

Fly over Live under



Presentation

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A project on two levels

Any intervention on the flyover will have a **major impact** on the life of the Corvetto neighborhood and its residents. After all, so it was with the introduction of a weighted road infrastructure, the flyover. The consequences have been greater **automobile accessibility** for Milan but **neglect for the neighborhood**. We cannot repeat the same short-sightedness with a project for the city of Milan but not for Corvetto. So here our proposal moves on **two levels**, the return of a quality public space to the inhabitants and the introduction of a project of international scope. Two **reference scales**, first the local one and then the metropolitan one, which are developed on two levels, the **square and the flyover**. They are and must be sides of the same coin, working in synergy and able to accommodate both the daily practices of the inhabitants and the extraordinary practices of people from outside, workers and tourists. A place that is capable of **attracting** the best talent **without excluding** those who reside here. That is why the title we have chosen to give our project is “**Fly over live under**”.

The project we came up with aims to respond to the following **Sustainable Development Goals** of the United Nations Agenda 2030:



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Our project crosses all of “The 10 Principles for a Green & Thriving Neighbourhood”, but particularly investigates the following:

1. **Complete neighbourhoods**
2. **People-centered streets and low-carbon mobility**
3. **Smart and connected places**
8. **Green spaces, urban nature and climate resilience**



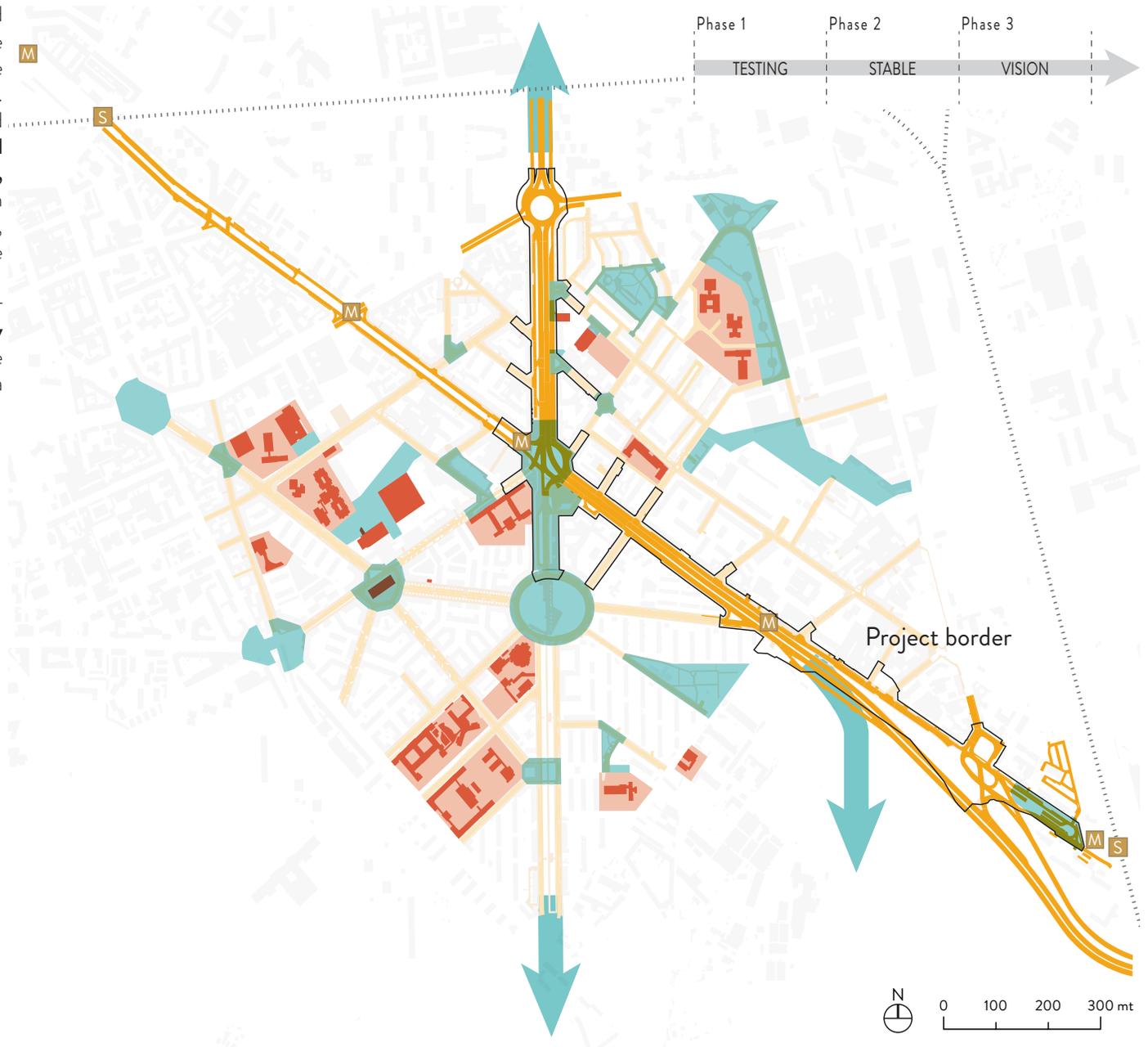
“Stop Gentrification” hanging from the flyover (Authors’ image)

Strategies and spaces involved

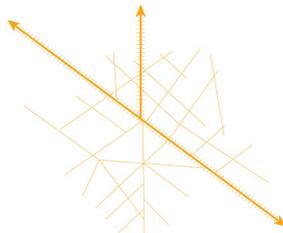
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We have defined **3 major intervention strategies** that hold together the **two dimensions**, local and metropolitan. The first concerns **mobility** within the neighborhood that puts the pedestrian at the center and attenuates the car-oriented logic. Two major axes of mobility for goods and people are defined, and a capillary grid of slow roads. The second seeks to **enhance and network service spaces in the neighborhood, sharing resources, spaces, experiences and knowledge**. The third is the definition and design of widespread **meeting spaces** in the neighborhood, held together by safe routes. Finally, an enhancement of the green heritage.

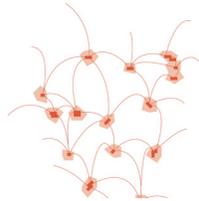
The strategies will all be developed **in phases** to have greater control and adaptability of the project. The first is an **exploratory phase** in which the city's reactions to the interventions are tested, the second learns and corrects the direction towards a **stable** milestone, and the third dares a grand **visionary project**.



