



Swedish University of Agricultural Sciences

Faculty of Landscape Planning, Horticulture and Agricultural Sciences

Department of Landscape Architecture, Planning and Management

# **Revival of the Jelgava Palace Park**

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Master's thesis in landscape architecture, 30 hp  
Landscape Architecture Programme  
Självständigt arbete vid LTJ-fakulteten, SLU  
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*I would like to thank everybody, who has been by my side, supporting, uplifting and believing in me during the last months. I would like to thank my husband, Mikaeil Kobeita, and my family, for their comprehension and for being my solid base, when I most needed.*

*I would especially like to thank my supervisors, Peter Eklund and Marie Larsson, for consistent support, encouragement and valuable advices. The discussions we had were very inspiring, and of a great help to see the educational process from the new perspectives.*



## Introduction.

*This work has emerged as consequence of the background, the interest I have in the topic of landscape architecture, and as a part of the Master level studies at SLU's, Department of landscape architecture, Alnarp.*

*I have chose this theme due in part to my desire to work for the state. I desire to work within the municipality as it is usually challenging and multifunctional work, which requires the person to gather all their talents and abilities to address the set topic.*

*It is rare to deal with historical sites during ones education, but although an important topic to study within landscape architecture. It is a difficult task to approach a historical site. Historical aspect is, beyond doubt, a challenging additional element to take into consideration when planning, in comparison with other sites.*

*Each case is unique, in my opinion, and has to be looked over very carefully. Most such places are said to be preserved due to their historical values, but what about the value of that history today or tomorrow? Therefore, within the frame of this work, it is my aim to familiarize myself with the type of sites with historical aspects, and realize the differences and challenges it sets for design.*

*Anastasija Petunina*



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## Background.

The Jelgava Palace and The Park territory is owned by the state of Latvia. However, the University of Agriculture of Latvia (LLU) is currently situated in the Palace building. Therefore the University is responsible for management of the Palace and its Park.

LLU is one of the largest universities in Latvia, which offers education for nearly 10 000 students each year, bringing lots of life into the Palace building. Despite this, the Park looks and feels abandoned. I myself was a student there for 5 years, and during the study period I resided in the city of Jelgava.

Jelgava has very few parks, and the ones which are there offer very similar experiences in most of the cases, and are mostly used for transit. There is also a need for more attractive, planned throughout, and developed green spaces in Jelgava city. The Jelgava Palace Park is situated very centrally in the city, and has a potential to be one of the most used parks. At the same time, I have hardly ever visited it after study times, not because it's not attractive (there are several very interesting features in the Park as a wild horse flock, living there), but because it is difficult to use the Park. Additionally, there are maintenance and safety issues that need to be resolved.

During the daytime students use the park as a transit point on their way to the university buildings. While many students study at the Palace building, the park is rarely utilized. Student's seldom go to eat or read outside, and they never arrange activities there. At the moment the park doesn't offer these kinds of possibilities, one can hardly find a place to sit within the park. The Jelgava Palace Park is in very poor condition. And currently the city has no plans of developing it due to lack of finances, although there is a vision in the city development program for the Park as with baroque character. During our educational period, we, as students, felt that we were lacking outdoor meeting spaces and discussion places. The park, full of activity possibilities, was what we needed.

It is necessary to understand the parameters you are working within, and the goals you set for your work, before actually starting the work. This is why I would like to define the main goals and methods before the design work.



## Goals:

- To increase my knowledge about historical site assessment.
- To survey the Jelgava Palace Park in the frame of history, present days and future times.
- To elaborate the development proposal and lay it out on plan. The proposal should include multilateral aspects, as to create the possibilities and opportunities for users to bond with the space, not only like it.

## Methods:

- Literature study, including statutory documents, books and other relevant literature.
- Comprehensive site survey based on the experience gained in university, including talks to the park Visitors while on site and SWAT analysis.
- Graphical and visual material analysis, including historical map survey, aerophotographical park analysis, obtaining of photo material on site and its further study and analysis.
- For the purpose of self critique and evaluation of design proposal the Patrick Grahn's characters comparison is used.

### **N.B.:**

*The North sign in all maps within the work is facing the top of the page, if not pointed out differently.*



SITE BACKGROUND



# SITE BACKGROUND

## Site background.

To familiarize the reader with the Jelgava Palace Park, I would like to start with description and history of The Park and The Palace, as well as the city of Jelgava, as these factors define the space I intend to work with. It is important, in my opinion, to understand how the area emerged and evolved over time to be able to make an attempt of defining its future.

### 1. Site description and history.

#### 1.1. The region.

The region of Zemgale is located in the central area of Latvia, south of Riga - the capital city. This region extends along the Latvian – Lithuanian border. One may also refer to Zemgale as a cultural region of Latvia. It is home for many beautiful architectural monuments, such as Rundale Palace and Jelgava Palace.

#### 1.2. Jelgava city.

##### 1.2.1. Main information.

Jelgava (see Figure 1) is a city in central Latvia and it lies about 45 km southwest of the capital Riga. Jelgava has about 64 000 inhabitants and it is the largest town in the region of Zemgale. Jelgava was an important city throughout the history of Latvia – it is known as the former capital of the Duchy of Courland and as the capital of the Courland Governorate until 1919.

Jelgava is situated on a fertile plain rising only 3.5 meters above sea level on the banks of the river Lielupe. From time to time, the city gets inundated at high waters. Jelgava also serves as a main railway center - a rare feature for a non-port city in the country. Jelgava hosts Jelgava air base as well.

##### 1.2.2. Jelgava through the history.

The city of Jelgava was developed in several periods, as explained below. It gained city status in 1573, and it is also one of the oldest cities in Latvia.

There were six important development periods in the city's history, based on the power ruling in the country. Each sphere of life was affected drastically when the changes took place, and Jelgava city, with its cultural heritage, wasn't an exception.



Figure 1. Jelgava in context of Latvia.

# SITE BACKGROUND

## **Crusades time and Livonian Order period.**

*Until 1561.*

It is known already that this area was populated formally around 2000 B.C. The first Castle was built in Jelgava in 1265 by the Livonian Order. At that time, Jelgava was only developed on the west side of the Lielupe river (see Figure 2).

This period was followed by **The Duchy of Courland era.**

*Starting from 1561 until 1795.*

For the whole of Latvia, this was a very significant time when a Latvian identity started to be built.

In 1573 Jelgava gained its city rights, and since 1578 has been used as one of the capitals of Duchy of Courland. During 16th century there was a channel excavated in the northern part of the city to supply it with clean water. The channel connected two rivers – Svete and Driksa. The channel was badly polluted until 20 century, and around the end of the 1930s it was filled in.

In the beginning of the 17th century, the city became a settlement for craftsmen and merchants with around 5000 inhabitants. During this time serious economic development took place, and the city was thriving.

Later on, the Polish – Swedish war occurred, as well as The Northern war. These events were followed by a large outbreak of plague in 1710-1711, when around 2000 of the city inhabitants of Jelgava died. These events drastically slowed the development of the city.

In spite of these circumstances, it was during this period that the Jelgava Palace appeared, as we know it today. The famous architect F.B. Rastrelli was invited to Jelgava for this purpose. The baroque style Jelgava Palace construction started in 1738. After a prolonged stoppage of work, restoration efforts resumed in 1772.

## **Russian Empire.**

*From 1795 until 1918.*

1975 the city of Jelgava became part of the Russian Empire. In 1868 the railway line was opened. In 1878 Jelgava railway station was built, and remains to this day. During this time period, serious and rapid industrial development occurred. This development was halted by the beginning of the First World War.



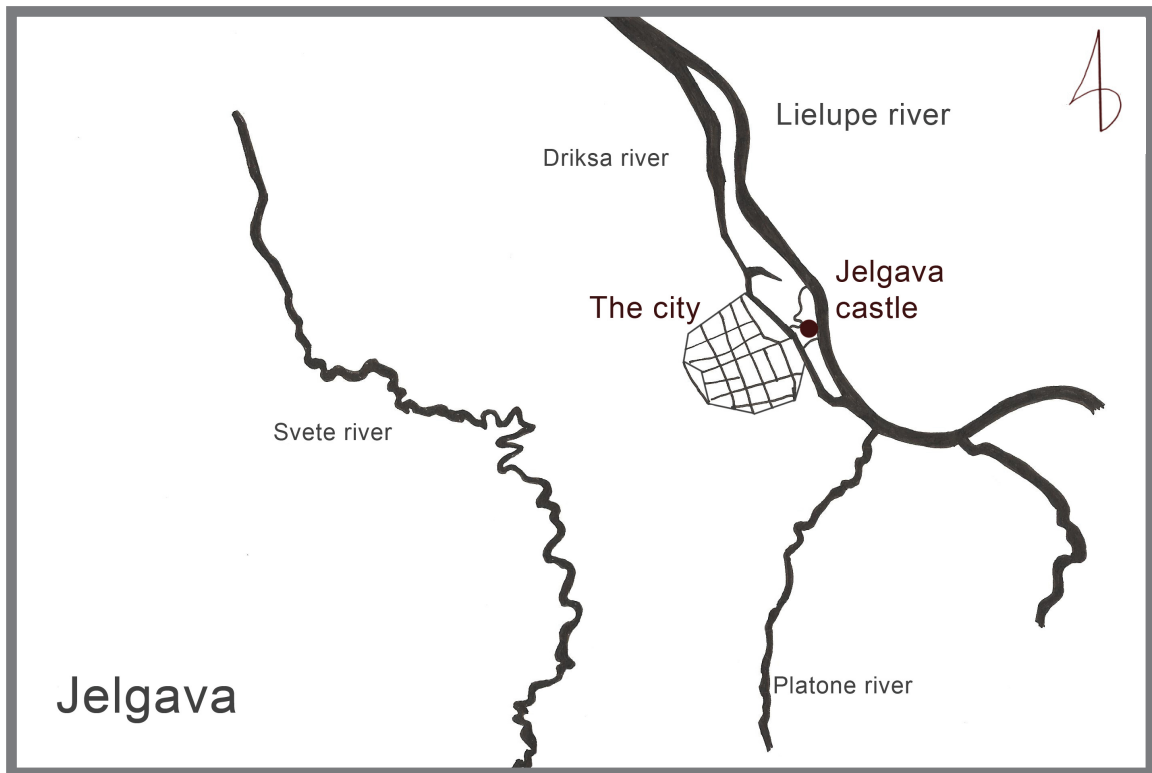


Figure 2. Jelgava city in the 13th century.

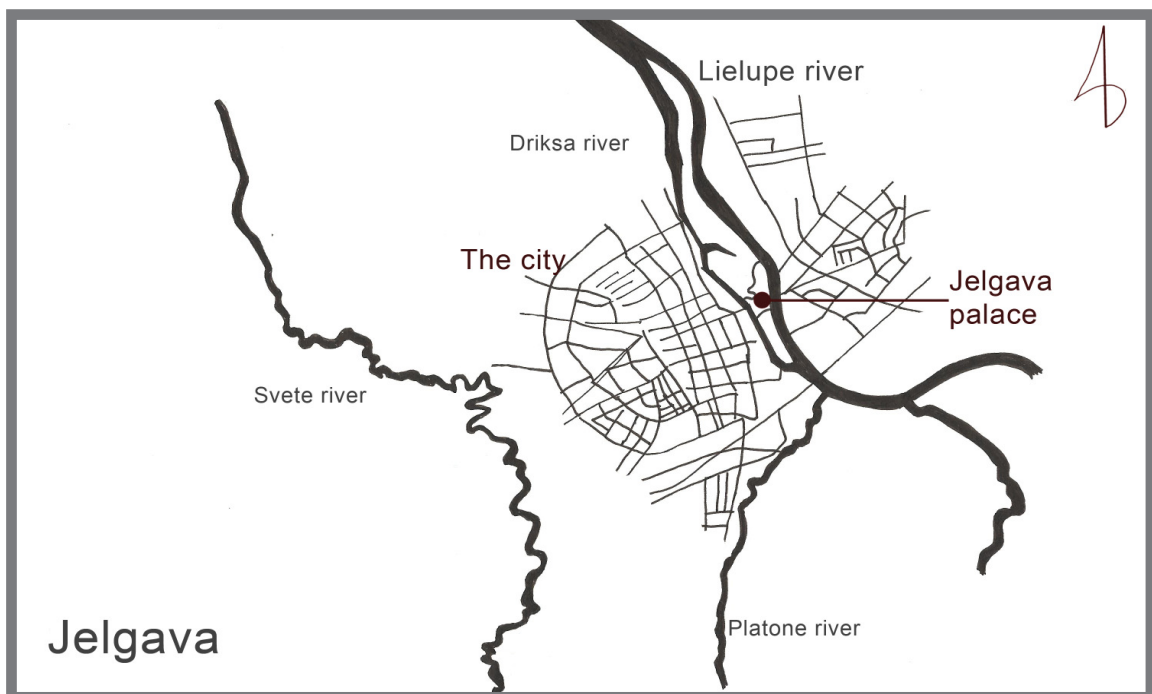


Figure 3. Jelgava city in the 20th century.

# SITE BACKGROUND

With the beginning of the WWI, enterprises are evacuated and the city shrinks from 40 thousands citizens until only 8 000 inhabitants.

While leaving the city, the Russian army destroyed the bridge over Lielupe. As of the 1st of August 1915 Jelgava was under German occupation. Later, the bridge was restored, sadly not in the same location: the new built bridge is closer to the Jelgava Palace, which has lessened the experience of the park.

## **Independent Latvia.**

*From 1918 until 1940.*

When the peace finally arrived to Latvia, many new companies launched their work, and in 1920s the city started to develop on the east of the Lielupe River, as displayed in the map on the previous page (see Figure 3).

In 1925 a sugar refinery was built, and the space was proposed for the future aerodrome. There were several important buildings erected during this period, such as the post and telegraph building, hospital, hotel etc.

## **Occupation time.**

*From 1940 until 1991.*

In 1944 The Second World War reached the city of Jelgava, which resulted in extensive damage. The damage in some areas of the city was so great that buildings would need to be reconstructed from scratch. Many historical buildings were reconstructed during this period, such as Academia Petrina (see Figure 4) in 1951. In 1975 the famous automotive RAF factory was moved to Jelgava, which was operating until 1998.

## **Independent Latvia.**

*From 1991 until present.*

After Latvia had regained its independence in 1991, many changes took place in the country. Inexperienced management and unsustainable resource usage policy lead to instability in the country, which is present nowadays. Land was sold (mainly to the foreign investors) and privatized; recourses were used unwisely, the main prerogative of the goverment seemed to earn money.

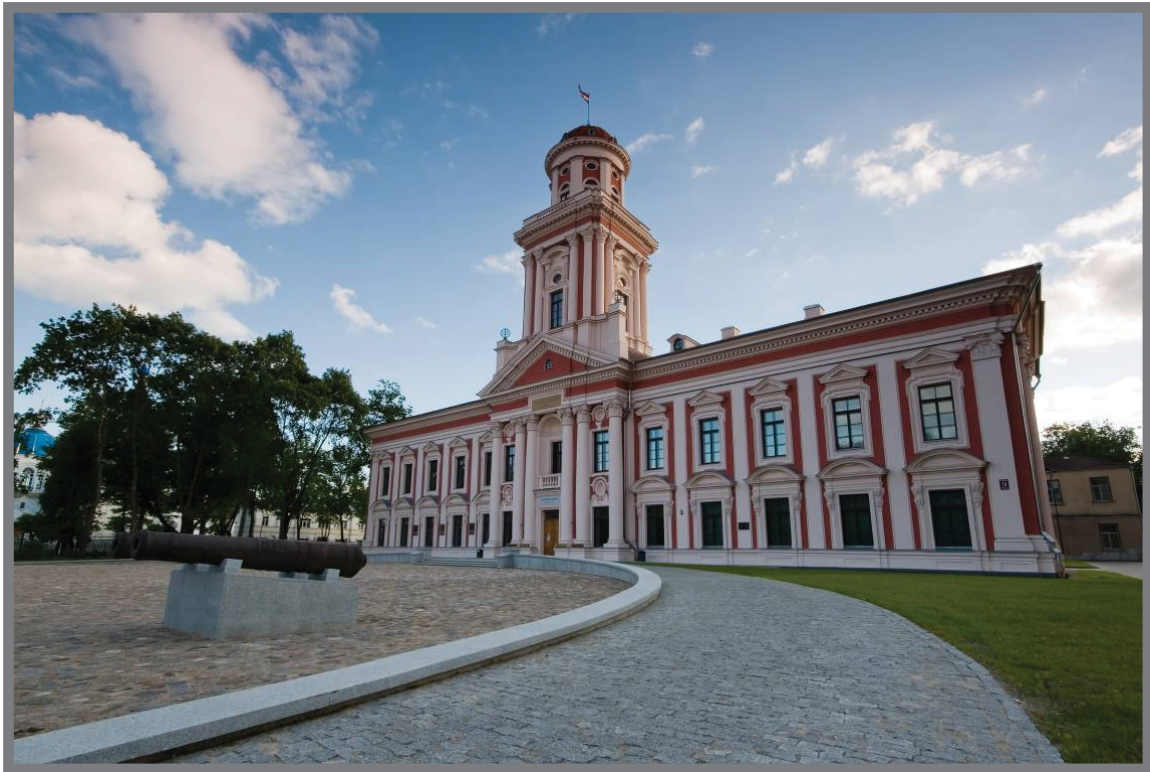


Figure 4. Academia Petrina.



Figure 5. New bridge over the river Driksa by Ivars Šļivka, Juris Šūpols and Oskars Norītis.

# SITE BACKGROUND

In 1998 the automotive RAF factory stopped production, which was closely followed by the shutdown of the sugar refinery in 2007 (Grosmane, 2010).

There was no visible and sensible development in the area of landscape architecture until 2010. When I was studying in Jelgava, the talks were going on about the need in the city development segment for several years already. 2010 was a symbol of change for the city and for me. The city started to develop green areas and public areas. Since that time many projects have been given its start and some were finished already. After my graduation I have moved to Sweden, and returned to Jelgava only in September 2012. I will never forget how amazed I was to find out, that the authorities have moved from plain talking to the real actions and implementation

In 2010, a new museum opened in one of the former churches (Trinity church) in the city center. Currently many projects have been implemented, such as the new promenade by the river, or the new pedestrian bridge over the river Driksa, which was named Mitow bridge by the residents of Jelgava city and designed by Ivars Šļivka, Juris Šūpols and Oskars Norītis (see Figure 5). During July 2012 the contract for re-purposing extensive territories for recreation purposes was signed. The development is continuing, which is seen as a very positive sign of public interest finally being awakened after so many years.

## 1.2.3. *City borders through time.*

With the change of the periods, the city's borders were also constantly changing. The city and its rural territories were first defined in 1615. Later, in 1652, the city borders were distinguished from its farmlands, when the ramparts were built around the city to mark its border. After less than half a century, the ramparts were demolished and were completely cleared in 19th century. Ideologically, the ramparts are preserved in the present "Vaļņu" (Ramparts) street name. When Latvia became independent, the need to define the borders of the city accrued again, but it was witnessed that the city has expanded. Therefore the borders were set with a law in 1927 titled "Jelgava city administrative borders". In the time that followed, the city started to expand over the Lielupe river. This is why the new borders set in 1949 were extending far beyond the river. These borders remain in place today as visible from Figure 6 (Grosmane, 2010).

