EUROPAN E14

PL WARSAW DWELLING FAB LAB SITE BRIEF



Warsaw, Jan. 2013

3/26





Warsaw, brief description of the city

Warsaw is the capital of Poland and the Mazowieckie Voivodship. It is the largest city in the country and its economic and cultural center. It is located in the central-eastern part of Poland, in the Mazovia region. Poland's longest river - the Vistula, flows though the city. Warsaw has about 1.72 million inhabitants, and its functional urban area - over than 3 million. European cities with comparable number of inhabitants are Budapest and Vienna (Budapest with 1.73 million, Vienna with 1.74 million inhabitants, BDL GUS 2012 (Statistical Office data)). The administrative area of Warsaw (517 km2) is, on the other hand, similar to the area of Budapest and Prague (525 km2 in Budapest and 496 km2 in Prague. BDL GUS 2012 (Statistical Office data)). In 2012 the population density in Warsaw amounted to 3 317 people/km2. The symbol of the city is a mermaid which is appears in its coat of arms. Warsaw is a bustling metropolis with a very rich and turbulent history. A quarter of the territory is green areas. According to the vision contained in the new development strategy "Warsaw2030", by 2030 Warsaw shall mean: active citizens, friendly spaces and an open metropolis.

DISTRICT, BRIEF DESCRIPTION + SHORT HISTORY

The study area is located on the territory of two left-bank Warsaw districts: Wola (Ulrychow) and Bemowo (Northern and Southern Jelonki), about five kilometers from the city center.

Wola

Wola has an area of 19.26 km². According to the Central Statistical Office data from 2015 (BDL GUS), there are over 138 thousand people living there. Its history dates back to the 14th century but the area did not become an important part of Warsaw until the late 18th/early 19th century when numerous cemeteries (Catholic, Lutheran, Calvinist, Jewish, Orthodox, Muslim and Karaite) were located in the area, which had been moved out of the city limits for reasons of sanitation and space. Intensive development of the district falls on the second half of the 19th and the beginning of the 20th century. Due to the construction of

the Warsaw-Vienna railway and a resulting influx of peasant population the district developed an industrial character. Grain elevators, breweries, spinning mills, power plants and numerous industrial plants were set up at that time in Wola. Population increased from 9 thousand in 1890 to 40 thousand in 1915. World War II and German occupation brought huge losses to the district. In 1940, the Warsaw ghetto was partly located in Wola, separated from the rest of the city with a wall, in which the occupation authorities held the Jewish inhabitants of Warsaw. The liquidation of the ghetto, which resulted in murder of all its inhabitants and a start of an armed uprising (the Warsaw Ghetto Uprising), was carried out from July 1942 to May 1943. On 1 August 1944 began the Warsaw Uprising, an armed uprising against German occupation. The Wola Massacre took place in the first days of the Uprising, 30 to 65 thousand of civilians, insurgents, hospital patients, medical personnel and members of the clergy the district were killed. It is one of the greatest crimes against the Polish population during World War II. After the war, Wola saw again an industrial development, which resulted in construction of housing estates and expansion of the city towards the district. The development of the industrial areas in Warsaw was centered around the areas of Czyste, near Warsaw Gasworks, creating the so-called Western Industrial Quarter. "Czyste" is a part of the Wola which in the 19th and 20th century became one of the most polluted areas of Warsaw. Due to development of railway and the launch of the Warsaw - Vienna connection in 1845, the district was covered in a vast system of railway sidings, called "Siberia". They served the Wola factories, such as the Ambrożewicz foundry in 37/39 Kolejowa Street, the Polish Phillips Company S.A in 30 Karolkowa Street, the Municipal Trams Power Plant in 79 Grzybowska Street, the Warsaw Gasworks, the Hen-

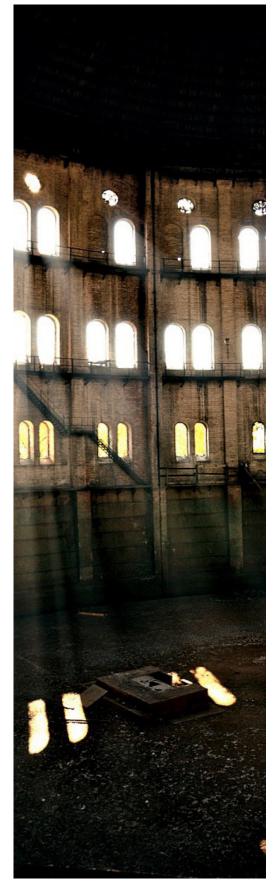




ryk Dabrowski Chemical Plant at the intersection of Siedmiogrodzka and Rogaliska, the Lilpop plants and many others. After the war, most of the pre-war companies were nationalized and expanded, the Marcin Kasprzak Radio Plant in 18/20 Kasprzaka Street was founded among many others. Intensive industrial development in Wola caused the authorities to decide to expand areas for this type of use, and it was decided to locate some of the new plants outside of the so-called ring railway line connecting Warsaw West (Warszawa Zachodnia) and Warsaw Gdanska (Warszawa Gdańska) stations and in the area of the Odolany railway link connecting the stations Warsaw Main Cargo (Warszawa Główna Towarowa) and Warsaw Gdanska. The plants set up there were the Marcel Nowotko Mechanical Plant (i.e. Mechanical Plant "Wola") in Fort Wola and the Cargo Station in 2a Ordona Street which managed most of the cargo supplies of goods to the growing Wola.

