



## PORT OF DEMOCRACY

The competition site is located in the north of a former Vilnius suburb of Lukiškės, in the front of Neris River. Since the XVII century Tatar settlement formed a village with cemetery and a mosque, that was demolished only during XX century, before the development of 60's administration buildings for institutes of technology of the time. Lukiškes is also know for historical river port, though to the south west from the competition site, due to dramatic river bend in front of the site. Therefore, from an urban planning point of view, riverfront urban fabric in A. Goštautas street follow a naturally meandering shape of the river and accordingly naturally shapes a curvy front line of urban blocks, with more iconic corner buildings at more intensive streets junctions. This urban logic was mainly developed in the end of 19th-20th centuries, with some minor exceptions. Meanwhile, the built environment in an urban block of this competition does not follow this logic perhaps, due to significant river bend. This bend is considered as an obstacle why the site did not become a river port itself as its neighboring sites to south-west earlier, and why in 1969 Institutes were built as free-standing plan shape. The lack of hierarchy of public spaces and natural forms of buildings facing river in a long term affected the place so, that after more than 50 years the area left with outdated administration buildings, lack of identity, with no public spaces, commercial attraction and limited amount of residents.

The main urban and landscape design conceptual idea is to renew the area of competition by forming a clear urban perimeter block with an administrative governmental center, that integrates, enhances and activates public spaces at historical and natural links on site between currently weakly populated Lukiškės urban area and the natural riverfront landscape, while the area itself becomes the new Port of Democracy.

This Port of Democracy is a symbolic urban facility comprising a complex of national administrative buildings and set of public space at the edge of Neris River, where architectural, urban design, cultural heritage and landscape architecture solutions creates democratic synergies.


## 1. URBAN DESIGN CONCEPT

The site territory falls within a cultural heritage area of Vilnius Naujamiestis, which is dominated by perimeter block development. Therefore, our architecture aim is to make 3 types of interventions to enhance the perimeter: 1. Renovate existing buildings which contains a clear perimeter from Goštauto, Mečetès streets and dismount existing sills to create entrances from ground floor all around perimeter.
2. Enhance the lack of perimeter at existing buildings at Goštauto street by repairing them based on river curved line.
3. Build new architecture volumes in Lukiškių and Mečetės streets junction both forming a clear perimeter from both 2 streets and open Flag plaza as en entry place.

## Historical Links

To fit well with an immediate urban context, historical links divide perimeter block into 3 urban blocks and following the maintained 1960s volume rationale - all buildings are separeted in order not to make additional connections from Mečetės street. At the same time, we propose dividing Goštauto 12 building to built additional entrance to the urban block from Western side. These historical links are used to build a sustainable modern city connection towards the river embankment through competition urban quarter.

## Courtyards

Proposed 3 urban blocks emphasizes 3 unique yards:

1. Plaza of Democracy, a hard paved meeting space for events, concerts and other cultural agenda.
2. Tatar Garden, a historical cemetery place with mature trees reinforced with additional vegetation and activities for children playground to create a public square
3. Residents Garden, a more private garden with mature trees with additional biodiversity.

## Green Links

Considering that Neris River embankment is a priority public space based on Cultural heritage and City Masterplan we shape the historical links as green corridors with added vegetation, which requires little maintenance but creates strong natural connection for biodiversity. Following that, relatvively with an upgrade on pedestrian accesibility, the amount of people in the embankment of Neris River grows, as well - new River Peer, with 2 observation decks are planned, in order to regenerate the urban and water relation.

## Riverfront Development

Following that bended Neris River embankment is the main natural element forming urban blocks in an urban blocks at the river edge our proposed northern side of the urban block supplement the naturally bended line of urban blocks and enriches the urban fabric with a corner tower with a publicly accessible observation deck towards Neris river bend and harmoniously integrates with "Vilniaus vartai" project and marks the Goštauto/ Geležinio Vilko street junction with an iconic clock tower, also a feature found in riverfront of Neris Facades.

## Street design

The streets design around the territory is updated following the main principles of Vilnius Street Standard. Mečetès street, with an update on the pedestrian widths, urban greenery and the motorway becomes important commercial street, with short term car parking and slow car traffic.
Lukiškiụ street and A. Goštauto street design updated regarding cycle paths and 4 extra pedestrian crosses to sustain historical link from Lukiškès suburb to the riverfront.

