of nature? The question remains open.

To understand the elements of the coastal area, it is essential to have an adequate interpretation of the concept ‘coastal area’ in a visual and spatial form. A policy planning document Basic Guidelines for Spatial Development of Coastal Areas for 2011-2017 prepared by the Ministry of Regional Development and Local Government (since 2011: Ministry of Environmental Protection and Regional Development) defines a coastal area as “the line where the Baltic Sea meets the land which is affected by coastal geological processes (erosion and accumulation) with a unique marine and coastal landscape including beaches, sea bluffs, estuaries, coastal meadows, dunes, lagoon lakes, lighthouses, breakwaters, harbours, ports, villages and farmsteads where the way of life (fishing at sea, fish processing, gathering of seaweed) and cultural heritage (buildings, dialects, traditions etc.) differs from that of the inland”. In its essence it is an interpretation of the European Landscape Convention that was adopted in Latvia in 2007 aimed at promotion of landscape protection, management and planning that is based on a balanced and harmonious relationship between social needs, economic activity and the environment, noting that the landscape has an important public interest role in the cultural, ecological, environmental and social fields [2]. The aims and principles of the European Landscape Convention are based on three elements: quality of life for all, sustainable development, observance of the principles of democracy in development and implementation of the landscape policy.

In 2010, the spatial plan and binding regulations have entered into force for Kolka parish in Dundaga area, determining functional zoning of the territory and some restrictions to building parameters, thus setting forth certain guidelines for spatial development. The Slītere National Park, located in Dundaga area, ensures protection of natural values and habitats. The International Livonian Friends’ Association and the Centre of Livonian Culture (Livõ Kultûr Sidām) have declared 2011 to be the international year of the Livonian language and culture that coincides with the conclusion of the national programme Livonians in Latvia 2008–2012 [3]. In this sense, the spatial plan for Kolka parish and binding regulations like local laws

Fig. 1. Aerial photo made in 2003 of Cape Kolka – a spatial culmination of the Livonian coast. [Photo by J. Vītiņš]
are the principal legal framework and the instrument for securing the democratic process. The environmental protection regime and the programme of Livonian culture need to be supplemented with contextual architectural guidelines informally suggesting the binding sections of the plan and establishing a visual and spatial system of values which respect opportunities for spatial development as a creative process in the context of cultural traditions.

Experience shows that such guidelines should be based on a single architectural and landscape concept for the entire Livonian territory along the Kurzeme coastline and for separate villages, highlighting the differences. Approaches to visual modelling, which are based on interpretation of landscape and geographic situation rather than on typology of buildings, emphasize the identity of the territories [4, 5, 6]. Interpretation of landscape and geographic situation implies survey, collection and analysis of the visual information of a particular place. Such informal approaches to architectural modelling are used to prepare spatial scenarios that substantiate and support legally binding documents. They help us define or specify the idea for a spatial structure of the territory, the attitude towards the environment and the procedure for integrating the architecture into the existing landscape.

Options for spatial analysis of the landscape as well as designing provided in the spatial plan of Kolka parish are one of the practical tools, facilitating implementation and modelling of this concept of architecture and landscape. They ensure continuity of the coastal village scenery, sequence of landscape elements, and visual and spatial interpretation of the accessibility within the limits of perception of the local landscape, designing profiles of certain public roads and using building lines as a legal way for implementing the results of informal architectural modelling in protection zones of the planned municipal roads. The incorporated sequence of planning processes demonstrates a rational approach to practical architectural planning with a visual reasoning in general principles of functional zoning and restrictions of building regulations in certain places on a detailed scale, making them understandable and binding for the users of these territories. The process is technologically supported by structural plans of villages prepared in the GIS system, which combines the unique spatial information available for each particular place (Figures 2, 3, 4 and 5).

The aim of the study is to establish a common framework for elaboration of architectural guidelines for development of the Livonian territories. The development of such context-sensitive
architectural guidelines is seen as an innovative result of this study. The basic tasks of the study are to identify the elements forming the cultural landscape of Livonian villages along Latvia’s coastline, to record their unique position and to provide a visual and spatial analysis of their interrelation. Thus, one of the most important tasks would be establishment and justification of possible solutions in the context of contemporary architecture, unifying them under a single systematic structure, and recommendation of guidelines for their protection and development.

