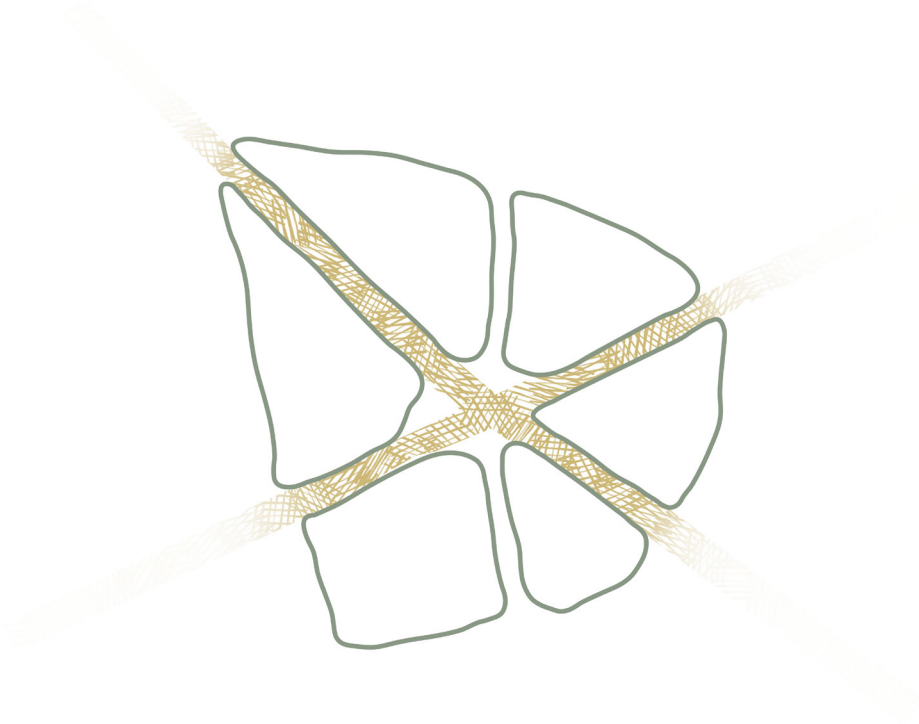


PiCo COMMUNITY PARK

A SYSTEMATIC DESIGN APPROACH TOWARD REGENERATION AND ACTIVATION OF
an unused historic urban land



POLITECNICO
MILANO 1863

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Piacenza Community Park (PiCo)

A SYSTEMATIC DESIGN APPROACH TOWARDS REGENERATION AND ACTIVATION
OF ACNA AREA, an unused historic urban land
in Piacenza city

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I'm glad that I can say, every minute of working on this project has been accompanied by joy, passion, excitement, Learning, and hope, in order to achieve my maximum capacity through both pleasant and uncertain times.

Abstract

The thesis investigates an abandoned urban area in the historic part of the city of Piacenza, Italy. A 44.000 sq meters triangular land with the risk of contamination because of its former function which was paint factory. Nowadays, it have been deactive and unused in spite of all positive functions and potential, specially its position and location. The needs of the neighborhood and lackage of the urban services in the vicinity convince us to propose and design a community park for neighborhood. According to analysis, the findings guide us to opt connectivity and environment as two actions which build our strategy and integrate small scale with medium scale, The third action for our strategy is urban service which neighborhood feels needed.

To give identity to the project, we inspired our design from a historical element of the city existing in the museum of the city and also to have maximum adaptation with context, we take advantage of the systematic urban network of Piacenza in designing the community park. In all phases of design and for all function and services, author tried to apply maximum sustainability and maximum respond to the context. At the end a pleasant space have been built which have maximum community engagement by its two nodes of gathering place and social interaction hub. Other needs of the neighborhood like sport and cultural one have been respond in the park properly.