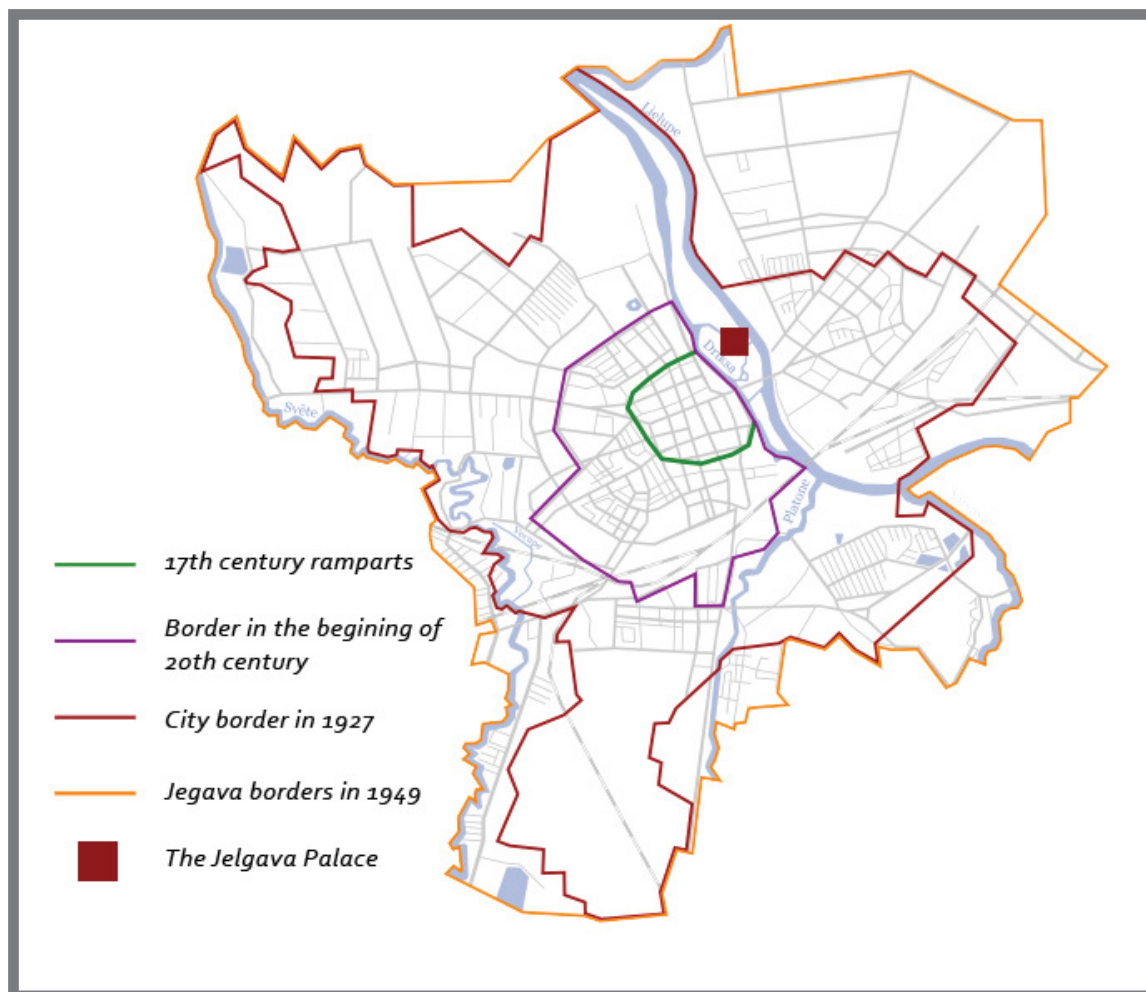


Figure 6. The Jelgava city borders through time.

# SITE BACKGROUND

## 1.3. History of the Jelgava Palace and Park.

The history of the present palace starts a long time before its appearance here in the heart of the city. During the Livonian Order ruling period, the first castle was built in Jelgava out of wood. The castle was called Mitow at that time. This wooden castle was erected in 1265 by Livonian Order (see Figure 7). The castle was truly reflecting the power of the time, though it was smaller than the castle seen today. This is reasonable, as the aims of that castle were to protect the small city as seen in the Figure 8.

In the beginning of 18th century duchess Anna had moved to live in Jelgava, where she had noticed Ernst Johan Biron – who worked in her secretariat. Later, around 1718 he had become her minion, and maintained this title until the death of Anna.

The relationship with duchess Anna helped Biron in his career, and when Anna became the Russian empress in 1730 he received the title of earl. Yet this title was not enough for him, so using his clever mind, and having the support of Russia, he became the duke of Courland in 1737.

With the new status, duke Biron gained new powers. In 1735 F.B. Rastrelli was contracted to make a project for the new castle for duke, as the existing castle was not satisfactory enough for him. Duke Biron wanted to emphasize his power, so he wanted to build the new castle in the same spot where the old one was situated. Therefore, the old castle was demolished in 1738 (Lancmanis, 1986).

Francesco Bartolomeo Rastrelli's (1700 – 1771) was a famous Russian court architect at the time, and his Jelgava Palace is one of the few Kurzeme – Zemgale dukedom's (1562 – 1772) buildings, which withstood the destruction of the city in 1944.



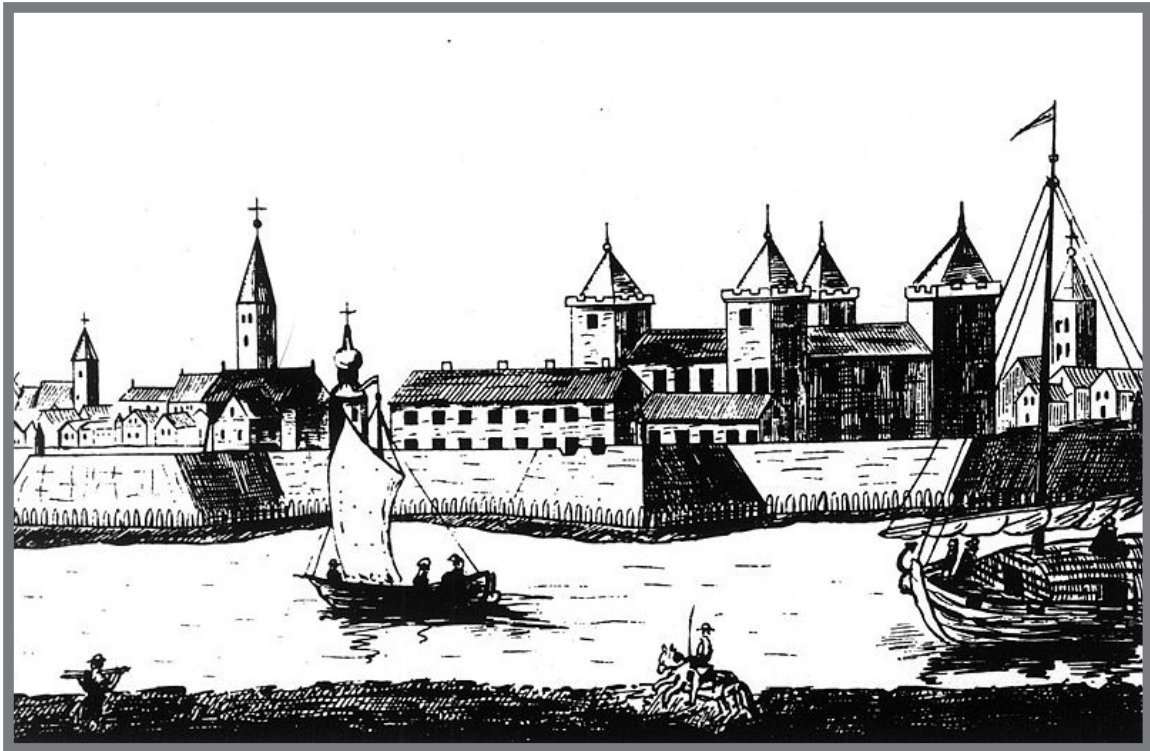


Figure 7. Wooden castle by Livonian Order.

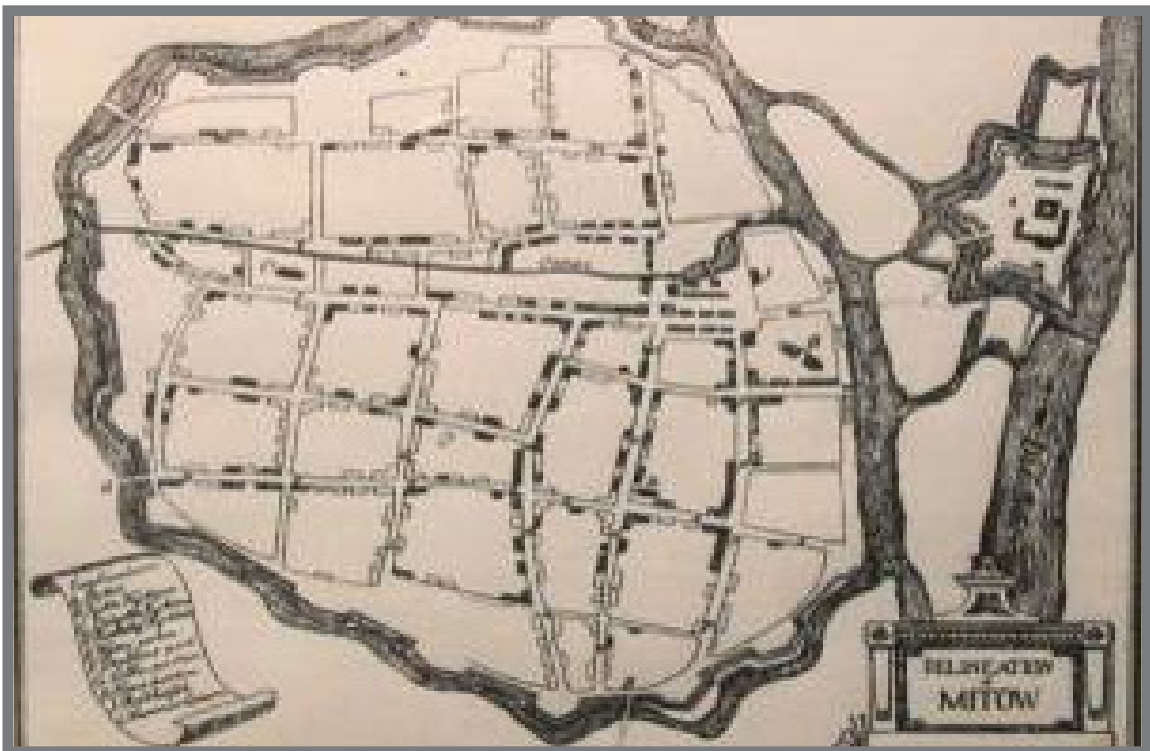


Figure 8. Mitow.

# SITE BACKGROUND

## **Two proposals were made by F. B. Rastrelli:**

F.B. Rastrelli has made two proposals for the new palace altogether. For his first proposal, as seen in the map in the Figure 9, the outer shape of the Palace Island was completely re-designed; the stables were arranged towards the West side on separate island from the Palace. The garden was also situated on another separate island on the North side of the Palace. The West facade was originally opened in both proposals, and has never existed up to 20th century, when it was added for university purposes.

In the second proposal, (see Figure 10) the fortification shape is left as it was constructed before with several adjustments. The second small island was added to bring more symmetry to the space.

As it was told by the main construction responsible, at the beginning the first sketch was accepted, but shortly before building has started, the decision was changed, and that was the reason why the second sketch appeared. Most probably, there was a shortage of finances in the Dukedom at that time, therefore F.B. Rastrelli was asked to adjust his proposal (Lancmanis, 1986).

## **The Jelgava Palace was constructed in two main periods:**

The first building period of the Palace started on June 14th 1738, when the first corner stone was laid. It lasted until 1740, when the Russian empress Anna passed away. According to her testament, the Duke became the regent of the Russian Empire till her newborn throne legatee reached his lawful age. However, it was not for an extended period that the new heir would be able to assume the throne.

One month later there was political overturn, and the power in Russian Empire changed. The Duke of Courland and his family were exiled for 20 years. In August of 1762 Duke was restituted, and regained his rights.



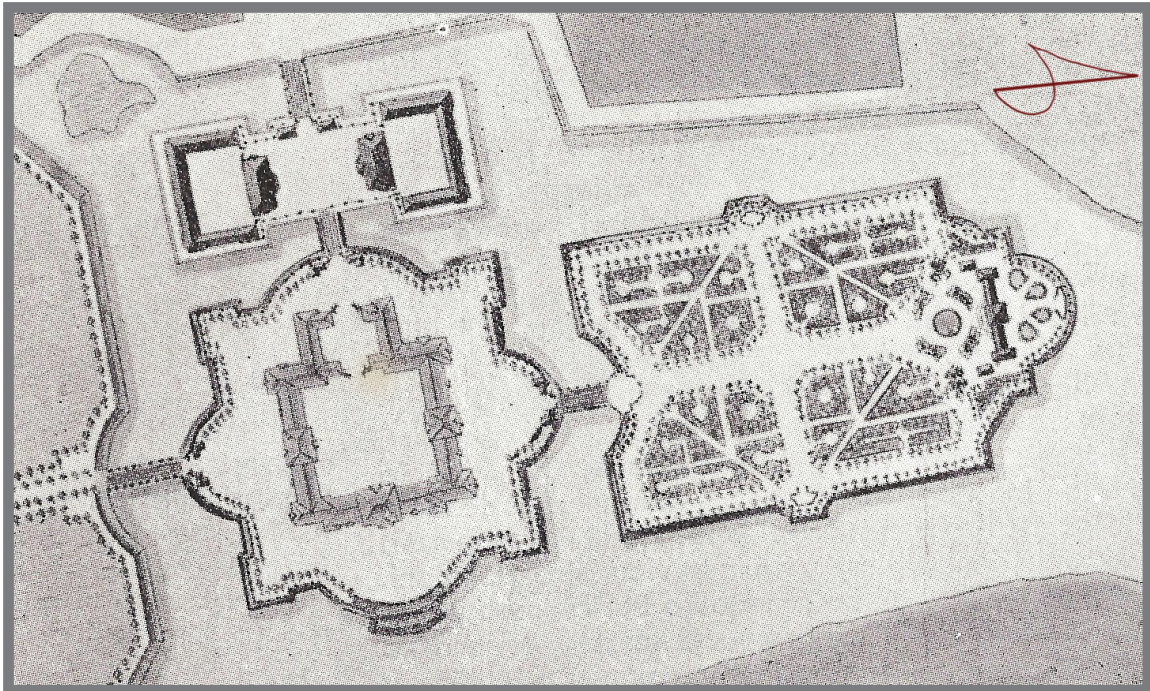


Figure 9. First proposal by F.B. Rastrelli.

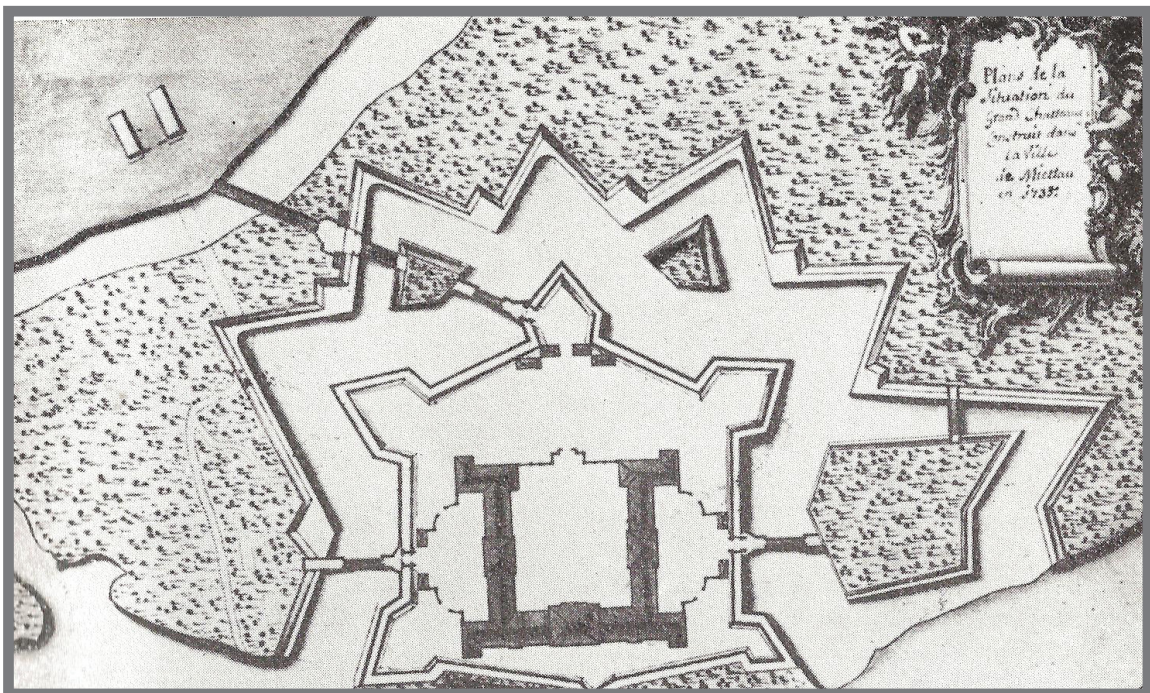


Figure 10. Second proposal by F.B. Rastrelli.



# SITE BACKGROUND

The second period of construction started in 1763 and continued up until 1772. In the end of 1772, Duke Biron was able to move into his Palace, but due to the lack of finances the interior work continued for an extended period. It was also due to lack of finances, that the baroque style park was never carried out in Jelgava (Lancmanis, 1986).

During its existence, the Jelgava Palace has been burnt several times, and was almost completely destroyed during the Second World War in 1944. Only the outer facades survived the destruction of 1944. Full reconstruction took place in 1961.

There is a vault in the base floor of the Palace, where dukes and their families are buried in sarcophagi. It is said by the Jelgava Palace museum director, that whenever one of the sarcophagi was opened, the Palace was burnt; therefore the opening of these chambers is strongly avoided.

The long and hard history of the property is responsible for its current conditions (see Figure 11; Figure 12; Figure 13). Due to lack of financing, lack of resources, or political turmoil, the palace has often been neglected. The condition of the park at the moment is sorrowful, in my opinion. When on site, the beauty of the Jelgava Palace and the lamentable condition of its park, creates even stronger dissonance in the visitors mind.



Figure 11. Park feature 1.



Figure 12. Park feature 2.



Figure 12. Park feature 2.

# SITE BACKGROUND

The Palace is situated on the northern side of the Riga – Jelgava motor road, at the narrow peninsula between the river Lielupe and its arm – Driksa, at the exact same spot where the 14th century Livonian Order castle was.

The park of Jelgava palace, as we see it today (see Figure 14), started to be shaped around 1817, at the place where the ramparts were before. There is still a canal present, though it is much smaller than it used to be.

Governors Island, in the bastion shape, is one of the parks most attractive features. There are many different species of trees in the park, including several protected trees as well. Those are the Grayish asp (*Populus x canescens*) with 5,09 meter trunk circumference, protected on municipal level; the Pedunculate oak (*Quercus robur* “*Fastigiata*”, which is 27 meter tall and has 3,44 meter trunk circumference, and is protected on the state level. Then, there is Norway maple (*Acer platanoides*) with 2,8 meter trunk circumference, which is protected on municipal level, and the Horse chestnut (*Aesculus hippocastanum* L.) with 2,9 meter trunk circumference and 11 meter tall (Leiburgs, 2003).

