Flyover Corvetto, Milano

The proposed site is located in the southeast quadrant of the city and can be accessed via three Metro Line 3 stations, which connect it to the city centre from the Rogoredo railway station. The area is accessible for private transport through direct connections to the motorway and the primary urban road system.

The surrounding area is characterised by a social mix, dense residential housing, and a significant portion of public housing. Recently, a series of interventions have been implemented: the new seat of the Municipality of Milan; functional reconversions of abandoned buildings; redevelopments of public spaces including Piazza San Luigi, Piazza Angilberto II, Piazzale Ferrara and the streets surrounding the municipal office building. The Porta Romana abandoned railway yard, which will house the Olympic Village in 2026, is another interesting area undergoing change in the area further to the northwest of the city centre. It is part of the regeneration process that began in the previous decade and features significant functional reconversions that create a new urban polarity. The City of Milan’s Urban Plan (P.G.T. “Milano 2030”), with the vision outlined by the Planning Document, identifies the flyover area and the neighbourhood in which it is situated as "regeneration areas," recognising their potential to both revitalise the neighbourhood by putting public spaces in the centre and to change the structural dimension of the City by bringing the centre closer to the suburbs and the Southern Agricultural Park.

For the purposes of the competition, the flyover must be reimagined in order to restore the urban fabric, reinforce the functional mix, remodel vehicular traffic, enhance bicycle and pedestrian mobility, reduce exposure to noise and air pollution, and introduce innovative climate adaptation solutions. What new areas and activities might be created if the flyover is redesigned by altering vehicle flow? How do public areas, links to the current road system, and green spaces in between change? A new ecological, social, and recreational infrastructure can be built to connect Cassinis Park to the south with Alessandrini Park to the north on a bigger metropolitan scale. "Reinventing Flyover Corvetto", becomes an opportunity to reflect on new spatial and functional configurations within the framework of the 15-minute city.

**Area:** The project area involves approx. 65,000 sqm, including the flyover, as well as public spaces and connections to the existing road system.

**Key Information:** The site is surrounded by a condensed and concentrated urban fabric that includes areas undergoing transformation and is densely populated with more than 36,000 people who have very diverse socioeconomic profiles. There is also a high concentration of youth and foreigners.

**Priority areas & main expectations:**
- reimagining the presence and role of the flyover to reconnect the urban fabric;
- creating a green corridor that connects the main existing and future urban parks;
- introducing new functions according to the 15-minute city model;
- redeveloping public spaces and creating new meeting places;
- extending the bicycle network;
- rethinking the vehicular mobility system within the site perimeter in terms of sustainability, as well as enhancing interchange systems.
Presentation of the site and development expectations

Socio-urban framework and characteristic elements of the territory

Situated in the south-eastern part of Milan, in Municipio 4, the flyover is located within the Lodi - Corvetto Local Identity Core (N.I.L. Lodi - Corvetto), a complex area characterised by the presence of very different portions of land, in which the transition between the consolidated urban fabric to the north and the agricultural areas to the south is evident. The N.I.L. Lodi - Corvetto is densely populated, with more than 36 thousand residents with different social profiles. The portion of foreigners, which has experienced significant growth in recent years, accounts for about 25% of the population, well above the city average. Equally significant is the presence of the population aged between 20 and 39, also attracted by the urban developments that have been affecting this portion of the city and the surrounding areas in recent years.

The Grigioni district, named after the company that created the residential complex situated between Viale Lucania and Via Boncompagni, is one of the various parts that make up the N.I.L., to the east of the square of the same name. It has services that are primarily aimed at the quarter itself, making it a part of the city in its own right, almost independent of the context in which it is located.
Similarly, the part to the west of Piazzale Corvetto is predominantly residential and the majority of the building dates back to the 1960s. The main services are located on Via Mincio and Via Oglio, including a swimming pool, a multifunctional centre, schools, a library, the seat of Municipio 4 and the new seat of the Municipality of Milan. This area is characterised by its housing and social mix, in which a substantial number of foreigners coexist as well as a young, well-educated population.