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01

SYNOPSIS

INTRODUCTION

Developments in the biological sciences over the past-half century have demonstrated our interdependence with our environment. The discovery that two neurons that fire together strengthen the synaptic bond between them has led to our present understanding of learning and the neuroplasticity of the brain (Hebb, 1949). Neuroimaging technologies such as positron emission tomography (PET scans) and function magnetic resonance imaging (fMRI) have allowed us to scan regions of the human brain as it responds to environmental cues, refining our understanding of how we perceive buildings and landscapes, and their spatial properties (Mallgrave, 2017). As professor of architecture Henry Francis Mallgrave notes, “We are developmental organisms raised within environmental fields, and the quality of these environmental fields has a powerful impact on our cognitive and organic development over a relatively short time” (2017, p. 18).

In an increasingly urbanized and digitized world, where once biodiverse ecosystems have been paved over with asphalt and turf, and we experience (or at least visualize) much of the world second-hand through images, it is critical that we sustain our close association with nature. Urban designers and architects can foster essential relationship of human and citizens with each other and also with nature by for example focus and design a perfect community park in neighborhood.

The transformation and regeneration of abandoned and wasted urban spaces is one of the essential urban design and planning stories of the late twenties century that government and municipalities willing to invest, even more than they can, to reactive these forgotten areas. The reason is mainly can be interact with the needs of people and community. Cities have reacted to this state of affairs with substantial regeneration programs and consider this problem as an opportunity to integrate to the other city fabric. However, since the success of most regeneration programs in Italy as an absolutely historic country which has lots of abandoned areas, reactivation and transformation an abandoned area in city of Piacenza, which has specific characters, will done in this project.

This thesis have been developed in different steps which starting by recognize the need of community and context that was beeing deactive. Then to response this need, a community garden proposed to the area by finding and knowing all the benefits and its role in the society and community, principles of design, steps to design and finally role of the community park in the neighborhood.

JUSTIFICATION

The study site is an abandoned industrial area at the north west side of Piacenza city and located in the historic part called ACNA. It was paint factory that have been demolished and now unused and wasted but due to high potentials and great opportunities, it is one of the most desired spaces to regenerate for both municipality and urban designers and planners. It is a 44.000 sq meters triangular area which municipality is owner of only 28.000 sq meters. It has essential location due to being located along with Piacenza historic wall and closing to the city center on south side. The area is stucked to the historic green belt and can integrate also to the northern green and natural network. The distance between Po river and north side of the site is less than one kilometer. ACNA included wild vegetation after many years and can be beneficial in terms of greenery and landscape itself. According to protection codes, ACNA included in indirectly cultural property protection(D.lgs. 42/2004 art.10)

AIM

The thesis aims to regenerate and activate an abandoned area in the central historic belt of Piacenza which has been forgotten. Adjusting and feeding back small scale issues based on medium scale logic throughout design process. The final project is smarter and more sustainable by embedment the small scale proposals into larger scales. According to initial analysis, the findings indicate; The lack of proper communication between the residents of the neighborhood and the lack of a suitable space for interaction and the low quality of social life in this neighborhood, lack of suitable shopping services in the surroundings and also according to municipality's desire, we wish to transform ACNA into community park which also fulfill the dream of up-level policy and legislation(PUA) by making new jobs. We also want to reclassify public green area in this spot and integrate it to the Po river and Trebbia. The riverfront clearly has various positive potential for city and citizen, so the goal is to take maximum advantage of its benefits for our project. To be more integrated to city, another goal is to provide recreation, eating services, social interactions and sport activities to attract people and make it active, specially from Pubblico Passeggio and using historic ring and ax. Furthermore, according to attractors active time and type, our project will be active up to 22:00 o'clock as a sparkler of the city.

