



WE HAVE

VE A DREAM



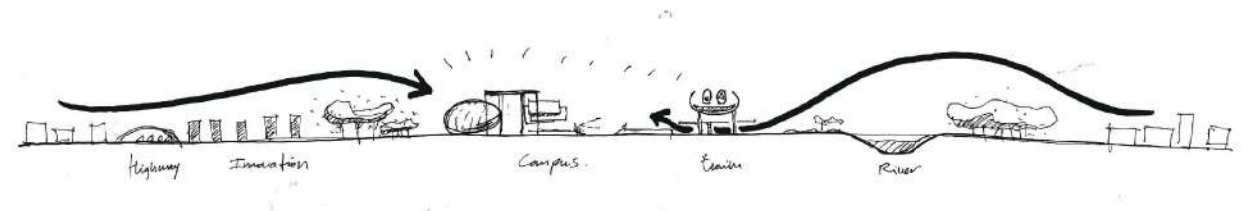
## BITACORA OF A TRIP TO THE FUTURE OF ITMO HIGHPARK .....AND THE CITY OF YUZHNY

Creating a Place that becomes the **MAGICAL SPACE OF THE FUTURE OF HUMANITY** was the first association in my mind when reading about the desire to turn ITMO Highpark into a new "Mecca of the Architecture". I believe Architecture is the Creation of Spaces for Life and if that is ITMO Highpark's goal then we believe we are the right architects to support you throughout this process. Changing paradigms is not an easy subject. It requires a collective effort that allows the dreams and illusions of many generations to be translated into stone. The focus of refoundation should not be elitist and should instead follow a Convergent and Inclusive Philosophy.

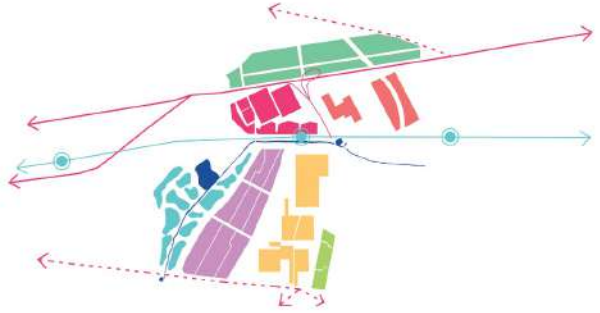
We are convinced that a **HOLISTIC ARCHITECTURE** is the right answer to solve the **HABITAT** at the beginning of the Third Millennium. We refer to an equitable and integral approach that includes all the disciplines and interests that shape the Constructed World.

Inventing ITMO Highpark and its own built environment based on little amount of data forced us to work as **SCOUTS OF REALITY** Architects. With this I mean, to go out and look for clues or hints in those many non-urbanized hectares.

It was not an easy task but we decided that the **FOUNDATION STONE** of the Vision we want to develop had to come from **THIS** specific place and not from the Virtual or Global World.







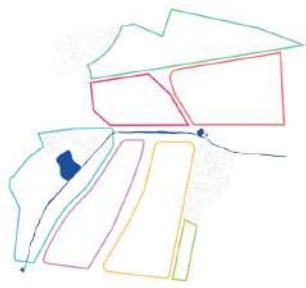
transport concept



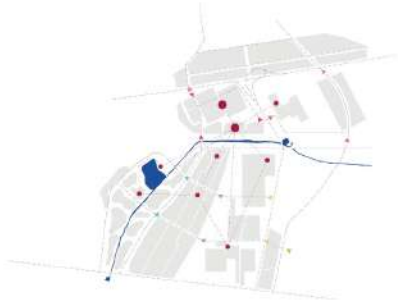
green areas



matrix concept



site plot



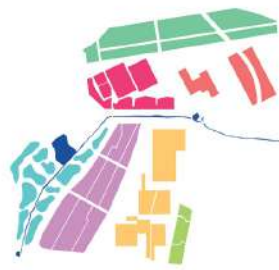
uses and connections



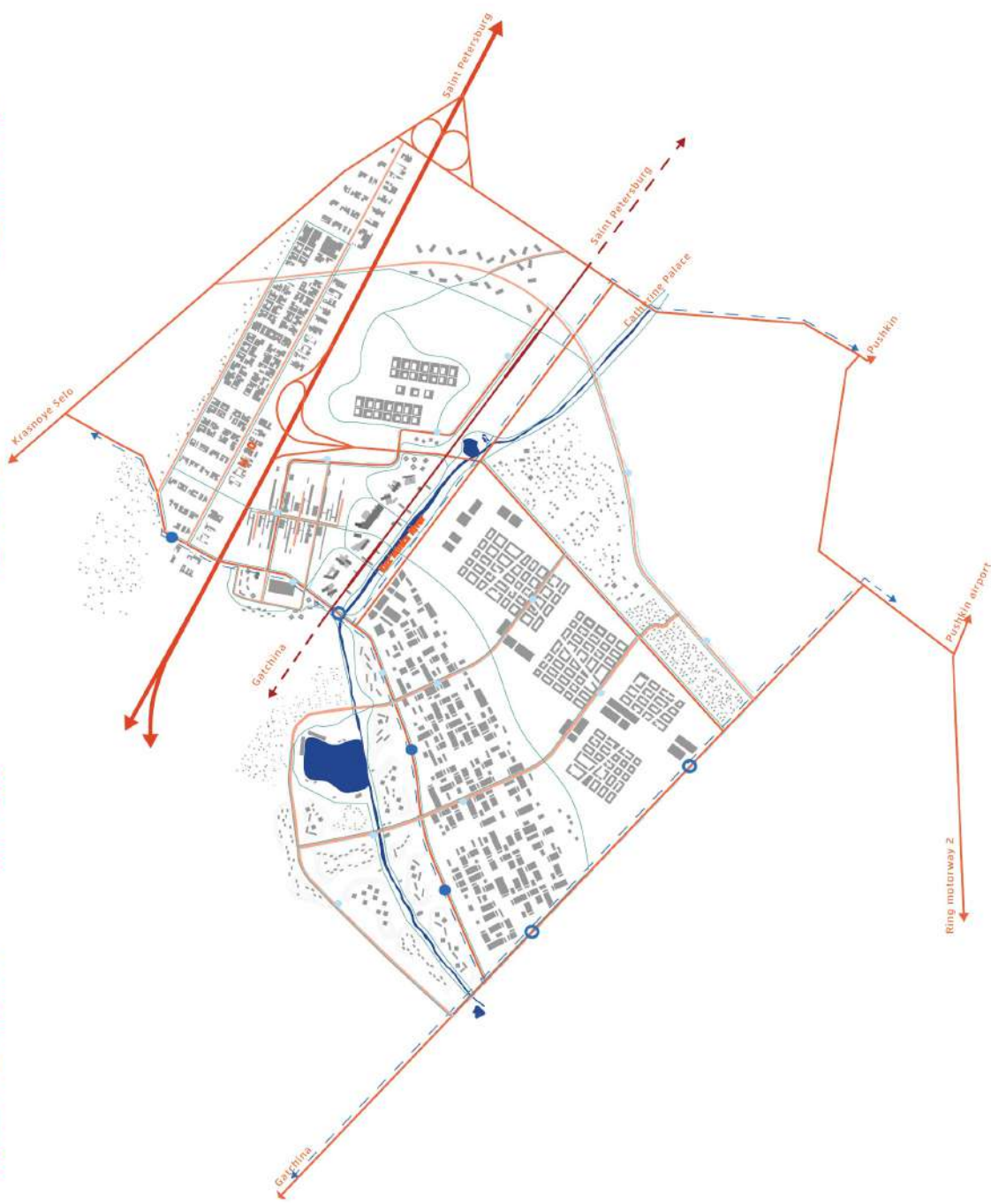
built areas



active areas



area formation



mobility between the urban islands of yuzhny



Thus, the first TRACE aims to celebrate the **CONNECTIVITY** role that the railway plays in ITMO Highpark. Therefore, we decided to elevate the train so that it is not a barrier between the future campus and the City of Yuzhny anymore, but that it becomes part of its identity. This is the origin of the **ARCHES** that enable the access to all sectors of the new urbanization in Yuzhny and to its centrality at the ITMO Highpark.

The second TRACE is intended to celebrate the **WATER** that, for this new city, should be discovered as a symbol of respect for the land that protects it. The few visible water mirrors led us to discover its current towards the Katherinenpark in the Puschkin Palace. This sap of life, not artificially treated but ecologically preserved, forms the riverside banks for the regeneration spaces of ITMO Highpark. This reinterpreted natural environment will not only increase the surplus value of the land but will also allow us to understand what an **ECOLOGICAL URBAN PLANNING** means.