## Ground Floor Entrances

Around all perimeters entrances are planned. New entrances to renovated buildings from street level are planned by lowering the ground level around.

## HISTORIC LINKS

1. Urban block is divide into 3 parts based on historic links. In the junction of these links new Flag square continuing Lukiškiụ axis is formed.
2. New development forms connections on historical paths and cemetery locations

## GREEN LINKS

Greenery inside courtyard is extended via new links towards river quay.
From the opposite side, New development is formed following bended natural river surroundings.

## URBAN CONTEXT

Based on urban context, built shapes of Lukiškių street, closed perimeter urban block is formed by rotating the corner building,
heights of other buildings are adjusted relatively to the competition task and context.

## SUSTAINABILITY

Volumes in Lukiškių street are divided to bring natural sunlight from the south-west direction towards green garden.
Top floors of alley buildings are recessed in order to make the buildings look smaller from human scale.



## 2. ARCHITECTURAL CONCEPT

The main architectural design conceptual idea is to create a synergy between existing historical urban and cultural fabric and integrate buildings of 1960s with new volumes adding the innovative, sustainable and climate positive intervention into a coherent destination. Therefore series of rational office cubes and cuboids articulated to balance in human scale, enhance dynamic public elevation and allow for $24 / 7$ activity with an accessible ground floor created a vibrant neighborhood.

- Our approach is to preserve historical Tatar Cemetery zones with natural vegetation and no built structures on it. Therefore, we form an open Tatar Arch building in the River alley to indicate the presence of historic cultural layer and visually connect River Alley with Democracy Square. New path is formed in River Alley on the cemetery, but maintaining the existing levels of soil, just lifting the the object itself.
- In the Perimeter of the Quarter we propose a rhythm of Cube Volumes with Pauses creating a dynamic elevation. All pauses reflect historical urban context:

1. Lobby yard between Twin Cubes allows more transparency and sunlight to enter to Tatar Garden.
2. Historical Links divide quarter in River Alley and Mečetés Street to emphasize human scale.

- Ground floor level of facades are different from upper floors pulses in height, depending of the activity of public space in translucent curtain wall facade as a modern interpretation of Rustic facades of stretched rectangles of Vilnius Naujamiestis facades a human level.
- Upper floor levels Office Grid of Windows continuous the logic of contextual rhythm of Vilnius Naujamiestis rational facades (walls with grid of windows)

Our proposal is built on an idea, that each building in the Ministry quarter should have a unique individual architectural character, with a unique material and facade aesthetics, but follow all architectural principles mentioned above.
Therefore we shaped the serie of five buildings forming smaller urban blocks:

## G12 CLOCK TOWER EXTENSION

Our urban analysis of the typical Vilnius riverfront urban fabric solution shows, that perimeter blocks at more intensive streets intersection requires a more iconic landmark, Thus, we propose the maximum allowed height building at Geležinio Vilko street and A. Goštauto. The location itself is suitable for public observation deck considering the curve of Neris, which initiated the suburb of Lukiškès establishment.

## G9 PRISM EXTENSION

The building G9 is built in a free standing urban shape. The prism shape building plug-in creates a minimum architectural intervention in existing building without any demolition of existing building itself, but conceptually, the more compact urban shape allows for more activities to happen in the ground floor in the riverfront. Existing needs renovation of facades to remove the sills at the ground floor and demolish the slab between current basement floor and ground floor. This would allow the building reflect current needs.


## G11A TWIN CUBES

The building both visually and semantically, being in the perimeter of Lukiškių street is a gateway to the Tatar square. Thus, our idea is to divide this cuboid building in two Cubes with a cut for Lobby and Sunlight to enter to the yard.
Facade is made of CLT Wooden pallets, with integrated shading in the southern side - facing Lukiškių street.

## G11B STRETCHED CUBE

Building reacts to the immediate urban context of axes of Lukiškių and Mečetės streets and newly formed square Flag Square.
Facade is made of Stainless Steel and curtain walls. The vertical facade elements are planned as natural shading southern side - facing Lukiškių street.