OBJECTIVE

- To regain the value of the area as a productive urban land in the historic center of the Piacenza city
- To regenerate and active the area in most hours which has the minimum distance with the city center
- To increase the urban life quality of the citizen in the neighborhood
- To engage people of the neighborhood in the community with all ages
- To give value to the rich greenery of the area and propose it to visitors
- To fulfill the needs of urban services in neighborhood
- To integrate people from all other public spaces in the vicinity and provide them a high quality space
- To lighting up the area as a sparkler and reaching its sparks to the other public spots of the vicinity

02

THEORETICAL TOPICS

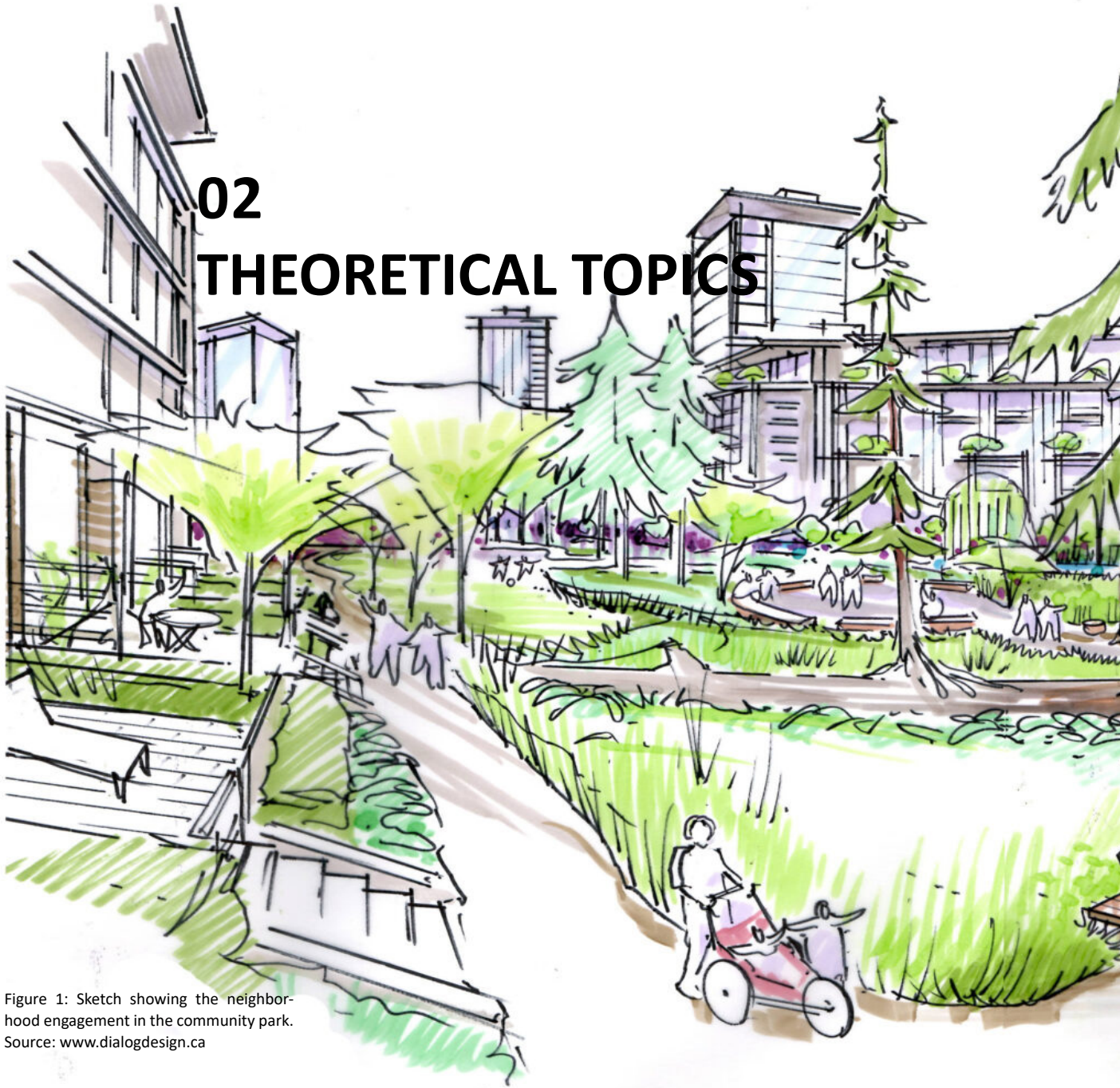


Figure 1: Sketch showing the neighborhood engagement in the community park.
Source: www.dialogdesign.ca



