

## PROJECT DESCRIPTION

This alternative develops the Roncaglette area as an accessible, recreational, water-focused park, while revitalizing and reinventing ZIP's role as a leader in industrial research and environmentally sustainable development in Padova and the Veneto region.

New development is situated in relation to existing infrastructure, allowing ZIP and the industries it supports to build off existing networks rather than starting anew. By concentrating the growth of research, commerce, and logistics within and adjacent to the existing industrial zone, agricultural land to the south is conserved.

The relocation of the existing rail yard is a major facilitator of this project. Moving the rail yard improves access to and visibility of Roncaglette Park by bringing diverse activities to the park's edge. The former rail yard becomes the park-front area of ZIP, raising the property values within this portion of the industrial zone and encouraging the reuse of the land for housing, mixed-use, and university development.

This relocation offers ZIP and the rail industry an opportunity to expand and improve upon the existing rail yard, transforming it into a larger, more efficient and productive multi-modal facility. Over 500,000 square meters of new warehouse space are constructed in close association with the new rail yard. This enables Padova to accommodate and enhance one of its fastest-growing industries: logistics.

A key component of the design is the location of ZIP's new headquarters within the park. ZIP thus begins to bridge the barrier between industry and residents' desire for a clean and healthy environment and lifestyle. The building's prominent location becomes a symbol of this alternative's greater strategy of green and sustainable industrial development.

We encourage ZIP to think of its landscape as not just that which is on the ground but also what you see above and beside you. By adopting an infill development strategy, ZIP can reduce sprawl and grow upward. Attractive and functional outdoor spaces are created through a series of green roofs. Employees and visitors will be able to access a new park landscape from above.

An intense building program is proposed as part of Scenario C. A number of large-scale, capital-intensive projects will require coordination among various investors. Key exchanges in this coordination effort will be:

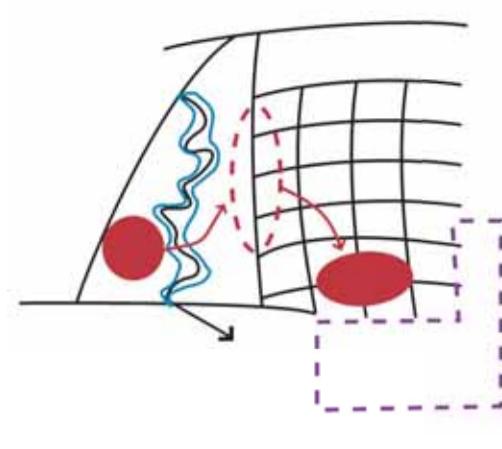
- the relocation of the rail yard within ZIP in order to develop park frontage;
- a proposed land swap between the University and ZIP to facilitate complimentary growth in the areas of research and development; and
- the sharing of transportation infrastructure costs among many users.

Improved transportation is essential to connecting the city, park, and ZIP. This design proposes three new vehicular roads: one running north-south and two running east-west. These roads enable convenient access to and amongst land uses within the park and provide links between the existing University site in Padova and the new University properties within the park. The north-south road serves as a spine through the new core of development, connecting neighborhoods north of ZIP to communities in the south. A new passenger rail line stops at two locations in the ZIP/Roncaglette Park area, offering direct service to the University, ZIP, and the park. A strong network of bicycle and pedestrian routes throughout the park connect ZIP and the city of Padova, providing additional transportation alternatives and increased opportunities for recreation.

With respect to water, Scenario C proposes that a new sewage treatment plant be built on ZIP land just south of the Piovego Canal and east of the Corso Argentina. This sewage plant will accept and treat the wastewater from residential areas that is now flowing in the Fossetta Canal. A process of dredging and/or capping the canal bed will solve the chronic problem of contaminated sediments in the Fossetta.

The wastewater generated from new development within ZIP will be treated in the existing wastewater treatment plant. To offset stormwater runoff from ZIP, much of which currently mixes with sewage and is sent to the existing treatment plant, a combination of green roofs, devices for water collection, and bioswales will be implemented to retain and filter excess stormwater, reducing total runoff.

It is essential that the Roncaglette area retain a green, recreational core to serve the surrounding communities and regional users. Activities include passive and active recreation at the aquatic center and lake, along with sports fields and trails. The green infrastructure created within the park should also penetrate into the city and to ZIP. This will take the form of establishing connections – bike and pedestrian paths and planted corridors that employ the recognizable topographic, water and planting strategies already associated with public spaces and canals in Padova.