Industry in Wola

Industry in Wola was largely associated with metallurgy. The Ambrożewicz foundry, located in Kolejowa Street, founded in 1904 by Wladyslaw Ambrożewicz, specialized in castings, both industrial (pulleys, bearings, machine modes, boiler grates) and artistic (tombstone crosses, reliefs). Polish Phillips Company S.A was founded in 1922-1923 on the initiative of Anton Philips, co-founder of Royal Philips Electronics. The factory operated as a Polish-Dutch joint-venture, and produced mainly light bulbs and radios; it was one of the first plants in Warsaw to introduce physical exercise at work. Municipal Trams Power Plant - Neo-Romanesque building of the power plant was built in 1905-1909, was designed by engineer Józef Lenartowicz. The building was largely damaged after the Warsaw Uprising, part of the building was blown up. During the Wola Massacre in August 1944, the German army shot the civilian staff of the power plant. After the war, the buildings were transferred to the Warsaw Thermal Power Enterprise (SPEC) which managed the urban central heating system. In 2001 they were entered in the register of monuments, and in 2004 were allocated to the Museum of the Warsaw Uprising. The Marcin Kasprzak Radio Plant was established in 1951. Until the 1970's it produced such radio sets as "Syrena", "Aga" or "Stolica", which for many years were synonymous with modernity; many Poles dreamt of their cassette and reel players. They also created "Kajtek" - the first Polish portable audio player. The factory was closed down in the early 1990's, some of the buildings were demolished and other were reconstructed and adapted as banks and offices. Mechanical Plant "Wola" was established in 1951 and had the area of approximately 60 hectares. They produced diesel engines, generator sets and propulsion units. The plant foundry also produced monuments, such as the "Glory to Sappers", "Little Insurgent Monument" or "the Fallen Undefeated". For many years it was one of the biggest and most dynamic industrial plants in Wola, said to be the "pride of the People's Republic." The plant had numerous social facilities, such as a day clinic and a vocational school. In 1974 a 11-floor office building and a social meeting venue were built, the latter is now a concert venue. In 1990 the name was changed to PZL "Wola", under which it exists today, although production was moved to Siedlce.











The Cargo Station was built in the 1950's. It served as a place for storage, unloading and reloading of goods transported to large industrial plants in Wola. Even today the part of Ordona Street in the area of the Station stands out from other streets. Paved roads with 2 lanes in each direction are separated by a section of greenery. Warsaw Gasworks in Wola was established in 1888 in Dworska Street (currently Kasprzaka). Its construction was considered a priority due to the rapidly growing demand for gas. Besides the production plants near Dworska Street, the construction included residential buildings with management headquarters which were built at the beginning of the 20th century. In 1886-1900 housing for gas tanks were built near Prądzyńskiego Steet - they still remain the most characteristic buildings of the gasworks complex. Fragments of the old cobblestone pavements and nine gas lanterns are still preserved on the premises. The switch from municipal gas to natural gas in 1970's marked the end of the gasworks as an industrial plant. Currently, the area belongs to the gas company PGNiG, it houses the headquarters of the company and the Museum of Gas Industry. Another plant located near the Museum of Gas Industry was Lilpop, Rau and Loewenstein, in 65 Bema Street. It was the largest mechanical plant in the pre-war Warsaw. It was created in 1904 at the premises of August Rephan plant, called Augustówka Factory Complex. "Lilpop" plant produced mainly rolling stock and trams, steam engines and cars. It also produced elements of railway and urban bridges. After the collapse of the Uprising the German army demolished most of the factory buildings. Only 5 buildings were preserved of the plant a pre-war area of 22 hectares Among other companies that developed the industry in Wola one should mention the following: Lace Factory "S. Landau" in 5/7 Burakowska Street (the factory had agents in Krakow, Lvov and Vilnius, buildings underwent revitalization, and the renovated main building and annex now house galleries, offices and a winery); Dairy Plant in Towarowa Street and Chlodna Street, Haberbusch brewery or the "Haberbusch and Schiele" United Warsaw Breweries in 59 Krochmalna Street or the Norblin Plant in 49/53 Żelazna Street. Another element visible in the city associated with the development of Wola are worker settlements related to the Wola industrial plants and charity activities of industrialists. They include: Wawelberg settlement in 15 and 15a Górczewska Street and Wawelberga Street founded thanks to a donation of philanthropists Hipolit and Ludwika Wawelberg, in 1900; a workers settlement in 1 Ludwiki Street.