Reorganization of mobility spaces for an intermodal rebalancing of flows of people and goods



Recognition, networking and promotion of public and association service resources spread throughout the neighborhood



Redesign and widespread expansion of the supply of open and green spaces in the neighborhood



The new mobility paradigm

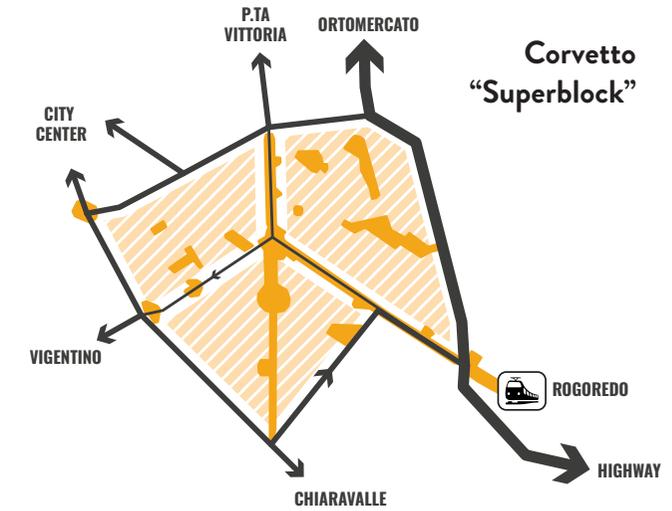
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The mobility strategy is the **trigger of our project**, as well as the one that really refers to the whole neighbourhood scale. The State of the Art of mobility in Corvetto is **dominated by the vehicular traffic**. All roads were planned and meant to answer cars demand and movement and there is a **lack of a real hierarchy** of streets, especially in the local ones. The A1 motorway, that is represented by the **flyover** in its final part, was meant to directly reach the urban fabric of Milan and let cars and especially trucks quickly arrive to the main attractive points of the city (e.g. the

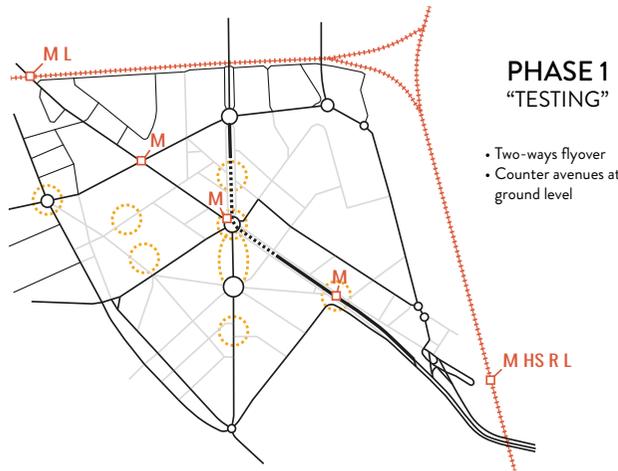
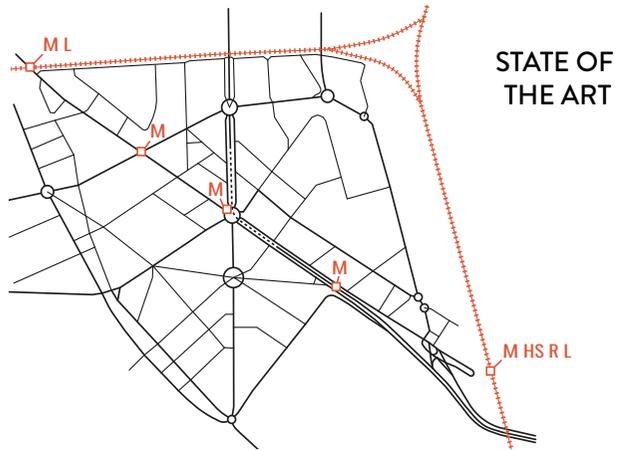
Ortomercato). The most evident result is the configuration of Piazzale Corvetto: basically **a road junction**. We think that the mobility of the area needs a radical reconsideration **towards a new paradigm**, following 3 main actions:

- 1. Setting back the motorway connection**
Since over the years the city has expanded and we need to rethink where and how the motorway road system should link to the urban road system.
- 2. Making Piazzale Corvetto a real square**
The logic of this car intersection must be reversed, in order to give back to the inhabitants a public space that can be lived and easily accessed.
- 3. From a network of streets to a network of spaces**
The residential and local streets have become the reign of cars, with oversized sections and parking spaces. We must design new **places for people** in the public space par excellence, which is the street.

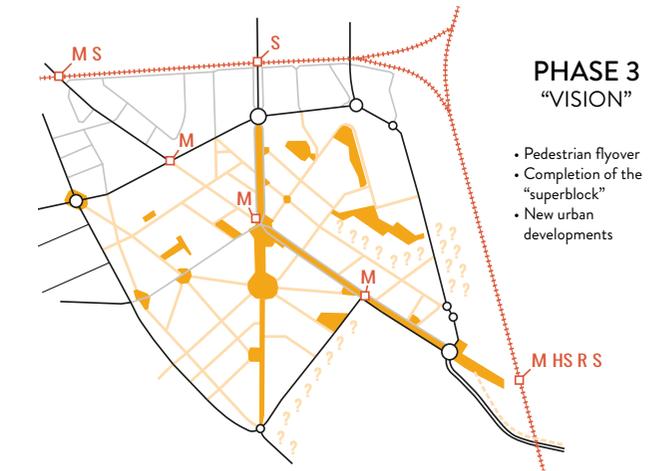
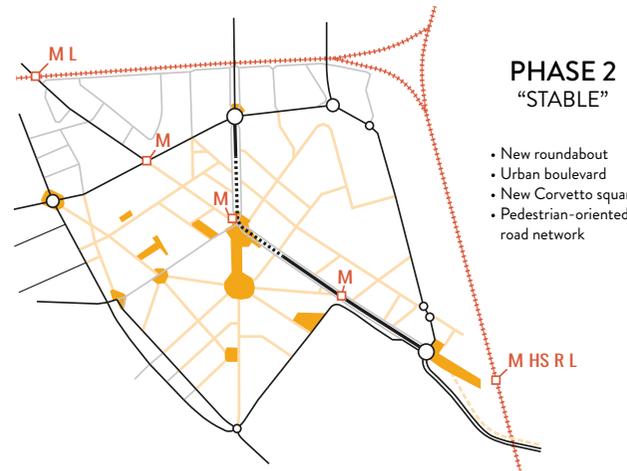
All these strategies find place in the 3 phases of our project, which are detailed in the diagrams below. The long-term goal is to achieve a mobility model that recalls the Barcelona's **superblock**



logic. In our case the block is divided in 3 more smaller blocks. In each of them we foresee a radical change in order to achieve new spaces for people and not only for cars.