At Piazzale Ferrara, where the covered market of the same name is located, the so-called 'Corvetto quadrilateral' is grafted, i.e. the historic public housing estate located between Via Polesine - Via Comacchio to the north, Via Carlo Marocchetti and the flyover to the east, Via Fabio Massimo to the south and Via Ravenna to the west. The Mazzini district, comprised between Via Polesine - Via Comacchio on one side and Viale Enrico Martini - Via dei Cinquecento on the other, extending as far as Via San Dionigi, appears as a portion of the city with a distinct identity. Built in the 1920s by the Istituto Autonomo Case Popolari (I.A.C.P.), it is configured as a compact reality made up of block buildings and internal courtyards and is characterised by a series of critical issues frequently found in E.R.P. neighbourhoods, including poor maintenance and social problems. The population in the neighbourhood consists mainly of elderly people and large families with a high concentration of children. Most of the population living there do not have university degrees. A similar situation can be seen in the residential complexes built in the 1950s along Viale Omero and Via Berzoni by INA-Casa, the Municipality of Milan and I.A.C.P., again consisting of block buildings, but according to an open settlement principle. In the vicinity of Piazzale Gabrio Rosa, the situation appears different: the E.R.P. housing has been largely sold to tenants over the years. The population appears to belong more to the middle class and the percentage of the foreign population appears smaller. Moreover, the condominium spaces themselves are characterised by greater care and quality. The Church of San Michele and Santa Rita is located in the square as well as a number of services, including the oratory, schools and nursing homes. The north-south axis of Viale Omero serves as a linear garden, a meeting place for locals, and a link between the city to the north and rural areas to the south.

With insufficient space for cyclists and pedestrians, Via Fabio Massimo, the quadrilateral's southern boundary, is an access road to the motorway junction. Beyond this is the Porto di Mare area, which also contains Cassinis Park and Porto di Mare Park, which is directly connected to Vettabbia Park.

The Vettabbia Park is characterised by its pedestrian and cycle routes that connect to the village of Chiara Vallee and its Abbey, as well as farmsteads, some of which are being renovated, and whose presence strengthens the park's peri-urban character.
Ongoing transformations

The southeastern part of Milan is experiencing a phase of strong transformation. In fact, there are numerous projects implemented by both public and private operators, which are planned to be implemented over the next decade.

One of the most significant interventions will be the transformation of the Porta Romana railway yard, which will include the construction of the Olympic Village in preparation for the Milan Cortina 2026 Winter Games. A new central park is being planned around which new offices, apartments, public services, and a student residence (temporarily the Olympic Village) will be built.

To the south of the railway yard, the Symbiosis operation is underway to create a new business district, which will include the Vitae project, the winner of the first edition of Reinventing Cities for the Serio site.

Equally significant is the transformation of the Rogoredo railway yard, where it is planned to build houses (partly Social Housing), a student residence, commercial spaces, public services and a park.

On the other side of the railway line, the Santa Giulia district is expected to be completed, which is already equipped in the southwest with houses, offices, commercial spaces, a park and public services. In the northeastern part, new houses, schools and other public services are planned, as well as the extension of the existing park. The entire district will be equipped with four major functions, such as a museum, a commercial facility, the new Conservatorio campus and the Palaltalia Olympic Arena. In addition, the district will be served by a new tram line, which will connect the M3 Rogoredo FS stop with the M4 Repetti stop. The Paullese road will be extended to the new roundabout planned at Via
Cascina Merezzate, and a further extension to the area of Via Sulmona and Via Varsavia is currently being assessed. This extension or other alternatives currently being studied, are currently an unavoidable condition for the closure of the flyover to vehicular traffic.