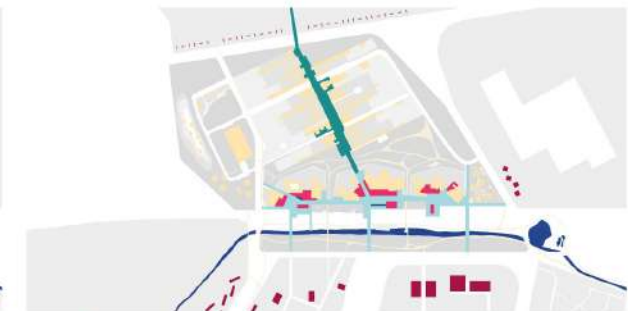
fluid landscape



entrances



accessibility and parking



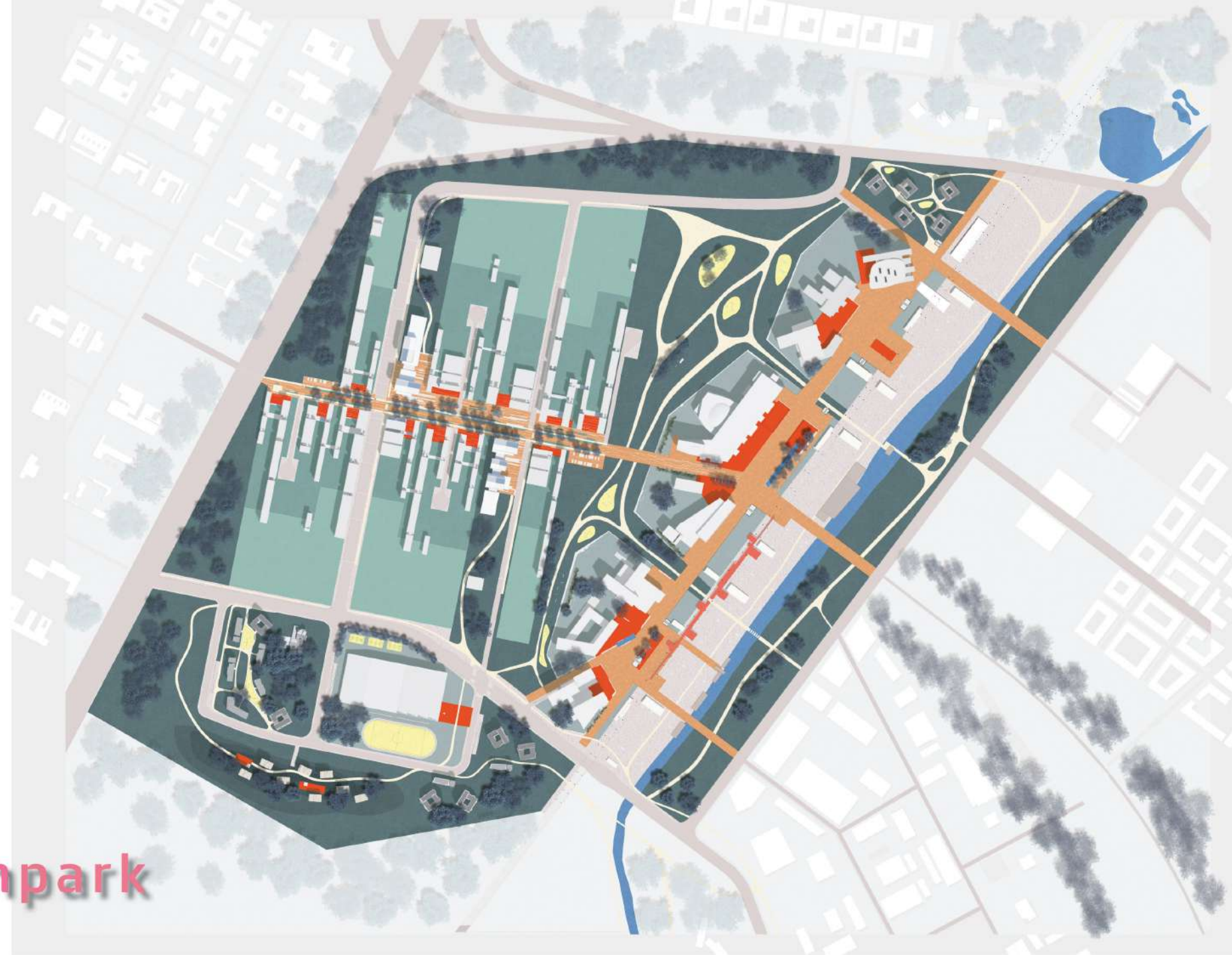
meeting areas



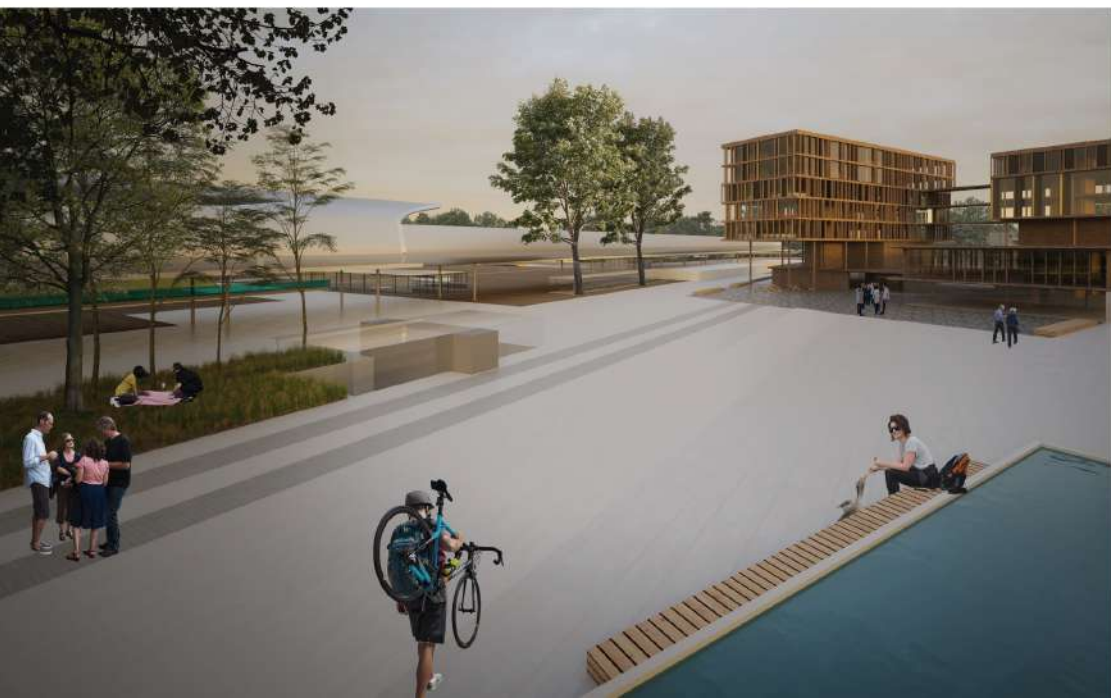
We understood its vocation and how to **CREATE THE LANDSCAPE** based on these two landmarks. In other words, we understood that it does not matter how long it takes for the **NEW HABITANTS** to settle down in this **CITY OF THE FUTURE**, because the **Natural and Urban Landscape** preceded them. Why is this topic so important? There is nothing more adverse than new built environments that produce detachment, cocooning and vandalism. This is typical of **unconsolidated urbanizations** without identity. We refer to the essential and fragile notion of **BELONGING TO A PLACE**.

What does **URBANITY** mean in the City of Yuzhny? What does it mean to create **CENTRALITY** in the ITMO Highpark? For us, the streets in the city are fundamental. We appeal to have incentives and invites for people to assemble along the public spaces of the city and **SPEND TIME IN SOCIETY**. Hence, we understand that a **CONTINUOUS SUBURBAN** configuration, would be the inadequate answer, because it would not offer inhabitants the necessary **INVITATIONS** to awake their **CURIOSITY**.

ecosystem  
ITMO highpark







South of the River ... We found four different HABITAT DREAMS.

We start from West to East by the 12 HILLS around the Lake of Illusions that will allow us to create Microworlds on the HILLS with Community Gardens, Running Tracks, Yoga and Dance Spaces or balconies as viewpoints. It is fascinating to realize that, in the context of this HORIZON CITY, elevating means dreaming!

To be part of the COMMUNITY tailored to human scale and organized around PRODUCTIVE PATIOS which invite to create COOPERATIVES and new NEIGHBORHOOD ties is the dream of many young families. The feeling of being part of a larger SCENE by having spaces for housing and work and free time in small microenterprises is fundamental.