It should be noted that fishing and farming dominating the lifestyle in the coastal area have also formed its traditional cultural landscape. It means living and working at the sea or near it. The traditional lifestyle in harsh natural conditions along the coastline determined where and how villages and farmsteads were built, along with specific household management features. The traditional cultural landscape of the seaside also includes ensembles of coastal estates and villages surrounding them with commonly used buildings like barns, mills and pubs – and later, when estates lost their importance, post offices, shops, schools and community houses appeared. Some relics of Soviet architecture still form part of the cultural landscape of the coastal area. Fishing, farming, establishments and buildings that used to be important along with the Soviet architectural heritage lost their significance for the initial lifestyle. Today the value of cultural heritage mostly comes from its architectural and landscape qualities that require defining possibilities for development.

With the traditional lifestyle losing its initial importance, several urgent problems can be identified which directly affect the appearance of the cultural landscape. Without economic activities (fishing, agriculture and construction) the traditional cultural landscape inevitably becomes scantier losing its usual visual elements. The lack of anthropogenic influences degrades environmental diversity and uniqueness in this territory. Poorly planned economic activities in the territory may seriously endanger the unique coastal identity that may lead to its loss. Development of sustainability and landscape quality requires more than just an environmental protection regime. The identity of the place forms as a result of an ongoing and dynamic process where the historical heritage is one of the most essential elements yet not the only one.

A holiday or second home and the related lifestyle shaping the overall architectural landscape is an important aspect in development of the coastal area today. In Latvia, this phenomenon is not much studied and is often regarded negatively. However, experience shows that holiday homes are one of the prevailing types of activities in the existing cultural landscape of the coastal area which significantly differs from the traditional fishing and farming, and adds a new touch to the scenery changing development features of the landscape and a system of values. If the traditional lifestyle implies more or less permanent living in one place, then holiday homes are uninhabited for the most part of the year. The overall settlement structure and the visual image of the environment are a constant value of the territory which can be appreciated also when its utilisation is sporadic. Currently, holiday homes are reflected in the economics and spatial development of local municipalities only in relation to an income tax. Yet a second home may also become a permanent residence. In the context of coastal development, this tendency may serve as a basis for facilitating high-quality and sustainable settlements. Construction of holiday or second homes is a tendency accounting for a new identity of the coastal area with inevitable economic and architectural consequences.

Being a driving force behind the development of the territory, holiday homes also contribute to the international recognition of the coastal area. Assuming that a holiday home should be accessible in two or three hours from the place of permanent residence or work (the city centre), the coastal villages of Latvia can also be reached by sea from Scandinavia and Germany. International competitiveness also draws attention to particularly sensitive values of architecture and landscape that cannot be made economically profitable merely in the local conditions. This approach would also ensure sustainable preservation and development of the values of the territory. Virtually each coastal village has some possibility of international recognition. In many instances people who permanently reside outside Latvia own the inherited land properties.

Experience shows that locally patriotic division of a local community into permanent residents of the area, who preserve the cultural landscape, and into strangers and newcomers, who only exploit the values of the cultural landscape, is not viable.
Even a temporary stay at holiday homes may lead to reconsideration of our notions about the values of the local architectural landscape. In many places in Europe interest groups are forming. In a civilised community such interest groups are not seen as a legal instrument of the third generation in each particular area for enforcement of “the public right of access to high-quality environment”. The established planning traditions facilitate further fragmentation of the territory as the local governments see interpretation of detail designs as the only way to define clearly the architectural and spatial concept, in some places within the limits of one plot. Local interpretation results in a detailed master plan of the construction idea for the plot. The spatial plan and its single architectural and spatial concept are delegated to individual developers. However, practical experience shows that separate fragmented spatial concepts do not create a single reference system of architectural and spatial values for the entire municipal area. The fragmented proposals imply inadequate interpretation of the environmental scale and local aesthetics. In this way the spatial plan fails to achieve the most essential objective – the shared interests and agreement on the values both in a particular site and in the entire area in general.