Additionally, there is one more unique object around the Palace – there is wild horse flock, brought from Holland, living here (see Figure 15). Wild horse flock is quite unique for Latvia, this is why it is in fact the very attractive element.



Figure 14. View of Palace and The Park nowadays.



Figure 15. Wild horses.

# SITE BACKGROUND

## **Palace and the Park through time.**

When one takes a look on the map on the right side of the page (see Figure 16), several thoughts are coming to mind. Thinking back in history, we can realize that the main priority was protection; palaces did not actually emphasize the beauty, but the power and majesty. This is what we can see from the dashed lines in the map. During Livonian Order era, the castle (it was the castle back then) was surrounded by water, which prevents it from being an easy target. It also had five bastions around in all directions. All of these were constructed with only one main reason – protection (Lancmanis, 1986).

With time passing, humanity evolving and medieval era staying behind, the politics and power started to be handled differently. As to my knowledge, during the 17-19th centuries many famous throne intrigues and conspiracies took place. The politics started to be handled in new ways, through deceitfulness and overturns. There was no more need in primitive force, which was also mirrored in the construction. At that time, the primary factors were the beauty and the ability to impress. It was all about “showing off”. Therefore the ramparts were torn down and the beautiful baroque Palace emerged.

In 19 century the Jelgava Palace still had the canal around it, which was filled only in 20 century due to great pollution, because of lack of maintenance. In the engraving (see Figure 17) several pyramidal shape trees are visible, though it is not very clear if those are only author's imagination or reality; those could be oaks since those are very symbolic for Latvia.

Though it is not very clear when exactly the Governor's island emerged, the aim of that was most likely protection and connection, since there are remnants as canon on the ground, indicating that purpose. It was also the place of the entry bridge for many years (Lancmanis, 1986).

Nowadays the main political focus in the country is to protect and educate the citizens, and, therefore, preserve peace and develop as nation (Latvian National Development plan, 2006). This is one of the reasons why, in my opinion, it is very important to keep the reminders of history and the devastating times it was bringing in order to avoid the repetition of the happenings, which can ruin the nation.



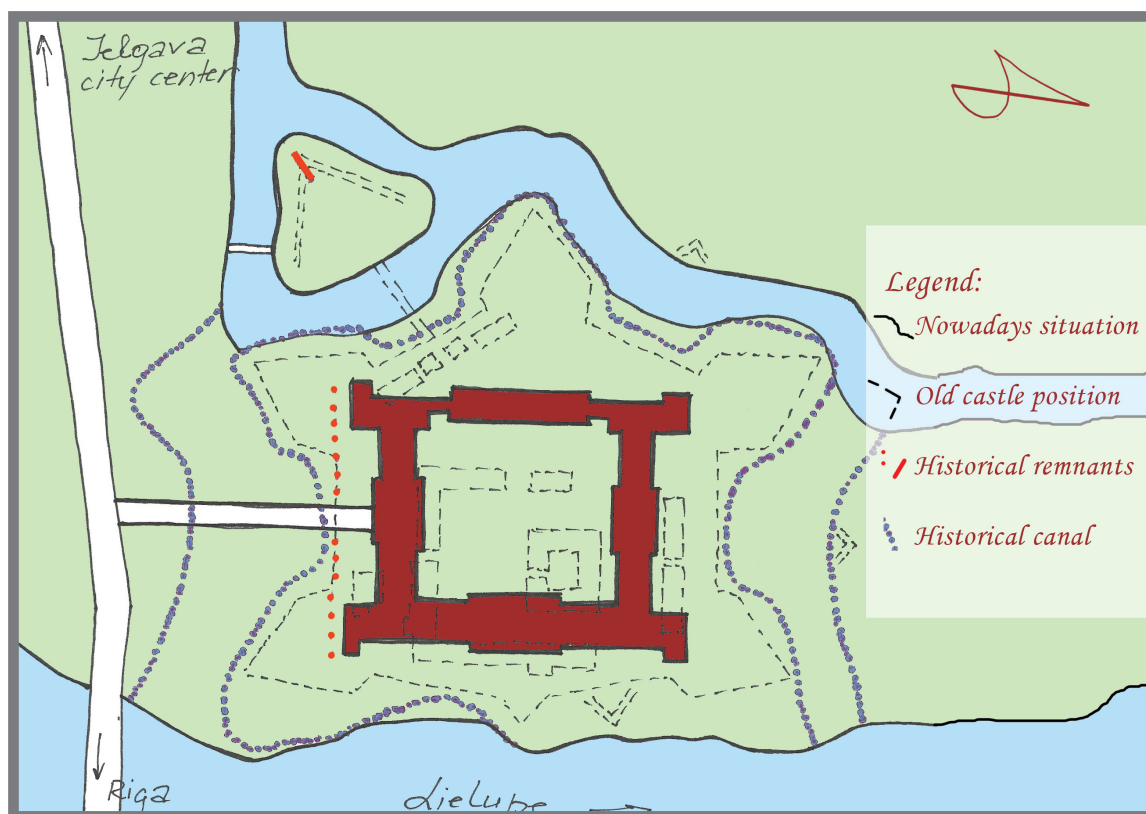


Figure 16. The Palace through history.



Figure 17. The Palace during the 19th century.

# SITE BACKGROUND

## **An interesting fact about this castle:**

During the work on the Jelgava Palace, Rastrelli also worked with many different sites in Latvia and Russian Empire, including Rundale Palace in Bauska, Latvia (see Figure 18) and Winter Palace in Saint – Petersburg (see Figure 19).

Therefore there is an interesting fact told by the Jelgava Palace museum director, that three palace complexes actually are able to "fit inside each other", as if we made scale models, than we can fit Jelgava Palace's model into Winter palace's model, and the smallest Palace's model will be Rundales Palace, which goes smoothly into previous ones. It gives us an impression of Rastrelli style and the way he connected his work, making each more elaborate with time. It could also be possible to create a tourist route through all these places as "The route through F.B. Rastrelli creative work in the Eastern Europe" or other.

*When examining the sites basic qualities,* it is crucial to remember that Jelgava has always been an important city; it was a capital of the region through many challenging times. It is situated close to Riga – the capital of Latvia, and provides the connections from Northern Europe down to the south.

It is important to understand that Jelgava city is not a large city, but has a long history of its own, exhibiting several historical monuments and attractions (such as Jelgava Palace or Academia Petrina) as a result. The Jelgava Palace is one of quite rare for Latvia Baroque monuments. This is a critical element to consider and to keep in mind when designing.





Figure 18. The Rundale Palace.



Figure 19. The Winter Palace (The State Hermitage Museum, St. Petersburg).



SITE NOWADAYS

# SITE NOWADAYS

## Site nowadays.

Within this chapter the site comprehensive analysis, other than historical, will be carried out, to understand the site in the context of the present times and be able to realize the current and future needs of the park.

### 2. Existing situation analysis of the Jelgava Palace and its Park.

#### 2.1. The Jelgava Palace in the context of the city today.

Latvia is suffering very much from emigration issues. During the last ten years, the country has lost a relatively high amount of citizens. Emigration continues to increase, according to the Central Statistical administration of Latvia. There were nearly 2,4 million citizens in Latvia in 2000. In 2012 that number has fallen to around 2,05 million (see Figure 20). As the diagrams on the right indicate, one can see that even though there is a drastic change in the country, the amount of residents in Jelgava is stable (see Figure 21), meaning that the city has appeal and locals have a desire to stay in Jelgava.

Recently, the city has started to develop very rapidly, especially in the construction sector. There are many new projects started each year, such as the new walking bridge over the river, new promenades, and resting areas. Many of these improvement projects are taking place in the proximity of the Palace itself.

As visible from the map (see Figure 22), there are lots of interesting “events” taking place around the palace. Territory connecting the two parts of the city on opposite sides of the river is developing rapidly. When I was still studying in Jelgava, the talks about the need of developing these areas and connectivity within the city was only starting to emerge.

Visitors who have been away from the city for a few years would be surprised by the immense changes. During this time large changes in Jelgava took place. The city of Jelgava continues to transform and evolve. Most of the development territories (marked with blue) are set for development for recreation and green areas. At the same time, there are huge protected areas next to the river Lielupe (marked with yellow), those are positioned in the same zone line with developing areas. This is why, this belt has a great potential of becoming the “Green belt” of Jelgava city in future, in my opinion.

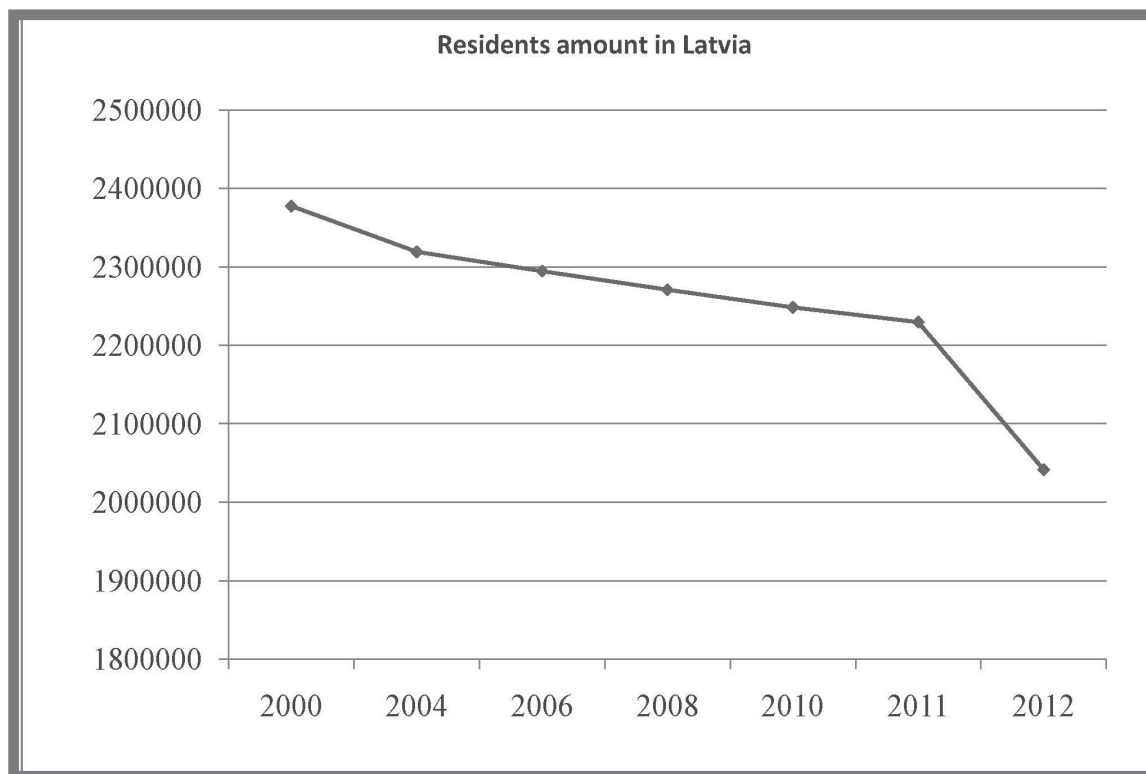


Figure 20. Residents of Latvia.

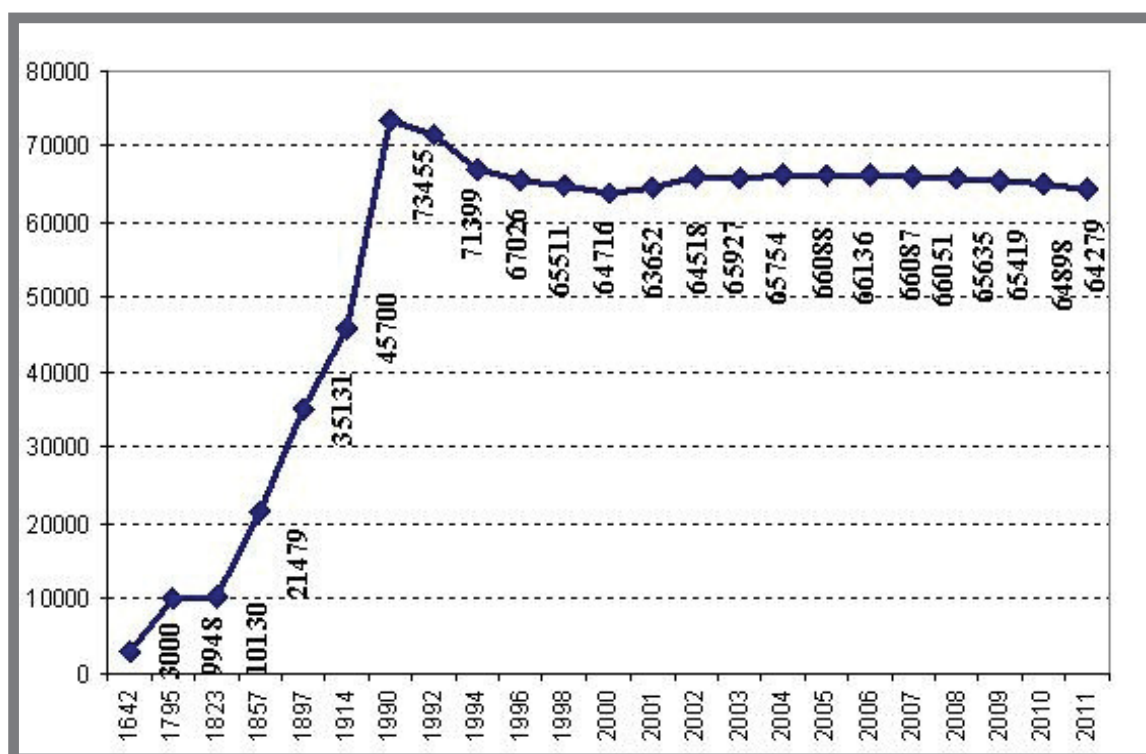


Figure 21. Residents of Jelgava.

# SITE NOWADAYS

What we can also see from the map is that the Palace is now lying between the protected Natura 2000 area, also known as Lielupe floodplain meadows, and the developing recreational area. So how should the Palace with The Park be incorporated within these territories? Should it connect Natura 2000 area with the recreational area, or should it be a space which stands out from the surrounding territory? These are definitely the points to take into consideration while working on this project.

Nowadays Jelgava is known as a city of students, due to high concentration of students residing there. The Latvia University of Agriculture is based in this city, providing around 10 000 inhabitants. It is one of the biggest universities of Latvia offering unique programs within the country. The streets are alive with the vibrant energy of its student population. The famous Jelgava Palace building has been part of the Latvian University of Agriculture since 1937. On the map on the right (see Figure 23) the student life connected infrastructure is displayed.

As development of the city continues, the Jelgava Palace is becoming a focal part of city center. However, it has managed to retain a sense of isolation due to the surrounding roads and environment. The motorway is a serious obstacle, which prevents The Palace Park from being a real “participant” in the city life. The old bridge (the motorway) was positioned slightly farther away from the Jelgava Palace, which made the park experience more unified. On the satellite map, the approximate position of the old bridge is marked with yellow dots (see Figure 24).

At the moment, the location is lacking connections to the other city parks and recreation areas; it has to have stronger identity to be able to attract more and more visitors and users.





Figure 22. Green belt of Jelgava.

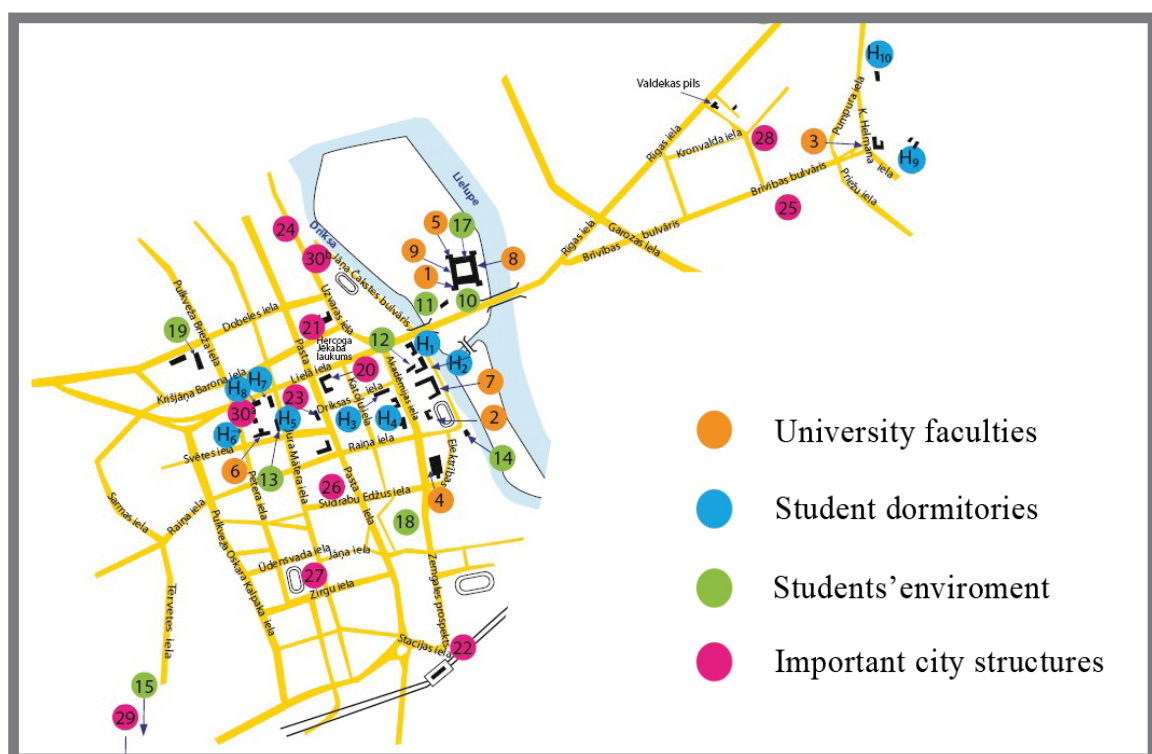


Figure 23. Students' life.

# SITE NOWADAYS

## 2.2. SWOT analysis.

Irrespective of the fact that the site is situated in the heart of Jelgava, in a very spectacular place which is between two rivers, there are serious problems present at site. For instance, one of the main country traffic roads was built in a way to cut the Palace park into two halves. The site is also situated on very low grounds, nearly equal to sea level, so flooding can occur unexpectedly. To gather all the important points relating to the site, I have started with SWOT analysis, when being on site.