The Porto di Mare area, which for years has been at the centre of media attention due to the state of degradation in which it found itself, was acquired by the Municipality of Milan in 2013 with the intention of starting a process of urban regeneration through a series of activities. The area falls, as reported by the P.G.T. “Milano 2030”, within the ‘Major Urban Functions’ scopes that provide detailed transformation projections. Today it is characterised by the disorganised presence of sheds and open-air warehouses, sports facilities and farmsteads, some active, others under-utilised or in a state of abandonment. The former Karma discotheque and the Casotello, Corte San Giacomo, San Nazaro and Carpana farmsteads, to which Casotto farmstead will be added, have recently been the subject of calls for use concession of buildings for the establishment of functions primarily of public interest. On the other hand, the redevelopment of the Nosedo farmstead, already the subject of the U.I.A. OpenAgri project, is underway.

In 2017, the Porto di Mare Park, bordering the railway line, was given in concession to the Associazione Italia Nostra, which took charge of its redevelopment, management and supervision, of the model experimented in other city parks. The same association drew up a landscaping project for the entrance areas (the document is available in the Dataroom).

As far as the Corvetto quadrilateral is concerned, the Viale Omero 15 residential complex will undergo a major renovation and adaptation of unused housing and ground floor spaces in the next few years in order to improve accessibility. At the same time, energy efficiency works will be carried out and the outdoor spaces will be redesigned.

The public spaces in the vicinity of the new seat of the Municipality of Milan will also undergo a series of redevelopments. The car park between Via Sile and Via Polesine will be transformed into a pedestrian area, keeping only the underground part as a car park, while on the surface new street furniture, children’s play areas and trees will be installed. Pending the redevelopment of the covered market, Piazzale Ferrara has been made semi-pedestrian through a tactical urban planning intervention. Also in Piazzale Ferrara, an A.L.E.R. building, which had been in a state of disrepair for many years, is being restored and will be converted by the Politecnico di Milano into a student residence, with the ground floor set aside for services for the neighbourhood. In Piazza Angilberto II, also the subject of a tactical urbanism experiment, the final transformation into a new pedestrian area with new street furniture, trees and flower beds is almost complete. Finally, the square in front of the seat of Municipio 4, currently used as a car park, will be transformed into a real neighbourhood square.

**Mobility**

The flyover Corvetto was built in the late 1950s and early 1960s to connect the A1 motorway (the so-called ‘Autostrada del Sole’) with Piazzale Bologna and the city in general. It is a symbolic infrastructure of twentieth-century planning centred around cars and the need to ease traffic flows at the expense of the city’s quality of life. We seek to shift the current paradigm, which is increasingly being challenged today.

Viale Lucania and the Via Marochetti - Via Cassini's axis, as well as Corso Lodi, are classified in the Sustainable Urban Mobility Plan (P.U.M.S.) as a **secondary network (neighbourhood street)**. In terms of private traffic, the Cassinis - Marocchetti axis now serves as an alternative to the flyover Corvetto for entering the city from the south-east, connecting directly with Corso Lodi, and also serving the areas of Piazza Angilberto II and Piazzale Ferrara. During the morning rush hour (8.00 - 9.00 a.m.), the traffic load is around 1,800 units, which is comparable to the value on the flyover.
As far as the public transport system is concerned, the flyover area is connected to the city centre via the Corso Lodi - Corso di Porta Romana axis, along which the M3 line runs, with the Corvetto, Porto di Mare and Rogoredo FS stops near the site. The Rogoredo railway station is one of the city’s main stations, served by suburban and regional trains (including lines S1, S2, S12 and S13 of the Passante Ferroviario) and by high-speed trains in the direction of Genoa and Bologna. Numerous bus lines also pass near the flyover: at urban level, lines 34 (Q.re Fatima - Via Toffetti), 77 (Lodi M3 - Poasco), 84 (L.go Augusto - S. Donato M3), 88 (Rogoredo FS M3 - V.le Ungheria / V.le Aviazione), 93 (Lambate - Viale Omero) and 95 (Rogoredo FS M3 - Q.re Barona); at interurban level, line 140 (Rogoredo FS M3 - San Donato).