Bemowo

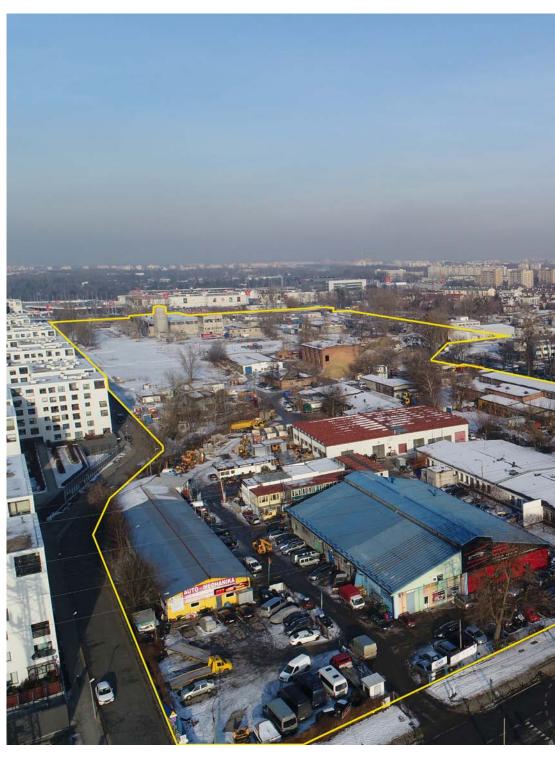
Bemowo was incorporated into Warsaw in 1951, originally as part of the Wola district. It gained its autonomy under the administrative reform of 1994. Its surface area is 24.95 square kilometers. According to the 2015 BDL GUS, it has about 119 thousand inhabitants (about 60% under 30 years of age). Its name was introduced after World War II and comes from the name of General Jozef Bem. The oldest settlement in what is now Bemowo is the Boernerowo (postal workers settlement) established in the vicinity of the Transatlantic

Radiotelegraphic Station in the 1930's. There was a tram line here as early as 1934. In 1951, after Bemowo joined Warsaw (Wola), the Military University of Technology opened near the postal workers settlement, a year later the "Friendship" barracks settlement was built for the Soviet builders of the Palace of Culture and Science. In the 1970's Bemowo saw growth in residential construction: settlements Lazurowa and Górczewska were built at that time, while in the 1980's settlements Nowe Bemowo and Górce were built. Bemowo is strongly associated with the Polish Army. The history of Fort Bema (Bem fortifications) goes back to the end of the 19th century, when the Parysów fortification was constructed as part of the inner ring fortification of the Warsaw fortress (name of Fort Bema came into use only in 1921). The area, until the outbreak of World War II, housed an ammunition plant, during the occupation it was changed into warehouses for the German army. After the war, it housed camps for German war prisoners. In the 1980's the area came under administration of the Central Army Sports Club "Legia". Since 1999 it has been under administration of the municipality and later the district of Bemowo. Fort Bema suffered years of oblivion and gradual recapitalization, but was eventually transformed into a friendly urban park. Neglected and damaged vegetation was removed and new plantings were made. Thanks to investments, such as the Bemowo Football Centre and a playground in Obrońców Tobruku Street, Fort Bema has become a popular place for family walks, especially for young parents, who constitute a large group of residents of the nearby new housing estates. The Warsaw - Babice airport is also situated in Bemowo, between the Chomiczówka settlement in Bielany, the landscape park Bemowo and Boernerowo. It is managed by the Ministry of Internal Affairs and Administration. The airport is home to such institutions as: Helicopter Emergency Medical Service, Aero Club of Warsaw, Polish Automobile Club. Several schools offering courses in civil aviation also operate there. The airport is known to a wider public as a venue for mass events. Military units and research institutes are situated in vicinity, including Military Aviation Plant, Operational Command of the Armed Forces, Epidemiological Response Centre, the Military University of Technology. Today Bemowo is primarily one of the residential areas of Warsaw - the majority of its inhabitants live in settlements built between the 1970's and the 1990's and in early 21st century.

STUDY SITE

Area of the study is limited by the following streets: al. Obrońców Grodna (northern ring-road of Warsaw), al. Prymasa Tysiąclecia, ul. Wolska and ul. Powstańców Śląskich. It covers an area of approximately 960 hectares. It is divided by the 509 railway line Warsaw Gdanska - Warsaw Odolany going along the northeast - southwest axis. According to the Study of the Conditions of the Spatial Management of a Commune (SCSMC) this area has unfavorable construction conditions. It is located on the plain of Warsaw (WWII - lower level), i.e. on the moraine plateau built of tills and glaciofluvial sediments, ground waters are shallow (above 2 m below the surface). Moreover, there are numerous points of air pollution in the area (individual boilers and furnaces in households) and of periodical surface emissions (cemeteries). The area is well



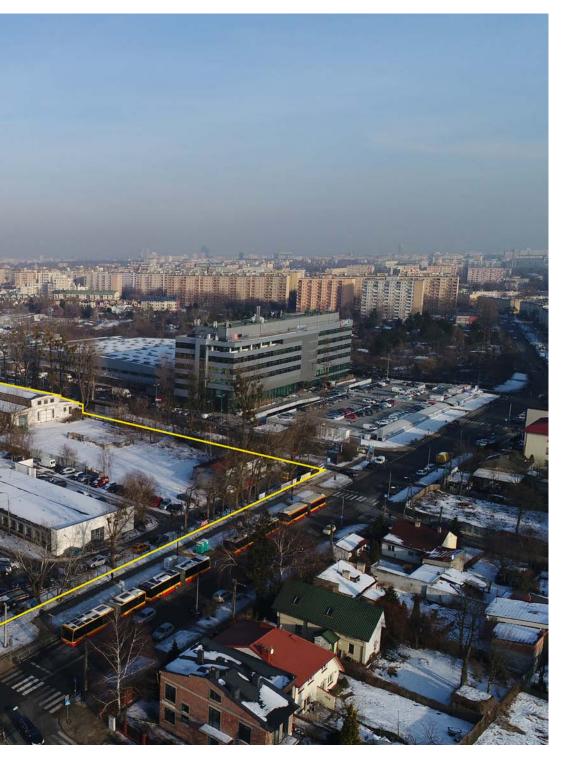


connected to the city center by the line of Górczewska Street, there are plans to build three new stations the second metro line (Księcia Janusza, Wola Park, Powstańców Śląskich). 3 routes run through the area where HGV's are allowed 24 hours a day. The site in question is a multifunctional area, there are three shopping centers there, modern residential areas and housing estates from the 1970s threatened by degradation, degraded

post-industrial areas and areas of cultural significance (cemeteries).

