

## Karlovac (HR) The Campus as a City

### Karlovac City of cities

Our proposal for the Lušćić site starts from an overall understanding of Karlovac as a city composed of different, very characterized types of urbanization: the compact grid inside the Svijeda dating back to the XVI century; late XIX and early XX century developments on both sides of the Kupa river; the socialist city spread out to the west; informal low density residential settlements around it, and finally, industrial settlements in its outskirts. Those components all have qualities and problems, and the whole of them form the complex spatial identity of the city.

On one side the Svijeda, a monument in itself, is organized through the strictly geometrical, military order of a square grid pattern of urban blocks. Although very compact in its layout, due to the low density of buildings which are mainly two stories high, the Svijeda lacks urban intensity.

The modernist organisation of the Novi Centar, by contrast, has some peaks of urban intensity concentrated within the big boxes containing public functions such as markets and public facilities, but the large spaces between these buildings remain largely generic and undefined, making their appropriation by citizens less likely.

### A contextualist approach

Incomplete attempts at implementing an overall plan for the city have left the different urban components quite distinct and separated from each other. We propose an approach that embraces this complexity by using strategies and urban figures characteristic of these types of city. The proposal for the Lušćić site will try to formulate a significant synthesis after a thorough observation of the elements already present in the city. Karlovac has witnessed very different planning strategies and events typical of the European urban development during the last five centuries. Firstly the construction of the city as a star shaped fortress based on an abstract geometrical order during the late renaissance, then the destruction of the fortifications in order to create a ring park around the historical centre, and finally, the never fully accomplished modernist and socialist approach. We propose to learn from past experiences and combine positive elements of all these approaches in order to define a new urban realm for Lušćić.

### From the axis to the city

The urban structure of Karlovac is organised around the crossing – or better, clash – of two axes. The first one (the high-capacity state road Prilaz Većeslava Holjevca), while being a strategic asset for the city due to its logistic importance actually divides Karlovac in two parts by crossing it from north to south. The second is the main axis of urban development and planning originating from the central square of the Svijeda, and stretching north-east and south west of it towards Gaza and Lušćić respectively.

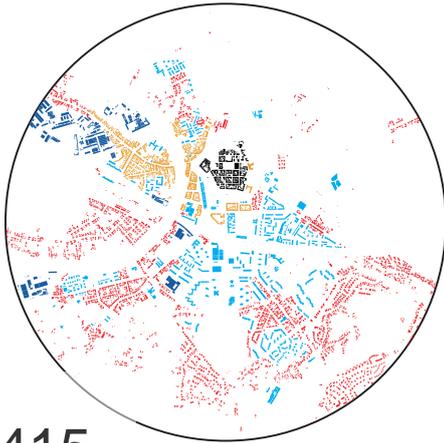
The unresolved relationship between the two axes will be addressed in different ways, and the main urban axis itself, intended as a model for the urban development of Karlovac, needs to be reimagined. We propose to articulate the idea of the axis as a linear connection by transforming it into a urban system based on a regular grid pattern.

### Lušćić

The project site, despite its location at the south-west end of the main urban axis, has at the current state little or no relationship with the urban fabric of Karlovac. This is a logical consequence of its military purpose, which demanded total enclosure of the barracks and facilities. The former base has a size comparable to the Svijeda, and is thus both symbolically and dimensionally the place to imagine a new kind of urban realm for Karlovac. The site is flanked by the Kozjača woods and hills, which rise around 100m over the city and define its western border. Lušćić must therefore be acknowledged as the end point of the main urban axis for its orographic conformation.

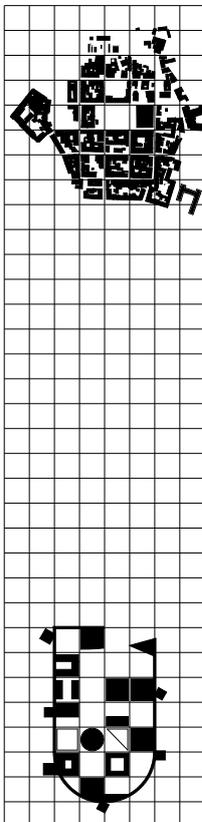
### The Grid, or the scale of the city

The urban blocks inside the Svijeda are arranged following an orthogonal grid measuring 66 x 66 metres. It is a medium size suitable for a small city like Karlovac (Manhattan blocks measure approximately 60 x 200m and the Cerdà block is 113 by 113 metres). We argue that this grid produces measurable urban spaces and can sustain new uses. We propose to stretch the grid from the Svijeda across the site, and to make it the fundamental spatial organisation of the Lušćić area. The main pedestrian circulation pattern will be based on the grid, and the new proposed buildings are also inscribed within it. The grid interests us not just as a circulation system, but precisely for its specific size, which is the scale of the historical centre



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- Svijeda – XVI Century
- XIX – early XXth Century
- Socialist city
- Industrial facilities
- Low density housing





OMA, Mission Grande Axe, 1991

of Karlovac. The grid is the tool to establish a relationship with the historical context of Karlovac just by spatial means, thus avoiding any mimetic attitude. It measures the otherwise blank space of the site through a series of urban blocks (when built) or urban rooms (when left empty) that can accommodate a variety of uses and programs.

