

**Kazanka Riverfront Master Plan** | kazan, republic of tatarstan, russia



Plan

**Merit Award**

**NBBJ**

*Category: Landscape Planning & Analysis*

**Client:** A Joint Stock Company - Millennium Zilant-City

The City of Kazan is located 1,000 kilometers east of Moscow, on the Volga River, and is the capital of the Republic of Tatarstan, which is part of the Russian Federation. The city was founded by the Tartars over 1,000 years ago and today the population of the region is half Muslim and half Russian Orthodox. At the heart of the City, on a prominent point overlooking the Kazanka River is the Tatarstan Kremlin housing their various branches of government. The Kremlin has been designated as an UNESCO world heritage site.

In the 1950's the Soviet government constructed a series of dams along the Volga River for hydroelectric power generation and flood control. As a result of the damming, a series of large reservoirs or 'lakes' were created behind them. The Kazanka River, a tributary of the Volga River, bisects the city establishing a right bank and left bank. The Volga River reservoir has also caused the Kazanka River to back-up, creating a two kilometer wide lake, a significant divide between the two banks. It also has impacted the hydrological flow of the river changing the ecological conditions, reducing the natural "flushing" process and endangering the water quality.

The historic center of the city is on the left bank around the historic Kremlin. Post Industrial Soviet area development has occurred on the right bank along with a larger amount of new housing, sports and entertainment facilities. Due to this recent development, the City has used up its remaining available development land in the center of the city.

As a result of the eroding river quality and the current lack of available new development land, the City of Kazan has decided to restore the Kazanka River closer to its original width and alignment through the creation of new fill along the right bank utilizing sand imported from the Volga River.

In 2006, DTZ was commissioned to prepare a Highest and Best Use Analysis for the Kazanka Riverfront. DTZ has recommended that the Kazanka Riverfront development consist primarily of residential uses with a capacity to construct approximately 6.65 million m<sup>2</sup>.

Our brief was to take the 463-hectare development area and establish the land forms of the new fill areas as well as the development character, building massing, density, urban design, open space, landscape and transportation systems. After thorough analysis of the city, region and river system, four initial master plan concepts we presented to the city. One concept, The Peninsulas, was selected for further development.

The Peninsulas concept increases the connectivity between the right and the left banks of the river through the creation of a series of land forms that project out into the river. The existing roadway network has been extended into and through the peninsulas to create an organic network of streets and development blocks. The curvilinear, "ribbon-like" buildings have been oriented to maximize views to the river, Kremlin and historic city center and to reinforce connectivity between the right and left banks.

Linear open spaces provide pedestrian access to the water and open up view corridors to the historic left bank.

Plan: Conceptual Master Plan - The final illustrative master plan developed as a result of our process. The cross-section, which is below the plan rendering, illustrates the 3 phases of the proposed development and range of density and building heights.

Figure A: Aerial view of the city of Kazan, Republic of Tatarstan, Russia federation - This aerial highlights the major elements impacting the Kazanka Riverfront; vehicular circulation, key access points, 1000 meter Kremlin setback, bridges, left bank vs. right bank, and the 3 phases of the development.

Figure B: Site Analysis - These diagrams look at two major elements. 1. History of the Kazanka river channel. Where it is today and where it was before the Volga River dams were constructed. 2. Distances. A 10-15 minute walk is what is considered a maximum distance before a person would prefer to drive. The grids and walking radii explore scale comparisons and distance relationships between existing riverfront activity centers.

Figure C: City of Kazan - Kazan has two distinctly different urban typologies on the left bank (historic city) and on the right bank (post industrial city). Both have the same elements, however, the scale, infrastructure, architecture, and the river separate the two typologies.

Figure D: Riverfront Urban Identity - To understand how the proposed development would fit into the context of the city, these diagrams were created to document what currently exists and what the new development proposes to establish, as it acts as a gateway between the left and right banks of the river.

Figure E: Design process

Figure F: Physical Model of the International Business District

Figure G: View from the Entertainment District

Figure H: View of Recreational Park/Area



Figure A

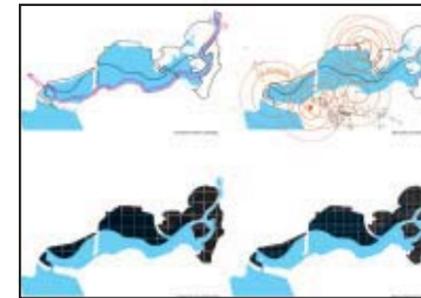


Figure B

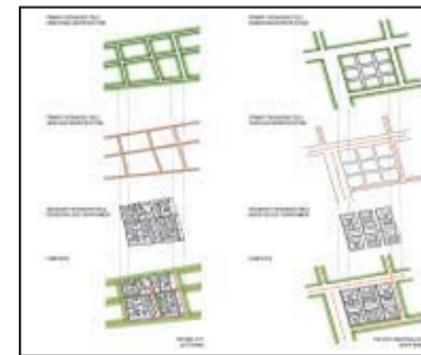


Figure C

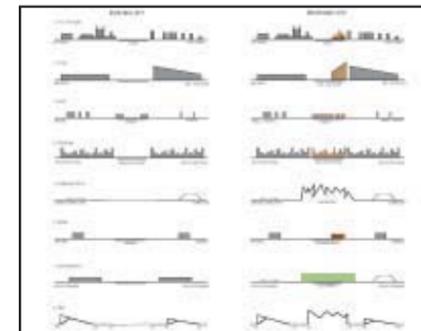


Figure D

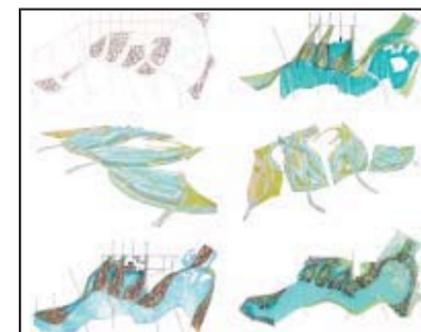


Figure E

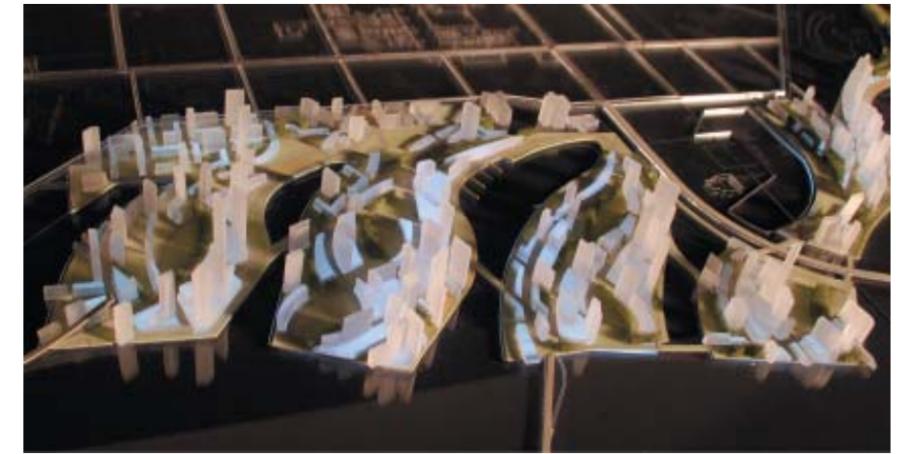


Figure F



Figure G



Figure H