— Main road network Two-ways flyover	— Pedestrian-oriented road network	⊙ Tactical urbanism	□ Public transport node	M Metro stop	R Regional train stop
○ Main road intersection	— Local road network	■ New squares and public spaces	?? Long-run urban regeneration	++++ Railway	HS High speed stop	S S-Line train stop



Corvetto and its social resources

In order to investigate the social tissue of Corvetto and to collect data and information, we experimented many social research techniques:

- **Interview** with Vincenzo, founder of **Corvetto Street Basket Academy**;
- **Participation** in the **meeting Corvetto in trasformation: toward what?** at C.I.Q. (Centro Internazionale di Quartiere);
- **Interview** with a worker of **DOPO?**;
- **Questionnaire** with open format questions;
- **Focus group** with 10 people belonging to age group 70 - 80;
- **Participation** in the monthly meeting of **Rete Corvetto at Laboratorio di Quartiere Mazzini**, where various associations meet up (like Terzo Paesaggio, La Strada, Equi.libri, QuBi, Todo Modo, Dare.ngo)

The main goal of this study was to **investigate the perception** of the present life in the neighbourhood, mainly referring to green areas, public spaces, mobility, cycle lanes, and the flyover and to let them **guide our design solutions**. We were able to collect testimonies of male and female residents with an age range of 21 to 80 years old, who gave us their impressions, ideas and memories regarding our project's main topics.

In particular, the negative comments and blurred memories

regarding the flyover were very often balanced by the desire to first realize something below it.

“Why should we do the Corvetto’s High Line, if it’s still a mess below?” (Vincenzo)

For this same reason, most of the people’s recommendation for a better livability referred to the creation of playgrounds, outdoor gyms, aggregation spaces. These desires were directly linked to the proposed vision for the flyover.

We refer to the dedicated appendix for the detailed results of the work.



Meeting of Rete Corvetto at Laboratorio di Quartiere Mazzini. (Facebook page, Laboratorio di Quartiere Mazzini)



Meeting of Rete Corvetto at Laboratorio di Quartiere Mazzini. (Facebook page, Laboratorio di Quartiere Mazzini)

STRONG POINTS

«**Proximity** to the city center and the countryside; efficient connection of public transportation»

«Green areas and many facilities»

«Human strenght, multiculturalism. benevolent **community dimension** which is not present in the city center»

WEAK POINTS

«**Insecurity** of certain pedestrian crossing»

«Dirt , neglect, **crime**, bivouacs»

«The cars parked on the pavement which make anything ruined»

GREEN AREA EVALUATION

«Nice, but **unlivable**»

«They could be increased»

NEIGHBORHOOD VIEWS

«Nice, but improvable»

«**Very positively**, an improvement has been made»

«It was built without criteria; **missing sections**»

«Ugly thing»

«**Junk**»

«Perception to be **blocked up in the traffic**»

«Possibility to attend public areas **calmly**»

«Possibility to have much more **social and cultural spaces**»

BIKE LANE EVALUATION

FLYOVER PERCEPTION

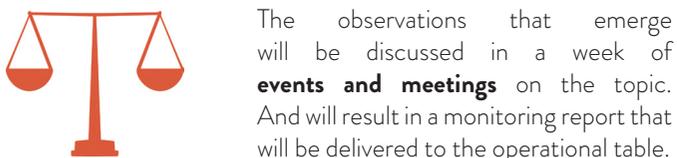
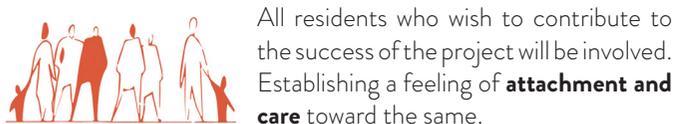
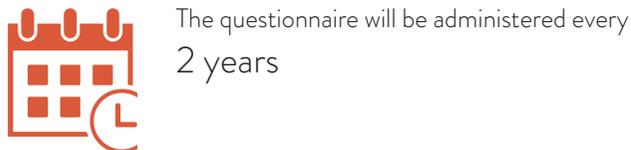
EXPECTATION AND DESIRES

Monitoring for an incremental design

The purpose of this approach is:

- **Monitor** how social actors' perceptions change as a result of the changes implemented;
- Let the monitoring activity **guide the project implementation** process in a perspective of incremental design, open to adjustments in progress;
- Keep up the level of **communication and attention** among the different actors involved, both on the side of the public administration and on the side of individual citizens or local associations.

The monitoring activity will be held following the scheme.



Our hypothesis assumes that the data collection will be done 1 time every 2 years in order to be in line with **actual needs** of the city users at that future time.

It is intended to construct a questionnaire through which respondents:

- Will be asked to express their degree of **agreement/disagreement about the statements** that will be proposed from time to time;
- Will **actively mention the difficulties or the negative aspects** emerged during project's phases;

- Will **actively propose new ideas, suggestions, possibilities and desires**;

This approach will let us develop **indices** of perceived environmental qualities that reflect the specificity and uniqueness of the context of reference and enable respective longitudinal monitoring (Repeated Cross- Sectional). But it will also allow us to include a more **active role** for the city users, especially fostering those feelings of **care and attachment** to the project that we mentioned earlier, because they will be one of the main engine of its **success over time**.

The indicators investigated will be as follows:



ARCHITECTURAL-URBANISTIC ASPECTS

Perception and pleasantness about the visualized and practiced space and the green areas



SOCIAL ASPECTS

Perceived safety, sociability, and the presence of friendly and cooperative people



FUNCTIONAL ASPECTS

Social services like school and health services, recreational services like sports services and facilities and socio-cultural activities, commercial services and transportation services



CONTEXTUAL ASPECTS

Perceived psychological climate, environmental healthiness (noise and air pollution), maintenance and care



PLACE ATTACHEMENT

Symbolic dimension measured by considering the connection with their neighborhood



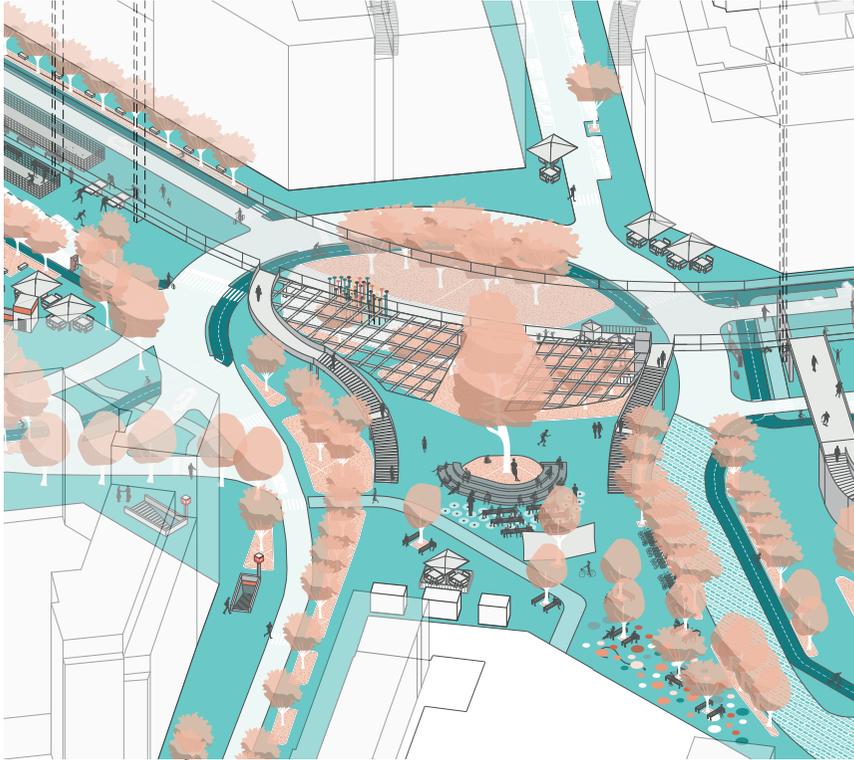
COMMUNITY PARTECIPATION

Perception of what an individual "can do" and "should do" to improve his or her living environment