PROJECT SITE:

The project area is approximately 18.30 hectares. Its boundaries are set by: to the north Górczewska Street, to the east Białowiejska Street, to south Jana Olbrachta Street, to the west build-



ings of the Górczewska Park settlement (from www.mapa. um.warszawa.pl ZMM sections 1:500: Z1N1W3, Z2N1W3, 2S132, 7S1W3, 6S1W3, 1S1W3). According to SCSMC it is a degraded area, located in an industrial area. It is intended for spatial and functional transformations. According to the Local Spatial Management Plan (LSMP), one of the main arteries of the road system in Warsaw - the planned N-S route is planned to be local-

ized on the western border of the project area. The land in the project area is largely owned by the Treasury and Capital City of Warsaw and in a smaller portion by legal and natural persons. The building-up of the area is scattered (mainly post-industrial and service buildings associated with business in the area), there are no buildings under protection of the conservator or under cultural heritage in the project area.



Planning conditions according to the Local Spatial Management Plan (LSMP) and the Study of the Conditions and Directions of the Spatial Management of a Commune (SCDS-MC)

SCDSMC in the study area

According to the SCDSMC, the largest number of interventions in the study area will refer to the environment, culture, heritage protection and transport. The main green corridor of greenery is planned to go through the area, that is supposed to ensure continuity of the Environmental System in Warsaw (System Przyrodniczy Warszawy). Protection of cultural heritage covers mainly elements of urban system and the cemeteries located in the study area. As regards transport, a station of the second subway line (currently under construction) is planned near the border of the project area, bike paths are planned near the northern and eastern borders of the project area, a supra-local public purposes investment in the field of transport (the N-S route) is planned near the eastern border of the project area.



Under the current LSMP, the project area is allocated for residential multi-family housing with supplementary service function. The applicable Local Spatial Management Plan specifies the following parameters of the planned buildings: minimum index of biologically active area: 30% index build-up maximum intensity: maximum height of build-up: 8 floors above ground, 25 m The plan assumes transport connection service from Górczewska and Olbrach tastreets. Public transports er vice by bus lines in G'orczewska Street and the subway station currently under construction.

Technical infrastructure:

sewer - main receivers of sewage and rainwater, combined sew-



Legend

Subway second line (under construction)

Railway, subway, tramline
Reads

Public transportation stops

Project area

er in Górczewska Street and combined sewer in Wolska Street. water supply - water supply from the municipal water supply system, source of water supply will be the existing watermains in Górczewska Street (DN 1000 mm) and in Olbrachta Street (DN 800mm), gas - connecting the planned single-family housing to the gas network; a strip of land must be reserved in the dividing lines of designed streets - 1 m for gas pipelines distribution in medium or low pressure, electricity - electricity supplied to all potential recipients from the municipal power grid, in newly designed streets a strip of land must be reserved - 2 m for cables in medium and low voltage.

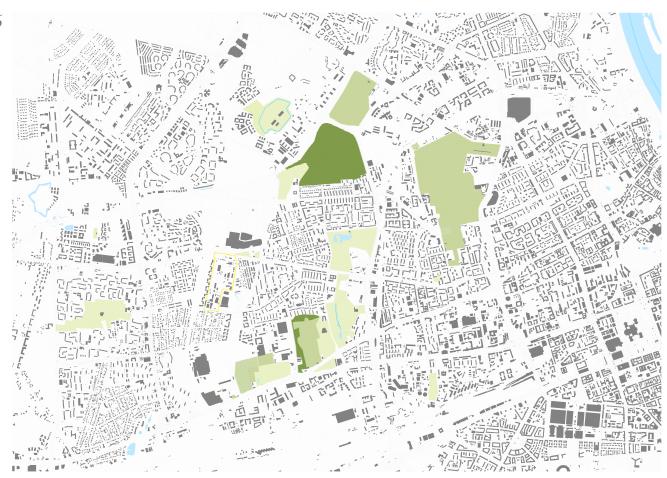
Development yield of the project area:

For the purposes of this conception one should assume urban indicators lower than in the local plan. We assume a minimum index of biologically active area at 40% and the real index of intensity of build-up - at 1.5. The maximum build-up height as in the LSMP, i.e. 8 floors / 25 meters. We assume the following division of generated net usable area:

residential space - 70%, services 10%, manufacturing 20%. The estimated number of apartments in the proposed complex is 2.6 thousand and the number of inhabitants - 6.5 thousand.