Urban Parks as Community Engagement

An important way cities can use parks and open spaces is for community engagement. This is the process of working collaboratively with individuals and groups to improve their local environment. For parks and open spaces, community engagement allows public officials to directly involve their constituencies in the ongoing design, planning, and management of these resources. This process results in informed and engaged residents that feel better connected to their communities. While sometimes contentious but more often productive and rewarding, community engagement is an essential ingredient of making successful urban open space. Parks support community engagement by providing residents with a venue for participation in and attachment to their communities. They also provide a sense of place and offer essential life-enhancing qualities that aid community and individual well-being. By understanding the community benefits of parks, decision makers can develop constituencies that can support and sustain their urban park systems over time.

Parks are one of the most effective ways to build a sense of community and improve quality of life. Parks are one of the most effective methods to change the character and improve the image of a community. Park improvements are often quick and tangible actions for mayors and citizens and can work in concert with other city-wide programs such as traffic management, creating cultural activities and sustainable development. Benefits of urban parks are numerous and include restorative experience, physical health benefits and improving regional air quality.

Parks provide places for people to connect and interact in a shared environment. Parks create a sense of place by connecting residents to one another and to their larger environment. City parks also provide residents with meaningful ways to express their concerns about the environment. They can physically reconnect communities to themselves by creating linkages or restoring historic connections broken by highways, sprawl, and poor planning decisions. Greenways, green streets, and linear parks are now widely used open space types. For example, a study by Human-Environment Research Laboratory at the University of Illinois found that the more green space in cities, the more that residents use public space and know each other. The researchers also found that relationships between neighbors are made stronger by the mere presence of vegetation. Compared to residents living near barren spaces, those closer to green spaces enjoy more social activities, have more visitors, know more of their neighbors, and have stronger feelings of belonging. They found that greener common areas facilitate the development and maintenance of stronger social ties.

Source: Essay; Urban Parks as Community Places - Mark Francis, FASLA University of California, Davis Chuncheon G5 Symposium Talk Chuncheon, Korea March 24, 2006

Parks can be mixed life places. It is important to think of parks and green spaces as places that bring together different kinds of people including children, teenagers, the elderly, tourists, and recent residents. It is this diverse mix of people that makes urban parks successful.

Parks can be gardens. Parks need not be just grass and trees but can include new and innovative elements such as public gardens, community gardens, skateboard parks as well as natural areas. Diverse kinds of vegetation can be used to create more diverse urban parks.

Ecological parks can also be people places. Parks should be designed to provide ecological benefits. Sustainable parks do not need to exclude people but should engage them in experiencing the natural world. This can be accomplished through direct access to natural areas and using art as a way to reveal natural processes.

Parks can help restore childhood. It is critical to think of the needs of children and teenagers in designing urban parks and open spaces. Parks can provide opportunities for children to become directly involved in the built and natural environment and help them experience childhood, a process often missing in modern urban life.

Culture is critical to integrate into park design. Culture is often neglected in urban park planning and design. Designers and planners need to consider the different cultural groups that use urban parks and work to express their needs through programming and design. Management and ongoing participation is critical for success. Parks can channel positive community participation by getting diverse people to work together toward a shared vision. The benefits of participation in the ongoing development of urban parks and open spaces include leading to a stronger sense of community and an increased sense of user or community control. There are also many low cost and effective methods of community participation available including workshops, surveys, interviews, and observation.

Source: Essay; Urban Parks as Community Places - Mark Francis, FASLA University of California, Davis Chuncheon G5 Symposium Talk Chuncheon, Korea March 24, 2006

Design Principles for Parks

Great parks require great designs. They rarely, if ever, just “happen.” Nearly all communities have some assemblage of public spaces and features that evolved without any type of an overall plan organizing it. These places may be appreciated, but they certainly are not the places they could have been with the application of solid design principles. The following top seven design principles should be evident in every great park or natural area:

Inclusive and Welcoming

Great parks make you feel good when you get there. They are open in their design and welcoming in their attitude. Regardless of your gender, age, cultural background or affinity group, you know you are in a public space that has been designed with you in mind, and you have little hesitation to enter and enjoy yourself. You enter knowing you are in a safe place, joining others who share your need to get away, relax, exercise, play with your kids or help your dog meet new friends. A great example of an inclusive, welcoming park is Trojan Park in St. Louis, Missouri, made possible by NRPA’s Parks Build Community initiative.