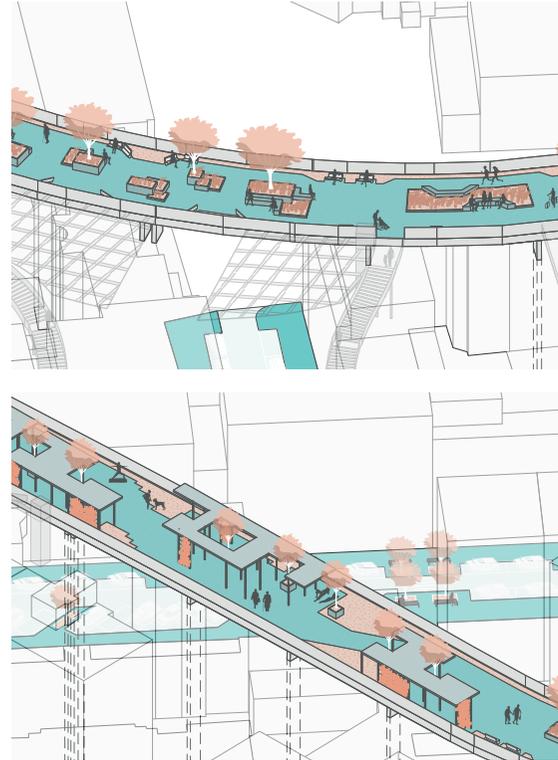
The new Corvetto Square

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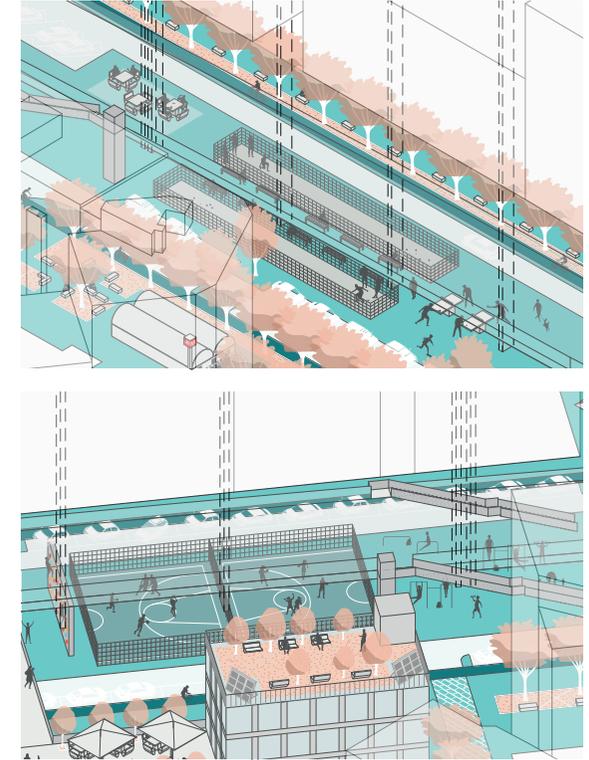
New face of the square



Fly Over



Live Under



The idea behind the whole project is facing the dualism between the **over** and the **under**. The peculiarity is trying to force the current situation, in which both the dimensions are almost inaccessible and often unpleasant for inhabitants and activities. The goal is redeeming and giving them back to people which would be the main actors in this process.

Over the highline will be a **pleasant place** where to look at the city from a different point of view, having a fascinating walk through wooden canopies, greenery and seats.

Under the highline is the **place where most of the activities are placed**. The realization of new public spaces through the redemption of surfaces which today are bounded to vehicular traffic, will guarantee an increasing quality of the entire area.



The new urban attractor

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Comune di Milano launches a call for the design, construction and management of the Piazzale Corvetto



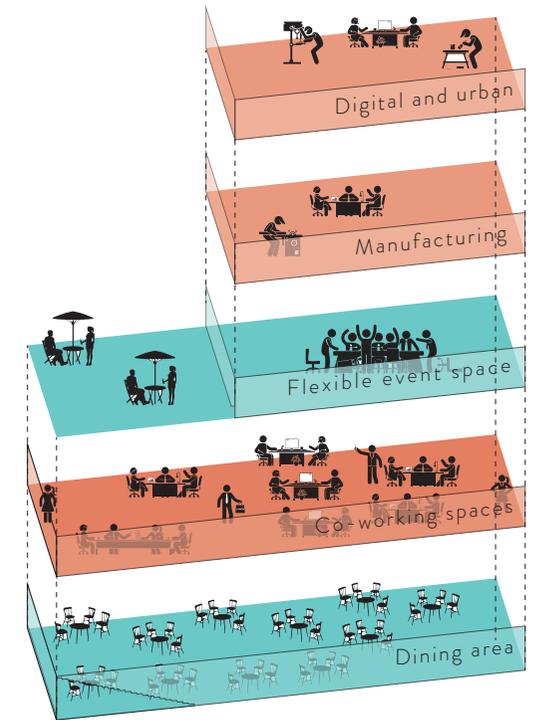
A co-design agreement is signed between the city and the private developer



Tool:
“Contratto di concessione per la progettazione, costruzione e gestione di opere pubbliche in Partenariato Pubblico e Privato”

The private developer:

- designs and implements the project
- takes care of public space management for 50 years
- obtains ownership of the building