<u>STRENGTHS</u>	<u>WEAKNESSES</u>
<ul style="list-style-type: none"><li>- historical heritage</li><li>- geographical position</li><li>- unique units as wild horse flock</li><li>- park, rich in species</li><li>- landscape views</li><li>- beauty through seasons</li><li>- water areas in large amount as an extra factor</li></ul>	<ul style="list-style-type: none"><li>- mostly daytime use</li><li>- geographical position</li><li>- existing conditions of the park (lack of maintenance)</li><li>- overgrown greenery in bad shape, but protected at the same time</li></ul>
<u>OPPORTUNITIES</u>	<u>THREATS</u>
<ul style="list-style-type: none"><li>- possibilities for diverse facilities (as education, recreation, research, water sports etc.)</li><li>- vast area</li><li>- unique place</li><li>- engagement in international projects</li></ul>	<ul style="list-style-type: none"><li>- loss of a scenery</li><li>- vast area, no functions</li><li>- loss of historical heritage</li><li>- unused, if no functions offered</li></ul>

**SWOT** analysis is helping us to determine what the strongest parts of the site are in order to preserve these in future design. It helps to realize the threats the site can face. It's important to keep those in mind to avoid deterioration. Geographical position of The Jelgava Palace and its Park is both, a strength and a weakness. The Palace is situated on the island in the center of the city, which gives it special feeling and an excellent vantage from wherever a visitor is approaching. At the same time, the island is surrounded by rivers which have turbulency; the rivers are also the reason to the Park's and Palace's inundation from time to time.

**SWOT** findings are vital to keep in mind during the whole designing process, in order to establish firm proposal.



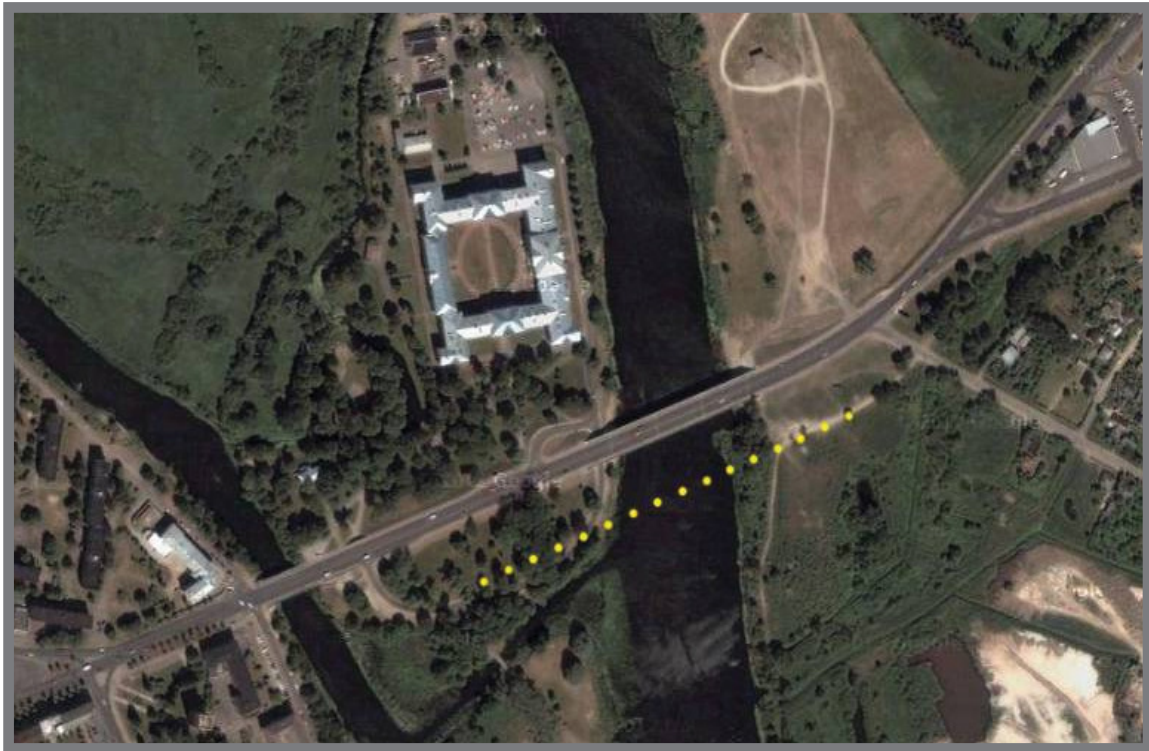


Figure 24. The approximate position of the old bridge.

# SITE NOWADAYS

## 2.3. Space and function.

### 2.3.1. Passages, entrances and movement.

It is important to emphasize the difference between the historical access points, and the usage of the space in order to be able to introduce the future proposal.

Historically, the Western facade of the Jelgava Palace was not closed - it was built way later for only university purposes. Before that time, the Palace was not in the shape we see it today. It was an unfinished square, with one opening, which served as a main entrance. It was also the location that was serving the owner as viewing point (Lancmanis, I. 1986). Historically, the owner would come out at the main staircase to overview the city or to meet the guests. So, basically, the inside entrance was outside and served as a main entrance into the Palace.

Today, the main entrances in the Palace have moved drastically. There are several main access points. They are equally important and accessible. Many students and teachers utilize cars, which forces them to drive around the Jelgava Palace and enter from the rear. Auto transport preferable routes are displayed with red lines in the map (see Figure 25).

Large numbers of students are renting rooms in the university dormitories, which are situated throughout the city. This creates much traffic through the park every day. Pedestrian movement is displayed with the blue lines on the map on the right (see Figure 25). It explains where people or auto transport can access the grounds, and which direction or destination they need to reach. The analysis on the map shows what the predominate traffic routes within the site are. It also points to the faults in the existing design, and explains why people are creating "short cuts" instead of using present directions. Secondly, there is a motorway next to the Palace, which is very heavy used, and it is clearly disturbing the Park experiences.

The movement analysis is based on the guidelines from the professor of Latvia University of Agriculture, Linare Gundega (2001). Her method emphasizes the nature of the person, saying that when in necessary activities, a person chooses the shortest possible access routes with the maximum deviation of 30 degrees from the destination, meaning every average human being will not actually obey architects design, if the latest is not thought through carefully.

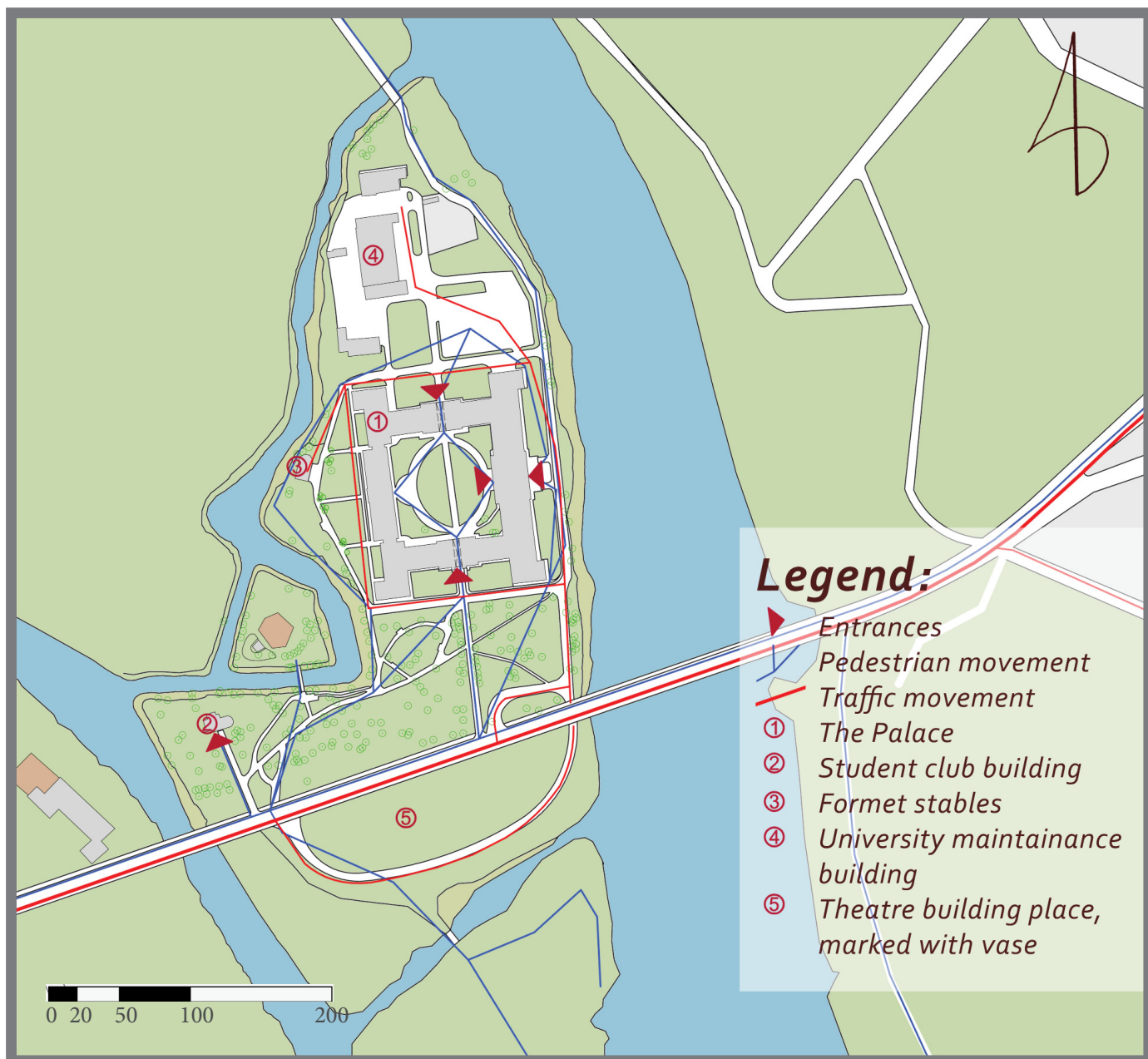


Figure 25. Movement analysis.

# SITE NOWADAYS

## 2.3.2. Noise pollution

To be able to create the experience of natural environment, architect should understand what the existing site brings into this topic. One of the parameters, affecting the experiences is, no doubt, noise. We are living under constant pressure in present times, Jelgava city is not an exception. Being one of the major transit hubs in Latvia, with high pressure of railway and motorway traffic, the city of Jelgava is polluted with noise. In fact, some of the parts of the Jelgava city are submerged into the constant high level noise, which doesn't only disturb the individual physically; but also creates certain stress amount on mental level.

Figure 26 displays the level of noise pollution within the area of the case study. The main noise source within this place is, of course, the motorway, which is very busy during almost all of the earthday (24 hours). Noise pollution level is marked from 1 to 4 in the map, where 1 is highly disturbing noise level, and 4 - the space which has only natural noises, as the sound of birds singing or the sound of moving grass in the wind.

As we can definitely see from the map on the right, the Natura 2000 protected area (see Figure 22) is mostly resembling the perfect environment for relaxation and experiencing „i am away from the city life” feelings, though is located in the heart of the Jelgava city. The territory around the Jelgava Palace Park is subjected to the high amount of disturbing noises, which is an important revelation to use in the further design proposal. It is important to create the barriers and the masking noises here, and to avoid generating additional disturbing noises.



Figure 26. Noise pollution analysis.

# SITE NOWADAYS

## 2.3.3. Spaces, views and barriers.

### 2.3.3.1. Spaces.

In the very beginning it seemed most beneficial to only work with the existing park area. However, during visits to the park, one realizes the park area should be much larger; that the site itself demands, and is already occupying the area, which doesn't belong to it territorially. If one takes a look at the field across the river Lielupe (on the East side of the Jelgava Palace), it is clearly acting as an entrance to the palace. Nothing was ever built in this place because the Palace is demanding the space to be experienced as a true monument. No one dared to interfere with its magnificence and dimensions before, and nowadays the field is the "mental" entrance on purpose.

Therefore, when starting the work, it was intended to only work with the official park borders. Shortly after some visits at the site, and exploration of the historical period of that time, it was realized that study area should be larger (see Figure 27).

The great examples of the parks of the period when the Jelgava Palace was built are parks as Versailles in France and Catherine's Palace and Winter Palace in Russia. It is understandable, that the amount of resources in France and Russian Empire differs from the amount of same in Latvia, and the Jelgava Palace could never reach the majesty of those two, but even the other palace designed by Rasstrelli in Latvia – the Rundale Palace is much more attractive. The Palace in Rundale with the harmonizing park, which was in fact constructed together with the Palace according to Rasstrelli project in 1736, emanates the majesty and beauty. Its park is truly the monument in Latvian scale (see Figure 18), and it is also the Palace's accompanying and finishing element. I believe, that The Rundale Palace and its Park is more attractive to visitors, because of its conditions. The insides of that Palace are of the marvelous beauty, as are the outsides.

All in all, the Rundale Palace is carefully preserved and cared for. It also had different history with a little more luck to it, when comparing to the Palace in Jelgava. In Jelgava, however, due to variable, challenging history and ruling power change, the visitor simply can't experience same majesty, admiration and astonishment.



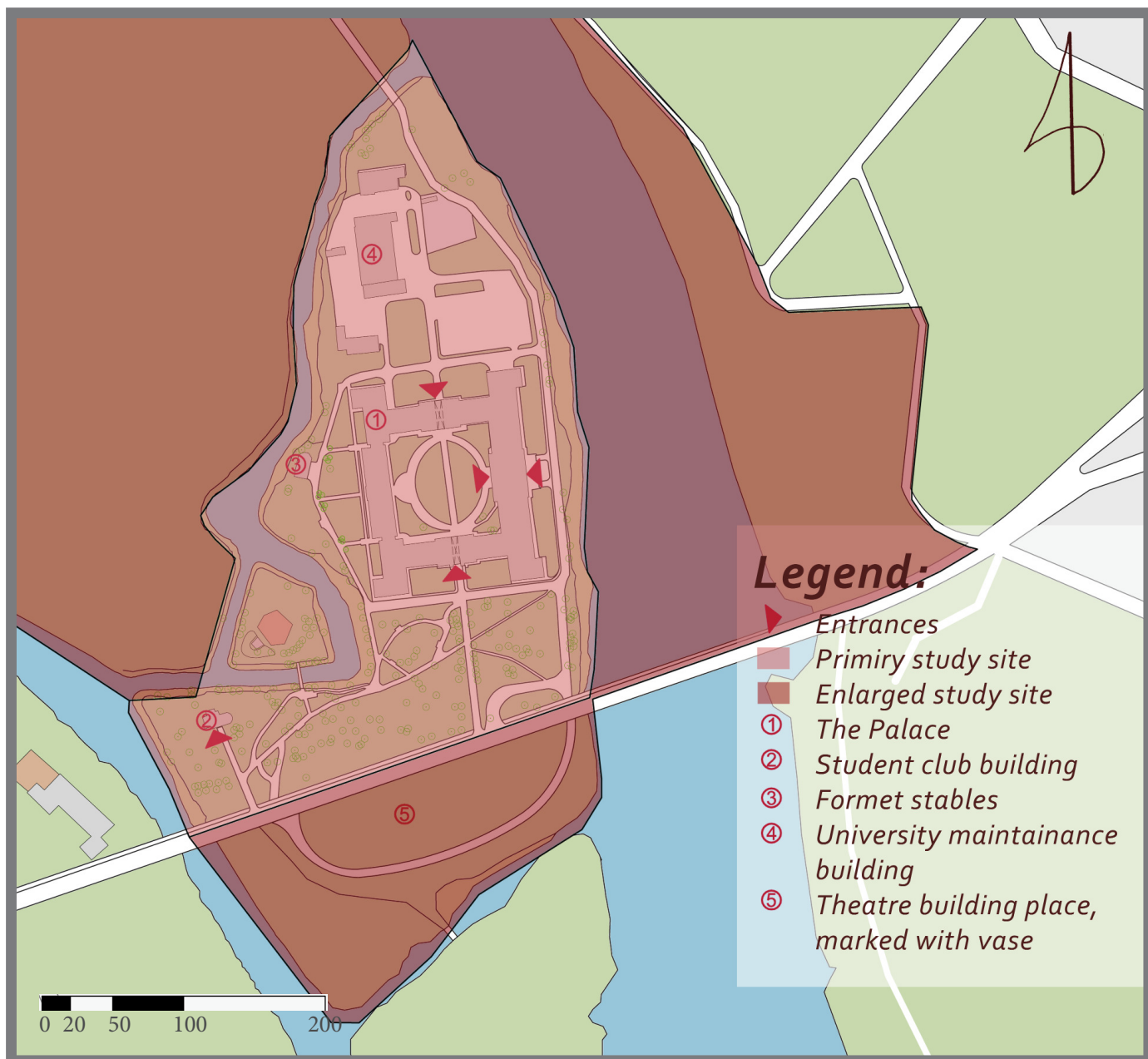


Figure 27. The study area.

# SITE NOWADAYS

## 2.3.3.2. Views.

When talking about the views and the viewpoints, it is important to get the understanding of what are the features to outline, and what feeling it is possible to create within the space.

This is why the most important view lines are divided into two major groups for a purpose of easier discussion. **First group** is composed of the views directed **towards** the site, and the **second** is consisting of views directed **away** from the site.

Nowadays, most of the views from outside space into the Park and towards the Palace are the views approaching the site from the motorway. It is very interesting, that the rear side of the Palace does not attract so much attention, though, as if all supportive buildings would be removed there, it would become a very impressive park area including many interesting features.

The most important views from inside of the Palace currently are only occupying three of the existing four facades of The Jelgava Palace. This has to do with the inside planning of the Palace, as in the rear facade there are several libraries and the supportive spaces arranged. There are no “hot” events going on in that part of the building.

It is important to preserve the views approaching the site, since those make one familiar with the space, and give the overall impression of the monument before one devotes oneself into marvelling the details.

As it is possible to read from the map on the right side, most of the activity is happening in the Southern part of the site, though there is much space and possibilities for events and functions in the other parts of the Park as well. Below, each separate viewpoint marked in the map is discussed (see Figure 28):



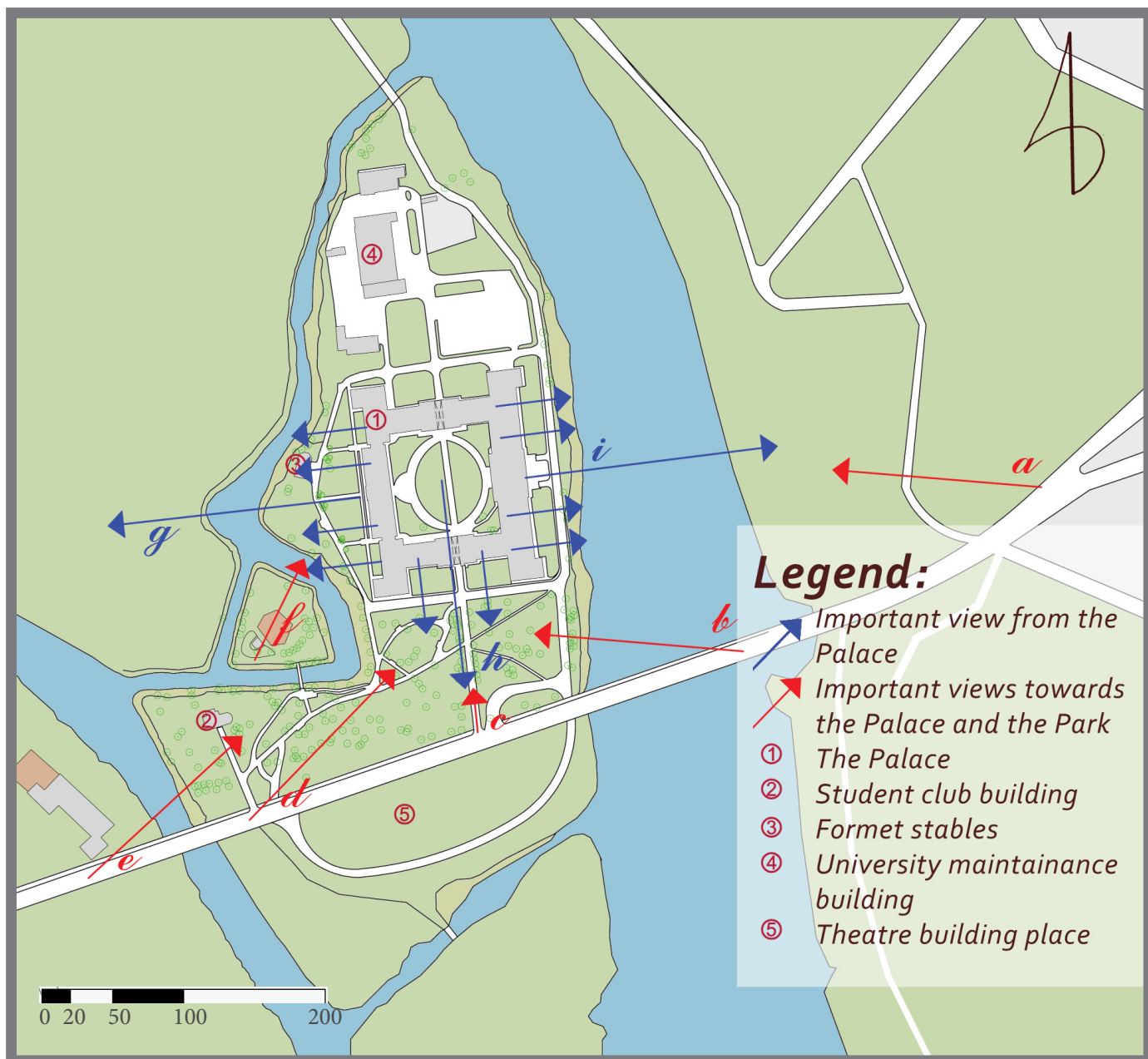


Figure 28. Map of views.