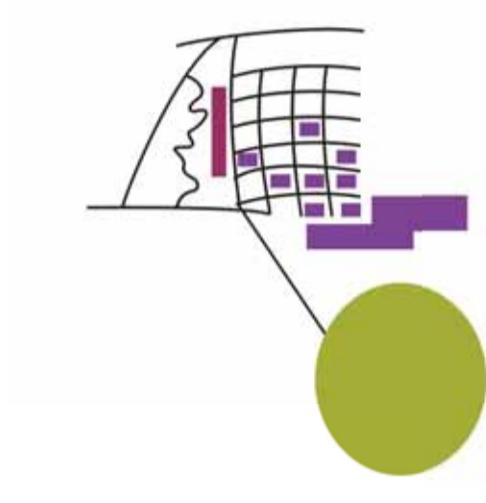
proposed boundaries



ZIP and Roncaglette area before



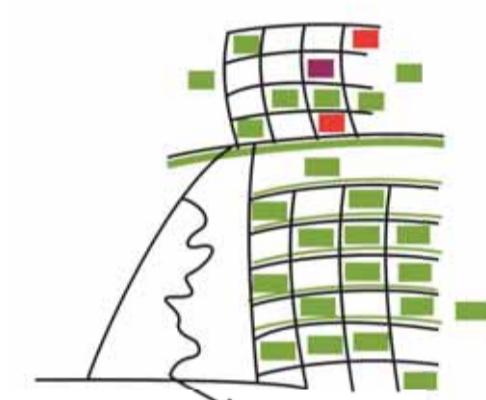
road access



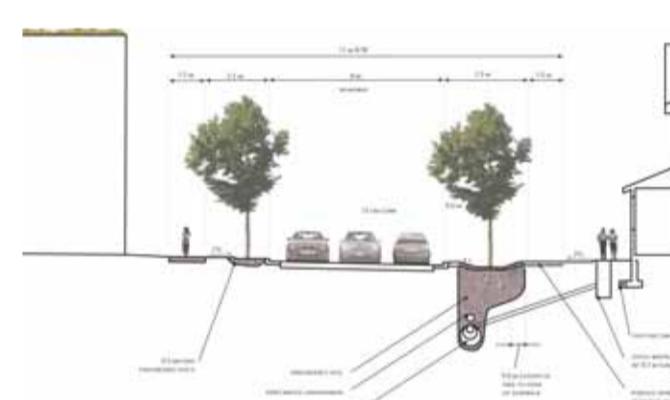
new development



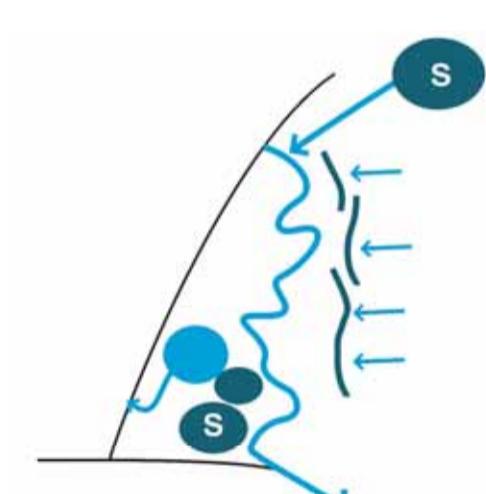
ZIP and Roncaglette area after implementation of greening strategies