## G11B TATAR ARCH

Tatar Arch building in the River alley indicates the presence of historic cultural layer and visually connect River Alley with Democracy Square. Top floors are recessed in order to balance human scale inside the River alley.



# New development roofscape line (Quarter of Ministries) <br> Valuable existing roofscape line, in terms of highest buildings and cultural heritage <br> Green Valley line 

## Existing and New roof scape Landmarks

Proposed volumetric scheme does not overlap with existing valuable panoramic views defined in the heritage register and current situation landmarks: The Lukiškès prison church, towers of Vilnius vartai and upper Naujamiestis objects. At the same time it falls well with proposed extension (Blue line) zone. Meanwhile, scheme defines an intersection between A. Goštauto street and Geležinio Vilko street, with a clock tower enhancing the River bend and perimeter and also complimenting the composition of Vilniaus Vartai and marking the junction with landmark.

## Materials and forms from Vilnius Naujamiestis

Proposed materials and color scheme is basend on the shapes and materiality from the urban context: Rustic facade, Naujamiestis urban grid facade, wooden buildings among the masonry, yellow brick facades, classic steel roofs.



## 3. PROPOSAL FULFILLMENT OF COMPETITION TERMS AND CONDITIONS

### 3.1 Functional planning

Our ambition is to create an environment, where public administration, social, commercial and recreational functions coexist and the needs of different interest groups meet. Thus, all commercial activities and spaces are designed with separate access from the outside, no back-sides and entry possibility all around the facade at GF. As well, terrace possibility around the building perimeter are planned, in order to get the maximum synergy from commercial and active ground floor.

Functionally, ground floor maintain all different groups of users, including public functions, and where the maximum amount of functions coexists. Therefore we aim, to achieve the client needs in the smart design GF. Following that, each cube shares one lobby between two or more ministries. Twin Cubes building has an extended lobby, which works as an additional entrance to Tatar Garden, can also be used a event space with having external entrance control. Shared lobbies creates more synergies, and allows to save space, e.g. security block is shared, so the amount of space needed is smaller. Twin Cubes are planned with shared meeting, reading and press rooms, that can be used by all ministries, in the ground floor, next to Lukiškiy street, where the space is least attractive for commerce. Staff children rooms are planned next to Daycare center, so that shared personnel and children playground can be shared. Both of them are located facing Tatar Garden, in order to face natural view, use outside space and playground infrastructure. Canteen is planned facing the Flag square, in order to have a direct access outside to terrace and have a possibility for events to expand outside to the square. Employees can access canteen from a lobby.
Conference center is planned between Alley Cuboid and Flexible Cube building. Centre has 6 halls and technical rooms, all transforming for various uses, e.g. seminars, conferences or training. Location facing Democracy Square allows the conference infrastructure to be extended towards Square of Democracy.

Each building has a clear structure of staircases, in order to suggest healthy and sustainable circulation instead of using elevators.
Premises facing Mečetès street are dedicated for intensive commerce, supporting external activities operating after working hours.

The offices are flexible and are suitable for everything from activity based offices with differentiated zones, to regular open landscape or cellular offices. The cores are used for services and meeting rooms. The raised access-flooring allows to reorganize the offices with minimal impact on installations.

### 3.2 Integration of sustainable and energy saving solutions

Our sustainability approach for Quarter of Ministries comes from the idea of designing a climate-adapted building that integrates passive strategies to reduce its energy demand.

## Management systems

For the individual user experience an app should be created, in order to modify not only the individual climate control but also matters like car pooling for employees to arrive to ministry quarter. The indoor air quality (IAQ) plays an important role in the users' well-being and productivity. For this reason, the mechanical ventilation will be carried out by a Demand Control Ventilation (DCV) system. Indoor air quality will be monitored in the Building Management System (BMS) by $\mathrm{CO}^{2}$ sensors that will maintain a concentration lower than 800ppm in the office areas. The exterior air quality will also be monitored to allow the use of integrated natural ventilation systems when possible. In addition, the supply air will be humidified with the help of spray mist that irrigates the plants.

## Transport

Proposed scheme develops of electric car and bicycle infrastructure on site. Carpooling to arrive to job can be promoted via local system app, which function can be extended from controlling the climate individually to car sharing. Strong pedestrian connections are planned for residents of the surrounding areas, universal design principles are being followed.