# SITE NOWADAYS

## **View a: View over the river Lielupe towards the Palace approaching from Riga.**

Very important view, the Palace opens up here for the first time for the visitors approaching from the capital of Latvia – Riga. However, there is huge uninviting field as the foreground and the trees in front of the Palace, obstructing the marvelous view (see Figure 29).

## **View b: View over the Palace from the bridge.**

View from the same highway, which is laid very close to the Palace. At the moment much obstructed with overgrown and illogically planted vegetation (see Figure 30).

## **View c: Main gates to the Palace.**

The view mostly opens up for pedestrians approaching the Palace from the bus stop. It is very attractive as it is and therefore should be cared for (see Figure 31).

## **View d: View over the Park and the Palace approaching from city center of Jelgava.**

The view approaching from the center of city of Jelgava, most of the students are using this road every day. During summer time, it is not possible to see the Palace, due to high concentration of greenery (see Figure 32).

## **View e: View over the river Driksa.**

Similar to the view before, but it is completely closed with the tree crowns, even during the winter period. As we can clearly see from the picture, at times, it is hard to screen the Palace or the Park features through the branches (see Figure 33).

## **View f: View from the Governors Island.**

A nice spot to overview the Park and a large part of the Palace (see Figure 34). It is also worth mentioning, that the Governor's island is possible to see from large part of the Park.



Figure 29. View a.



Figure 30. View b.



# SITE NOWADAYS



Figure 31. View c.



Figure 32. View d.





Figure 33. View e.



Figure 34. View f.

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## **View g: View over the western part of the Park from the Palace.**

Historically, this is the city overview point. Nowadays, the view is not very inviting and pleasant, outweighed by poorly maintained and overgrown greenery (see Figure 35). The former stable building is visible in the background. It is now functioning as a garage for tractors and economical needs.

## **View h: View towards the motorway.**

View towards the existing Park area and towards the motorway. Just before the motorway, the soil dam is visible, obstructing the further view of the Park on the other side of the motorway (see Figure 36). This is the Southern part of the Park in direct proximity to the Jelgava Palace, and is widely used for everyday transit by students.

## **View i: Eastern view from the Palace over the river Lielupe.**

View over the river Lielupe, directed to the East from the Palace, towards the floodplain meadows. The meadows over the river are not quite functioning at the moment. (see Figure 37).





Figure 35. View g.



Figure 36. View h.



Figure 37. View i.

# SITE NOWADAYS

## 2.3.3.3. Barriers.

Barriers is a very sensitive topic within this area, as many features compose the identity of this space can be also experienced as the major barriers on the way to get oneself familiar with the site. Below, the only several major barriers such as the motorway and the amount of overgrown greenery within this site will be discussed.

The river Lielupe is one of the biggest rivers in Latvia, and it is very beautiful with many inlets. This site has the privilege to have huge amount of water surrounding it. Many view the water to be a benefit, since it adds so much recreational and visual values. But at the same time, the river can act a border and a threat. The park is experienced as an entrance corridor between the city of Jelgava and the Palace, and it clearly demands more space. So, if trying to connect several islands or different banks of the rivers into becoming one Park, the architect can meet several obstacles. One of those, without a doubt, would be the financial demands of the grand design, but certainly cheaper solution than digging the motoway under the ground.

Lielupe river sometimes breaks its banks and floods The Park area around the Palace, as well as the underground floors of the Palace. In recent years, 30 cm of the water was covering all of the southern part of the Palace Park.

The motorway acts as a huge barrier to the experiences of the Park, but it is also a very essential part of the everyday city life and a part of site historical identity. The noise pollution level from it is very high, as the motorway is raised couple of meters above the Park level. So, the motorway, is dividing the Park visually and physically and is disturbing the users simultaneously (see Figure 38).

At the moment, the huge amount of trees planted without planning are partly preventing the noise from entering into the park at the very high levels. Trees are also aiding the visual pollution. In this sense, greenery is a big plus, but it also hampers the experience of the Park. When a person is inside, it almost feels as one is inside the forest, so numerous are the trees that there is no sense of order whatsoever. This feeling makes a contradictions in the person's mind, as when experiencing the "forest", he is also seeing very symmetrical Palace in front of him.



Figure 38. Raised motorway in the background.

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There was a tradition among the students of planting trees in the beginning of each year at the University of Agriculture, which the heads of the University decided to stop this year as it is taking up too much space inside the Park. The tradition of planting a tree with the note for future generations in capsule under it began in 1971. Every year new students planted a new tree; it was often a different and unusual for the area tree. Those trees are called "The trees of the friendship" as the course can always return to the planted tree after many years, when gathers.

The planting was not performed according to any kind of plan or similar, so the new trees were added to the Park with no planning behind it. It was a nice tradition which was badly coordinated and performed, thus leading to its demise. At the link below is an interactive plan of the planted trees with information about each year planted tree and panoramic pictures available: <http://www.llu.lv/pirmaja-studiju-diena-staditie-koki>

## 2.3.4. *Functional analysis.*

As clearly read from the map (see Figure 39), the area is not very diverse in function and usage of space at the moment. The main part of the existing park is serving for entrance and access purpose, which is probably due to the lack of safety experiences and the lack of attractive resting and social spaces within the park.

In spite of lack of equipment and atmosphere for social interactions, two areas (marked with green color) are gatherings points for many people. Whether it is due to location or natural resources is unclear, but it is clear, - that these areas should be even more emphasized for this usage. Red color marked areas are used widely for recreation and sports. The river area is greatly used for activities such as canoeing and recreation as the rent of small boats and catamarans for rides. There are also small areas for University support (marked with orange color), one of those is settled down in the former stables. It is not a proper use for this building, in my opinion, since it is very beautiful, also constructed during baroque times. It could be used for museum or cafeteria in the park instead.

Having examined this, the realization of the need of more functioning spaces comes in the mind. It is also important to consider, that the spaces for functions are huge here, the average human being just can't comprehend these spaces, they are simply too frustrating.



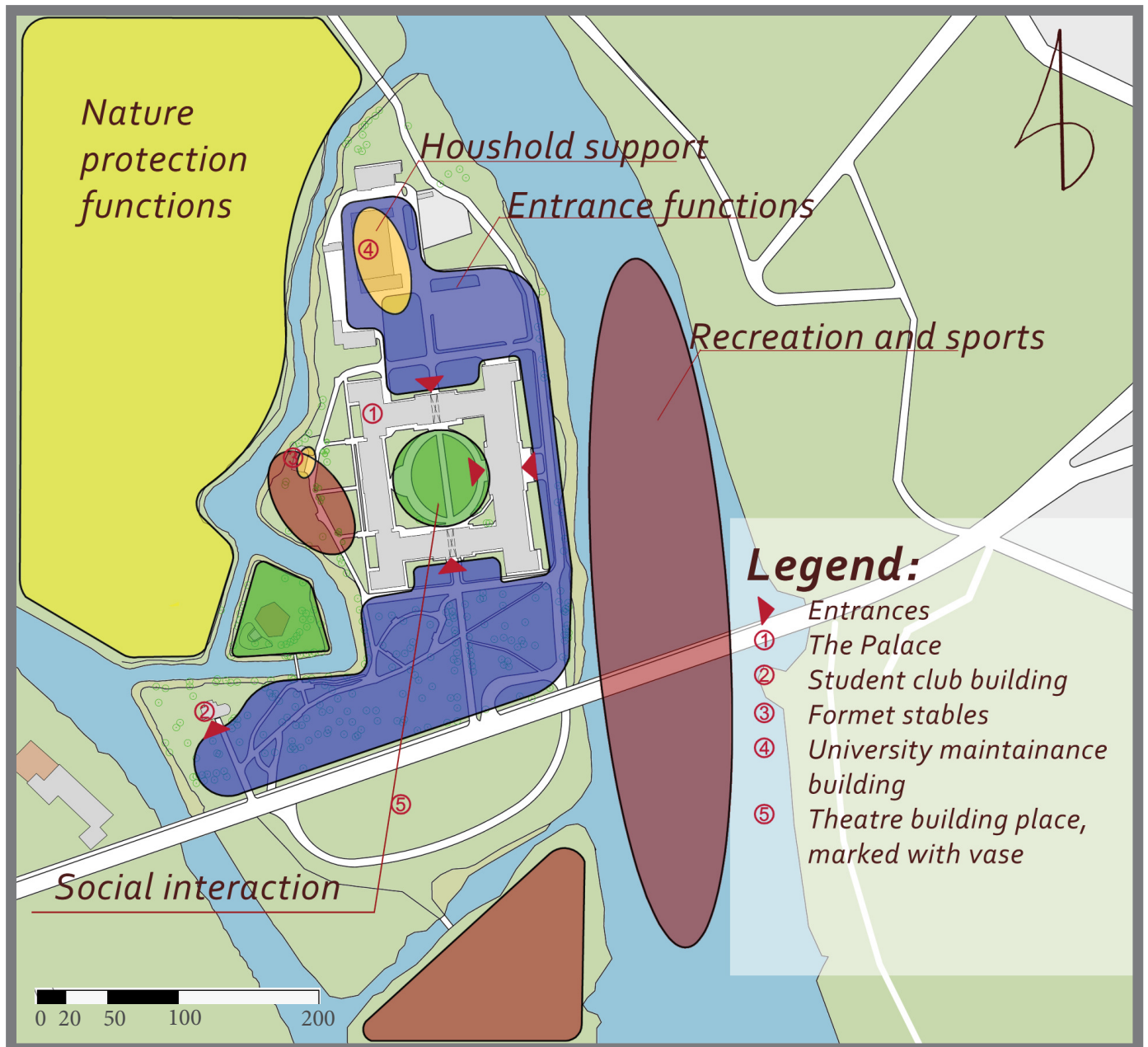


Figure 39. Present functions.

# SITE NOWADAYS

## 2.4. Greenery and insulation analysis.

When taking a short glimpse inside the site, one can fast realize that natural materials and greenery are dominating in this area in comparison with hard materials, which is a very positive fact.

Most of the plant material though is not in a very good shape, with one very outstanding exception, there are two huge flowerbeds of roses, which are flowering plentiful every autumn. Most of the trees are overgrown, some are even dangerous, as those are empty inside, but are still in place due to their age and size.

It is also worth mentioning, that the difference in layers of the greenery is very obvious, there are no transition zones, most of the green spaces are either huge lawn or very tall trees. This situation is not contributing to biodiversity of the site, and the site is also missing visual aspects due to that. Whenever one is in Jelgava Palace Park, he may experience sort of "trapped" feelings, as the amount of tall trees is so high. They are experienced as a tall wall from a small distance already.

Latvia is a northern country, and the people are longing for sun, catching every smallest opportunity for that. This park is not offering this activity at all, even if a person is boating the canal, there is not much of a sky above him; the canopies of the trees are preventing it. The Park is submerged in shade most of the time of the year, it feels dark and moist here, not inviting at all. High amount of shade and darkness is creating several problems in this park as: safety issues, microclimate influence within the park, recreational capacity.

*As a conclusion*, it is worth mentioning that even though the Jelgava Palace Park is not in the good shape, it has a potential to become a great social space in the heart of the Jelgava city as a multifunctional human scale related space, and a part of the green hub of the city.

The Park, definitely, has lots of issues to solve, many of which appeared due to historical instability, but at the same time these issues can turn out to make the site unique. The realization of the needs and the problems, as well as the strong parts of the Park, makes the design process easier to organize and more logical to follow.



SITE IN FUTURE

# SITE IN FUTURE

## Site in future.

### 3. Revitalization proposal for Jelgava Palace park.

#### 3.1. Territory development concept.

Based on the present use of the site, and the development in the adjacent areas, the overall territory concept shall be carried out. Multifunctional human scale design is proposed. Some of the building volumes are to be redefined and attributed new uses.

Diversity is a fundamental part of the concept. It is not very common yet in Latvia for a landscape architect to consider biodiversity, as this factor is usually in the study area of ecologists. The collaboration is still very weak. As it was stressed in the “Jelgava Palace in the context of city today” portion and displayed in the “Green belt of Jelgava” map (see Figure 22), the site is situated in the proximity of nationally and internationally protected areas, which sets the certain standard of care, when working with the development concept for the Jelgava Palace Park and its surrounding territories. There should be possibilities for preserving, promoting and creating even more diversity in green spaces, biological species, and social interaction, as well as cultural diversity.

The educational aspect is very important to create within this park as the area seems to be lacking a certain academic feel. SLU Alnarp is a great example of combining academical and restoration needs, in my opinion. Here, students are constantly put outside to explore the nature and its core, contrary to Latvia. It feels as in Latvia we (students) are gaining a strong base of theoretical knowledge, but not so many experiences. Every summer students in LLU have some obligatory weeks of practical activities, which are not very effective, as it is relevant to receive the experience at the same time one receives information, not after a long period when student's mind is not able to connect to materials anymore. Therefore, in this proposal the important part is devoted to arranging the spaces for new biotope creation resulting in more educational and research possibilities offered. Labs like Alnarp's outdoor labs could be introduced step by step with the emphasis on floodplain meadows, as the prerequisites are good here and these types of meadows are very rare in Europe.

Promoting social interaction is one of the main goals within the frame of the work. Without visitors, the park becomes a national reserve in the best-case scenario, and an abandoned plot in the worst. This goal is achieved by providing enough space for social contacts, as well as areas for sports and recreation, which are also supporting the aim.

# SITE IN FUTURE

People need socialization to be satisfied and happy, and complete; and while it is unnatural for a person to live alone, the whole society benefits from social interaction in the green spaces. Linare Gundega, the well known architect in Latvia, is known for saying “one park saves a city huge amount of resources, which otherwise would be spent on psychiatric clinics and jails”. It is partly a harsh statement, but there is also truth behind it. The importance of health issues is stressed more and more within the modern society, many authors as Grahn P. (2005), Kaplans, S. and R. (1989) and Ulrich, R. (1983), who all mentioning the importance of existence of diverse green space in the human's life.

## 3.1.1. *Compositional concept.*

The main features of this composition are hubs (see Figure 40), which host different activities, resembling all the study area. As mentioned many times before, Palace island area is a transitional area and a hub area within the city. Therefore, resembling the composition of the Universe where the largest constructions are similar of those tiniest (as planets and atoms, for instance), the composition of the site with the small hubs, and is similar to the Palace island role in the city of Jelgava.

The main element of composition is, no doubt, the Jelgava Palace itself. In fact, the compositional concept derives from it. The Palace is definitely the most dominant feature of the site. It is an outstanding example of baroque architecture. The facades of the Palace are adorned with curved and complicated features, which create the appearance of movement. It has plenty of windows, reflecting the surroundings. It is also highlighted in the Jelgava territorial development program for 2007 – 2013 (Jelgava territorial development program for 2007 – 2013), that there is a need in the radical changes in the park, which would correlate with baroque style and emphasize the Palace. Contrary, the composition I have chosen for the park is simple logical, and modern - in contrast to the essence of baroque. Bearing the thought of emphasizing the monument, it suits the palace well. The main reason for not proposing the baroque style park is that historically that type of park was never in place here. It was always the lack of finances, or constant changes of political powers with different priorities.

At the same time it is vital to remember, that the site is a hub, situated on the island in the heart of the city, which makes it as well a bridge between the two parts of Jelgava city. It is a place, where people will meet and interact. This is why it should be experienced as an element of both parts of the city.

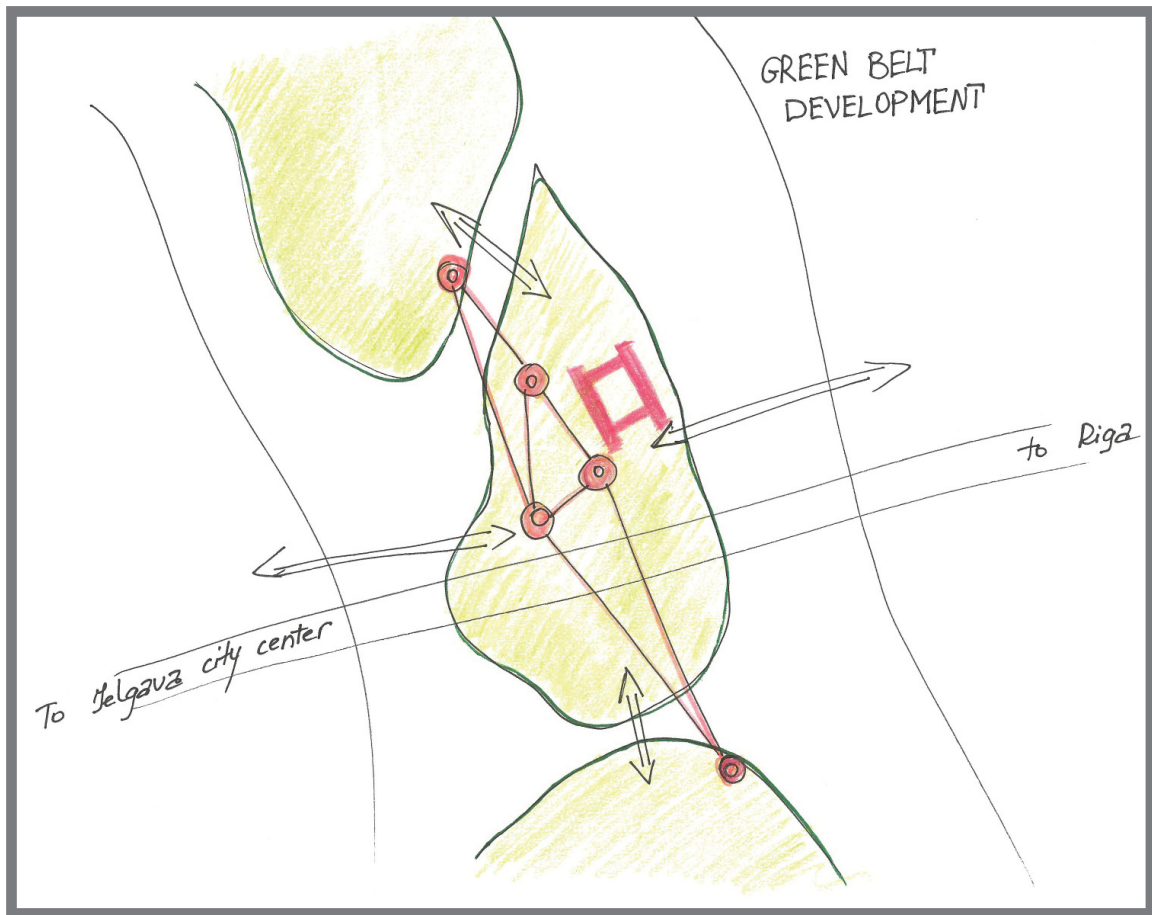


Figure 40. Hub concept.