Regarding the bicycle network, the P.U.M.S. identifies a series of main and secondary itineraries, some of which have already been implemented, aimed at facilitating both movement between the city’s various centralities and connection with the surrounding area. Specifically, the site follows the main itinerary that runs from Piazzale Bologna along Viale Lucania to Piazzale Corvetto and then turns onto Via Marocchetti - Via Cassinis to Rogoredo station. Roads with only signposted cycle lanes converge at the site, such as the one in Viale Puglie, and in protected lanes, such as the one in Corso Lodi and in Viale Enrico Martini - Viale Omero. The latter connects to the ‘AbbracciaMi’ itinerary (the 70 km-long cycle path around Milan, which passes through a series of parks, including the Porto di Mare Park and the Vettabbia Park), as well as to the ‘Strada della Abbazie’ and the paths within the Southern Agricultural Park.
With regard to ‘BikeMi’, the bike-sharing service of the Municipality of Milan, there are only three stations in the vicinity of the site, located in Piazzale Bologna, Piazzale Corvetto and Piazzale Gabrio Rosa, respectively.

It should be emphasised that the flyover is a **real barrier** that can only be crossed on foot in Piazzale Bologna, in the vicinity of Piazzale Corvetto or thanks to the subway of the M3 Porto di Mare stop, whose external accesses, however, present reduced spaces for pedestrians, especially on the Via Fabio Massimo side. The spaces under the flyover are occupied daily by unregulated parking cars. The pedestrian crossing in Piazzale Bologna is about 300 metres from the first effective crossing in Viale Lucania, while between the subway in Porto di Mare and the first effective crossing in Viale Marocchetti, the distance is about 400 metres. The presence of the infrastructure and the excessive space for cars have as a consequence the **fragmentation of public spaces**, as well as the **inaccessibility of several green areas** that have an interstitial character and are poorly developed. Furthermore, the presence of active frontages, characterised by neighbourhood commercial activities, which are poorly valued and concentrated mainly in Piazzale Corvetto and along the north side of Via Marocchetti, is to be noted.
Priority development objectives and project scenario

In this context, the students taking part in the competition are asked to reimagine the presence and role of the flyover Corvetto as an opportunity to connect the different parts that make up the N.I.L., which are currently isolated and poorly integrated into the urban fabric, according to the principle of proximity underlying the ‘15-minute city’ model.

The flyover barrier is one of the main road axes in the city and is a space solely dedicated to cars. The daily traffic generates a number of negative impacts, especially in terms of noise and air pollution.

The main objective to be pursued and requested of the participants is to rethink the urban axis of the flyover so that it no longer constitutes a barrier, but rather becomes a connecting element between the main existing urban parks, such as the Alessandrini Park to the north and the Cassinis Park to the south, and the parks to be built in the future in Santa Giulia and in the Porta Romana and Rogoredo railway yards.

The transformation should aim at implementing and strengthening the bicycle network in the neighbourhoods, in particular by improving the itinerary connecting the Rogoredo railway station with the existing bicycle paths in Viale Puglie, Corso Lodi and Viale Enrico Martini - Viale Omero, so that it can be travelled directly and safely.

At the same time as the reorganisation of the connections with the existing road system, the public space will have to be redesigned so that it is converted into an inclusive place, an area for individuals to socialise and congregate, easily accessible and of high quality, well integrated with services and the public transport system. To this end, the flyover will have to be rethought through innovative actions aimed at transforming this space, and thus also the context, into an attractive place, while introducing solutions to counter the effects of climate change on the city.

In developing their proposals, the participants will necessarily have to deal with the issue of existing vehicle traffic and its probable transformation.
City climate priorities and specific environmental challenges

The Municipality of Milan has recently approved the Air and Climate Plan (P.A.C.), as an instrument, in the urban sphere, aimed at reducing atmospheric pollution, contributing to the prevention of climate change and defining adaptation strategies for the municipal territory, in compliance with the principles of the right to health, equity and justice and considering the priority criteria of social inclusion and the protection of the weaker segments of the population. The P.A.C. contemplates the time horizon of 2025 for the return to the air quality limits and that of 2030 for the consolidation of a low-emission city model, capable of coping with climate change through the implementation of adaptation actions, as a necessary transition towards a carbon neutral city by 2050. Students Reinventing Cities fits into this context.