Sustainable and Resilient

Great parks embody environmentally responsible development strategies, which are a key part of a community’s public realm. They are not only great places for people, but also for migratory birds, insects, soil organisms and aquatic life. They are designed with ecological processes in mind and incorporate them beautifully. Stormwater treatment, native plants, pollinator gardens, highly efficient water and energy utilization, and organic maintenance practices have both intrinsic and symbolic benefits for park patrons. A great example of this type of park is Tanner Springs Park, designed by GreenWorks and Atelier Dreiseitl, in Portland, Oregon.

Beautiful

Great parks must be filled with beautiful elements. Researchers tell us that beauty is not simply a subjective exercise with a wide divergence of opinions. Despite our cultural differences, there is broad consensus among humans about what is beautiful. The design elements that make something beautiful include line, color, texture and form organized in ways to create balance, unity, rhythm, proportion and emphasis. Sit on a beach watching the sunset, examine a flower’s intricate internal structure or take in the long view across a park’s pond toward the trees on the other side and you instantly recognize beauty, and it refreshes your soul. One of the most beautiful parks in the world is Hibiya Park in Tokyo, designed by

Dr. Seiroku Honda. Even elements placed within landscapes should be beautiful and add to the user experience. For example, Portland, Oregon's Forest Park Bridges, by Fieldwork Design & Architecture, which was recognized nationally by AIA in its 2019 Small Project Awards.

Sensitive to Context

Great parks do not ignore their physical or social context, but rather directly respond to it. A park adjacent to an elementary school must recognize the young users next door and should be designed to maximize its playability by students. A design process for a new park set within a neighborhood of immigrants will work with these park users to understand their needs and desires. This may lead to clustered picnic tables for large groups, rather than individual, isolated tables. Some high-density neighborhoods lack gardening space, so including community gardens responds to this need. An example of this contextual sensitivity is Cully Park in Portland, Oregon, set within a diverse community of both Native Americans and recent immigrants. It's design includes an extensive Inter-Tribal Gathering Garden and key ceremonial spaces.

Flexible to Evolve Over Time

Great parks have longevity; yet, reflect how we prefer to recreate changes over time. Landmark parks, such as Central Park in New York City and Druid Hill Park in Baltimore, Maryland, have shown their adaptability over the decades. Originally designed as "Pleasure Grounds" for promenading, both parks later added active recreation facilities, such as sports fields, and Central Park converted the sheepfold into the Tavern on the Green restaurant, while Druid Hill Park added the H.P. Rawlings Conservatory. A great park can adapt and replace uses preferred in earlier generations with new activities.

Timeless

Great parks are also timeless in their design. This means that although they should reflect the era in which they were designed, they are not so gimmicky or trendy to be quickly outdated. Some of the most innovative park designs have changed the course of park design elsewhere. Two remarkable examples are Lawrence Halprin's Ira Keller Fountain Park, which opened in Portland in 1970, and Maya Lin's Vietnam Veterans Memorial dedicated by the National Park Service in 1982.

Community Park

Community parks are located in cities or towns and their purpose is to accommodate a wide range of recreation needs based on the surrounding community. These recreational parks have many activities and amenities to keep visitors of all ages active and engaged for an entire day.

Parks may have nature trails, swimming pools, splash pads, basketball courts, tennis centers, volleyball courts, thematic playgrounds and more features. Community parks also commonly feature picnic areas and pavilions and other additional facilities like bathrooms, parking, indoor recreation space, event space and on-site park attendants.