Thus, the programme Livonians in Latvia 2008–2012 is also supported, admitting that the preservation of Livonian identity may be compromised by the failure to preserve the uniqueness of Livonian coast and to use the new opportunities provided by the increase of activities in the Livonian environment along the Western Baltic coast [3]. The visual and spatial guidelines for the territory of Livonian villages could form a basis for protection of architectural and landscape values and balanced development of their system.

Contextual, visual and spatial guidelines for the territory of Livonian villages should include summarized information as a database for the area, provide a visual and spatial analysis of the architectural and landscape space, model a spatial concept for the entire territory and make recommendations how to behave in the valuable cultural landscape. The mentioned guidelines should also include a possibility to apply different local spatial scales, in order to evaluate the proportion between restrictions and opportunities, as well as visual interpretation of particular ideas spatially. Such guidelines would establish a new lifestyle and management traditions in the coastal area.

One of the principal tasks of the guidelines is to formulate a conceptual level, identifying key indicators of architecture and landscape along with the ways for their administration, i.e. “administratively make spatial or to administrate spatially”, as well as recipients of indicators and types of administration. In practice, formulation of the conceptual level results in a structural plan modelled visually and spatially, which includes systematically collected and analyzed spatial data, key words and key visual elements that determine the identity of the territory. A visual structural plan can also be described as site mapping, a location-specific visual picture, an image, a metaphor and an atlas of words. In order to have a sustainable and appealing landscape and to communicate directly with its creators, working groups will be preparing structural plans of visual identity of villages for local residents and architects. These plans will reflect the common, diverse, traditional and modern visual elements of the coastal landscape (Figures 6, 7 and 8).

The experiment with the visual mapping and the atlas or creation of visual legends and corresponding methodology has been carried out at the Faculty of Architecture and Urban Planning of RTU. The work on its improvement still continues. The methodology adopted as part of the elaboration of a visual and spatial analysis and guidelines for the landscape development for the spatial plans of Saka and Nīca areas will be approbated in the territory of Livonian villages. For the current study, several
visual and spatial indicators have been selected for the analysis of spatial plans, i.e. valuable elements of the territory forming a unified architectural landscape, which can be attributed also to the contextual, visual and architectural guidelines for the Livonian cultural landscape:

1. At the landscape planning level – geographic landscape elements as visual and spatial landmarks, significant means of landscape formation that are legally protected by protective zones as a tool of landscape planning. The following indicators are analysed at the landscape planning level:
   - relief and micro-relief of the territory;
   - hydrogeological situation, renaturalisation of water courses, historical shipbuilding sites, coastal beaches of rivers and seas, tributaries and swampy lowlands;
   - existing habitats and protected habitats.

2. At the level of architectural and spatial development – the existing buildings and infrastructure as important elements structuring the landscape, possible architectural objects and infrastructure. Interaction between the existing and potential architectural objects and infrastructure is the modelling of a new regional identity. The following indicators are analysed at the level of architectural and spatial development:
   - architectural composition of the historical distribution of population, villages and farmsteads at the regional (urban planning) level and the level of separate architectural objects;
   - infrastructure of cultural and historical lifestyle;
   - historical infrastructure, roads linking residential areas, roads from residential areas to the sea, sea routes and transit routes;
   - infrastructure of coastal navigation;
   - modern principles of village and farmstead development at the urban planning level;
   - principles of architectural composition at the level of separate farmsteads and architectural objects.

At the levels of landscape and architectural and spatial development, it is important to find and define focal points, infrastructure of interaction and infrastructure satisfying public needs and expectations characteristic of every village and area in the territory, and to find infrastructure the restrictions of which in the territory are not sufficiently well formalized to be used in the overall planning, at the same time bearing in mind possibilities of monitoring. It is important to incorporate the established coastal access network in the legally binding documentation that would allow residents and visitors to use the cultural landscape as it is planned through the prism of visual and spatial perception and physical accessibility, not just recognizing the existence of values. By openly dominating in the local landscape, interventions of contemporary architecture can be regarded as undesirable in the respective territory, however, justified by influences and methods, their artistically professional utilisation cannot be restricted. Certain architectural and landscape values that define a unified spatial concept of the environment can be regarded as exceptions. It should be kept in mind that a farmstead that is sometimes associated with a Latvian way of life and significant cultural heritage is the most expensive solution economically with a considerably distributed load on the environment.