Profitable uses of the building

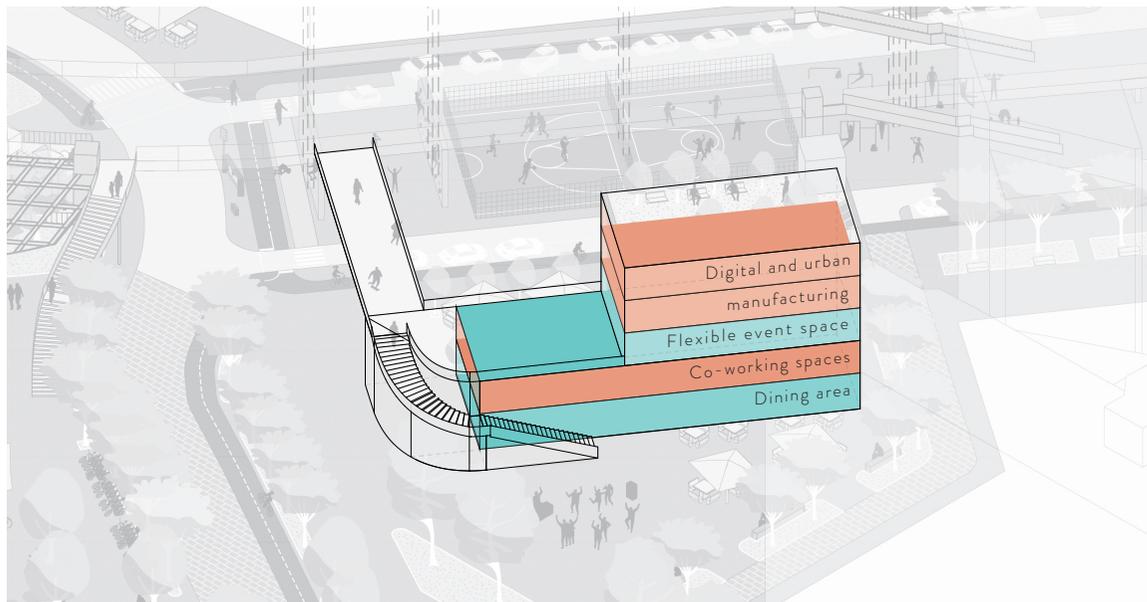
- co-working spaces

 es. COWO Network
 is a network of independent co-working spaces based in Milan but present throughout Italy
- creative, digital and urban manufacturing

 es. LOM - Locanda Officina Monumentale
 is a space in Milan where digital technologies and craftsmanship meet
- dining area

 es. Rob de Matt
 is a bistro that is based on a social and labor inclusion project aimed at people with distress
- flexible event space

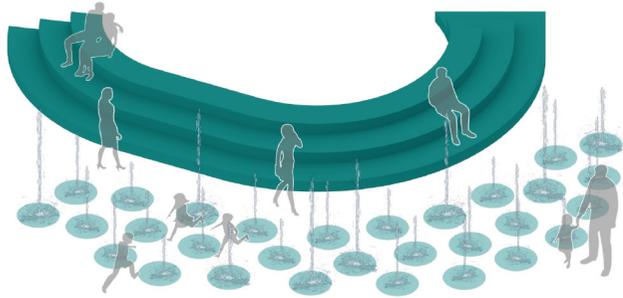
 es. Daste
 is a former thermoelectric plant in Bergamo, now an open hub for sociality and aggregation



Project urban materials

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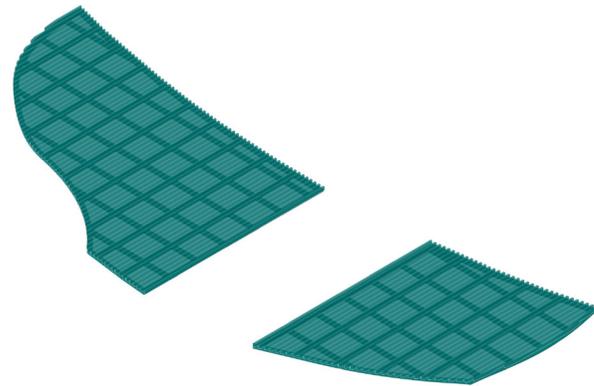
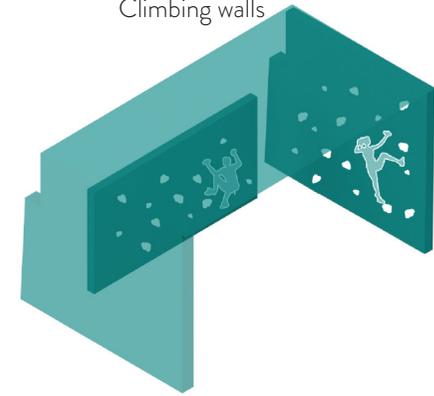
Seats and water games



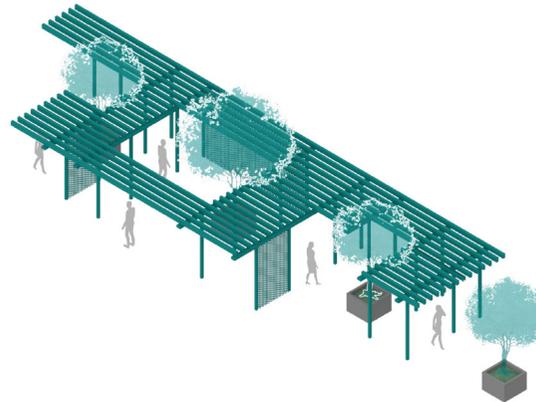
Tree vase plantation



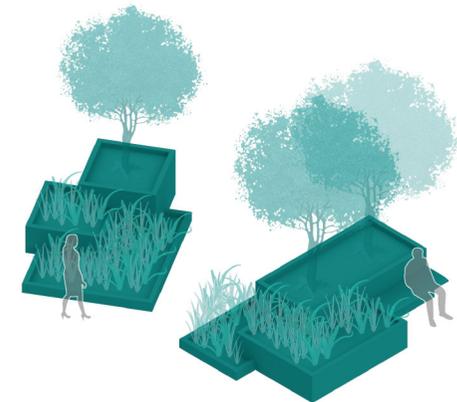
Climbing walls



Corvetto Pavillon



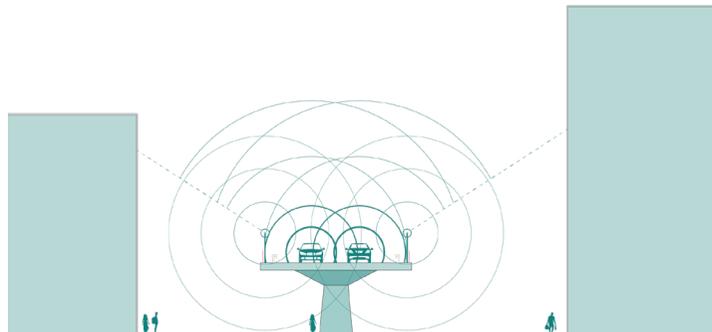
Wooden shed



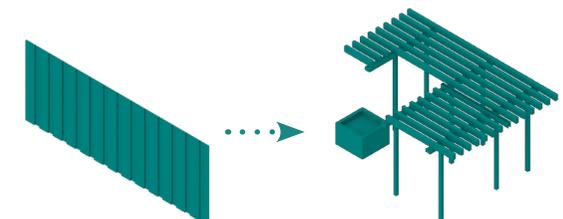
Gardens

Dealing with Noise Pollution

The **second phase** of the intervention must take in consideration the management of the noise pollution that would be produced mostly over the **high line**. However, this would represent a restricted criticity due to the reduction of heavy vehicles. The project deal with this problem through the use of **high density plants** and **wooden acoustic panels**. This will guarantee an attenuation of the noise, providing an healthy environment for inhabitants and neighbourhood users.