# SITE IN FUTURE

## 3.1.2. Functional concept.

Functional concept central idea is to create as much as possible miscellaneous activities and uses, which would be easily adjusted to the current needs, allowing development and transformation through time. Diversity plays primary role here, from biodiversity to social diversity, allowance, and coexistence. The space should always offer a number of choices for activities, in order to be sustainable, in my opinion.

On the map on the right (see Figure 42) the possible functional development is presented. Complementing the existing functions (see Figure 41), the new ones are proposed; social interaction and recreational areas are to be enlarged, but diversified within, hosting small scale activities and functions. There is large amount of water surfaces in the area, which add more quality to the space and offer supplementary activities.

## 3.1.3. Transport and pedestrian movement development proposal.

Though an island, the area is very well connected to the other parts of the city by public transport. It is easy reachable on the motorway, which is laid in the heart of the Palace Park, dividing it.

Auto transport movement is practically unchanged with the exception of speed limit controlling features within the area, due to amount of pedestrian traffic. Speed limitation is achieved by using relevant signage, raising the pedestrian crossings (as bumps) and using corresponding materials as boulders. The auto traffic street space will also be narrowed to create the artificial experience of the need for slow driving.

As for pedestrian traffic, it is rationalized and simplified. Due to the new bridges on the West side of the Jelgava Palace over the canal, much more area becomes in use. Main movement paths within the area are wider than walking paths to allow for carrying capacity during busy hours. The passages under the motorway are preserved, since those are well functioning connections.

Parking lot space near Jelgava Palace is reduced in favor of green areas and bicycle parking possibilities. The reason for these actions is to encourage people to use public transportation and environmentally friendly traffic such as bicycles. Therefore the very important feature, which is introduced to the site is bicycling possibilities and parking arrangements for the bicycles.



# SITE IN FUTURE

Usage of bicycles is still not very popular in Latvia, but it is growing each year. Availability of using the bicycles within the site will compliment a city plan of creation a grid of bicycling paths including the new bridge (see Figure 5).

## 3.2. Formal park.

Formal Park part should be seen as Modern park with incorporated historical traces and diverse usage features. One of the main goals for the Formal Park part is to secure its usage throughout the year. W.H. Whyte (2009) was searching for factors defining the green space usage and found, that there are several prerequisites to park usage as location and amount of people using the space. However, the major factor defining whether the green space will be used proved to be sittable spaces. This is why the main idea of the park is to create diverse hubs, with different choices and alternatives available. Doing this, will generate many different places for socializing.

According to Semenzato (n.d.) in *Natural Elements and Physical Activity in Urban Green Space Planning and Design*", there are several green space characteristics that can strongly influence their use for physical activity, and therefore those should be considered carefully when planning an urban green space. Those characteristics are divided into six main categories: *Accessibility, Features, Conditions, Safety, Policies and Aesthetics*. Each of these categories defines a park and is very important. Therefore, when making design, the guidelines were taken into consideration:

**Accessibility:** The Park is already situated very central within the city of Jelgava, providing easy access from all the directions. To simplify usage and access, bicycling paths were introduced, as well as ramps for people with disabilities, and several bridge connections over the canal proposed.

**Features:** Several "squares" are proposed within the space of the Park, with the understandable routes leading towards them. There is also a new cafeteria proposed instead of rarely used student pub. Additional points of interest such as an outdoor gym and barbeque areas were provided through design as well. The Jelgava Palace Park proposal also incorporates several history related features, as the baroque shape of the part of vegetation, and usage of materials and forms, where some trace back to 13th century.

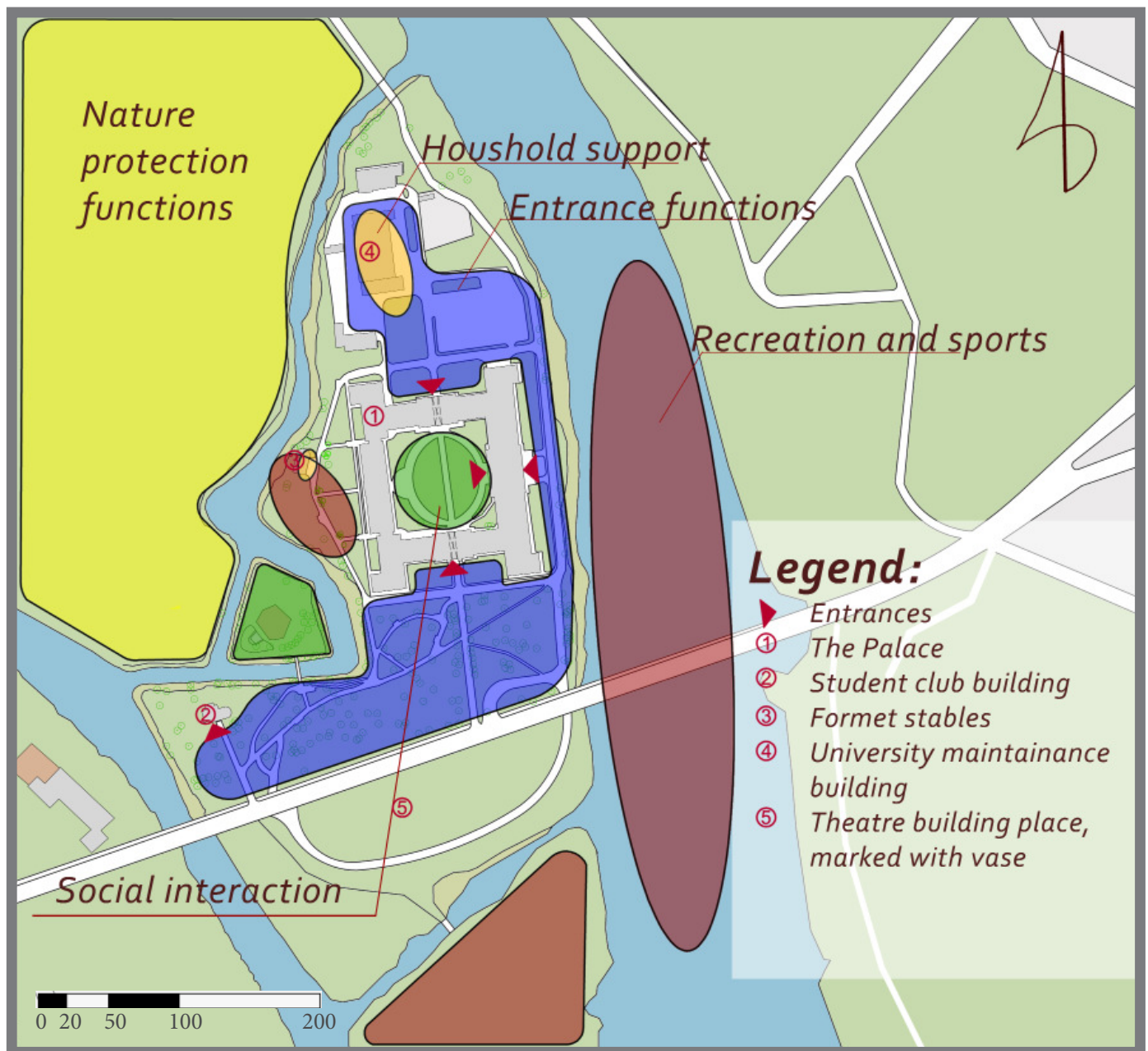


Figure 41. Existing functions.



Figure 42. Proposed functional map.

# SITE IN FUTURE

**Policies and Conditions:** These are the criteria, which are very important through all period of Park existence. Therefore, should be considered more in detail while planning, providing the Park with diverse and functional spaces and its responsible infrastructures with the maintenance and development guidelines.

**Safety:** Much of this aspect is created through the serious amount of greenery clearance proposed. Clearing the edge areas out of the unmaintained and overgrown vegetation, as well as performing the inside clearings to provide openings in the canopies of the trees and open views inside and outside of The Palace Park, will provide the Park with the substantial amount of light throughout the year.

Car speed reduction and appropriate lightning systems are important components of creating safe experiences in the Park and are taken into consideration within this project.

**Aesthetics:** This area is already very beautiful; the architect's task is to emphasize the space's beauty. Therefore logical and simple design was proposed with the emphasis on the Palace itself, allowing contemplation and admiration.

Water creates the special microclimate within the Jelgava Palace Park, complementing body and mind relaxation. It is also important to create middle layers of greenery, such as bushy vegetation, in contrast of two layered lawn and tall tree existing park. This action will support the diversity goal, as well as protect the Park from outside pollution and disturbance.

- ① Accessibility
- ② Features
- ③ Conditions
- ④ Safety
- ⑤ Policies
- ⑥ Aesthetics

# SITE IN FUTURE

## 3.3. *Biotops and transition areas.*

Towards the north on the same island where the Palace is situated, floodplain meadows are located as well. This territory is 211 ha large and is included into Natura 2000 area for its biodiversity, especially for floodplain meadow biotopes and for housing several special bird breeds. As stated in Jelgava city development program (Jelgava city integrated development program for 2007 – 2013), this area should be preserved carefully, but also should become a recognizable on Latvian and European scale territory for recreation and tourism.

There are two new biotope types introduced to the area to transform it into more diverse and rich neighborhood, and to attract broader groups of visitors. The intention is to create transition spaces, which will be reached through introducing water edge biotopes and more meadow type biotopes (see Figure 43). There are path systems introduced or enhanced in each biotope area, preferably raised wooden decks should be constructed to create as less disturbance to biotopes as possible.

As stated in 3.1. Territory development concept part, creating possibilities for broader education is necessary within this area. Biotope creation and development could be implemented and monitored by researchers and supported by groups of students, as a part of educational process.

**Water streams** play an important role in the present environment. The streams serve as corridors for fragmented habitats helping to support biodiversity and development. In my vision a “water stream” in reality would have very slow water movement since it is connected to both of the rivers Driksa and Lielupe almost perpendicularly. Therefore, the water basically will be almost standing here.

Vegetation should occupy most of the shallow water. Some of the plants should be planted in groups to give enough shade to the stream; some should be planted as solitary, being attracting elements. To aerate the water and support turbulence, some rocks should be added to the bed of the stream. Existing trees will provide enough shade, but low trees and bushes should be introduced to create the transition and promote higher biodiversity. All these enhancements would also create a shield from the existing motorway, allowing the users to relax and engage in stronger experiences (see Figure 44).



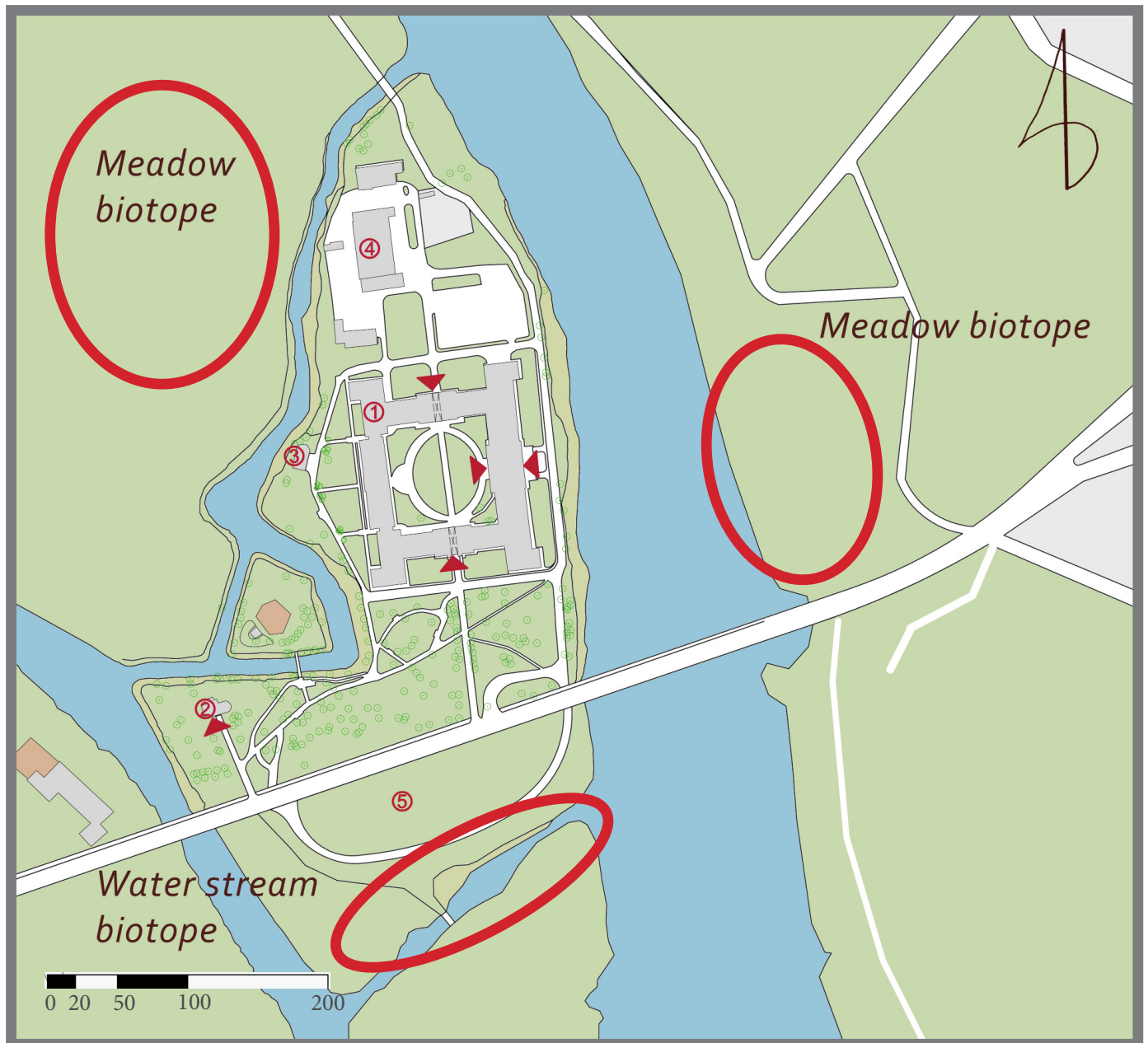


Figure 43. Biotopes' location.

# SITE IN FUTURE

There is also a possibility of expanding the water biotopes areas using the parts of the canal in the Formal park part.

As the **Meadow biotopes** are already present in the surroundings of the park area, towards the north of the Jelgava Palace, the aim is to enhance the existing areas by introducing the path system of raised wooden decks. This area has very interesting wild-life and some plants, which are included in the Red book of Latvia, as Snake's head fritillary (*Fritillaria meleagris*). Thus it is important to preserve what is there already, especially knowing the tendency of floodplain meadows' disappearance in Europe.

The area on the East side of the Palace over the Lielupe river however does not resemble the floodplain meadows in any way, moreover it is here, where huge concert are happening from time to time, mostly in summers. So the proposal in this part of the site is to create different meadow types from flooded to drier ones. This is to be achieved by creating several hills (of 3 – 4 meter maximum height over the existing heights), which would still allow panorama over the Jelgava Palace approaching from the capital - Riga (see Figure 45).

The path system with the resting spaces is proposed within this area as well. There could be grazed meadows introduced as well to use in education process as well, as for example studying the grazing effects and pressure on meadows.



Figure 44. Water stream area.

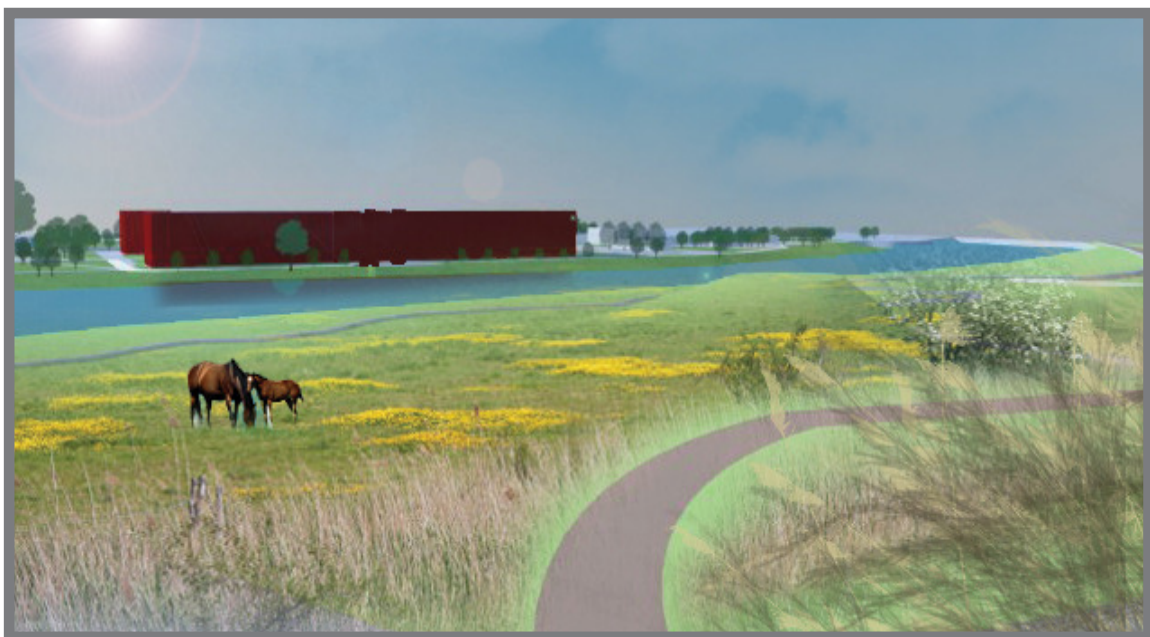


Figure 45. Meadow area.

# SITE IN FUTURE

## 3.4. Recreation and health restoration areas.

Many people would agree being with nature in pleasurable settings helps restore mental and physical powers, thus supporting the health of the individual. There is no better way to clear your mind and gain new energy than exploring the nature or having a hot bath, in my opinion. These views of mine seem to be human needs in general, since there are studies proving that the nature has huge restorative powers.