## Energy and water use

To achieve the BREEAM Outstanding classification, the chosen energy systems are primarily based on renewable energy sources, high efficiency, and low operational cost. Heating, ventilation, and air conditioning (HVAC) will consist in a hybrid GEOTABS system, composed by a Ground Source Heat Pump and a Thermally Activated Building System (TABS). The geothermal heat pump will be powered by the electricity produced by the photovoltaic (PV) panels located on all roofs of the buildings. Any surplus, if any, electricity generated will be made available within the building facilities for electric mobility.

Lighting systems will be based on Light Emitting Diode (LED) technology and will have daylighting and glare control, with integrated sensors to switch it on at dusk and off at dawn. This system will be controlled by the Building Energy Management System (BEMS) to allow dimming the intensity of the luminaries during daylight hours to reduce energy consumption associated with artificial lighting.

## Materials

A natural material covered building envelope with low thermal transmittance materials and high-performance glazing, together with the use of integrated high-efficiency energy systems based on renewable energy sources, complete the building's sustainability approach aiming for the highest sustainability ambitions, including an A++ energy class a BREEAM Outstanding classification result.
The external identity of the complex is created with glass and wood - glass is used for the maximum amount

of daylight for offices, thus ensuring the comfort of employees and flexible options for office layouts. Wood both in inside and outside, as a key material, was chosen to create a subtle nuance to the environment, as the location still has visible wooden single family houses in the closest area, but at the same time give the building solidity and naturalness.

## Waste

Current buildings demolition waste ir planned to reuse for sustainable waste sorting, Preservation Goštauto 9 and Goštauto 12 buildings is considered as an ecological solution, in order to diminish the amount of construction waste.

## Ecology

As part of our design approach, we have introduced biophilic design as both our indoor and outdoor design strategy. The introduction of small to medium plants in these office spaces will not only create a more pleasant working experience, but will also improve the air quality, reducing the CO 2 concentration generated by the users through the natural photosynthesis process of plants. This can potentially generate savings in the operation of the mechanical ventilation system for indoor air quality. Exterior mature greenery promotes the better psychological health of the employees.

## Water management

A water treatment plant will be integrated in the building's water supply service, allowing to reuse the rain and storm water in toilets and for irrigation. The collection of this rain and storm water will be done through the pond on the outdoor space acting as a water retention system. Moreover, fixtures for water conservation will be installed in lavatories and showers as well as water saver toilets.


CLT WOODEN PANELS
Building G11A_Twin Cubes

ANODIZED BRONZE ALIUMINIUM
Building G11B_flexible Cube

LIGHT GREY CLINKER BRICK Building G11C_Cuboid

LIGHT YELLOW CLINKER BRICK Buildings G9 G12 RENOVATION


## 4. PLANNING OF PUBLIC SPACES

Our design addresses enhancement of historical links by adding more natural vegetation and all periphery facades at ground floor of these links are planned with shop windows, cafes and open offices to create a safe public space. We avoid blind walls in the ground floor facades for the same reason. During Phase I public space infrastructure on phase I territory will be built, including pedestrian paths, cycle paths, garden, alley and squares.

Main historical links directs towards the main public spaces of Naujamiestis:

1. Square of Flags - extends Lukiškių st. direction from GF to $3^{\text {rd }}$ floor, creating both visibile entrance and covered public space. New pedestrian crossing is planned at the location to link via Lukiškių and Washington squares
2. Both River alley and Tatar Garden entrances - adds up new pedestrian crossings towards River embankment and towards Independence Square and Gynèju st.
3. Mečetès street will be elevated to the height of pedestrian trails. Pedestrian and cycle paths will not come down to the street level at all intersections with entries to courtyards, stores, parking areas. Mečetès st. perimeter at GF will have entrances and shop windows.
4. Square of Democracy and Tatar Garden adds up new urban public spaces that compliments the surrounding area and attracts not only employees but both residents of surrounding areas and guests of Vilnius in the case of event ar daily use.
According to the Brief main convienient servicing of the area by motor vehicles is design via underground parking, which is accessed via Mečetès st., smooth accessibility by bicycle and on foot, and propose ways to reduce restrictive effect of $A$. Goštauto, Lukiškių and Geležinio Vilko streets.
Closed perimeter block creates safe inner space for Garden, Sqaure and Alley, this is both common to Naujamiestis urban fabric and also propose a clear way to reduce restrictive effect by the walls of buildings of A. Goštauto, Lukiškių and Geležinio Vilko streets.