CHARACTERISTICS OF THE IMMEDIATE SURROUNDING AREAS Jelonki

The history of Jelonki is inextricably linked with the person of Gotlieb Schneider, who came to Poland with his family to the Polish in the 19th century. Schneider acquired a farm near Warsaw called "Jelonek", located in the area of what today is Fortuny Street. The Schneider estate grew quickly: in the second half of the 19th century, in 1904, after his death, it consisted of nineteen farms, brickworks and a roof tiles factory and had a population of 729 people. In 1927, sons of Gotlieb Schneider obtained approval of the District Court in Warsaw to break up the estate and create of Garden City of Jelonki. Under a decision of the Voivode of Warsaw of 1932 the plan for division of the Schneider family estate was approved and the urban design of the garden city was prepared. Because of problems with the sale of plots Schindlers entrusted the initiative to an experienced



division company of engineers Malanowski and Krajewski, who recommended a broader advertising campaign. They prepared a plan with designated streets, including Aleja Schneiderów (today Powstańców Śląskich Street), Kościelna, Parkowa, Poniatowskiego (today Sternicza Street), Żeromskiego (today Człuchowska Street), which was then promoted in the whole city. The main buyers of plots were humble people: railway, gas service and power plant workers. Some shard of assumptions of the garden city remain in the area of Sternicza and Powstańców Śląskich streets and Kasztelański square. The geodesic plan shows the division structure of the former urban concept.

Górce

Today's Górce is a settlements in Bemowo. In the past, the village of Górce belonged the Pielgrzym family. A family of Warsaw gardeners - Ulrichs came here at the beginning of the 19th century. Their example encouraged creation of more gardens and the area became known for its orchards and vegetables. After it was connected to Warsaw in 1951, Górce remained an agricultural enclave of the city for three decades. The first blocks of the Górce settlement were built in the early



1980's by the Housing Cooperative WOLA. Currently, the area of Górce (Stare Górce) is an area of expansion of new, gated residential settlements slowly displacing old buildings. One of the few wooden churches in Warsaw was located here until 2004. It belonged to the parish of St. Luke the Evangelist. Unfortunately, the property built in 1991 burned down only thirteen years later. The seat of the church and parish is now in newly constructed buildings. Expressway S8 runs to the north of the settlement.

Przyjaźń settlement

"Przyjaźń" (Friendship) settlement is located in Bemowo - it is a complex of partially wooden houses, the so called "barracks". It was built in 1952 as a symbol of Polish - Soviet friendship. The complex was built for the Soviet workers building the Palace of Culture and Science. After completion of the Palace of Culture, the settlement was transferred to the employees, engineers (southern part of the estate) and students (the northern part of the estate) of Warsaw universities. The "engineers" houses are



part of war reparations paid by Germany to the Soviet Union. The rest of the build-up are the so called barracks. They were built with materials from demolition of the Stalag IB "Hohenstein" war prisoner camp, located near Olsztynek. Initially the complex was surrounded by barbed wire and monitored by guards. Wooden houses constituted a self-sufficient residential complex. They had, among others, a cinema, a post office, a library, a canteen and baths. Currently, the area covers 32 hectares. There are 25 student houses (inhabited by about 1,300 students), 35 apartments, 77 single-family houses, 3 new student dormitories, Bemowo City Hall and social, cultural and administrative facilities there. Some famous inhabitants include: prof. Leszek Balcerowicz - politician, economist and knight of the Order of the White Eagle, prof. Jerzy Bralczyk - linguist, Krzysztof Tyniec - actor, and Alpha Oumar Konaré - President of Mali and student of the Faculty of History of the University of Warsaw, who successfully defended his doctorate in Poland.

Ulrychów

The part of Wola where the study area is located, Ulrychow, got its name when in 1876 Jan Krystian (Christian) Ulrich - a well-known gardener, decided to change the location of the dynamically growing company founded by his father, Jan Bogumil Traugott Ulrich. He bought the land in a village Górce outside Warsaw (today in Górczewska Street), enabling further develop-











ment of the company - a gardening plant, greenhouse and demonstration garden. For over eighty years the C. Ulrich company played a fundamental role in development of gardening in Warsaw and served as a meeting place for the growing number of local residents. When in 1958 Krystyna Machlejdowa, the last member of the Ulrich family died, the plant was nationalized and de facto deprived of its host. It gradually became more and more devastated, and finally closed down in 2000. Today, the Wola Park shopping center is located in its place. The only remaining elements of the so-called Ulrich Gardens are fragments of the preserved palace and greenhouse (under protection of the conservator). Ulrychow was completely connected to Warsaw in 1951 and while the residential buildings began to appear on the area in the 1970's and1980's, its development continues to this day. In the last two decades transformations have also taken place in the western, so far the most neglected part of Ulrychow, where industrial plants were located in the past. Part of it is covered by the project area.

Górczewska Park settlement

In 2009, Górczewska Park settlement (181 Górczewska Street) was built in the immediate vicinity of the project area. The authors were the Polish team JEMS Architekci who realized the project for JW Construction. The settlement covers an area of 9.3 hectares and is located on the linear plot along the railway line running in the north-south direction. The realization is minimalist in form - there are no intricate details and the focus is primarily on creating the internal space of the settlement. Górczewska Park consists of twelve separate eight floor buildings, located in a straight line, characterized by large windows, bright façade and straight lines.

CURRENT ECONOMIC LIFE OF THE REGION

Over the past 20 years Wola is again going through economic recovery, there are more and more new investments. New life comes in between the old, sometime pre-war, buildings, previously abandoned post-industrial areas attract new investors and are being adapted to new functions. New office district is cropping up along Towarowa Street - the eastern boundary of the district. Transformation of the district is also encouraged by public investment: in 2004 the Warsaw Uprising Museum chose the old Municipal Trams Power Plant as its seat. Residential development follows development of office buildings. 19 Dzielnica was built on the location of the Ludwik Waryński Construction Machinery Plant. It is a complex of multi-family buildings designed by JEMS Architekci realized in the years 2008 to 2012.