Rachel and Steven Kaplan were discussing restorative environments in “The Experience of Nature” (1998), according to the findings in their research the settings, which are preferred by individual, are also the settings, which will most probably appear the most restorative environment. It is also known, that nature plays an important role when it comes to preferred environments, thus meaning, that natural environments are providing the most capacity for restoration. Therefore, the average person may be expected to use the proposed space if the settings are pleasurable and inviting. For these reasons, it is important to create diverse settings so that each individual would be able to find the environment that they prefer. According to Ulrika Stigsdotter and Patrik Grahn (2002), different qualities of nature and parks and the preferences for those have been studied for many years. Over a decade a serious work on studying those preferences was performed, and, as a result, eight characteristics of outdoor environments were identified as fulfilling basic human and his needs.

These eight characteristics can be summarized as follows:

1. **Serene.** A place of peace, silence and care. Sounds of wind, water, birds and insects. No rubbish, no weeds, no disturbing people.
2. **Wild.** A place of fascination with wild nature. Plants seem self-sown. Lichen and moss-grown rocks, old paths.
3. **Lush.** A place rich in species. A room offering a variety of wild species of animals and plants.
4. **Spacious.** A room offering a restful feeling of “entering another world”, a coherent whole, like a beech forest.
5. **The Common.** A green open place allowing vistas and stays.
6. **The Pleasure garden.** A place of imagination. An enclosed, safe and secluded place where you can relax and be yourself let your children play freely and also experiment.



Figure 46. The eight characteristics of outdoor environment.

# SITE IN FUTURE

7. **Festive/centre.** A meeting place for festivity and pleasure.
8. **Culture.** The essence of human culture: A historical place offering fascination with the course of time.

As seen from the comparisons (see Figure 46), the space had many characteristics already (marked with black numbers), but the proposed design is planned to diversify the space and to offer more possibilities for choices (marked with red numbers), eventually meaning - satisfied site users. Culture and festive characteristics will be located within the Formal part of the Jelgava Palace Park. Spacious, wild and lush will be easy to find within the frame of the created and enhanced biotopes. Also other characteristics are present within the new design.

It would also be winsome to introduce site maintenance involvement programs, for people to volunteer. There are some days organized in Jelgava city already when citizens clean the parks or plant greenery. These types of activities in this park would be profitable to both city and the citizen. This thought is also supported by de Vries "Recent evidence suggests three principal ways that neighborhood outdoor spaces can contribute positively to people's health and the quality of life: through support for physical activity such as walking; through support for mental health by offering restorative experiences and engagement with the natural environment; and through opportunities for positive social interaction" (2010; p.79).

*In conclusion*, it is worth pointing out, that the proposed design is not only enhancing the unique parts of the site, it is also introduces new uses, such as research and educational opportunities, as well as possibilities to allow the site development with the time. Through the proposed design, the understandable and accessible space is created, and which is more important – diverse groups of users are considered, and their needs are supported by design.



SITE IN DETAIL

# SITE IN DETAIL

## Site in detail.

### 4. Formal Park.

#### 4.1. Activating the Park.

In this part of the work, I would like to zoom in the Formal Park, the part of the park which lies in the direct proximity to the Jelgava Palace. According to Jan Gehl (2010) there are different types of activities, which he divides into three categories:

- **Necessary activities** (compulsory activities like going to school, waiting for the bus or walking out the dog)
- **Optional activities** (activities done only if there is a wish to do them and if time and place make them possible; examples: taking a walk to get a fresh air, sunbathing)
- **Social activities** (activities dependent on the presence of other people: children at play, greetings, conversations, communal activities of different kinds and most widespread – passive contact “seeing and hearing” each other).

In the present time, the “formal” part of the park is only used for necessary activities. Therefore it is important to provide the park users with the possibilities engage themselves in a wider choice of activities. The engagement is achieved through the supply of substantial amount of facilities and interactive spaces, as well as through space defining purposes and the details. Outdoor gym or cafeteria is an example of space defining purpose. When interviewing the users of the park, most common reasons for choosing another green area to spend spare time was: poor condition, lack of sitting possibilities, dirtiness and unsafe feeling.

Jan Gehl also stated that “when outdoor areas are of poor quality, only strictly necessary activities occur” (2010, p.11), which is most probably the case with the Jelgava Palace Park. Even though sometimes there are activities organized by LLU in this park, it is not enough for people to bond with this place. So the question is how to bring other types of activities, which Jan Gehl has talked about? And what are the standards for creating the place, which people will experience as special?

These questions turn us back to 3.2 paragraph, where the Accessibility, Features, Conditions, Safety, Policies and Aesthetics categories were discussed. In my opinion, the mentioned categories are of a big help to create “space for everybody” with the help of the details and the historical aspect, which are making the park special.



Figure 47. Hubs in focus.

# SITE IN DETAIL

The details can be many things, as materials tracing back in time, or vegetation structure in some parts, resembling baroque. These criteria won't automatically make a user to bond with the space, but creating the "space, which everybody likes" is definitely the first step towards transforming the Jelgava Palace Park into the special place. A place, the user would like to come and stay, because of the experiences of connection with that place. There can be many things, as materials tracing back in time, or vegetation structure in some parts, resembling baroque.

The proposed design (see Figure 47) is based on research and the needs of the certain user groups, as students and elderly people, or mothers with baby carriages and disables people. The hubs, mentioned before in 3.1 paragraph "Territory development concept" and displayed in Figure 40, are intersection and meeting places, with different activity possibilities. Those hubs are marked with purple color in Figure 47.

The main paths are serving as fast connections between the most lively spaces as the straight path from the city center towards the Palace – University building (see Figure 47). All the paths are 1,5 m minimum wide , to secure comfortable movement for all of the pedestrian traffic participants, including persons with confined abilities. All paths should be substantially illuminated, ensuring safe and pleasurable usage during the earthday (24 hours).

As shown in the map (see Figure 47), approximately 40 % of the greenery within the area of the Formal Park is cleared out. Some of the trees worth sparing should be extracted and planted in the nearby areas to support effective and sustainable resource usage. Clearings should be performed at once to create clear views and attract the visitors. Middle layer as bushes and low trees are very important for microclimate and diversity, therefore different types of greenery are introduced within this range. Part of the vegetation, which is closer to the Palace building, is highly maintained as if resembling strictly shaped baroque topiary to secure gradual transition. The other part, contrary, is let to develop freely, mostly supporting the slopes near the river. There are also several spots proposed for flower beds, as "having flowers in the garden" is said to be one of the "typical Latvian garden" characteristic.

Further in the work three of the hubs will be presented on the more detailed level (see Figure 47). Those have been named:

1. The Museum Plaza connection
2. The Governor's island
3. The Southern Entry Plaza.

These specific hub spaces were chosen due to the capacity of characteristics provided in those design, based on the aspects discussed in 3.2. Formal park part.



# SITE IN DETAIL

## 4.2. The Governor's island.

The Governor's island is a very attractive and fascinating feature in terms of the history of this area. As seen from the Figure 8, the island already existed as a part of the Livonian castle protection. It is indeed very fascinating, how it travelled through time, maintaining exactly the same shape. Though its direct purpose is not protection anymore, indirectly there is a spirit of the time and the strength protected within the image of this island. Therefore, body of the island is reconstructed (see Figure 48), with the very symmetrical shape, using boulders as an image of strength and permanency as the material for slopes.

There are two path systems laid out on the island. One is very direct with the meeting point at the intersection of the three main directions, connecting the Governor's island to the surrounding park as to symbolize that the island was always a transit point between the Palace and other areas. The other path system is parametrical, symbolizing the patrol route. This path will lead the visitor to a canon, found on the island. The canon is raised on the pedestal and is turned towards the city as protecting the Jelgava Palace from the attacks.

There are several resting and interaction places proposed on the island. Throughout the Island one can find a secluded bench to abstain from the pressure of social interactions or to simply contemplate the vistas. There is also two levelled terrace facing the Jelgava Palace, and allowing one to stay closer to the water. One of the lawns will be reinforced to make it possible to use it for exhibitions and sport activities. There is a small plaza, hosting numerous steel tables and cheats, possible to use for both, recreation and education. There is also a water body and a huge triangular mirror on the other side of the same plaza. The fountain is serving as an attraction and as a noise level reduction simultaneously (see noise pollution analysis in Figure 26). Mirror has three sides symbolizing the three different timelines: history, present and future. Mirror was also used very widely within the baroque era to expand the space and create light effects.

Most of the existing greenery on the slopes is removed due to the serious reconstruction and to ensure the views throughout the park, simultaneously the bushy vegetation I proposed throughout the Governor's island, part as the ground cover therefore around 0,4 m tall, the other part around 1,2 m tall, planted densely. Some new decorative trees are also introduced.

Although the amount of the water surfaces in this area is pleasantly high, there is additional water body, situated on Governor's island, in the proposal. The character of the water in the canal and the rivers is very different from what is proposed. The almost still water of the canal is fascinating to look in and marvel the reflections of the canopies and The Jelgava Palace; there are also possibilities for user to get closer to the water, as wooden terraces. Contrary, the water on the Governor's island is proposed to create sound effects and other, than still visual experiences.

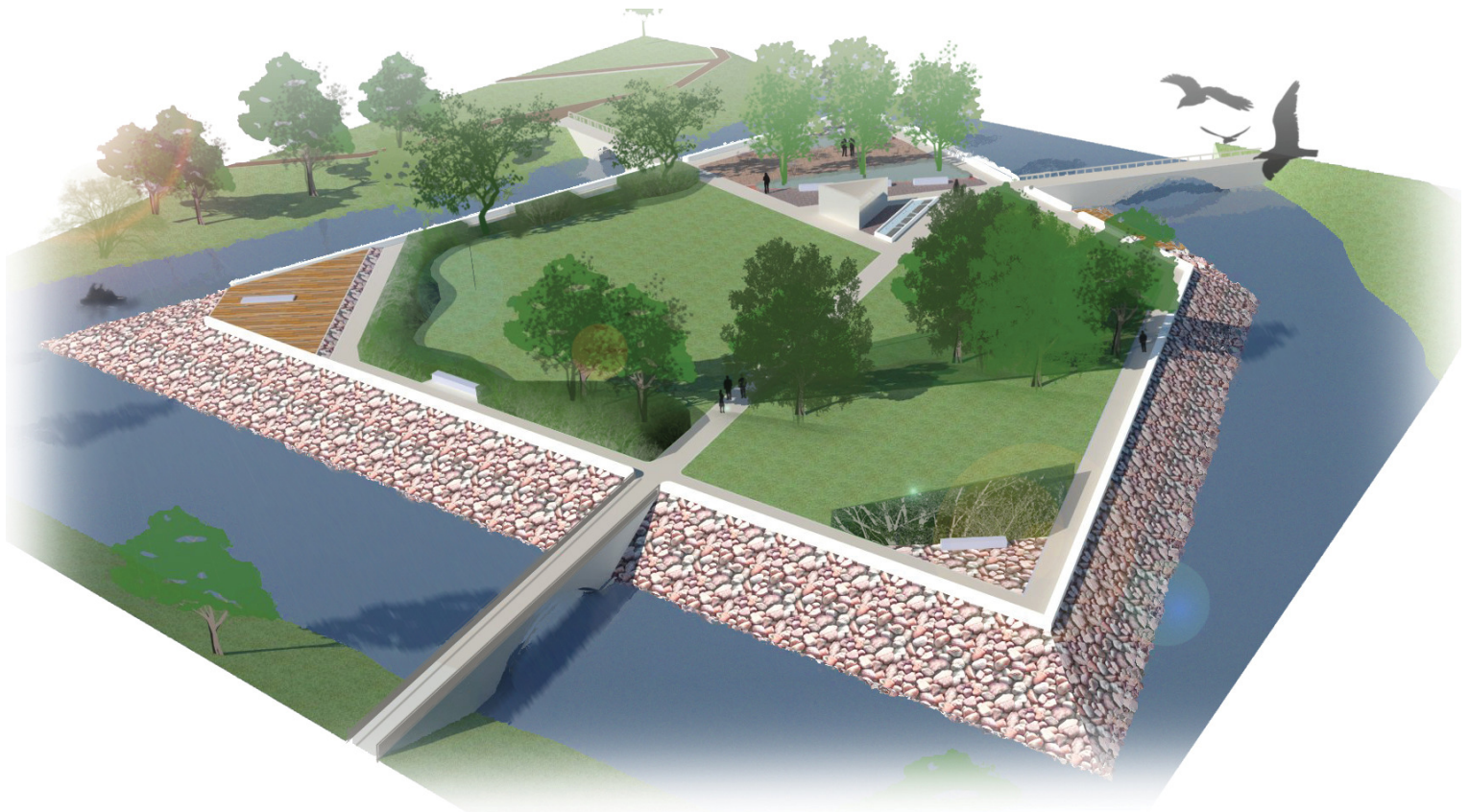


Figure 48. The vision of the Governor's island.

# SITE IN DETAIL

- ① *Gathering plaza, hosting numerous movable stainless steel chairs and tables, allowing the space to transform easily according to current needs.*
- ② *Three sided mirror, resembling the past, the present and the future in composition with fountains.*
- ③ *Secluded (semi-private) resting spaces are scattered across the island to ensure different types than common contemplation.*
- ④ *The historical canon, found on the Governor's island, is raised at the pedestal facing away from the Palace as to protect it.*
- ⑤ *Wooden terrace allowing contemplation of the Jelgava Palace, as well as the relaxation near the water canal.*
- ⑥ *Forty five cm tall concrete wall with the opening towards West-East, is acting as the symbol of protection, which might be adjusted to multifunctional usages as play, sitting or exercising, etc.*
- ⑦ *Reinforced lawn for outdoor sport activities and art exhibitions.*
- ⑧ *To point out the long history of the Governor's island, the shape of that is reconstructed, using boulders as main cover material.*

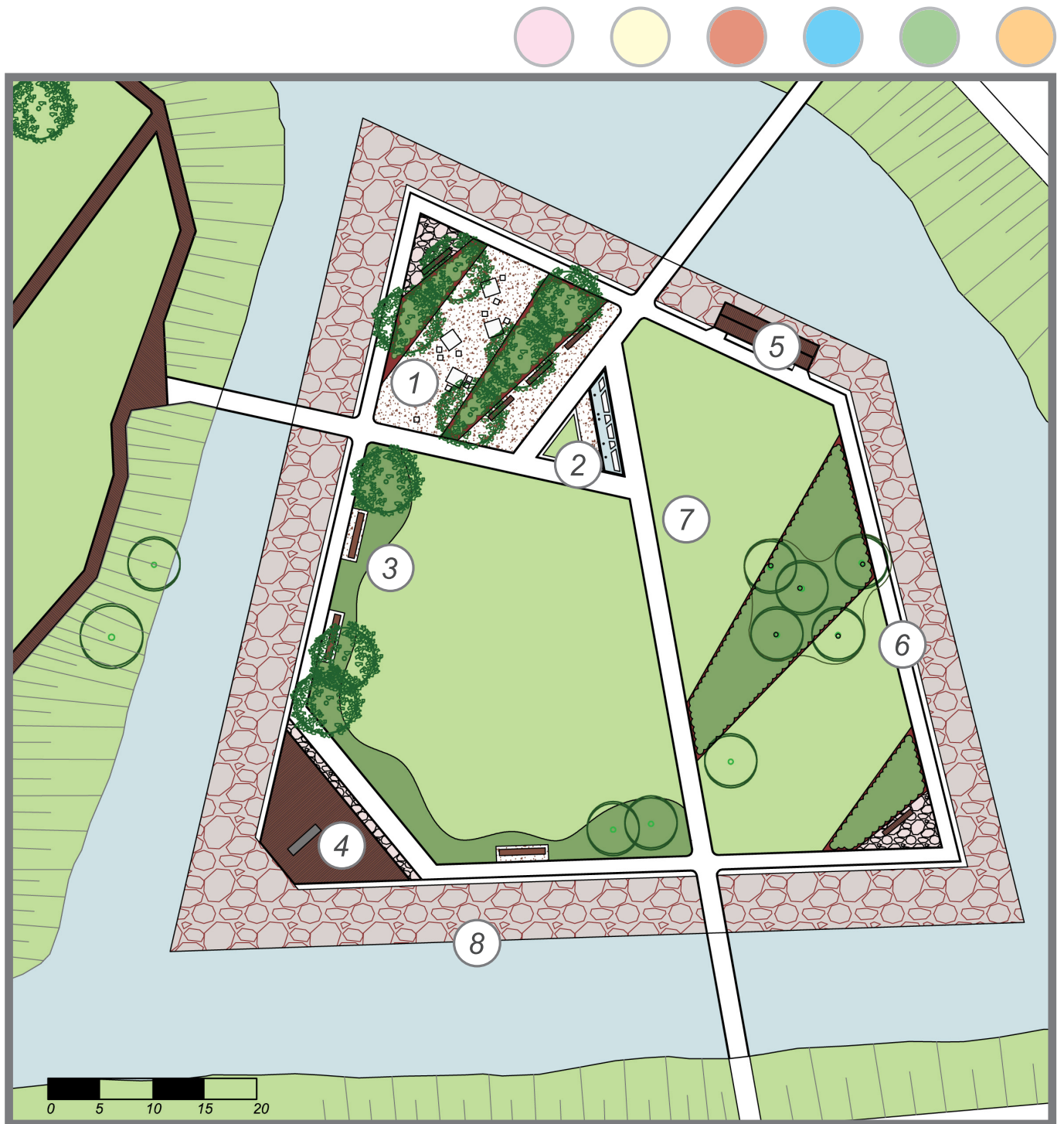


Figure 49. Design proposal for the Governor's island.

# SITE IN DETAIL

## 4.3. *The Jelgava Palace Museum Plaza connection.*

The existing Jelgava Palace museum is situated in the Palace building nowadays. It is not very obvious to visitors, that there is also museum in the Jelgava Palace, therefore the new design proposes transforming the former stable building, which is used as a garage at the moment, into the Jelgava Palace museum. It is also offered to construct the winter garden, which will serve as a **Teahouse**, adjacent to the stable building. There will be no harm doing so, as the glass material will be used, so that construction seems light and offers reflections of the water and the sun. The Western facade of the Palace was only built after the WWII to serve the university purposes; therefore it was never carried out in baroque style, meaning it is not historically valued view to preserve. If the visitor pays attention, he will sure notice the difference of this side of the building.

As this part of the park is more secluded than the part facing south, more spaces for social contacts and interaction are proposed here. The square next to the Teahouse is constructed as resembling the **Baroque chess board**, with squares wide as 1 on 1 meter. Partly the “squares” are planted with perennials and bushes, and the plaza itself hosts stainless steel furniture to use as preferred. Chess tournaments could be organized here as well. The Chess square is possible to use for the University’s dancing group (Latvian national dance) rehearsals during the warm season, as that style dancing normally doesn’t require the mirrored classroom.

On the Western side of the canal, in contrast to the **Museum Plaza** which hosts the number of attractive elements, more calm and close to nature environment is laid out. Here, the wooden docks are raised over the existing vegetation, and the paddock for the wild horses created. The vegetation is allowed to develop on its own, and student can receive the benefit of studying the effects of grazing on the meadows. If there is a need for further development, several paddocks or simply more raised wooden paths can be created, expanding the tourist path network.





Figure 50. The vision of the Museum Plaza connection.



Figure 51. The vision towards the Museum Plaza.