## 5. DIAGRAMS OF TRANSPORTATION AND PEDESTRIAN FLOWS

Our design addresses enhancement of historical links by adding more natural vegetation and all periphery facades at ground floor of these links are planned with shop windows, cafes and open offices to create a safe public space. We avoid blind walls in the ground floor facades for the same reason.

Main historical links directs towards the main public spaces of Naujamiestis:

1. Square of Flags - follows the Lukiškių st. direction from GF to third floor, creating both visibile entrance and a clear covered public space. New pedestrian crossing is planned at the location to link via Lukiškių and Washington squares
2. Both River alley and Tatar Garden entrances - adds up new pedestrian crossings towards River embankment and towards Independence Square and Gynėjų st.
3. Mečetés street will be elevated to the height of pedestrian trails. Pedestrian and cycle paths will not come down to the street level at all intersections with entries to courtyards, stores, parking areas. Mečetés st. perimeter at GF will have entrances and shop windows.
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Closed perimeter block creates safe inner space for Garden, Sqaure and Alley, this is both common to Naujamiestis urban fabric and also propose a clear way to reduce restrictive effect by the walls of buildings of A. Goštauto, Lukiškių and Geležinio Vilko streets.

## CAR FLOWS

Car flows are organized around the territory streets, clockwise, as the current traffic, around the urban block. In Mečetės street, the only location car can turn left - the entrance to major underground parking lot is planned, via slow traffic zone. Perspective underground parking is planned in A. Goštauto 12, in the new building zone. Entrance to this underground parking - via A. Goštauto street.

## CYCLING FLOWS

Good accessibility of the area for nonmotorized vehicles is ensured by the existing cycle path along the upper part of the Neris embankment. New cycle paths are proposed in Lukiškiu street and A. Goštauto street, in order stimulate the use of sustainable mobility. In the territory, based on the Street Manual of Vilnius, are not designed.

## PEDESTRIAN FLOWS

A strong emphasis is placed on convenient accessibility to the area on foot, making these connections a priority guideline for the development of the block.
Flows from southern and south eastern sides emphasizes the historic routes and major public spaces of the quarter are planned on the entry points to it.

## PUBLIC TRANSPORT FLOWS

Current public transport routes are quite limited in the area, considering the amount of alternatives, thus we consider that existing public transport situation will be modified and more public transport will use Goštauto st. station, both sides. Meanwhile, existing stations are integrated in to design, and pedestrian flow from/to public transport station is considered.



## 7. ESSENTIAL BUILDING STRUCTURAL SOLUTIONS NEW BUILT AND

Currently the territory is dominated by cars inside courtyards. By the proposal, it is transformed completely, changing the priority for pedestrian flows. Car flows are organized around the territory streets, clockwise, as the current traffic, around the urban block. In Mečetes street, the only location car can turn left - the entrance to major underground parking lot is planned, via slow traffic zone. Perspective underground parking is planned in A. Goštauto 12, in the new building zone. Entrance to this underground parking - via A. Goštauto street. In front of all office buildings in the perimeter - places for delegation parking are planned. On the ground level, paralelly to the street, short term and electric car parking places are planned in Lukiškių, A. Goštauto and Mečetés streets. All street parking is planned with drop off places all around the buildings of the block.

No motorized vehicle traffic is foreseen within the block, with the exception of special emergency vehicles. Maintenance of the buildings is to be carried out via the underground part of the building. Good accessibility of the area for non-motorized vehicles is ensured by the existing cycle path along the upper part of the Neris embankment. New cycle paths are proposed in Lukiškių street and A. Goštauto street, in order stimulate the use of sustainable mobility. Dedicated cycle paths are not provided on the site, and incoming visitors and employees are guided by a ramp to the underground level where the main storage facilities are organized. Additional bike parking racks are placed at all entrances to the territory. A strong emphasis is placed on convenient accessibility to the area on foot, making these connections a priority guideline for the development of the block. We identify the connection to Lukiškių Street as one of the main accesses to the new area, as it is the main access for the movement of people from the public transport stop and the larger public transport hubs, from the White Bridge, from the upper New Town. Thus, a new pedestrian spot is planned, Flags Square extending the axis of Lukiškių street into the quarter.