In addressing the environmental and climate challenge, the project proposal should share the vision and objectives of the P.A.C., specifically:

- protection of sensitive areas, residents and city users from exposure to air pollution;
- net reduction in motorised personal mobility for private use;
- urban cooling and reduction of the ‘heat island’ phenomenon through urban forestation and an increase in green areas;
- Milan ‘sponge city’ through depaving, reducing the hydraulic risk and decreasing the inflow of rainwater to the sewerage system;
- promote Clean Construction, i.e. reuse, disassembly, life-cycle approach and minimisation of waste generation on site.

Alongside the environmental problems that affect the entire city, such as concentrations of air pollutants (especially in winter) and heat waves (in summer), the flyover Corvetto area is currently exposed to noise pollution, mainly from traffic. For this reason, the
project proposal should aim at reducing it, through the reshaping of the flow of cars that pass daily over the flyover.

In order to contribute to transforming Milan into a ‘carbon neutral’ city by 2050, a number of aspects will have to be addressed, including making it a cycle-pedestrian city, characterised by active, intermodal and sustainable mobility, as well as a city suited to combating climate change, characterised by an abundance of greenery and the utilization of water resources for the enhancement of health and quality of life.

Specific planning rules and regulations

According to the provisions of the City of Milan’s Urban Plan (P.G.T. “Milano 2030”), the flyover Corvetto area is subject to the forecasts summarised below. With reference to Table R02 ‘Urban Planning Indications’ of the Regulatory Plan, the site falls within two distinct areas of Regeneration:

- **‘Piazza’ area in the northern parts of the site**, is to be viewed as an urban space that serves as a pivot between the city’s core and its periphery. According to the general framework, within this area:
  - it is permitted to transfer building rights from other areas;
  - it is possible not to realise, but to monetise the Social Housing quota when obligatory for changes of use and new construction;
  - it is permitted not to count private services, neighbourhood businesses, craft activities and catering establishments within the Gross Floor Area if they are directly related to the public space and up to a maximum of 250 square metres;
  - Large Sales Facilities (more than 2,500 sqm) are allowed if mezzanines are involved;
  - the maximum building index (1 square metre/square metre) is allowed to be exceeded for interventions that achieve the following public objectives: continuity of urban relations, optimisation of road connections, maximisation of pedestrian areas by increasing safety, permeability and capillarity of connections, diversification of ground floor uses and maximisation of the attractiveness of open spaces, improvement of the relationship between built and open spaces, integration of renaturalisation elements to improve the microclimate.

- **The interchange area in the south-eastern parts of the site** is to be understood as large public transport and interchange facilities to be regenerated. According to the general framework, within this area:
  - it is permitted to transfer building rights from other areas;
  - it is possible not to realise, but to monetise the Social Housing quota when obligatory for changes of use and new construction;
  - it is permitted not to count private services, neighbourhood businesses, craft activities and catering establishments within the Gross Floor Area if they are directly related to the public space and up to a maximum of 250 square metres;
  - Medium Sales Structures (up to 2,500 sqm) and Large Sales Structures (over 2,500 sqm), also organised in a unitary form, are permitted;
  - it is permitted to exceed the maximum building index (1 sq m/sq m), for interventions that achieve the following public objectives: continuity of urban relations, the interaction between built and open spaces, overcoming infrastructure barriers, maximisation of pedestrian areas, diversification of
Any new buildings may be built on several storeys above ground level. However, given the proximity to the Milan-Linate airport, the limits on heights indicated in Table R08 ‘Obstacles and dangers to air navigation’ of the Regulatory Plan must be respected. With reference to the boundary area of the obstacles, the flyover area falls within:

- Superficie Orizzontale Interna (S.O.I) - between Via Avezzano and Rogoredo station - where the maximum height of the permitted building height is 147.85 m;
- Conical surface (S.C) - between Via Avezzano and Viale Lucania - between the external horizontal surface (247.85 m) and the internal horizontal surface (147.85 m). The maximum permitted building height is to be determined by linear interpolation between the two maximum heights indicated. Specifically, the area is between 160 m and 147.85 m.