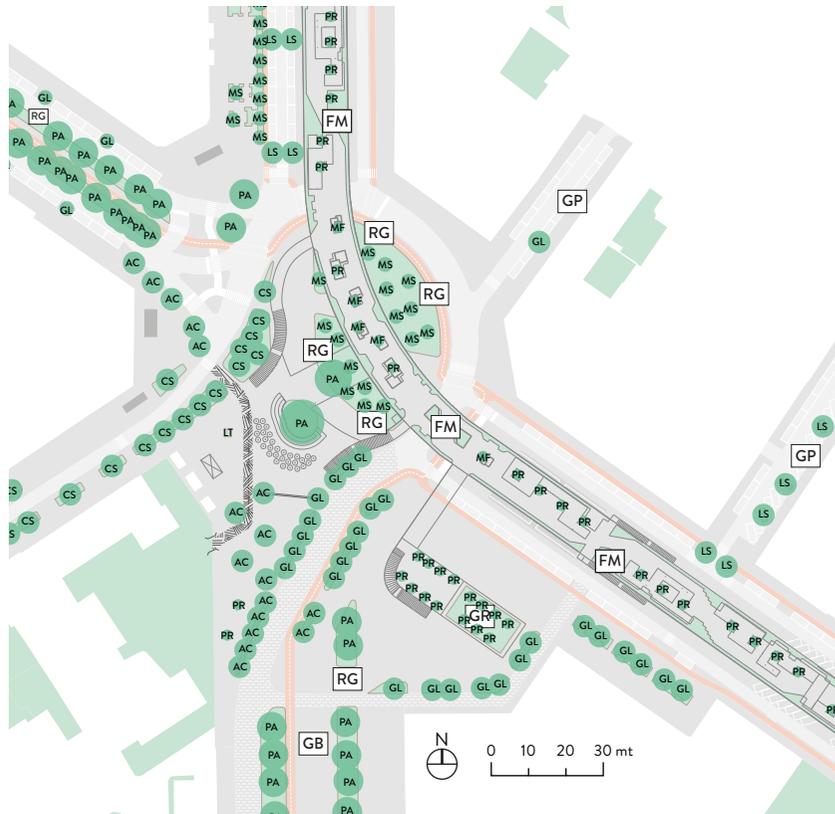


During the **third phase**, would be possible to **recycle** the wooden panels to create furnitures and elements, such as **wooden sheds, vases or benches**.



Project green materials

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Species name	Seasonal Foliage				H	W	Co2 detected (kg)	Suggested Position	Map position
	W	SP	SU	A					
<i>Gleditsia triacanthos</i>	○	●	●	●	30 m.	8 m.	21.7	Square / Garden	GT
<i>Liriodendron tulipifera</i>	○	●	●	●	25 m.	8 m.	19.6	Square / Garden	LT
<i>Liquidambar styraciflua</i>	○	●	●	●	20 m.	6 m.	13.7	Square / Garden	LS
<i>Acer campestre</i>	○	●	●	●	18 m.	8 m.	20.6	Square / Garden	AC
<i>Cercis siliquastrum</i>	○	●	●	●	8 m.	6 m.	11.7	Square / Garden	CS
<i>Magnolia x soulageana</i>	○	●	●	●	7 m.	4 m.	18.9	Square / Garden	MS
<i>Acer griseum</i>	○	●	●	●	7 m.	4 m.	10.3	Square / Garden	AG
<i>Prunus avium</i>	○	●	●	●	10 m.	8 m.	10.5	On the viaduct	PA
<i>Cornus florida</i>	○	●	●	●	6 m.	4 m.	9.2	On the viaduct	CF
<i>Malus floribunda</i>	○	●	●	●	8 m.	5 m.	15.7	On the viaduct	MF
<i>Prunus cerasifera 'pissardi'</i>	○	●	●	●	5 m.	5 m.	14.3	On the viaduct	PC
<i>Carpinus betulus</i>	○	●	●	●	15 m.	12 m.	30.3	Sound barrier	CB

NATURE BASED SOLUTIONS

RAIN GARDEN RG

Rain garden are designed to absorb rainwater that runs off from a surface and release it in more time. They also have the function of lowering the temperature during the warm period.

GREEN ROOFTOP GR

Green areas on the rooftops can be used by the people and they increase the permeable surfaces. Furthermore they reduce the heat island and they absorb rainwater.

GREEN PARKING GP

Parking with trees to create more shadow areas and with permeable materials. They also reduce the heat island.

GREEN BOULEVARD GB

It creates more shadow areas and more green spaces that increase biodiversity and absorb the rainwater. They also reduce the warm area.

DRAINING FLOORING DF

They reduce the run off, they increase the biodiversity and they reduce the warm area.

FLOWERY MEADOW FM

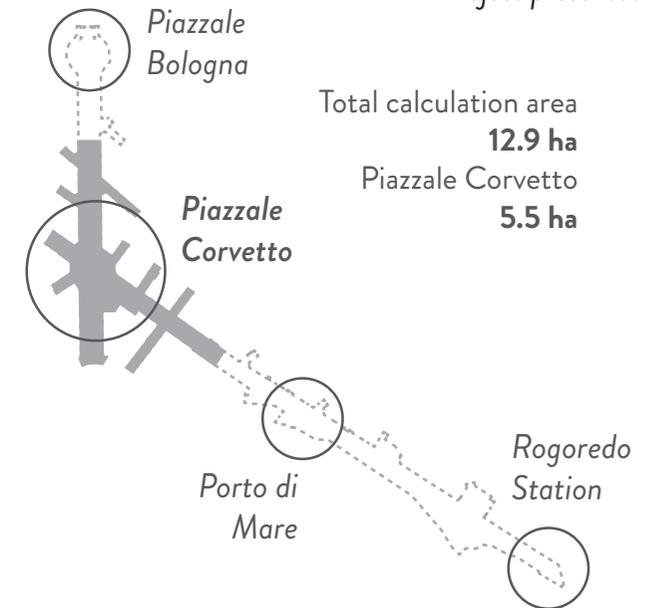
Green areas that are increasing biodiversity and that are also reducing the warm areas. The swaths can be three at a year.