But there are those who enjoy devoting much of the day to SPORT and CULTURE and that is why we have the LEISURE ISLANDS with INTERIOR PATIOS inserted in an idyllic landscape. Here one can find the most varied offers of cultural stimuli as well as individual and group physical activities. It is paradise on earth for those who do not want to get in the car to go running in the woods.

And what do we do when young singles or families have the DREAM OF INDIVIDUAL NEST with less contact with their neighbors. Living with DESIGN in a different artificial REALITY is the BRAND of those who seek to differentiate themselves from the suburban mass in this city.

Who were the architects, TROUBADOURS OF A BETTER WORLD that achieved planting these seeds to create this MAGICAL PLACE? I do not know if it matters, as I really feel that it has been a collective effort of thousands of people that allowed us to believe in a BETTER WORLD.

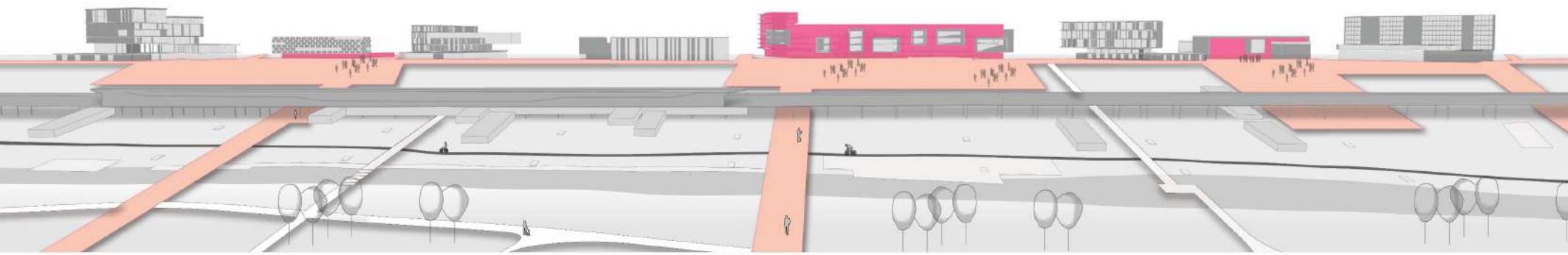
And what happens when we want to go to the CENTER? We can go walking through the BOULEVARDS. We can go with the SHUTTLE BUS through the Avenue of the Newness, or by skating or biking along the Boulevard of the Youth Olympics that show us the best LOCAL, REGIONAL and WORLDWIDE INVENTIONS to live in HARMONY WITH THE COSMOS.





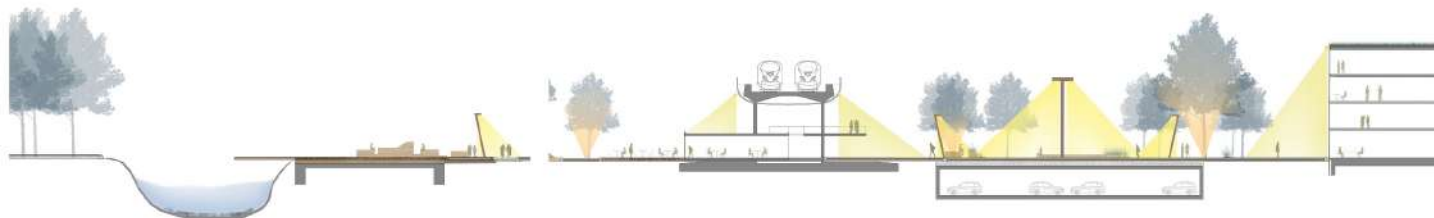


holistic village  
ITMO highpark

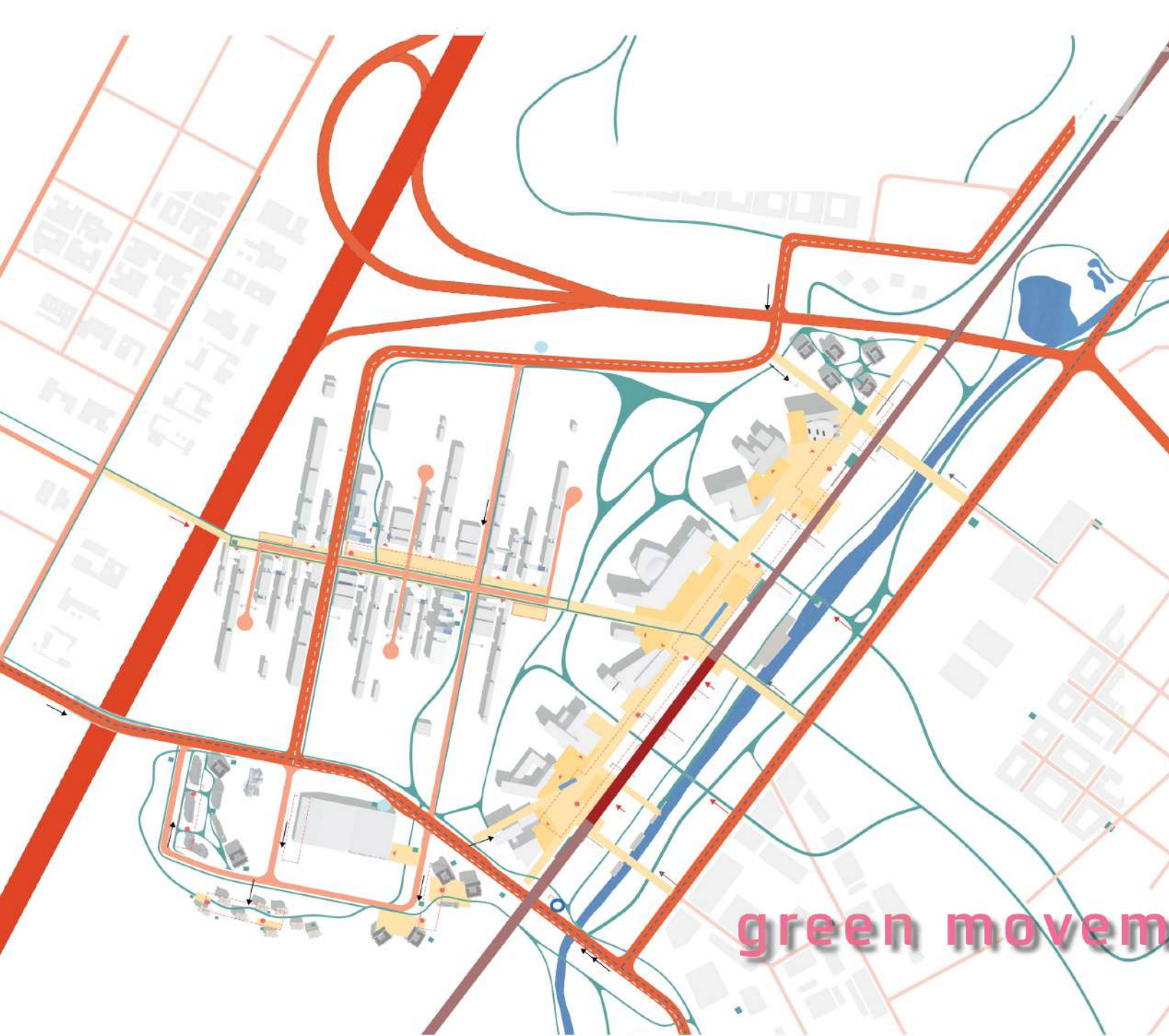




making visible to have urbanity 24/7







Whichever path we decide to take in the everyday life, we will arrive at the ARCADES OF YUZHNY with all its bars and meeting places before going through the new EXHIBITIONS of the DIPLOMAS and DOCTORANTS of the ITMO University. Did you know that each PLAZA has a SPATIAL INSTALLATION TRIBUTE to the NOBEL PRIZE Laureates that have studied or taught at ITMO? I do not know if that exists in the most prestigious universities in the world but I am proud to know that my children can be part of this URBAN MIRACLE!

In light of the Center being a living Organism, it surprises me every time I visit it, either because a new building was inaugurated or because some of the Squares finally implemented the Light and Sound shows with the Ecological Artificial Rain that they had promised since we moved in. There is no doubt my family and I do not know which will be our first stop to visit next time. I think we will start during the warm hours of the noon, sit down and have lunch, enjoying these events at the Science Center, since today there will be a show of Mimes of Instability accompanied by the new Robots of the ITMO.