PROJECT GUIDELINES AND EXPECTATIONS

Project site is located in the area of "The Factory of Houses" near Górczewska Street. It belongs to the municipal company called "MPRI", has an area of 17 hectares and a chance to become a laboratory in which there will be a modern model of the city developed. The history of such an area located just between two parts of Warsaw Wola and Jelonki focuses just perfectly on the issues present in this year's competition. "Productive city" is:

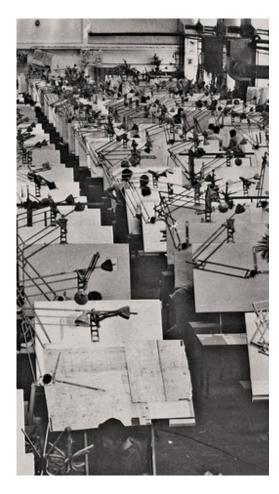
- efficient designed to optimize use of time, transport energy and to use the effect of "cogeneration" (in the case of cancellation of the separation of functions in the urban structure); producing meaning it returns to the production which is a source of income of people who life there. In this context the question of what should be the production profile of such a city so that it can be competitive in a globalized world arises,
- harmonious it shall offer a complex of buildings that provide space for residents and all necessary public services,
 possible to produce food and host other outdoor activities,
- "and productive again" capable of adapting post-industrial models of development. Activating proventials and working on one

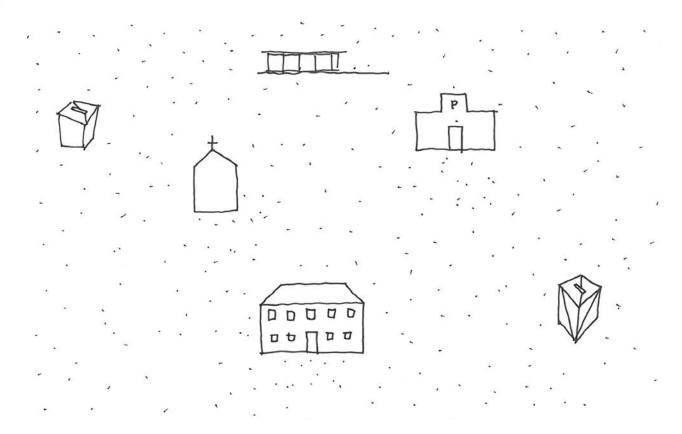
els of development - activating brownfields and working on economic models which are the results of such spatial systems.

Firstly, the aim of the competition is to develop an optimal spatial system and urban design proposal of new buildings that allows creation of a fully functional part of the city that contains living, production and social functions. Designed district should produce, give a decent place to live in and provide basic social services (school, church, police station and others, according to outcomes of analysis made by participants).

Most recent history of the site takes place from 1970 to 1990, just when "The Factory of Houses" has been active there. It can be treated as a source of ideological inspiration. Thinking about a new city one can not ignore basic urban material - residential development. "The Factory Houses" represents a very important chapter of its existence on both national level and broader - Eastern European thoughts which have been dominating urban structures and been present in our landscape as an industrialized prefabricated construction for more than three decades. Modern history came around to the idea of prefabrication rather brutally - all the "Factory Houses" ceased functioning in the 1990s. What remains up to today, however, are the outputs – residential developments, optimized construction and rationalization of manufacturing, which today seem to remain forgotten.

Production is the second aspect of the site. Participants should develop a catalog of rules specifying what kind of production is desirable and economically justified. Different types of production are associated with different requirements of space - housing in different ways allow you to build for the local community. Should the production profile of the new district be universal or rather have a clear profiling and a burden? The decision in this regard will have a direct impact on urban planning solutions adopted.



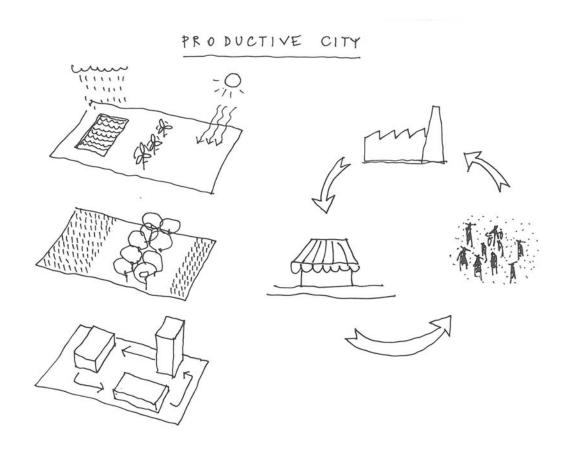


IDEOLOGICAL CONTEXTS

The Warsaw Social District

Availability of housing is one of the key challenges Polish cities are facing. Tendency to identify housing safety with owning an apartment caused neglect of development of the rental market. Broadly understood availability of housing is one of the operational objectives of the Warsaw development strategy update - Warszawa2030. The aim of the new housing policy is to lead to creation of a comprehensive housing offer appropriate to needs and resources of all inhabitants. It is based on four sectors: A - social housing, B - communal flats, C - SHA's (flats built by the Social Housing Association), D - commercial rental market. The 2014 REAS report analyzed potential areas for investment in housing. One of the locations suggested in this context is a plot in the area of Górczewska Street and Olbrachta Street. The Warsaw Social District project is an idea of an innovative social residential area, located on the plot mentioned in the report. It was created by a multidisciplinary team of professionals. It aims to propose a concrete and feasible answer to the problem of housing accessibility. Objectives of the project relate to three