Traditional cultural landscapes, retaining the infrastructure typical of farmsteads, should be balanced with benefits for the entire society where the underlying philosophy is economically justified and draws attention to a wider territory and quality of the landscape.

As a result of the study, several conclusions can contribute to practical urban planning. Regulation of architectural and design approaches is debatable, and many professionals categorically object to this method selected for ensuring the environmental quality. Supportive rather than punitive methods should be used, offering recommendations and case studies with positive outcomes. In the legally binding urban planning documentation, principles of site location and mutual relationships can be regulated, by introducing legislative provisions and even restrictions to certain properties for the sake of a common goal – the quality of the landscape. Basically, competitiveness of areas and visual and spatial guidelines should be established already in the planning process, not as arguments supplementing the spatial plan, but integrating both the knowledge available about the specific area and the attitude towards a person as to an integral part of this territory, guaranteeing preservation of its history and sustainability. In a particular environment, solutions should be as tailor-made as possible, and determination of real requirements for spatial planning should be made at a local planning level. This is the only way how to ensure development of harmonious local landscape and further application of the same building techniques. Integration of cultural environment and current social scenery forms a unique bridge to the future in collaboration (future cooperation) with the nearest Livonian territories in Estonia and Finland.

REFERENCES

2. LR likums “Par Eiropas ainavu konvenciju”. Latvijas Vēstnesis, 2007, 18. aprīlis, Nr. 63
Egons Briņķis, Jānis Briņķis, Ivars Strautmanis. Spatial Regeneration of Cultural Heritage of Latvia’s Coastal Territories in Dundaga Area

Abstract

The research aims to explore the case of Dundaga Area located in Latvia, a historical coastal territory which is rich in cultural heritage. It continues the research conducted by the authors in 2006–2009 to model the spatial development of Latvia’s coastal areas. The research is focused on the cultural heritage of Dundaga, which is a small coastal village. The research is conducted by the authors of the article, who are specialists in architecture and urban planning. The research is based on the analysis of historical records, interviews with local residents, and field studies. The results of the research are presented in the form of a report that discusses the current state of the cultural heritage of Dundaga and proposes recommendations for its preservation and use.

Keywords: Dundaga, cultural heritage, spatial development, architecture, urban planning.

1. Introduction

Dundaga is a small coastal village located in Latvia. It is situated in the Gulf of Riga, which is a part of the Baltic Sea. The village is known for its rich cultural heritage, which includes a number of historical buildings and sites. The research aims to explore the cultural heritage of Dundaga and its potential for spatial development.

2. Research Methodology

The research is conducted by the authors of the article, who are specialists in architecture and urban planning. The research is based on the analysis of historical records, interviews with local residents, and field studies. The research is conducted in a collaborative manner, with the involvement of local communities and stakeholders.

3. Results

The results of the research are presented in the form of a report that discusses the current state of the cultural heritage of Dundaga and proposes recommendations for its preservation and use. The report includes an analysis of the historical and cultural significance of Dundaga, as well as an assessment of its potential for spatial development.

4. Conclusion

The research has identified a number of potential opportunities for the spatial development of Dundaga. These include the renovation of historical buildings and sites, as well as the development of new cultural facilities that can be used to preserve and promote the cultural heritage of the area. The research has also identified a number of challenges that need to be addressed in order to achieve this goal.