Maybe we should go through the Aula of the "Waterfall of Wisdom" at the main Building before walking to the Innovation Park. I have been told that it is very attractive from the Transversal pedestrian street to see the Scientists and scholars discussing about the Future of Science on those Capsules that are suspended from Heaven. It's very nice that ITMO has decided to build buildings that share the development of knowledge with people like us. I really feel part of a community in which I can participate by leaving messages about my free associations in the mailboxes of the Plaza based on what I do. Maybe this will help my children to feel proud on how we have contributed to the development with a little grain of sand.

green movement

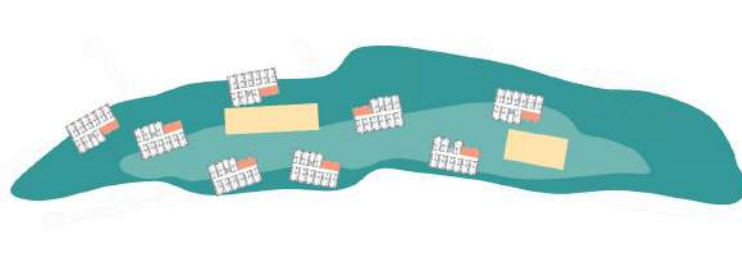




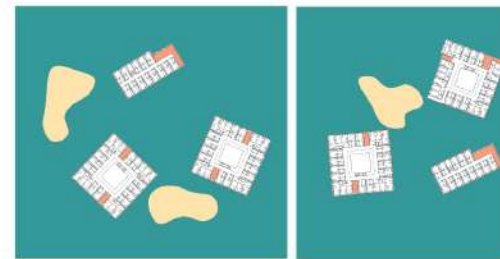
STUDENT RESIDENCE UNIT 04



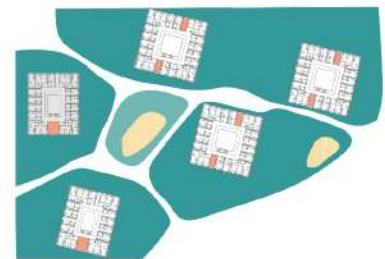
STUDENT RESIDENCE UNIT 03



STUDENT RESIDENCE UNIT 02



STUDENT RESIDENCE UNIT 01





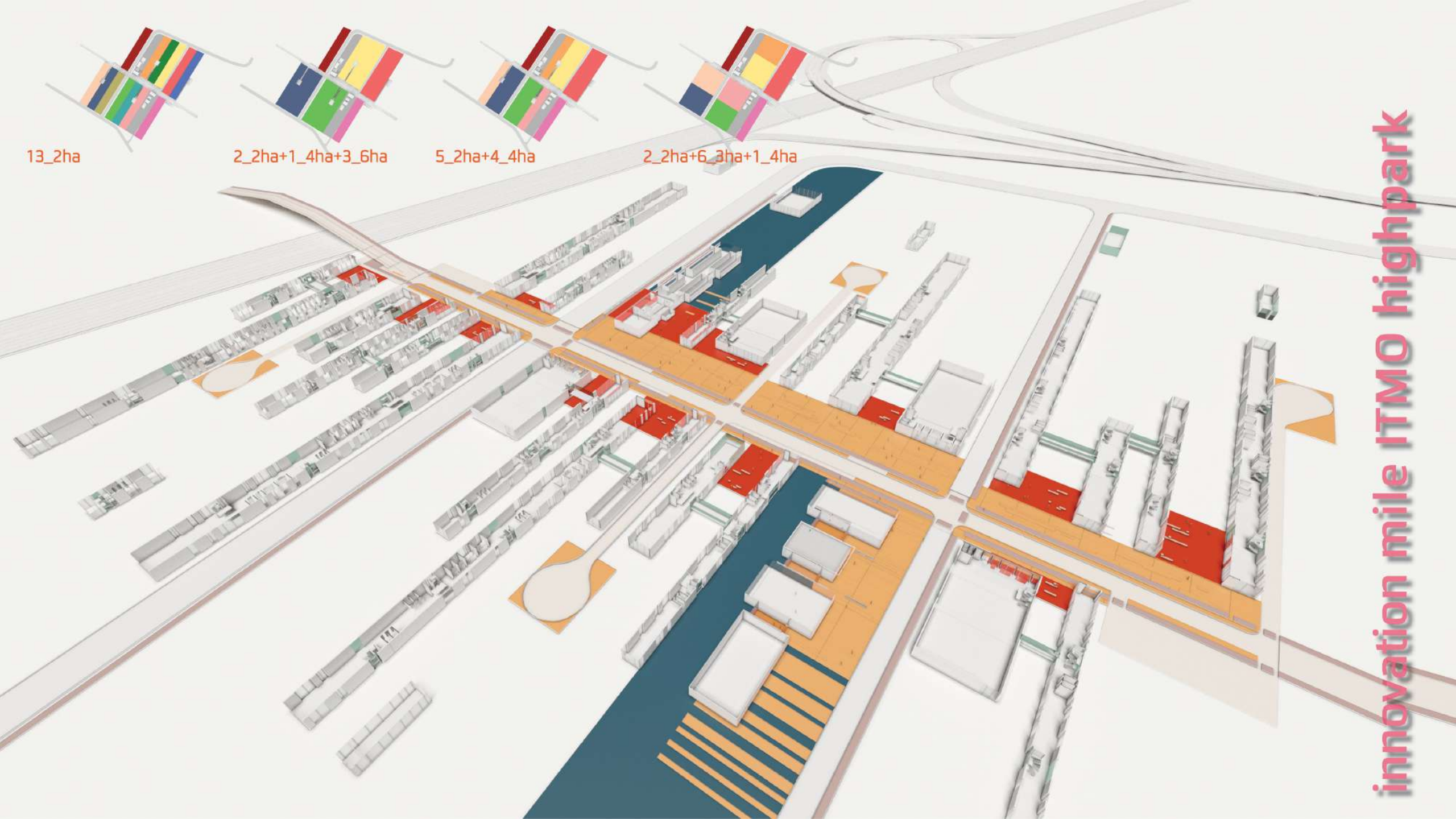
13\_2ha

2\_2ha+1\_4ha+3\_6ha

5\_2ha+4\_4ha

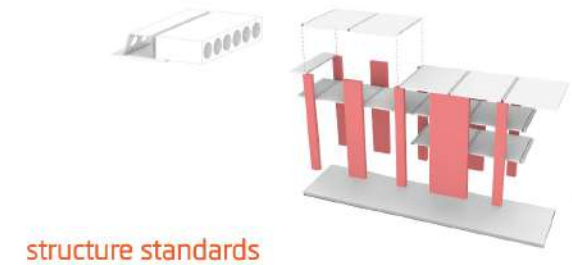
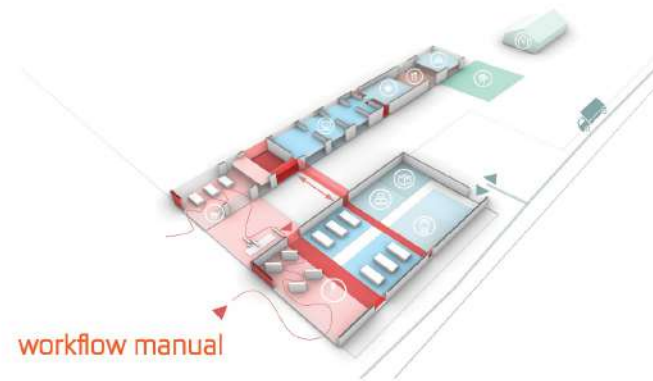
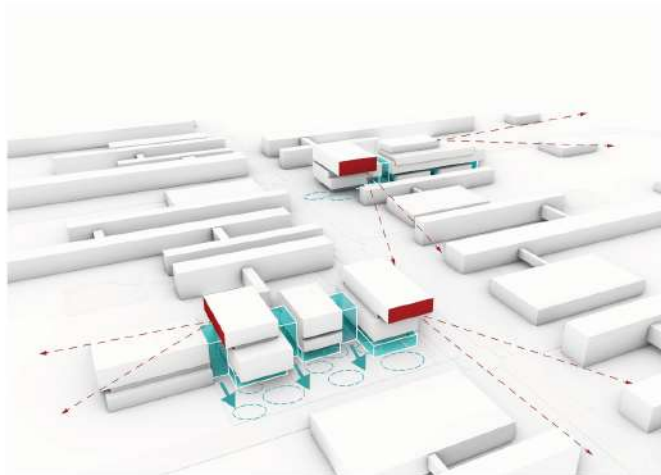
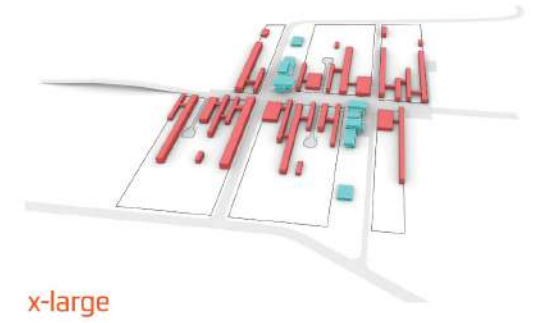
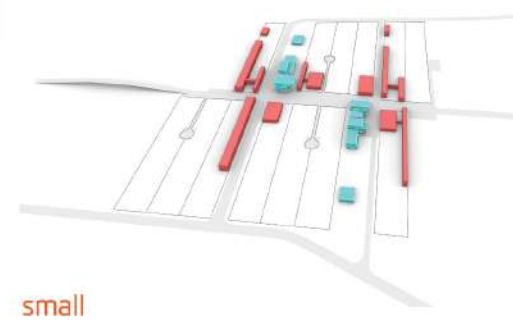
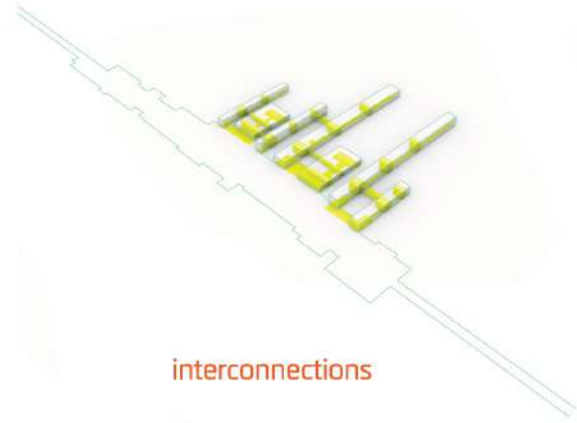
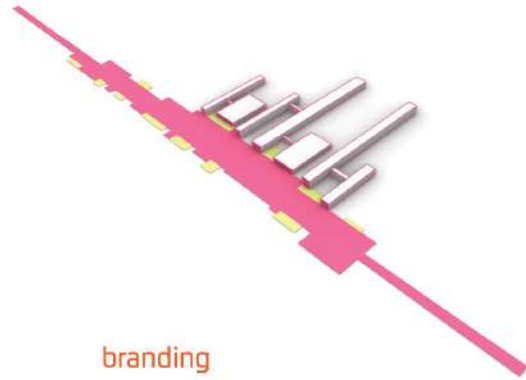
2\_2ha+6\_3ha+1\_4ha