The heights of the ground level should be taken into consideration: Piazzale Bologna is located at approx. 111.4 m asl; Piazzale Corvetto at approx. 109.5 m asl and the Rogoredo station square at approx. 107.2 m asl.

Furthermore, in the P.G.T., depending on the degree of hydraulic hazard, the characteristics of the surface water table and the geological-geotechnical aspects, certain feasibility classes have been identified that the municipal territory be zoned (Table R01 ‘Geological and hydraulic feasibility’), to which precise implementation rules refer. More specifically:

- the area between Piazzale Bologna and Via Pallia falls within feasibility class II (“Feasibility with moderate limitations”, as per Art. 44 of the Regulatory Plan);
- on the other hand, the area between Via Pallia and Rogoredo station falls within feasibility class IIIC (“Feasibility with significant limitations”, as per Art. 45, paragraph 5, of the Regulatory Plan). Since this is an area with a low water table submergence (< 5 m), competitors must take this aspect into consideration if they envisage the construction of underground or basement rooms pertaining to any new buildings, as well as water discharges and compatibility with hydraulic invariance criteria.

Both Table R01 and Table R09 ‘Hydrographic network’ highlight the presence of the Cavo Redefossi, a culvert, which runs along the Corso Lodi - Via Marocchetti - Via Cassinis - Via Rogoredo axis and belongs to the Main Water Network (R.I.P.), as per Articles 49 and 50 of the Regulatory Plan. It should be noted that a buffer strip 10 m wide from the edge of each bank is envisaged for the network within the Consolidated Urban Fabric (T.U.C.) and, as specified in Article 7 of the Hydraulic Police Regulations (annex no. 2 of the Regulatory Plan), it is not permitted to carry out works within the riverbeds. Within the buffer strips, the interventions pursuant to Article 8 of the corresponding Regulations are possible, subject to the authorisation of the competent Water Authority.

The same axis, as indicated in Table 06 ‘Protection and safeguard constraints’, coincides with a strip at risk of archaeological discoveries, as it follows the route of the ancient Mediolanum-Placentia, i.e. the road of Roman origin that connected Milan with Piacenza. This strip largely involves the flyover Corvetto area, which is therefore subject to the indications of Article 66 of the Building Regulations in the case of excavation works.

Part of the site is affected by the constraint related to the presence of wells as shown in Table R05 ‘Administrative and soil protection constraints’, which identifies a protection strip of 10 m from the well as an ‘absolute protection zone’ (unbuildable) and a buffer strip of 200 m (conditional buildability), both obtained using a geometric criterion starting from the position of the wells.
Language requirements

The proposal must be written in **English** and optionally also in Italian. In addition to the entries requested in the Regulations for the Competition, competitors shall submit the digital illustrative panel in A3 format and also in A1 format, horizontally. The A1 panel must be printable, in light of the upcoming exhibition organised by the City of Milan.

City-specific awards

The City of Milan will give the winning team public recognition and will publicise the results of the competition through an exhibition open to the public and possible publication of the works of the participating teams, giving adequate visibility to the winning team through social media, press releases as well as a presence on the website of the City of Milan. 

By participating in the competition, competitors authorise the exhibition and eventual publication of their entries.

Participants will be allowed to publish their entries, as long as they are published at the end of the competition, under penalty of possible exclusion measures.

References

- AA.VV., Corvetto-Chiaravalle. Conoscenza per il cambiamento, I Quaderni de Lacittàintorno, Fondazione Cariplo, 2019, available at the link: https://lacittaintorno.fondazionecariplo.it/download-2/
- "Milano 2030" - PGT in force, Municipality of Milan, available at the link: https://www.pgt.comune.milano.it/
- Sustainable Urban Mobility Plan, Municipality of Milan, available at the link: https://www.comune.milano.it/aree-tematiche/mobilita/pianificazione-mobilita/piano-urban-della-mobilita
- Air and Climate Plan, Municipality of Milan, available at the link: https://www.comune.milano.it/aree-tematiche/ambiente/aria-e-clima/piano-aria-clima