### **Mobility and infrastructure – urban strategy**

Karlovac is located in a strategic position at a regional level and is crossed by major infrastructure, but the city itself lacks a coherent mobility infrastructure. We propose to address the problem of sustainable and integrated mobility as one of the main drivers for potential development of the city.

The main focus of the proposed mobility strategy is to encourage pedestrian, cycle and public collective modes of transportation.

We propose as the main intervention the creation of a circular tramway line that connects efficiently existing urban assets between each other and with the new development at the Lušćić site. The new circle line will allow for a low emissions, safe and fast connection of parts of the city on both banks of the Kupa river and both sides of the high capacity road Prilaz Većeslava Holjevca. Further development could include an extension of the line towards the Stadium and Aquatika Centre. We propose to use a rubber-tyred tram for its easy installation on existing streets and its quiet running.

We also propose to implement a network of cycle paths formed by a circular ring and some linear interconnections running parallel to the main urban axis and along the Kupa river banks.

Both proposed infrastructures are interconnected between each other and with railway and bus stations in the infrastructural node of Novi Centar. The node is located at the intersection of the main urban axis with the Prilaz Većeslava Holjevca, and its importance for the development of a mobility strategy for Karlovac has already been acknowledged with the creation of the railway line station of Novi Centar in 2013. We intend to reinforce this choice by making this place not only an intermodal exchange node but the gateway to the new Productive Campus of Karlovac. This is underlined with the improvement of the train station connection to the ground level and the new tramway stop through the use of escalators. The railway fly-over that crosses the main urban axis is also improved with the insertion of a metal structure which acts as a large urban sign, a landmark signaling the entrance to the Campus to the visitor and the passer-by. (Project view n.1)



### **Karlovac city of Parks**

Karlovac presents a variety of green spaces within its urban fabric. Some are mostly natural like the woods covering the hills on the eastern part of the city or the banks of the Kupa and Korana rivers, those areas constitute an attraction for hikers and water sports fans. Others are completely artificial like the ring park on the former bastions of the Zvijeda, the tree lined streets that run across the city, and a few big lawns which cover the large empty spaces left between buildings belonging to modern urbanization.

The proposal for the Lušćić site addresses mainly the two latter: on one side the network of tree lined avenues providing an uninterrupted connection between all green areas of the city is expanded and integrated. We also propose to plant trees along the grid pattern spread on the big empty area just east of the project site, further defining it spatially and finally transforming this generic lawn into a park.

On the other hand, the proposal for the Lušćić area adds a new type of park to this variety of green spaces: the productive park. In the productive park, existing natural elements such as the tall perennials and large green areas coexist with several activities and buildings. The open spaces framed by the grid are further articulated through different typologies of greenery: vegetable gardens, formal gardens, open air sports facilities, playgrounds, spaces suitable for live performances, leisure infrastructure.



### **Productive campus**

We propose to transform the Lušćić site into a productive park by constructing a urban campus devoted to the economy of knowledge. The new Campus will be a place to learn, produce, and live. In opposition to the mono functional zoning of the socialist city, we propose to integrate all aspects of a vibrant urban realm within the project. Evolving from the idea of the campus as devoted just to learning or working, the productive campus integrates in one place all these stages, from education to production to consumption. In fact, we conceive the Campus as a City, full of programmatic and formal variety.

The strategic location of Karlovac (45 minutes by car to Zagreb and its airport) can allow us to imagine that the new Campus will attract investors and highly qualified workforce from across Croatia and neighbouring countries. At the same time the Campus will act as an engine of development for the local population – thus avoiding



Thomas Jefferson, University of Virginia, Charlottesville, 1817-26 (view by E. Sachse and co.)

further emigration – by providing new spaces for all the stages of education, and then qualified job opportunities. Those two aspects are fundamental components of a strategy aiming to invert the current negative demographic trends. On an architectural level the campus is made of a limited set of urban figures with specific spatial and programmatic roles: towers, mid-size boxes and a porch.

### Mid-Size Boxes - Produce

The big-boxes scattered around the city which form the industrial heritage of Karlovac are a fundamental part of the urban landscape of the city. Their scale is also reflected by some of the public facilities planned and built during the socialist era. While retaining some formal aspects of such productive buildings we propose to reduce their size in order to fit them inside the grid. Brought back to the human scale, these boxes will accommodate the productive parts of the campus, while producing urban relationships and articulating with their volumes the sequence of squares, lawns and public spaces inside the campus. Public uses like small scale businesses, cafes, restaurants and shops are located at the ground level, while the upper floors are devoted to productive activities such as workshops, co-working spaces, start-up incubators, learning centres, fab-labs, convention halls. These volumes will constitute the core of the productive campus.