innovation mile ITMO highpark





*how to start with an information exchange network  
for a worldwide success of ITMO highpark production*

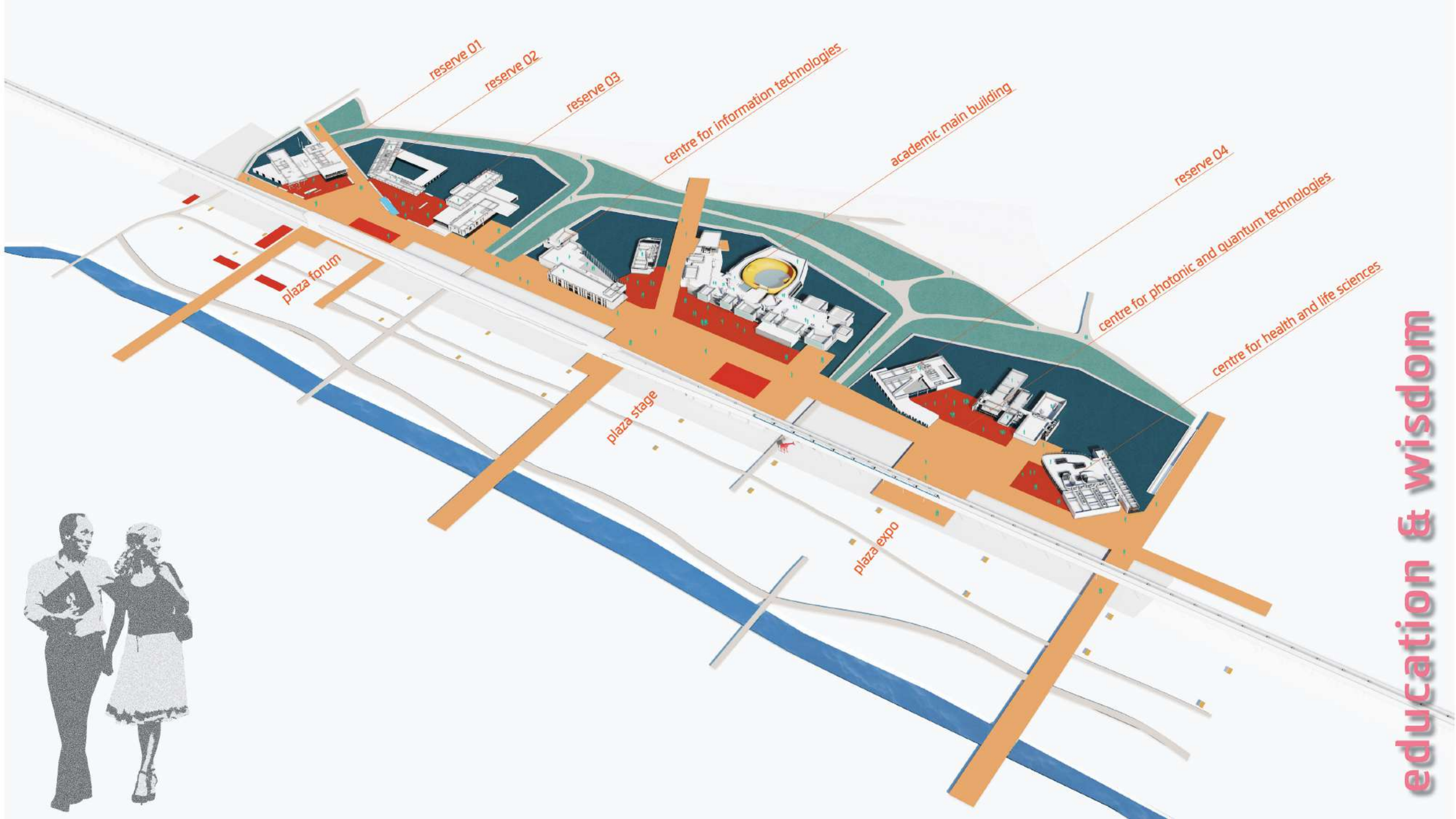


*hot spot public and urban logistics*



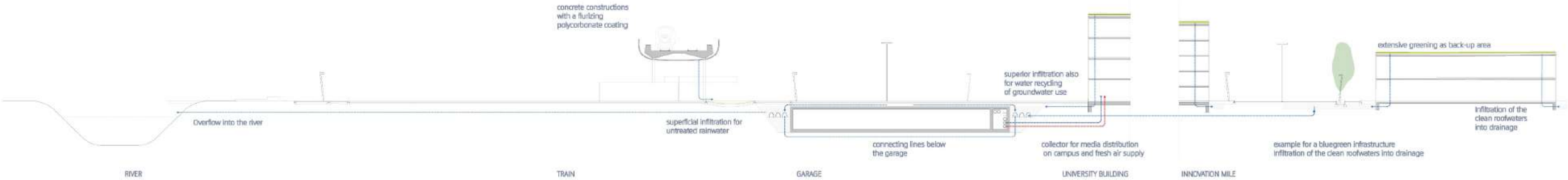
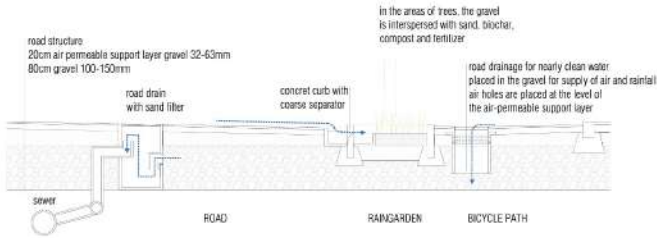