Egons Briņķis, Jānis Briņķis, Ivars Strautmanis. Spatial Regeneration of Cultural Heritage of Latvia’s Coastal Territories in Dundaga Area

Contact Data

Egons Briņķis, Docent, Dipl.arch.
Riga Technical University, Faculty of Architecture and Urban Planning
Address: Āzenes iela 16, Riga, LV-1048, Latvia
Phone: +371 67089116
Fax: +371 7089130
E-mail: af@bf.rtu.lv

Jānis Briņķis
Riga Technical University, Faculty of Architecture and Urban Planning
Address: Āzenes iela 16, Riga, LV-1048, Latvia
Phone: +371 67089114
Fax: +371 67089130
E-mail: janis.brinkis@rtu.lv

Ivars Strautmanis, Professor, Dr.habil.arch.
Riga Technical University, Faculty of Architecture and Urban Planning
Address: Āzenes iela 16, Riga, LV-1048, Latvia
Phone: +371 67089256
Fax: +371 7089130
E-mail: af@bf.rtu.lv
Latvijas piekrastes kultūrvēsturiskā mantojuma telpiskā regenerācija Dundagas novadā

Egons Bērziņš, Jānis Briņķis, Ivars Strautmanis,
Rīgas Tehniskā universitāte

Dundagas novada Kolkas pagasta teritorijai 2010. gadā ir stājies spēkā teritorijas plānojums un saistošie noteikumi, kas nosaka teritorijas funkcionālo zonējumu, atsevišķus limitējošus būvju parametrus, līdz ar to reglamentējot un iezīmējot atsevišķas telpiskas attīstības vadlīnijas. Slīteres nacionālais parks, kas atrodas Dundagas novadā, nodrošina vides un raksturīgo biotopu aizsardzību. Starptautiskā lietu darbu biedrība un biedrība „Livō Kultūr sidām” (Liebefeld kultūras centrs) 2011. gadā izsludināja par starptautisko lietu valodas un kultūras gadu, kas saistīja pārmaču arhitektu attīstības, demokrātijas principu sadalījumu kultūrvēsturiskajā ainavas attīstības procesā raidītājiem. Tā nav jābūt pietiekami zinātniski pamatošai, lai būtu saglabātas daudzveidīgas teritorijas funkcionalitātes, kā arī ir jāņem vērā, ka lietu darbu biedrība un biedrība ir kultūrvēsturiskajā attīstības procesā īpaši active, lai ierobežotu un ierobežošu attīstības procesu.
Pētījumā mērķis ir izveidot kopējo ietvaru arhitektonisku vadītojumu izstrādāšanai lībiešu teritoriju attīstībai. Šādu konteksta jāgūtu arhitektonisku vadītojumu izstrādāšana ir vērtējama kā inovatīvs šī darba rezultāts. Pamatumdevumi, ko izvirza pētījuma mērķis, ir apzīmēt Latvijas piekrastes lībiešu ciemciem kultūrvēsturavas elementus, fīksēt to unikālo stāvokli, kā arī vizuāli telpiski analizēt to savstarpējās saistības. Par vienu no svarīgākajiem mērķiem pamatumdevumiem jāuzskata izveidot un pamatot iespējamo reziniānu panēmiem mūsu arhitektūras kontekstā, sistematizēt to vienotā struktūrā, kā arī ieteikt vadītojumu to aizsardzībai un attīstībai.

Jāatzīmē, ka tradicionālā kultūrvēsturavu piekraste ir veidojusies dominējošajos zvejniecības un zemkopības dzīvesveidā. Ti kā dzīvošana un saimniekošana tiek pielāgotā pie jūras vai jūras tuvumā. Tradicionāliās dzīvesveides skarbajos vietās piekrastes darbā apstākļos nozīmēte un ņemot vērā arī vienīgo unikālo nozīmi, piemēram, dzīvošanu jebkāda laika vai kādu citu laiku, tās ir abu vienādu saimniecībai ir nepieciešami. Zvejniecība, zemkopība, kādreiz nozīmīgāki centriem un ēkām, arī ir tradicionālām saimniekošanas līmeņiem ir joti svarīga telpiskā identitāte. Tradicionālās dzīvesveides saimniekošana laikā ir radījusi daudz galu galā dažādu arhitektūras atpūtas vietas, kas ir veidojusies pieredzējumā. Šāda izveide ir radījusi dažādu praktisko praksē, izmantojot to saimniekošanas līmeņa attīstībai. Pētījumā mērķis ir izveidot kopējo ietvaru arhitektonisku vadītojumu izstrādāšanai lībiešu teritoriju attīstībai. Šāds prāvs ir saistīts arī ar piekrastes starptautiskās atpazīstamības kontekstu. Jāpieņem, ka brīvdienu mērķis ir jābūt sadzīvējai divu līdz trīs stundām laikā no pamata dzīves un darba vietas metropoles regionā. Šajā kontekstā brīvdienu mērķis ir izveidot kopējo ietvaru arhitektonisku vadītojumu izstrādāšanai lībiešu teritoriju attīstībai.
jaunās iespējas, ko sniedz aktīvā apsaimnieks un arhitektoniskās vērtības sistēmu.