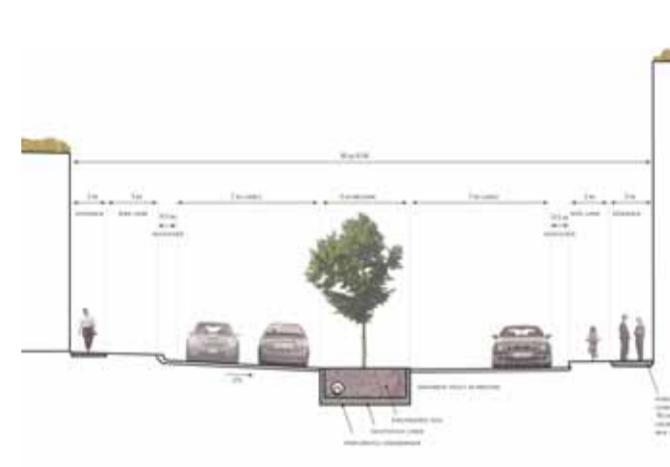
green ZIP



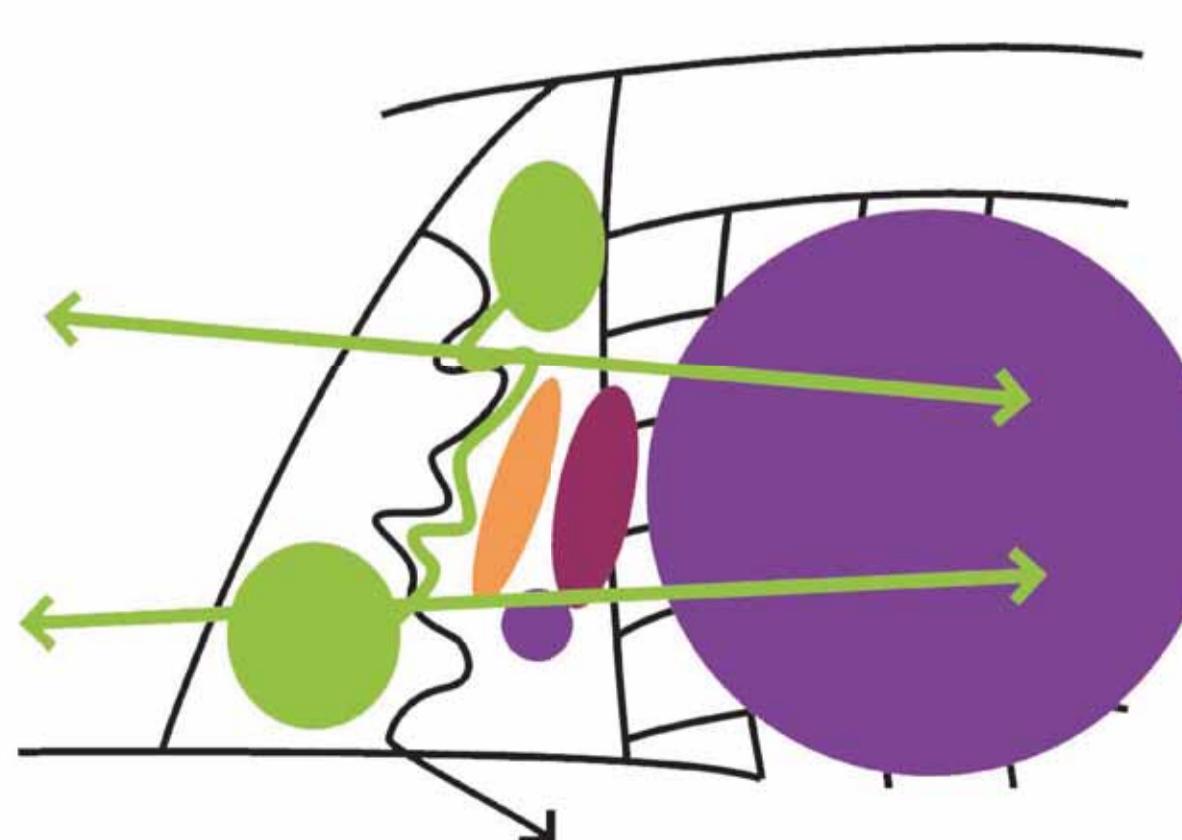
street section: industrial-commercial (nts)



water quality



street section: residential-commercial (nts)



concept

## ZIP & the environment

ZIP has the opportunity to become an exemplary organization in terms of environmentally sustainable development strategies. ZIP could potentially serve as a model for future industrial development throughout Italy and the European Union.

Italy's Ministry of the Environment currently has minimal resources. With only 164 full-time employees, it lacks the manpower and broad expertise to fulfill its many tasks. Some effort has been made to improve the situation, and employees have been transferred from other ministries. Even with these additional workers, however, the Ministry's staff in 1993 amounted to only 450 people. Although regulation and enforcement are not currently working to full capacity under the Ministry, Italy does have nationwide target goals to reduce energy consumption; these were established by the EU along with other goals listed below.

ZIP has also shown interest in meeting the standards suggested by the Sustainable Industry Area Model (SIAM) in order to become more economically, socially, and environmentally sustainable. Under SIAM the Municipality of Padova, Padova University, and ZIP have all agreed to take responsibility for initial measurements, analyses, and modeling to determine their potential for meeting sustainability goals. One benefit of ZIP's plan to voluntarily implement sustainable strategies is that ZIP could be renovated and sustainably developed on its own terms. This could potentially stimulate a broader trend of self-structured 'green' practices among other public and private interests.

The European Union environmental policy is based on the belief that "high environmental standards stimulate innovation and business opportunities."

The Action Programme entitled Environment 2010: Our Future, Our Choice outlines the importance of the following points for the period 2001 to 2010:

- tackling climate change and global warming;
  - protecting natural habitat and wildlife;
  - addressing environment and health issues;
  - preserving natural resources and managing waste;
  - enforcing existing environmental laws;
  - taking environmental impact into account in all policies relevant to the EU's governance (e.g. agriculture, development, energy, fisheries, industry, the internal market, transport);
  - closely involving business and consumers in identifying solutions to environmental problems;
  - giving people the information they need to make environmentally considerate choices;
  - raising awareness of the importance of using land wisely in order to preserve natural habitats and landscape, and minimize urban pollution.
- (from [http://europa.eu.int/pol/env/overview\\_en.htm](http://europa.eu.int/pol/env/overview_en.htm))

The EU also has a directive on Urban Waste Water Treatment (91/271/EEC). As sewage is presently flowing untreated within the canals of the Roncaglette area, this directive has clear implications for Padova and ZIP.