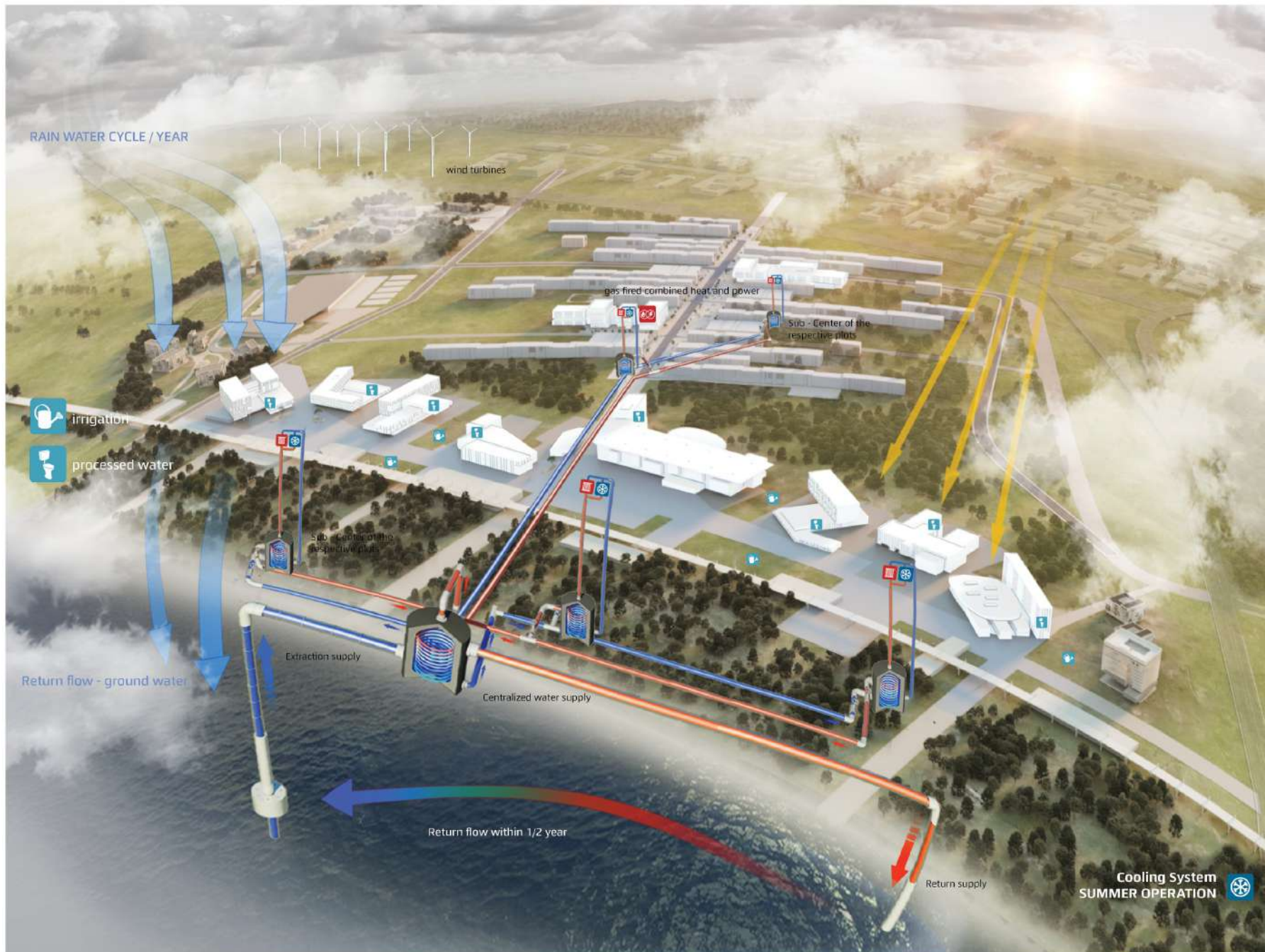


BLUEGREEN INFRASTRUCTURE



WATER SENSITIVE URBAN DESIGN





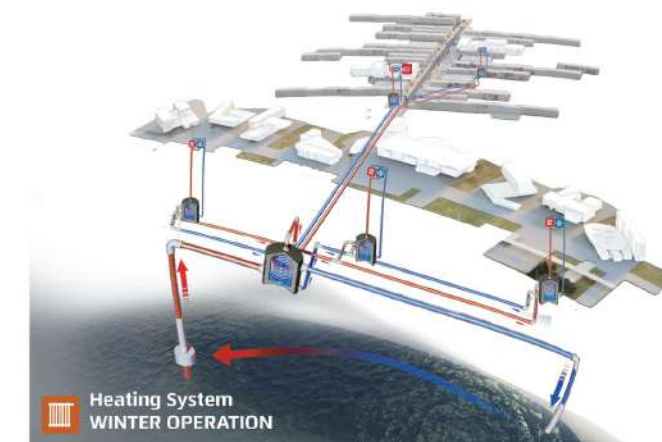
#### HEATING / COOLING SYSTEM

An optimum use of energy resources can be derived from the groundwater, which is found under the site. This is achieved by utilizing the heat storage capacity of the entire mass of the building site. The difference in thermal energy between heating and cooling demand is stored in the ground and flows back to the tapping point with a 6-month frequency shift, resulting in a substantial improvement in energy efficiency. During the heating season, waste heat from the gas-fired combined heat and power plant and groundwater will be primarily utilized for supplying energy for the low-temperature heating. Only peak loads ( ~ 20% / year ) are covered by short-distance heating. During the summer months, dissipation of operational waste heat and cooling of the buildings happen almost exclusively with groundwater. Due to the required temperature level, only the dehumidification of the ventilation systems and the redundancy of the heat dissipation are assured by compression refrigeration.

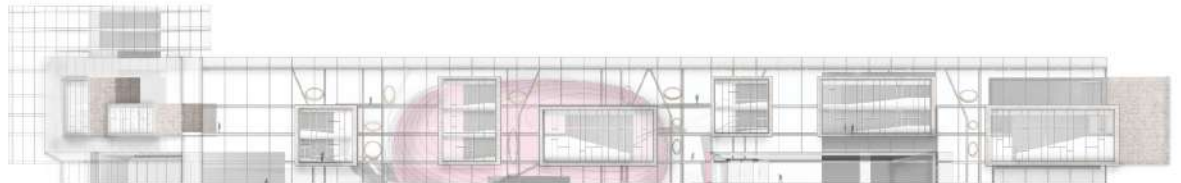
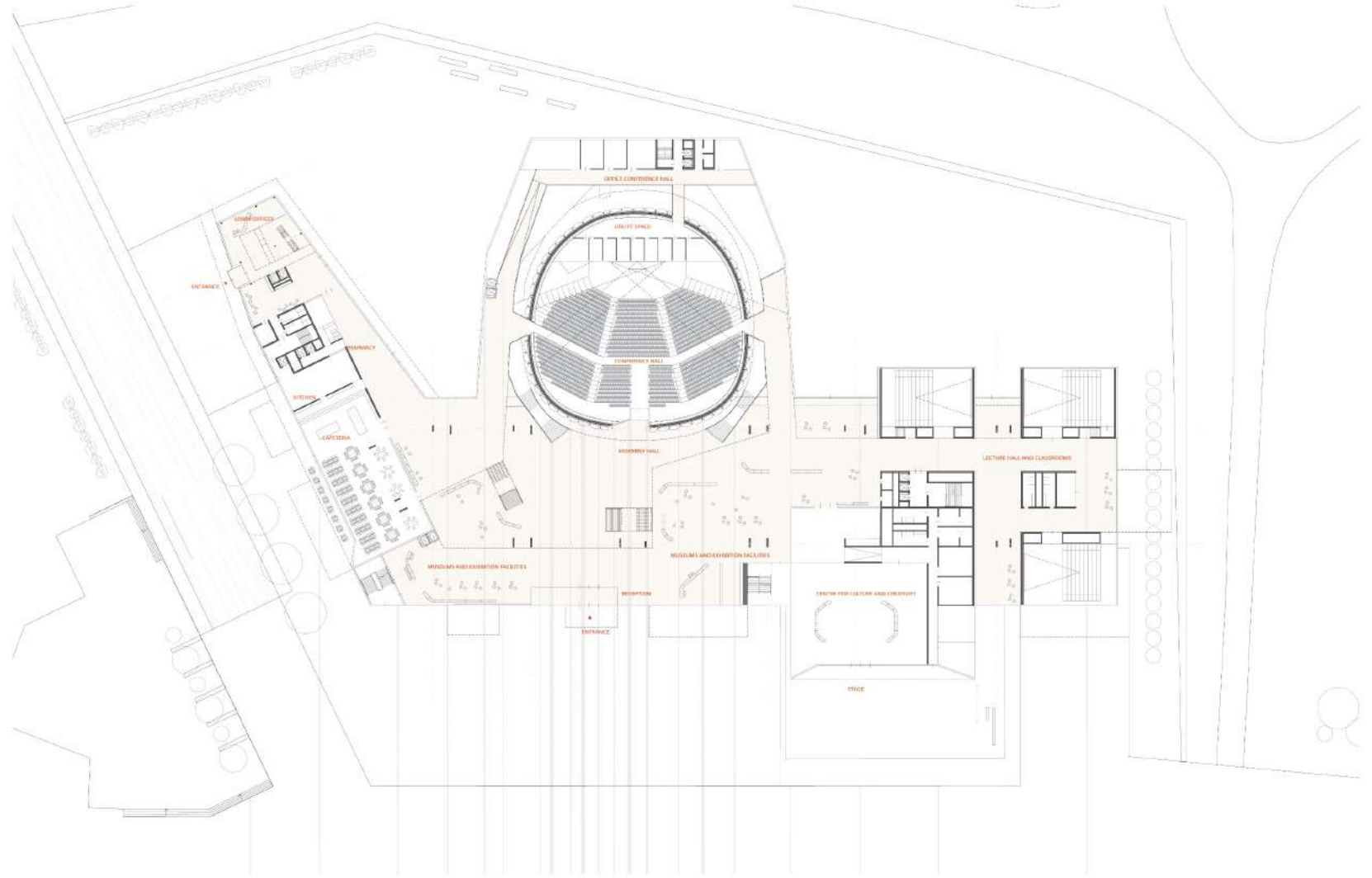
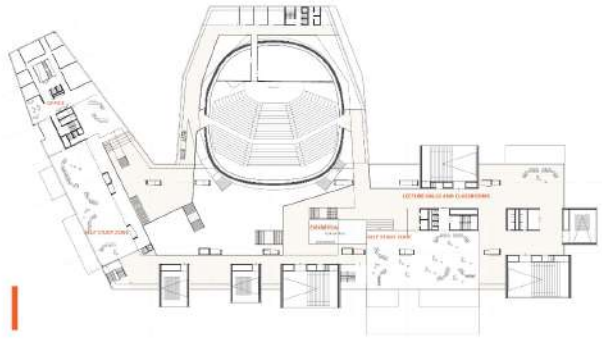
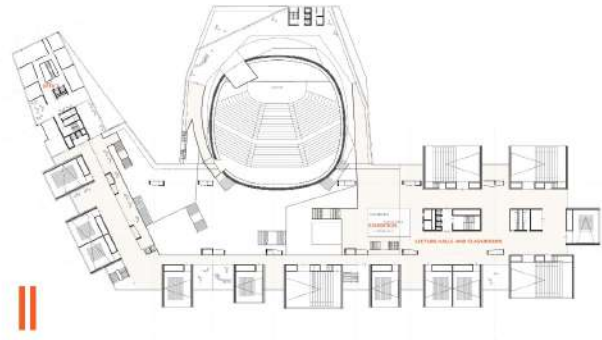
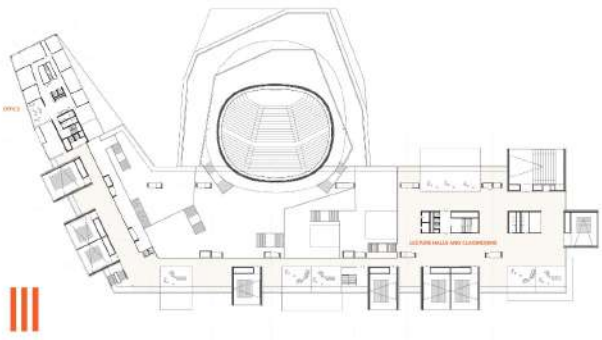
#### TECHNICAL FACTS