### Towers - Live

One of the typical elements of the late XXth century urbanisation in the vicinity of the site is the residential tower. We propose to integrate this typology in the development and to open it up to a programmatic complexity much more suitable to contemporary needs. The six 15-stories towers located along the perimeter of the intervention also constitute the visual backdrop of the main urban axis, and will function as a recognisable sign for the new campus.

The towers are dedicated to different forms of living: student housing, social housing, guesthouses, a hotel. Different combinations of program, are also foreseen within the towers. Mostly public uses are proposed at the ground and lower levels, while communal living facilities like laundries, meeting spaces and gyms are also present in all towers. This crown of tall buildings will attract the critical mass of inhabitants that shall sustain the liveliness of the new neighbourhood.

### Porch - Meet

A generous porch spanning 6 metres defines the space of the campus. Its function is both spatial and infrastructural. The porch frames the new campus and defines its porous perimeter. It acts as a strong and recognisable urban figure that connects and provides rational and protected pedestrian circulation to the system, while accommodating the tram line stops and integrating the lobbies and accesses to the main buildings of the Campus.

The porch, the archetypal figure of the campus framing a big empty lawn – typically the space of *otium* – in this case stages the spectacle of production and exchange. Through an ordering gesture it opens up new relationships between the interior of the buildings, the protected space of the campus and the surroundings.

### Mobility and infrastructure – Lušćić

No further car infrastructures at the ground level are planned on the site. Parking needs will be satisfied with the progressive construction of one or two stories underground car parks, to be positioned under the new buildings. The underground car parks will also function as geo-thermal energy facilities, providing the Campus with zero emissions power supply. Access to the underground car parks is located along the streets surrounding the campus.

Public transport is secured by the tramway which runs along the porch, with three stops planned on the Campus, one for each programmatic cluster: the innovation district, the education district, the convention centre.

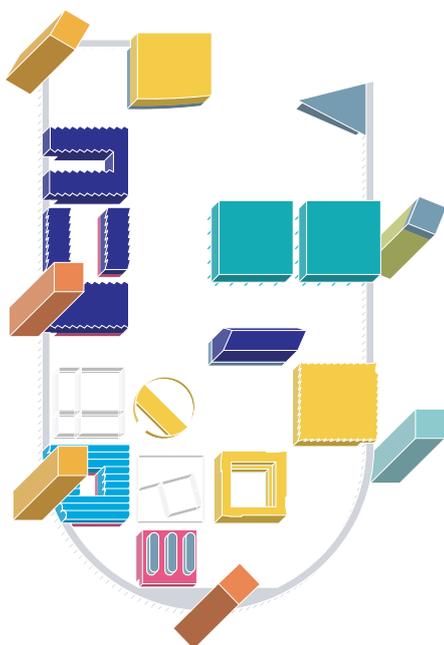
The widespread geometrical pattern of pedestrian circulation along the grid which also connects the system with the surrounding roads is complemented by more informal paths crossing the green areas of the park.

### Implementation process

We propose a 10 year horizon for the implementation of the project spanning from 2020 to 2030. More than a specific timeline, we propose a general strategy that keeps together economical aspects of the intervention and the need to have a strong symbolic and communicational impact on the development of Karlovac.

The modification of the Lušćić area shall begin in 2020 with the demolition of the dilapidated buildings of the former barracks in order to make the area safe and accessible to the public. Particular attention will be devoted to the preservation of the existing tall vegetation. The whole area of the former base will then undergo environmental remediation works, that will precede the superimposition of the grid pattern of pedestrian circulation paths on the project site and on the green area

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- Total GFA: 126.700 m<sup>2</sup>
- Housing GFA: 17.200 m<sup>2</sup>
- Social Housing/guesthouse GFA: 17.200 m<sup>2</sup>
- Student Housing GFA: 8.600 m<sup>2</sup>
- Hotel GFA: 7.000 m<sup>2</sup>
- Congress Halls GFA: 10.000 m<sup>2</sup>
- Bars/Restaurants GFA: 6510 m<sup>2</sup>
- Co-Working / Office GFA: 20.000 m<sup>2</sup>
- Workshops GFA: 9600 m<sup>2</sup>
- Retail GFA: 13.800 m<sup>2</sup>
- Educational/Culture/ Public service GFA: 16.800 m<sup>2</sup>

stretching between the Lušćić ulika and the Ivana Meštrovića ulika. This process can be completed within 18 months and will allow for a first stage of re-appropriation of this space by the public. This stage of the project will provide the city with a large new park where big public events such as concerts or festivals might be held. General electrical, waste water and heating infrastructure will also need an update and should be implemented at an early stage of the process, creating the necessary conditions for private investments on the area. The area should also be linked to the public transportation network, including the new tram line. We then propose to start the building phase from the highest revenue activities, such as the hotel and convention centre. This approach will secure funding necessary for building public facilities such as the primary school, open air sports facilities, kindergarten. These public uses will attract new users to the area, which will be subsequently completed through the construction of the innovation park, with co-working spaces, workshops, commercial and recreational activities. The residential towers and student housing will then built and public facilities completed. The last step of the project in 2030 foresees the construction of the porch, which completes the urban figure of the campus by linking spatially all the buildings.

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Timeline