The first is to create a social district. The Warsaw Social District program is an offer for all social and age groups. The proportions between social groups and their appropriate types of housing should be the subject of further workshops as there is no existing experience to fall back on when developing solutions. The second aspect is innovation in terms of new forms of housing. Commercial housing market is generally conservative and must adapt to the expectations of buyers. Public investment initiative offers opportunity to experiment. The Warsaw Social District has already prompted a debate over legitimacy of existing solutions. In next stages of the project more functional alternatives to housing estates, buildings and residential systems themselves will be designed. Such district must be eco-friendly and designed according to the principles of sustainable development. The Warsaw Social District is also to develop new standards in architecture and, above all, in urban planning of residential settlements. The project is to prove that it is possible to have housing that would be cheap to implement and maintain, and that would at the same time have good quality and functional-



ity; and that developing master plans is effective and necessary for creating a well-functioning, living and attractive urban environment.

NEED FOR ALTERNATIVES TO DEVELOPER HOUSING. The Warsaw Social District can be a strategic project in the new Warsaw housing policy.

APPLICATION OF INNOVATIVE SOLUTIONS AND INTRODUCTION OF NEW STANDARDS REGARDING HOUSING AND COMMUNAL DEVELOPMENT is only possible with a model district design. The commercial market is conservative and only uses proven solutions. WSD would offer a chance to prove that good quality, functional social and housing development is possible. With innovative architectural design and wise master plans, buildings can be inexpensive to implement and maintain.

THE RIGHT SOCIAL AND PROGRAM MIX would create an inclusive and vibrant district where Varsovians from different income and age groups would live together.

OF THE PROCESS to create it, and only later will the time come to develop architectural solutions. The study project should be developed by a multidisciplinary team of professionals in cooperation with the city. This would allow to explore possibilities to develop specific program guidelines and develop the overall spatial framework and assumptions of urban planning. Only in the subsequent stages can one think about designing forms and spatial solutions.

CURRENTLY WARSAW SOCIAL DISTRICT NEEDS DEVELOPMENT



Ideological context of the idea of a social housing estate in Poland

Just a few years ago the site of the former prefabricated panels plant, which in its good years would provide wholesale quantities of parts for construction of Jelonki, Górce and Chrzanów, only had empty halls and large abandoned cranes. Around it, among lush weeds lay stacks of concrete slabs with holes for windows and doors. Derelict concrete revealed rusted reinforcement bars. It has been years since anyone has wanted new apartments in houses made of large-scale blocks. Today, all that remains from the old plant is a collapsing concrete plant and piles of rubble. The ruins of a factory of dreams have become a dumping ground for unrealized utopia.

In today's economic conditions and the present state of technology, the need to provide every family with their own apartment, and each person in the family with their own bed requires looking for the most cost-effective solutions - wrote Teodor Toeplitz in a companion text to the Polish edition of "The Smallest Apartment" exhibition, presented in Warsaw in 1930. Housing deficit in the interwar Polish cities, however, was so huge that a handful of enthusiasts associated with the housing reform movement were not

able to fix it. Toeplitz could not have suspected that his diagnosis would remain almost equally valid until the end of the 20th century, if not still.

What could not be fixed before 1939, turned out to be even more challenging after the war. The destruction caused by the war significantly damaged the situation of Polish housing and the thousands of people migrating to cities had little chance of finding decent accommodation. Subsequent tools to deal with the housing deficit implemented after the war by the administration of the People's Republic - who theoretically should have had the welfare of the working class as the highest priority - failed. Huge, ostentatiously monumental investments of the six-year plan were too expensive to effectively deal with the problem nationwide. Poor-man's constructions of Gomułka's 1960's - though much cheaper and faster to implement, thanks to the growing trend to use new technologies - were also not enough to meet the growing needs.

Top-down cooperative systems were nothing like the original Warsaw Housing Cooperative activities. Centrally controlled housing, or rather the housing industry, turned out to be completely inefficient due to constant underinvestment. At the beginning of the 1970's, as baby boomers were starting their own families, waiting lists for allocation apartments were so long that those who did not turn to sophisticated tricks and strategies had to sometimes wait for their apartment for several years if not longer. Usually, getting to the top of the waiting list did not bring the expected satisfaction. Tenants usually received substandard product - apartments were badly made, badly finished, full of faults and botches.

Of course - there were some exceptions: there were well-designed, cozy housing estates with comfortable apartments, equipped with a full range of social infrastructure - from kindergartens and schools, to health and shopping centers. These exceptions were, however, available to the precious few. Usually, during implementation of settlements which on paper met all the demands of a modern 'paradise on earth', there was only enough money for what was most essential - the residential buildings. The rest was ignored.

At the end of the 1960's, drawing inspiration from both Western solutions, as well as those from the fraternal Soviet Union - decision was made to comprehensively modernize housing. The cure for permanent housing deficit and a guarantee of a rapid quantitative leap was supposedly even faster industrialization of construction, brought to extreme forms. This meant total subordination of multi-family housing construction to one technology - large panel prefabrication system. Although Poland had already had its first experiments with large panel building techniques - the first blocks in Poland were constructed as early as the 1950's and in the next decade buildings from imported parts (mainly the USSR and GDR) were built in many Polish cities, this time implementation of a new technology would mean a systemic change. Since then, like magic, new mysterious names and abbre-



viations began to appear in the context of new buildings: WWP, Winogrady, Rataje, Szczeciński, or W-70 - names of large panel prefabrication systems.