The Project in numbers

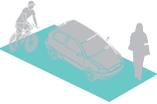
The final image we intend to present is an overall evaluation of the project using aggregated quantities and numbers. All the calculations were carried on **inside the main border of the project** (the dashed line in the image on the right) and they

measure the changing between the state of the art situation and the **Phase 3 outcome**. "Space and activities" are referred to the only *Piazzale Corvetto* area, with a focus on the new spaces and activities.

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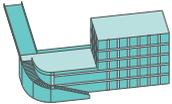
Surface use

-  **-5.5 ha (-68%)**
of car only space
-  **+5.4 ha (+225%)**
ha of pedestrian space
-  **+0.5 ha**
of new shared spaces
-  **-16 %**
of parking spaces*
-  **+2.8 km**
of cycle lanes
-  **+1700 m²**
of permeable surface

Trees benefits

-  **+485**
of trees
-  **+1.05 ha**
of tree canopy
-  **+4.6 tons/yy**
of carbon sequestration
-  **+154 tons**
of carbon storage
-  **+191 m³/yy**
of avoided water runoff
-  **+115 kg**
of removed pollutants

Piazzale Corvetto

-  **+1**
new multi-use square
-  **+2410 m²**
of new spaces for sport and game activities
-  **+1460 m²**
of new building for services and commerce

*following the reduction of per capita car ownership from Milan's SUMP

Appendix 1 - References

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- Patrimonio del verde, Comune di Milano - <https://geoportale.comune.milano.it/sit/patrimonio-del-verde/>
- Geoportale Comune di Milano - <https://geoportale.comune.milano.it/sit/download-utili/>
- Openstreetmaps - www.openstreetmap.org
- Google Maps - www.google.it/maps
- Google Earth - www.earth.google.com/web

Appendix 2 - Results of the questionnaire and the focus group

The preliminary analysis of the perception about the current experience of the Corvetto neighborhood involved the administration of a semi-structured **questionnaire** involving 12 respondents, distributed as follows:

- 2 respondents belonging to the 21-29 range;
- 3 respondents belonging to the 30-39 bracket;
- 3 respondents belonging to the 40-49 range;
- 3 belonging to the 50-59 bracket;
- 1 belonging to the 70-80 bracket.

A **focus group** involving 10 respondents belonging to the 70-80 bracket was also conducted.

The gender of the respondents is distributed as follows: F 60%; M 40%.

All respondents are of Italian nationality.

About 70% of the respondents have lived in the neighborhood for at least 20 years; the remaining 30% are in the group of those who have lived in the neighborhood for less than 5 years.

The surveyed areas investigated were the following:

strengths and potentials, limitations and criticalities, leisure time, enjoyment of green areas and the bike path, perception of safety, past and current perception of the overpass, perception of vehicular traffic in piazzale corvetto, and potential improvements that would allow boys and girls to experience a qualitatively better neighborhood.

RESULTS:

- *What do you think are the strengths and potentials of the Corvetto neighborhood?*

About the neighborhood's strengths and potentials, the most recurring answer was its proximity to the city center, efficient connections by means of transportation (just think of the Milano Porta Romana and Milano Rogoredo train stations and the M3 metro) and, consequently, the convenience of those who use it. Added to this is the presence of various services, such as supermarkets, pharmacies, banks, and restaurants, all within walking distance. Also classified as a resource is the proximity to the countryside and green areas, such as the countless parks present, including the Vettabbia, Porto di Mare and Cassinis parks. Analyzing a more cultural and social dimension, multiculturalism and attachment to the neighborhood are also perceived positively. "the lack of green areas, the difficulty of certain street crossings (especially Piazzale Corvetto/ Piazzale Bologna and the underpasses), the relative lack of seating and public spaces adequate to the amount of people living in the neighborhood" (F, 30-39)

"Poor policing of some squares left to drug dealing and degradation; cars parked on sidewalks that make everything blighted" (M, 40-49)

- *(if you use it) How do you assess the enjoyment of green spaces in the neighborhood?*

The state of deterioration affects not only the neighborhood streets, but also the green spaces: residents rate their presence as good, in terms of extent and accessibility, but call them unlivable because they are "Dirty and badly frequented" (F, 50-59)

- *(If you use them) How do you rate the extent of the bike path within the neighborhood?*

Judged positively, on the other hand, is the bike lane, which has undergone improvements over the years, although there are absent sections and it is too limited.

- *How do you usually spend your leisure time within the neighborhood?*

Leisure time spent within the neighborhood when not running errands is mainly spent walking or hanging out in parks. It is reiterated that "being outdoors is difficult because of a lot of traffic" (F, 30-39)

- *What would you like to be able to do during your free time within the neighborhood that is not possible for you to date?*

The resulting needs concern the future and conceivable attendance of quiet public areas and outdoor places, to which is also added the need for social and cultural gathering spaces. Regarding this last point, it is worth mentioning that the associations present in Corvetto are countless, all united in Rete Corvetto: participation in the monthly meeting confirmed the associative richness of the area.

- *Regarding your experience of the neighborhood, how do you assess its security? Have you noticed any changes over time?*

The perception of safety is relatively low and refers to a desirable improvement; the presence of particularly neglected areas is emphasized. Also emphasized is the "steady deterioration" (F, 40-49)

- *Do you remember what were the opinions and feelings associated with the introduction of the flyover? What is the perception of the same today?*

Current opinions pertaining to the flyover are basically negative: "eyesore," "ugliness," "crap," and "feeling of being in the middle of traffic" are some of the expressions used. These opinions are definitely hostile, but they may change to the positive thanks to the modifications to which the overpass will be subjected, which will ultimately become pedestrian friendly and provide public open spaces. As one of the very few interviewees who remembers the flyover's commissioning states, "It was perceived negatively right away, but (the flyover) in the early 1960s was still not open to cars and I have good memories associated with biking" (M, 70).

- *What specifically do you think the traffic calming of Piazzale Corvetto would benefit?*

As for the goal of relieving traffic in Piazzale Corvetto, the relative benefits refer to: "Definitely, from an acoustic and air quality point of view, but also from a perceptual point of view, there is a feeling of walking on a highway to this day"; "Greater livability and less pollution" (F, 50-59); "To the enlargement of pedestrian and green spaces" (M, 40-49); "To the livability of residents" (F, 40-49). One respondent is also hesitant "To little because it is a very important interchange" (M, 21-29)

- *What do you think could be (if you recognize the need) the improvements to be implemented that would allow for a qualitatively better neighborhood life for girls and boys?*

Among the suggestions made by citizens for improved livability for girls and boys, the implementation of playgrounds, outdoor gyms, and gathering spaces prevail.