for the planned project on the basis of an ecological and economic consideration. In addition to the groundwater usage described above, which covers most of our required energy, a cogeneration unit with gas operation is planned at the Innovation Center. This makes it possible to ensure the peak coverage in winter and to provide the power for the system. The distribution of this energy takes place via a high-temperature network between the Innovation Center and the University to the respective sub-centers. A low-temperature network is planned in the buildings.

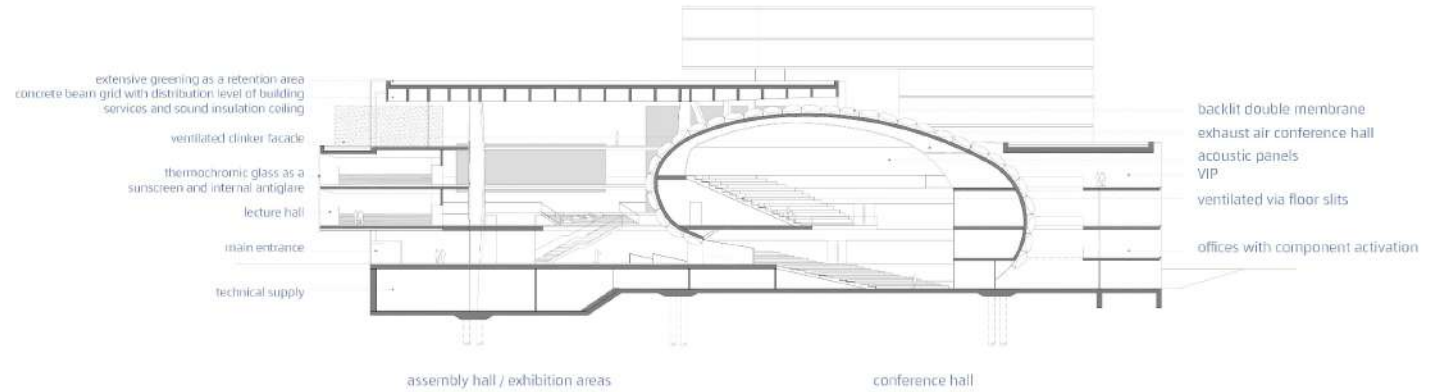
The underfloor heating systems and cooling ceilings are planned as a change - over system, which enables cooling in summer and heating in winter. The ventilation is basically carried out without humidification and dehumidification. In the lecture halls a CO<sub>2</sub>-dependent ventilation with variable volume flow controllers is provided. The exhaust air is led from all areas via a highly efficient heat recovery. A night cooling, which is controlled by the existing weather station, can save further cooling capacity. The fresh air required is passed through a collector so it is already pre-conditioned according to the season before reaching the ventilation control centres. The building envelopes receive effective sun protection and corresponding thermal protection. In addition, correspondingly tight building envelopes are being built. In order to be able to reduce energy cost, there is a presence and daylight-dependent control of the planned LED lighting. Furthermore, attempts should be made to increase the percentage of renewable energy in addition to generating electricity by the gas-fired combined heat and power plant through wind energy.



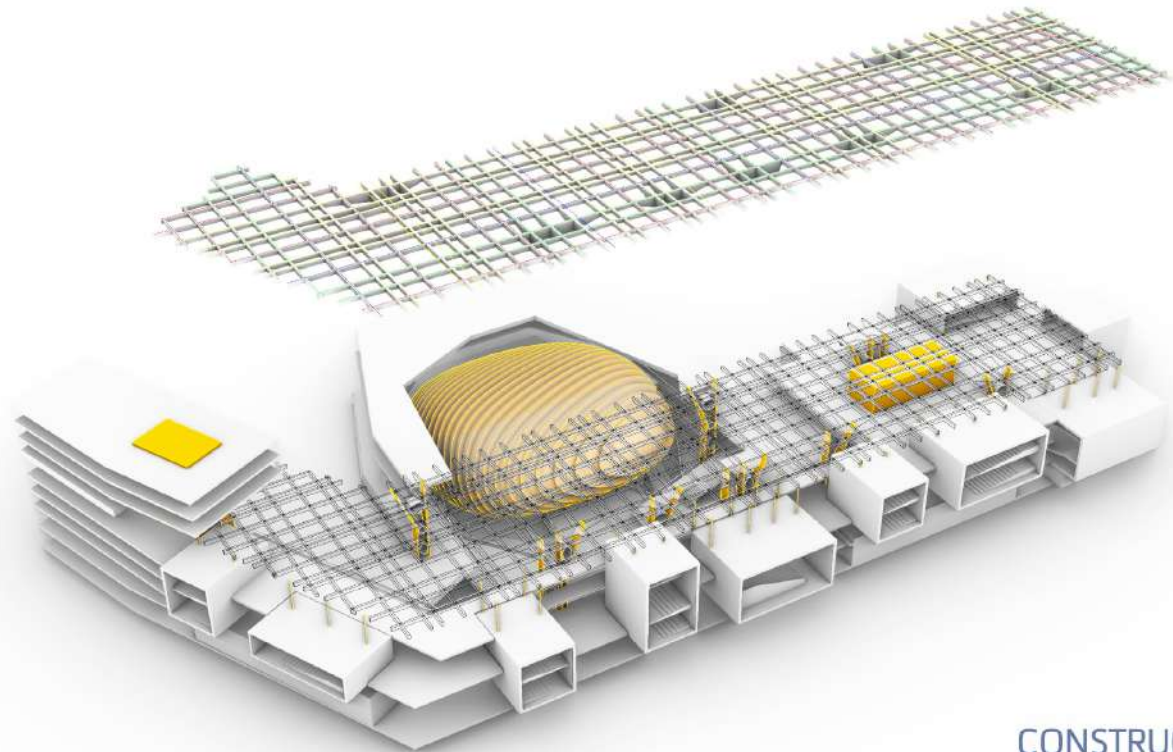








Every time we enter the Main Building, I feel the greatness and meaning of the “Cascade of Wisdom” and it elevates me to other levels of consciousness. Will the same happen to everyone who studies and works here? I believe it will, mainly because during the day and throughout the four seasons, being in a building that is so open to the cosmos, makes you feel alive as an integral part of the PLANETARY ECOSYSTEM. That is good. I do not know how we will manage not to stay at the “Concert of the Forgotten Inventions of the World” that the New ITMO Graduates are announcing on the access screens. The Auditorium is so wonderful that one really manages to forget everything by immersing in those scientific and cultural views.