All you needed to have settlements of identical blocks crop up all over the country was adequate technological infrastructure - production lines of large prefabricated panels, commonly called house factories. At the peak there were more than 150 of them. The first ones were brought whole from the Soviet Union and East Germany, next ones were produced domestically, although almost all the machinery and equipment was imported from the West for hard currency. One of these factories was set up in Górczewska Street, where Wola meets Bemowo.

With mass production it was actually possible to speed up delivery of residential chambers. Almost 2.5 million apartments were delivered during the 1970's. In the record year of 1978 more than 284,000 families received keys to new apartments. However, large panel building did not prove to be the antidote to all ills - quantity still did not translate into quality. High expected pace meant that quality of buildings was brought even lower than in the previous decade. Continuous cost cutting meant that new settlements instead of drowning in greenery, were sinking in mud, and there was no social or city development infrastructure among the high blocks.

Already at the beginning of the decade it was clear that the "modern" technology (that the West was abandoning at the time) was not enough to pull the country out of the housing crisis. What was also needed was a wise doctrine and reasonable guidelines. Already in October 1972 the Sejm of the People's Republic of Poland adopted a resolution announcing a long-term housing program. Its general provisions related to the plan for the next two decades, which was to lead to construction of up to 7 million homes by 1990. It postulated improvement of planning and architectural design of residential construction, by means of development of modern housing industry and creation of a broadest possible theoretical basis for the new housing. Implementing decisions followed the Sejm resolution: under a resolution of the Council of Ministers PR-5 - the multiannual program for general housing development, was one of six government modernization programs announced in 1974. Numerous scientific and research institutions were invited to participate in the research and design works. Universities, the best design teams, as well as central research institutes were involved - a total of forty-eight institutions. The aim of the program was "to focus the activities of scientific and research institutions on problems considered to be the most important economically and socially, and to ensure a close link between research results with their practical implementation". Those at the front of the struggle for better cities, housing estates and apartments were not only the engineers and architects, but also psychologists, sociologists, biologists, so that in near future the lifeless bedroom-settlements would be replaced by organisms meeting social and psychological needs of their residents. Although at the beginning the work of hundreds of experts looked optimistic, ultimately the broad, extremely technocratic reform of the housing program did not bring the desired results. Works slowed down, first due to the economic crisis of the mid-1970's and later due to the martial law and stagnation of the 1980's. It also turned out that the implementation of modern visions was hindered by immediate problems with the technology itself. Potential yield of the 150 factories still remained out of reach. The deepening crisis melted funds allocated for housing development and current expenditures continued to exceed original expectations. Poor quality of components produced overrode essential advantages of large panel technology i.e. speed of execution and reduced workload on the construction site. Bold visions and analyzes remained shelved forever. Only one model settlement was fully implemented in the framework of the program - Nowe Miasto II in Zamość designed by Bohdan Jezierski. As the socialist system collapsed so did not only the large prefabricated panel factories - like the one on the location of the new architectural experiment. We also lost the huge theoretical knowledgebase that could become the foundation for creating a social and housing policy in independent Poland. The largest comprehensive program of housing development in Polish history was discarded as a product of the discredited socialist system. From now on the shape of the future would be designed by the market that still is - as in Toeplitz' writing in 1930 - inclined to seek the most cost-effective solutions. Using its own interpretation of what are savings.



Prefabrication in Czech, the housing sanatorium

The apartment building in Sosnová street in Liberec was called "the housing sanatorium" in local newspaper in 1965, three years before its construction began and almost ten years before its first residents moved in. What made the author of the newspaper article call a block of flats such a poetic name? From the very beginning, this unique building, which is set in an old residential area, offered an above-standard housing inspired by Scandinavian architecture. The ten-floor building looks nice from both a closer as well as a further view despite its size. This is caused by subtle rounding of 180 meter long ground plan and by textured frontal façade. The house is perceived positively also for its sensitive setting into its natural surrounding - Jizerske mountains foot. The author of this project was Jaromir Vacek (1925), the co-founder of the famous Liberec studio SIAL. He chose housing the main theme of his professional career, which was unfortunately terminated in 1968. Before the house in Sosnova street, he built several blocks of flats in Liberec. Here he experimented with both the layout plans as well as structural system. His aim was to design architecturally attractive buildings as until then the main feature of building was quick construction and low price.

Inside "The Sanatorium" there are mostly three-room flats and studios. On the top floor there are luxury four-room flats equipped with a fireplace and a large terrace in a half-open atrium. After a long time the flats are again equipped with a kitchen and a dining room combined - which reflected the changing needs for family housing. The project includes also other services such as garages, a heating room, a mangle, a laundry and a common room. All this is hidden under a large terrace creating the house base. The house project was based on a common construction system for concrete blocks of flats To6B. Eventually this was used only partly for several standard parts. The architect together with a structural engineer Vaclav Voda conducted an experiment tested on previous buildings - on-site production of panels The wall panels were cast directly on the building site and ceilings were monolithic. This system enabled building an atypical block of flats with an architectural look very different from buildings in the following two decades. The design and building of such a block of flats was possible in the 1960s – thanks to a short liberalization of political system in Czechoslovakia. It was an era which for a short time favored experiments even in the field of standardized prefabricated building.

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Texts and elaboration:

Dominika Misterka

Michał Duda

Vladimir Balda

Kamil Miklaszewski