Appendix 3 - Trees benefits calculus model

STATE OF THE ART												
SPECIES	NUMBERS	CANOPY	ECO_VALUE	STOCK_CARB_KG	STOCK_CARB_EURO	SEQ_CARB_KG_YY	SEQ_CARB_EURO_YY	AV_WAT_M3_YY	AV_WAT_EURO_YY	REM_POLL_GR_YY	REM_POLL_EURO_YY	ECO_BEN_EURO_YY
Platanus x acerifolia	47.00	2362.48	135219.00	46859.00	7520.00	1034.00	166.38	65.80	121.73	40561.00	3666.00	3948.00
Cercis siliquastrum	1.00	3.14	148.00	12.10	1.95	1.70	0.27	0.10	0.15	50.00	4.50	4.92
Magnolia grandiflora	40.00	125.66	22160.00	3120.00	504.00	188.00	30.40	8.00	12.40	4156.00	376.00	418.80
Magnolia x soulangeana	2.00	25.13	500.00	31.40	5.04	3.80	0.62	0.20	0.42	142.00	12.86	13.92
Malus floribunda	2.00	6.28	1662.00	334.40	53.72	15.20	2.42	0.60	0.96	317.20	28.70	32.10
Ulmus pumila	10.00	31.42	3940.00	540.00	86.70	37.00	6.00	1.00	2.70	847.00	67.20	75.80
Celtis australis	29.00	91.11	16675.00	2476.60	397.88	150.80	24.07	14.50	26.68	8430.30	668.16	718.91
Acer platanoides	10.00	31.42	5130.00	770.00	123.90	47.00	7.60	3.00	6.50	2048.00	162.30	176.40
Carpinus betulus	1.00	50.27	1466.00	397.30	63.83	12.70	2.04	0.60	1.16	365.70	28.99	32.19
Ginkgo biloba	4.00	50.27	5672.00	1149.60	184.72	42.00	6.76	1.60	3.40	1076.40	85.32	95.48
Sophora japonica Pendula	15.00	47.12	4800.00	300.00	47.85	33.00	5.40	1.50	2.55	804.00	63.75	71.55
Populus nigra	4.00	201.06	15320.00	11266.80	1810.20	153.60	24.68	3.60	6.72	2121.60	168.16	199.56
Fraxinus excelsior	3.00	37.70	6774.00	1637.40	263.07	39.30	6.30	2.70	5.01	1582.80	125.46	136.77
Lagerstroemia indica	5.00	15.71	2930.75	446.50	71.70	26.50	4.25	0.50	1.10	351.00	27.85	33.20
Prunus avium	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gleditsia triacanthos	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liriodendron tulipifera	1.00	12.57	1210.00	211.60	33.99	8.10	1.31	1.00	1.81	572.30	45.36	48.47
Liquidambar styraciflua	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PROJECT												
SPECIES	NUMBERS	CANOPY	ECO_VALUE	STOCK_CARB_KG	STOCK_CARB_EURO	SEQ_CARB_KG_YY	SEQ_CARB_EURO_YY	AV_WAT_M3_YY	AV_WAT_EURO_YY	REM_POLL_GR_YY	REM_POLL_EURO_YY	ECO_BEN_EURO_YY
Platanus x acerifolia	70.00	3518.58	201390.00	69790.00	11200.00	1540.00	247.80	98.00	181.30	60410.00	5460.00	5880.00
Cercis siliquastrum	37.00	116.24	5476.00	447.70	72.15	62.90	9.99	3.70	5.55	1850.00	166.50	182.04
Magnolia grandiflora	133.00	417.83	73682.00	10374.00	1675.80	625.10	101.08	26.60	41.23	13818.70	1250.20	1392.51
Magnolia x soulangeana	16.00	201.06	4000.00	251.20	40.32	30.40	4.96	1.60	3.36	1136.00	102.88	111.36
Malus floribunda	7.00	21.99	5817.00	1170.40	188.02	53.20	8.47	2.10	3.36	1110.20	100.45	112.35
Ulmus pumila	12.00	37.70	4728.00	648.00	104.04	44.40	7.20	1.20	3.24	1016.40	80.64	90.96
Celtis australis	31.00	97.39	17825.00	2647.40	425.32	161.20	25.73	15.50	28.52	9011.70	714.24	768.49
Acer platanoides	41.00	128.81	21033.00	3157.00	507.99	192.70	31.16	12.30	26.65	8396.80	665.43	723.24
Carpinus betulus	113.00	5680.00	165658.00	44894.90	7212.79	1435.10	230.52	67.80	131.08	41324.10	3275.87	3637.47
Ginkgo biloba	8.00	100.53	11344.00	2299.20	369.44	84.00	13.52	3.20	6.80	2152.80	170.64	190.96
Sophora japonica Pendula	24.00	75.40	7680.00	480.00	76.56	52.80	8.64	2.40	4.08	1286.40	102.00	114.48
Populus nigra	8.00	402.12	30640.00	22533.60	3620.40	307.20	49.36	7.20	13.44	4243.20	336.32	399.12
Fraxinus excelsior	3.00	37.70	6774.00	1637.40	263.07	39.30	6.30	2.70	5.01	1582.80	125.46	136.77
Lagerstroemia indica	5.00	15.71	2930.75	446.50	71.70	26.50	4.25	0.50	1.10	351.00	27.85	33.20
Prunus avium	62.00	194.78	45756.00	9610.00	1550.00	496.00	79.36	18.60	36.58	11513.40	912.64	1028.58
Gleditsia triacanthos	52.00	1470.27	173472.00	50299.60	8081.84	1128.40	180.96	20.80	38.48	12095.20	958.88	1177.80
Liriodendron tulipifera	1.00	12.57	1210.00	211.60	33.99	8.10	1.31	1.00	1.81	572.30	45.36	48.47
Liquidambar styraciflua	36.00	1017.88	28368.00	2746.80	441.36	111.60	18.00	10.80	18.36	6098.40	551.88	588.24

VARIATIONS												
	NUMBERS	CANOPY	ECO_VALUE	STOCK_CARB_KG	STOCK_CARB_EURO	SEQ_CARB_KG_YY	SEQ_CARB_EURO_YY	AV_WAT_M3_YY	AV_WAT_EURO_YY	REM_POLL_GR_YY	REM_POLL_EURO_YY	ECO_BEN_EURO_YY
STATE OF THE ART	174.00	3091.33	223606.75	69552.70	11168.55	1792.70	288.50	104.70	193.29	63425.30	5530.61	6006.07
PROJECT	659.00	13546.55	807783.75	223645.30	35934.79	6398.90	1028.61	296.00	549.95	177969.40	15047.24	16616.04
VAR	485.00	10455.22	584177.00	154092.60	24766.24	4606.20	740.11	191.30	356.66	114544.10	9516.63	10609.97
VAR_PERC	278.74%	338.21%	261.25%	221.55%	221.75%	256.94%	256.54%	182.71%	184.52%	180.60%	172.07%	176.65%