## 8. INDEXES



|  | Name | Quantity / Index | Comments / Calculations |
| :---: | :---: | :---: | :---: |
| Land plot | Goštauto 11 |  |  |
|  | Land plot area | $14527 \mathrm{~m}^{2}$ |  |
|  | Development Intensity | 2.18 |  |
|  | Development Density | 0.47 |  |
| Building | G11 |  | Currently under construction (Not in a competition) |
|  | Built on Area | $1877.17 \mathrm{~m}^{2}$ |  |
|  | Gross Floor Area | $8938.40 \mathrm{~m}^{2}$ |  |
| Building | G11A | $6655.96 \mathrm{~m}^{2}$ |  |
|  | Number of floors | 7 |  |
|  | Building height | 28 m |  |
|  | Use of the building: Office | $10029.90 \mathrm{~m}^{2}$ |  |
|  | Use of the building: Commerce | $904.40 \mathrm{~m}^{2}$ |  |
|  | Built on Area | $2228.40 \mathrm{~m}^{2}$ |  |
|  | Gross Floor Area | $10934.30 \mathrm{~m}^{2}$ |  |
|  | Surface Volume | $51979.00 \mathrm{~m}^{2}$ |  |
| Building | G11B |  |  |
|  | Number of floors | 7 |  |
|  | Building height | 28 m |  |
|  | Use of the building: Office | $10658.30 \mathrm{~m}^{2}$ |  |
|  | Use of the building: Commerce | $1180.70 \mathrm{~m}^{2}$ |  |
|  | Built on Area | $2710.90 \mathrm{~m}^{2}$ |  |
|  | Gross Floor Area | $11939.00 \mathrm{~m}^{2}$ |  |
|  | Surface Volume | $52718.00 \mathrm{~m}^{3}$ |  |
|  | Underground Volume | $40112.00 \mathrm{~m}^{2}$ | Underground parking under buildings G11A and G11 B |
|  | PHASE I, $1^{\text {sT }}$ LEVEL OF DETAIL | $22773.30 \mathrm{~m}^{2}$ |  |
|  | SPACES WITHOUT ACCESS CONTROL | 3385.00 / 15\% |  |
|  | Common areas | $1300.27 \mathrm{~m}^{2}$ |  |
|  | Synergistic commercial functions | $2085.11 \mathrm{~m}^{2}$ |  |
|  | Underground/ On-ground parking places | 338/44 | PHASE I parking places calculation: 326 places ( 1500 employees requires $14890 \mathrm{~m}^{2}$ gross area of workspaces. Office needs: $14890 \mathrm{~m}^{2} / 25 \mathrm{~m}^{2}$ *0.5 $=298$. Commercial Space needs used by visitors: $1689 \mathrm{~m}^{2} / 30 \mathrm{~m}^{2}=28,298+28=36$ STR 2.06.04:2014 "Gatvès ir vietinès reikšmès keliai. Bendrieji reikalavimai"). We consider, that Phase I underground parking will be used for the employees parking, and extemal places can be used for Phase Oir Phase II employees. Visitors parking is planned in on-ground includes drop-off for delegations and can be modified in technical project phase. |
|  | SPACES WITH ACCESS CONTROL | $19318.00 \mathrm{~m}^{2} / 85 \%$ |  |
|  | Meeting and co-working spaces <br> Offices for ministers and their teams | $\begin{aligned} & 583.00 \mathrm{~m}^{2} / 3 \% \\ & 747.00 \mathrm{~m}^{2} / 4 \% \end{aligned}$ |  |
|  | Workspaces for ministerial staff <br> Functional backroom spaces | $\begin{aligned} & 14892.00 \mathrm{~m}^{2} / 77 \% \\ & 3095.00 \mathrm{~m}^{2} / 16 \% \end{aligned}$ |  |