# SITE IN DETAIL

- 1 *The raised wooden deck path system is ensuring movement through the area, without disturbing existing biotopes. Path system is possible to expand with time and according to the current needs.*
- 2 *One of the new connections over the canal. The bridge is leveled to allow easy movement for all types of user groups. Due to proposed shape, the bridge also allows the small boats and catamarans to pass under.*
- 3 *Low bushes, up to 1,2 m tall, to reinforce the slope.*
- 4 *The Former stable building is transformed into the Jelgava Palace museum.*
- 5 *The Baroque chess square and the Teahouse.*
- 6 *Four meter wide road, where movement is limited to necessary as the Teahouse support, fire-alarm cases etc..*
- 7 *Thuja trees, shaped conically, as to resemble baroque era's vegetation.*
- 8 *The Museum Plaza's main groundcover material is slightly cemented crushed granite with the 3 half meter wide paths of boulders cutting through the Plaza.*
- 9 *Large flowerbed of Roses, as in continuation of the Roses theme from the courtyard of the Jelgava Palace.*

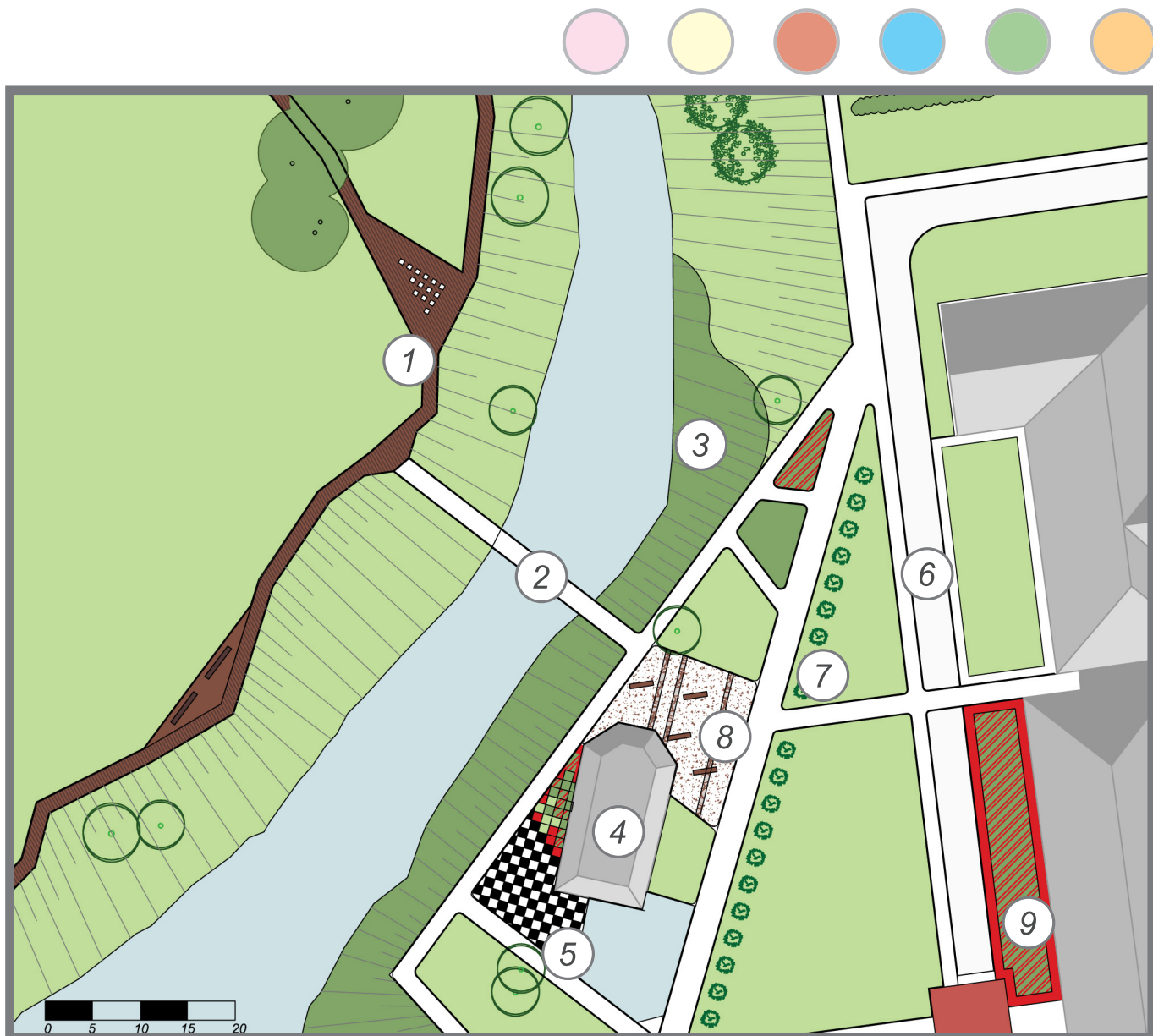


Figure 52. Design proposal for the Museum Plaza connection.

# SITE IN DETAIL

## 4.4. The Southern Entry Plaza.

The Southern part of the Jelgava Palace Park is serving as the entry area for a large group of users and visitors. It is proposed to have a **Sculpture park** throughout the whole southern part of the Park. Two of the Jelgava's parks are already famous for hosting the Ice sculpture and the Sand sculpture festivals once a year. The Jelgava Palace Park, and especially its southern area have all the prerequisites to host more contemporary sculptures than just sand or ice. The idea of artist being inspired of the given space, used in one of the Swedish parks – Wanås – could be implemented in this part of the park, promoting the Jelgava's name and supporting the international collaboration.

The Southern part of the Formal Park is a place of symbols in my opinion. This is where visitors connect to the other era gradually approaching the Palace. It is also, where the young people enter the new period of their lives, when they begin their journey through the University life.

This is where the young students were planting the tree, as a symbol of unity, growth and development. Symbolism and traditions are the factors, which support the bond between the visitor and the place, in my opinion. Those are not the determining factors, but could definitely increase the affection and usage of the outdoor space. As the tradition with tree planting, discussed in the paragraph 2.3.3.3. Barriers, has come to its extinction, and most of the parks in Jelgava already are attributed traditions, the symbolism is used as the central idea for this part of the park.

The entry Plaza's hub is divided into the two smaller plazas:

The Entry Plaza is within the close proximity to the Palace itself, acting as a little stage for the Jelgava Palace entry gates. Large area of The Entry Plaza is covered with bushy vegetation of similar structure and color of that, as if balancing the vivid dark red color of the Palace's facade, but avoiding distracting attention from the Jelgava Palace at the same time.





Figure 53. The vision of the southern Entry Plaza .



# SITE IN DETAIL

Apart from vegetation, most of the Entry Plaza is covered with the crushed granite and can host numerous activities, as city markets, which are very popular in Latvia, for instance. As mentioned earlier this page, the Southern Entry Plaza is also hosting the symbol of growth and development, the symbol of continuity and life - the Mighty oak tree.

The oak tree is of high symbolism in Latvia, it is the most important tree in Latvian culture, in fact. It is placed in the very central part of the Plaza, so that the park visitors, approaching from all the directions, could have the possibility to interact with the oak. To do so, there would be pebbles available to write the wishes on, and leave under the tree. With the pebbles the energy from the people will flow to the tree, as if speaking directly to the Universe. The main idea is to offer new symbol and tradition to everyone visiting, not just students of the University of Agriculture of Latvia.

The part of the Southern Entry Plaza closer to the motorway is hosting the outdoor sport activity "center" for teenagers and students. The activity space should host the modern and "not childish" equipment for the young people to use. The sport ground could be used in the breaks between the lectures, and during the free time as well.



Figure 54. The Mighty oak.



Figure 55. The bicycle usage possibilities.

# SITE IN DETAIL

- ① *The Entry Plaza is hosting the large amount of evergreen bushy vegetation (could be Rhododendron) to compensate the amount of hard surfaces and the lack of the visual transition.*
- ② *The space for arranging cultural and traditional events as markets.*
- ③ *Bicycle path, which is quite new concept for the Jelgava city.*
- ④ *The outdoor sport area for the young people, hosting modern and “relevant to age” equipment.*
- ⑤ *Crushed red granite and strictly clipped low bushes acting as “the greenery remnants” of Baroque era. Those are also serving as transition between the facade of the Jelgava Palace and the park in modern style.*
- ⑥ *The Mighty Oak as a new symbol of development and growth. It is very natural for Latvians to believe in symbols and signs as the nation had developed many beliefs and traditions during the Pagan times.*
- ⑦ *One of the historical entry roads, which is still covered by material (boulders) from the old times. There is also the young alley already planted along this road.*

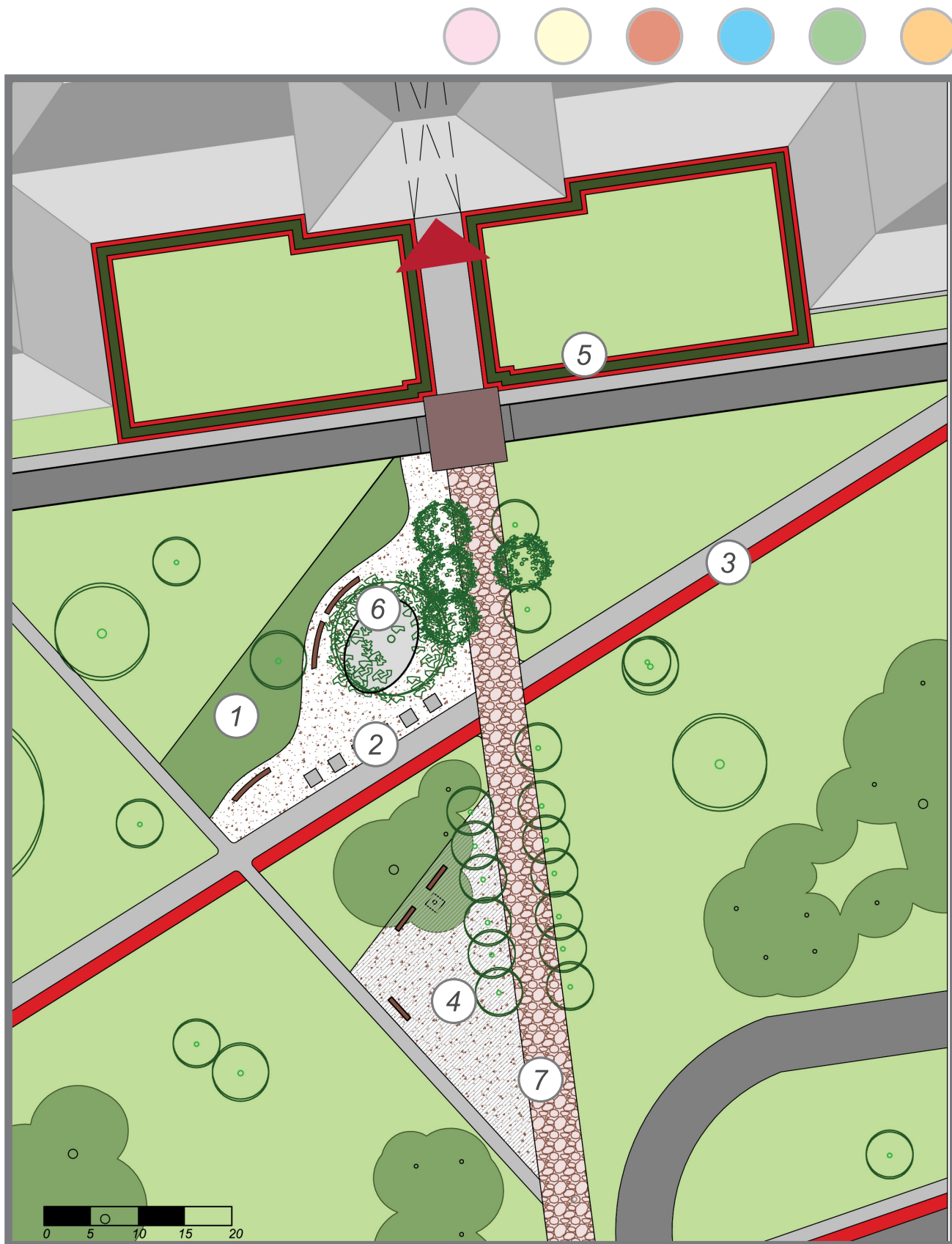


Figure 56. The Southern Entry Plaza design proposal.



## Reflections

This thesis has been a very interesting time for me, as the process of the work has been very new. I had never got to work on my own that much in the previous studies, and had never given such freedom as to lay out on paper whatever thoughts I have. During my previous studies we were much asked to operate only facts, not emotions. Therefore the whole process of writing this these was a little struggle to understand where the balance is.

Starting the work with the clear will to regenerate the historical baroque park, it was much of a shock and struggle to me to accept the historical facts. It was much of the surprise to find out, that the baroque style park F.B. Rastrelli has envisioned within the site, was never implemented. Historical analysis has definitely provided the new edge to the work, as well as brought me to the completely unexpected result. I could truly say, that historical research was a turning point in my work, which has changed all the course of it.

As discovered while working on the thesis, the city of Jelgava nowadays is the city of rapid changes. There is a new layer of history created nowadays, we might not be fully aware of that at the moment, but soon we will be amazed that we knew completely different city just years ago. I believe, with the changes in the city, the changes within the society are occurring, therefore, there is a need in development and growing, also within the field of landscape architecture. Witnessing exactly these kinds of changes is a great honour and privilege.

When looking back at the goals of the work, I believe, those are achieved, though it might have not been the best site chosen to deal with historical perspective, since historical park has never appeared in this place. On the other hand, the present Jelgava Palace Park is the consequence of its history. There are traces of the Livonian times – The Governor's island, and the baroque era – The Palace itself, there are also remnants of the Soviet times – the motorway cutting its way through the park and dividing it. I have come to realize, that almost every place to work with, is historical to certain extent. It is always a background to the space, but not always the country/world famous background.



The proposed design is emphasising the strengths of the Jelgava Palace Park as beautiful vistas and unique environment. In the proposal, the problems, as safety and lack of places for interaction, are solved. There is the multilateral environment provided for different user groups, as if children, disabled, age different. Most of all, the proposal covers the concepts, new to Latvia as health and stress reduction, educational possibilities and biodiversity development and restoration categories.

While this work is only the first step into creating the design for the studied area, it has been the great task to dig into the information, given it is not so easy to process this amount of data in such a short time span. There are many topics still to be covered as water fluctuation prior working with the site on the detailed scale, still, this work can certainly be used as an insight into the site, and provide stepping stones for the team to work.

Dealing with the site like this made me realize very clearly, that this had to be the team job. There are so many aspects to take into consideration, and it would be much of a deeper work understanding, having the experienced professionals to deal with, as well as having their support and advices. The process of working on this thesis also confirmed my desire to work for municipality, as municipality itself is a big team of professionals.

All in all, it has been a great journey discovering new facts about the city I have spent around 4 years of my life, realizing the significance of historical events to the city and society development, and understanding that this thesis is not the finishing line, as I was thinking before, but only the beginning of a deeper research within the topic of landscape architecture and myself.

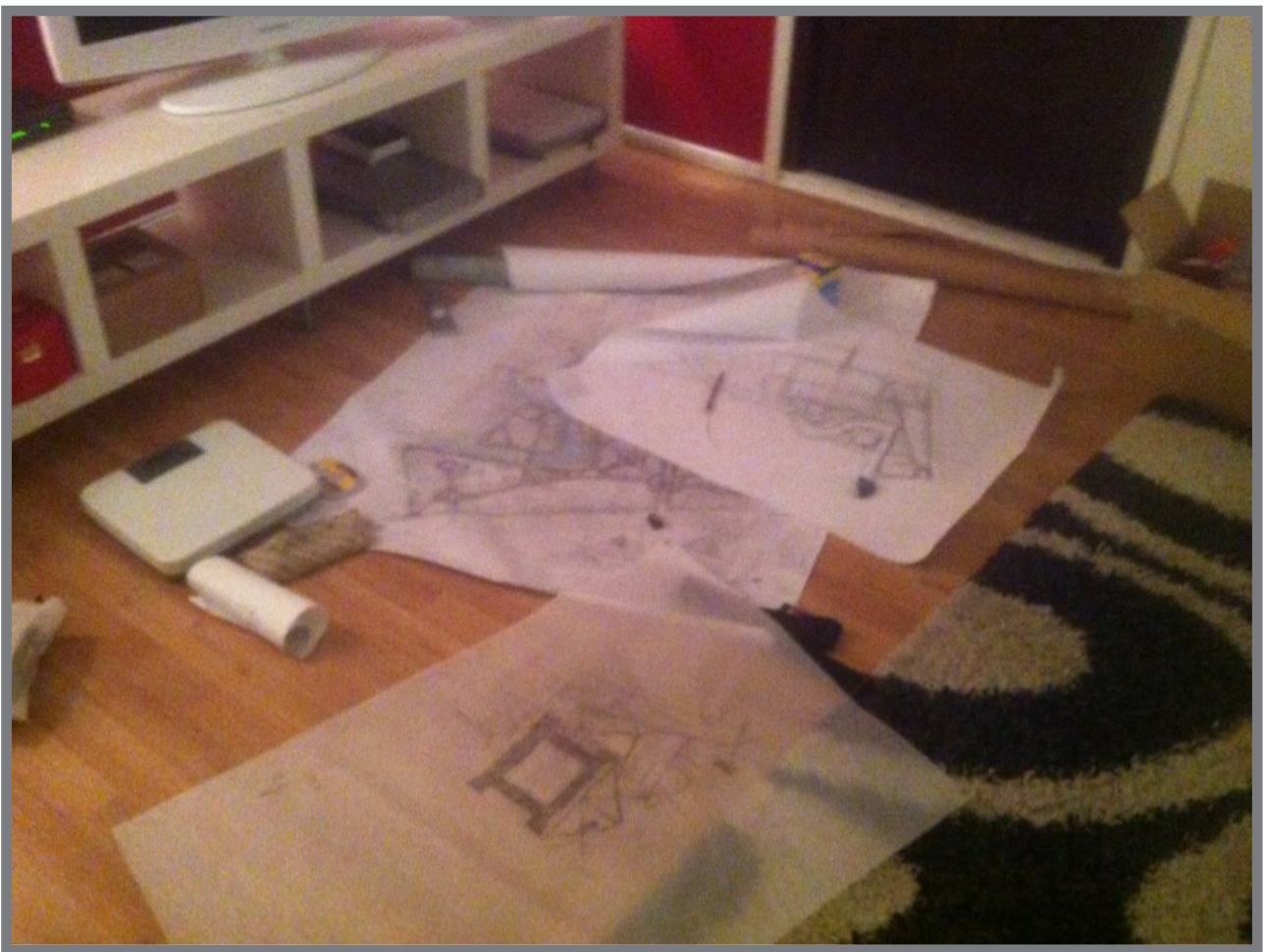


Figure 57. The design process.

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## Reference list of Graphical material:

### **Figure 1. Jelgava in context of Latvia.**

Map made by Petunina, A. 2012.

### **Figure 2. Jelgava city in the 13th century.**

Map made by Petunina, A. 2012.

### **Figure 3. Jelgava city in the 20th century.**

Map made by Petunina, A. 2012.

### **Figure 4. Academia Petrina.**

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### **Figure 6. Jelgava city borders through time.**

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### **Figure 10. . Second proposal by F.B. Rastrelli.**

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