# I AM A WOMAN



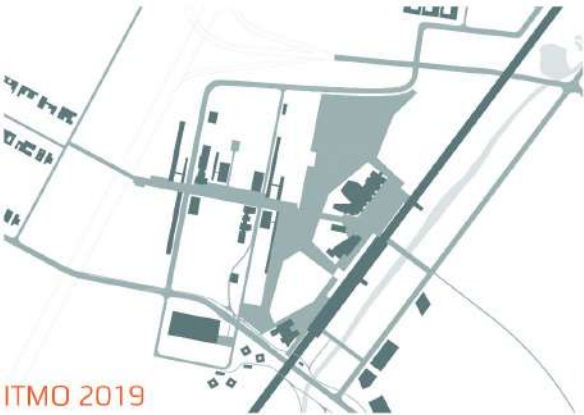


But we should leave it for another day. If we want to meet with some friends at the Tea House located opposite of the Center of Multifaceted Physical Activities before walking through the “Park of Wonders” along the Strip of Innovations... we must hurry up!

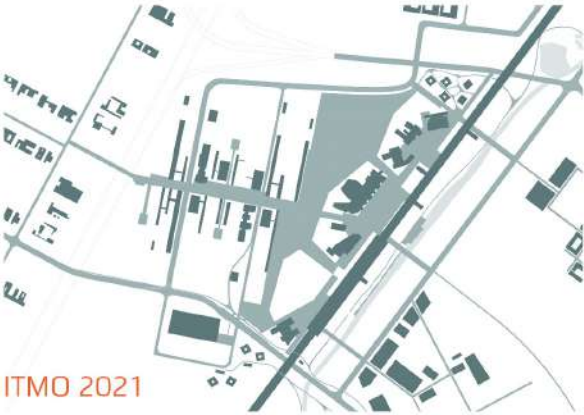
And finally, we arrived. We cannot believe it. The new Start Ups are coming from all over the World. And I am discovering that the idea of driving them to hang their name along the Boulevard, in their original language, and to present themselves each month with their new products, attracts young people from the surrounding cities to permanently discover what’s going on in the World. I think it is essential to continue with these networks because the global success of our “Olympics of Science” was undoubtedly built from the new interconnections created by young people. I really hope that the professional practices leading them to know about us and inspiring them to initiate their Start Ups in this Center of the Wisdom of the Planet will be an example for other cities of the World.

I am delighted to be able to develop myself within this creative environment that undoubtedly has helped me every day by inspiring me to be part of this unique phenomenon of the Grand Holistic Village of ITMO in Yuzhny!

As Architects, ARGONAUTS OF THE WORLD OF FANTASIES, we are very happy to have been able to share with you this ambitious dream that we produce for your Earth and that could only materialize if we all unite and push together in the same direction. Thank you!



ITMO 2019

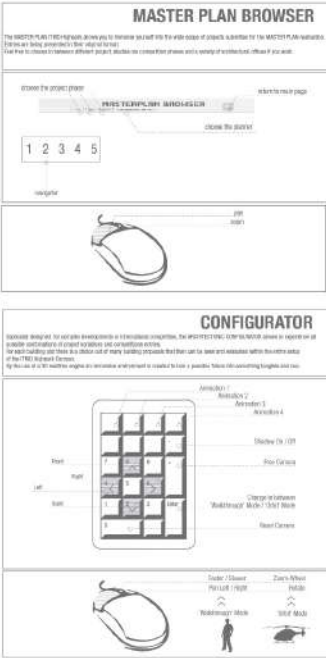


ITMO 2021



ITMO 2025

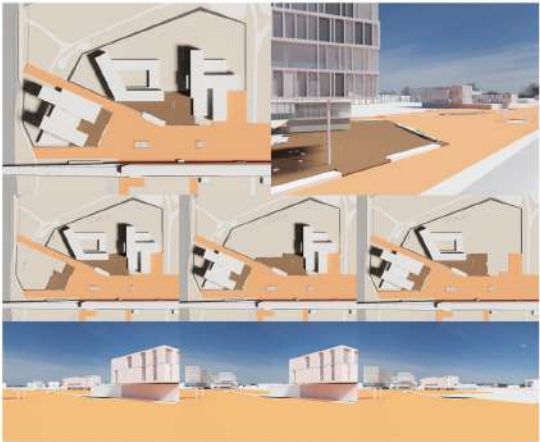
## CAMPUS ITMO HIGHPARK MASTERPLAN INTERACTION TOOL: URBAN MENUS



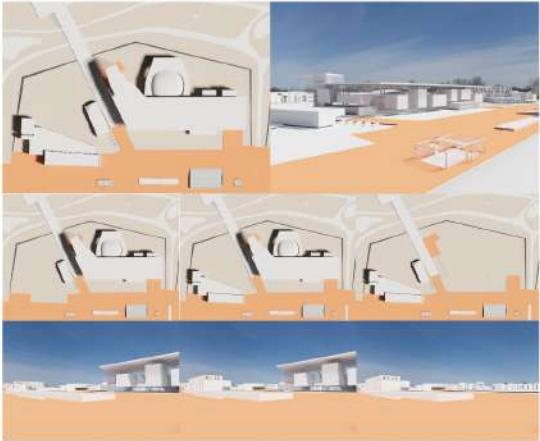
To present and assess the outcome of different project stages or for a holistic evaluation of architectural competition, an interactive 3D visualization interface – the “Master Plan Browser” – was developed. It allows to combine the competition entries for the nine building plots and to visualize the architectural situations. Open space concept, entrance situations and in-between spaces are examinable from 4 different viewpoints.

For a next step of developing of the urban fragments to the realisation projects or different competitions a standalone application was developed. It incorporates the possibility to virtually walk through the campus at particular times of the day and to assess natural lighting situations from arbitrary angles.

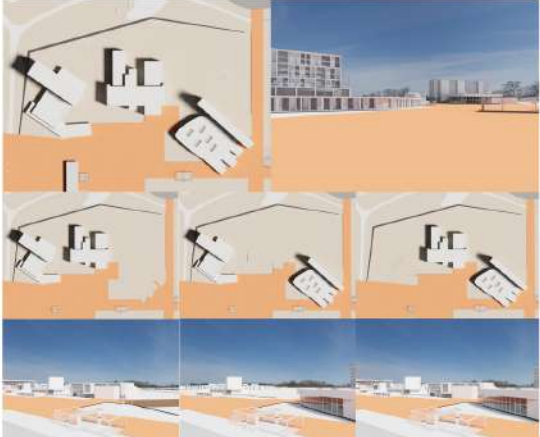
PIAZZA FORUM



PIAZZA STAGE



PIAZZA EXPO







ITWO HIGH PARK IS THE HOLISTIC FUTURE



## A project by

Laura P. Spinadel - Bernd Pflüger - Santiago Sanchez Guzman - Bogdan Hambasan



## Team

Elena Monsalve - Petra Vušković - Maja Karska - Betül Kazanpinar - Rina Gorchaj - Kristyna Sevcikova

## Consultants

Structure: Bollinger und Grohmann Ingenieure

Energy: Büro für Kultur- u. Umwelttechnik Ernst Nöbl

Transport: Werner Rosinak & Partners

Landscape: LandschaftsArchitektur Stefan Schmidt

Experts for client-oriented office solutions: teamgnesda, Andreas Gnesda

## Renderings & Free Spaces & Communication & Urban Menus

BOA office of advance randomness

Vitalii Tomashchuk - Roman Levoshka - Bianca Severin - Catalina Pedraza