1. Anavu plānojuma līmenī – ģeogrāfiskie ainavas elementi kā vizuāli telpiski ainavas orientieri, nozīmīgi ainaviskais īstieksme līdzekļi, kurus likumiskā veidā atbalsta asīsargzījums kā anavu plānošanas instruments. Anavu plānojuma līmenī tiek analizēti šādi indikatori:
   - teritorijas reģi un mikregeļi;
   - hidroģeoloģiskā situācija, ūdensteču renaturalizācija, vēsturiskās kuģu būves vietas, un jūras piekrastes un pludmales, vizas un valkā;
   - esošie biotopi un aizsargājami biotopi;

2. Arhitektūriskais telpiskais attīstības līmenī – esošie arhitektūras objekti un infrastruktūra kā nozīmīga esošo anavu struktūrojā sastāvdaļa, iespējamī arhitektūras objektu un infrastruktūru. Esošo un iespējamo arhitektūras objektu un infrastruktūras mijiedarbinātā jaunās regionālās identitātes modelēšana. Arhitektūriskais telpiskais attīstības līmenī tiek analizēti šādi indikatori:
   - kultūrvēsturiskā apdzīvojuma, ciemu un viensētu arhitektūrskā kompozīcijas posmā (pilsētāpšanos) un atsevišķu arhitektūras objektu līmenī;
   - kultūrvēsturiskā dzīvesveida un saimniekošanas infrastruktūra;
   - kultūrvēsturiskā infrastruktūra, ceļi, kas savieno apdzīvotās vietas, ceļi no apdzīvotām vietām uz jūru, jūras ceļi un tranzieļi;
   - piekrastes navigācijas infrastruktūra;
   - mūsdienās ciemu un viensētu veidošanas principi pilsētāpšanos līmenī;
   - arhitektūras kompozīcijas principi atsevišķu viensētu un arhitektūras objektu līmenī.

Anavu un arhitektūriskais telpiskais attīstības līmeni ir svarīgi atrast un formulēt katram ciemam, katrai lokālai vietai teritorijā raksturīgās identitātes mezgli rapidekās pētniecības cenās un dažas projektiem, kas attiecas piekrastes aizsargi.

Eksperiments ar vizuālo kartēšanu un atlasu jeb vizuālo interprētāciju izveidoja jaunās reģionālās identitātes modelēšanās, ģeogrāfiskās kultūrainavas kultūrinās attīstībā. Anavu plānojuma līmenī tiek analizēti šādi indikatori:
   - teritorijas reljefs un mikregeļi;
   - hidroģeoloģiskā situācija, ūdensteču renaturalizācija, pludmales, Vigas un valki;
   - esošie biotopi un aizsargājami biotopi;
ATTĒLI
2. att. Sīkragas ciema topogrāfiskais plāns, 1930. g. [Autoru foto]
3. att. Sīkraga ciema vizuālā struktūrplāna GIS pamatkarte, 2011. g. [9]
4. att. Sīkraga ciema ainava, 1930. g. [8]
5. att. Sīkraga apbūves fragments, 1930. g. [8]
7. att. Vaides ciema topogrāfiskais plāns, 1930. g. [Autoru foto]
8. att. Vizuālā struktūrplāna GIS pamatkarte, 2011. g. [9]

IZMANTOTIE AVOTI
2. LR likums “Par Eiropas ainavu konvenciju”. Latvijas Vēstnesis, 2007, 18. aprīlis, Nr. 63