The benefits of parks make them irresistible to surrounding residents. In urban areas, community parks may be one of the only options for residents to enjoy nature and be active. In addition to the variety of amenities, community playgrounds and parks are beneficial in many other ways:

Contribute to community identity

Provide active and passive recreational opportunities

Appeal to all ages

Contribute to the health and wellness of a community

Create valuable green space

Parks are beneficial to humans for many reasons, and they are also beneficial to native plants and animals. Especially in urban areas like cities, parks are an effective area to encourage native flora and fauna to grow. This will make the area more inviting and safe for wildlife to enjoy, as well.

Why Are Parks Important for Communities?

Parks and playgrounds can become the hearts of communities, meaning community planners should make these recreation areas high priorities. Parks are more than green spaces that beautify a community. Residents, kids and local governments all benefit from the creation of a local park or play space.

1. Promoting Community Wellness

Many Americans live sedentary lifestyles, especially today. By providing places for community members to get outside and be active, parks help encourage a healthier lifestyle.

Spending a small amount of time at a community park can have a significant impact on your health. Even just 30 minutes in a park can help:

Strengthen your heart and prevent heart diseases.

Decrease blood pressure and cholesterol.

Reduce inflammation.

Boost your immune system.

Public parks can encourage people to take control of specific aspects of their physical health or experience general health benefits for stronger, healthier communities. Parks and recreation areas can also help improve mental health, allowing the wellness benefits to extend past encouraging better physical health. Frequently visiting parks can help reduce depression and anxiety, and exercising in parks can reduce stress and lower cortisol levels by 15%. Simply viewing nature-inspired scenery led to reports of less fear and anger and more considerable attention and peacefulness.

When people have a park nearby, they can access open outdoor spaces easily for a healthier, more active lifestyle. The Centers for Disease Control and Prevention (CDC) reports that less than 50% of Americans live within half a mile of a park, and even fewer live in an area where they can safely walk or access public spaces. Investing in community parks can provide most Americans the access they need to public outdoor spaces where they can freely exercise and decompress from their daily lives.

Communities need to promote their residents' well-being. Creating recreation areas is one way to cater to the needs of both mind and body. Community members may use the park to walk their dog, play basketball, ride their bike or enjoy a picnic with friends. Regardless of how they choose to use the space, they'll be able to benefit in their own way from the opportunity for physical, mental and social health that a park provides to the community.

2. Clearing the Air

In cities, air pollution from cars and industrial plants can reach dangerous levels for the residents. Planting trees in recreation areas can combat this problem.

One study argues that even just one hectare of trees can remove up to 40.7 tons of carbon dioxide from the atmosphere. While the range will depend on the type of tree and its age, community spaces like parks that include trees can help bring environmentally-friendly solutions into cities and neighborhoods. To get the most significant benefit from these green spaces, cities should reduce the use of maintenance equipment that contributes further to air pollution. Greenery's contribution to lowering air pollution and fighting climate change is only one of the reasons behind the importance of parks and playgrounds in cities, though it benefits people around the world.

Source: www.miracle-recreation.com

3. Providing Connection Space

With the internet's prevalence, it's become more common to go from work to home without changing up the routine. Parks give individuals a space for meeting their neighbors in person. Community parks can be spaces for kids and adults to gather and meet new people who enjoy similar activities. Parties and reunions can use picnic areas to provide space for large gatherings.

Thrilling playground equipment can further encourage parents to bring their kids again and entice visitors. It's more likely parents will meet more of their community members when they visit a park more frequently.

Those interactions then form the basis of community. Separate families and individuals can bond together with the intention to help their surrounding community and fellow community members. Creating a communal space like a park can help bring all members of the community together to build a better sense of unity and decrease feelings of isolation. People can interact with neighbors and community members, sparking unique and meaningful connections.

4. Encouraging Activity in Kids

When kids get to play outside instead of indoors, it increases the positive impact of physical activity. Kids who spend time outside have:

- Better test scores
- Better cognitive function
- Fewer behavioral problems
- Fewer signs of ADHD
- Improved self-discipline

Getting kids to play has risen to such high levels of importance that doctors prescribe time outdoors for some patients as part of a push by the National Recreation and Park Association. Pediatricians have recognized the advantages of a park for their patients.

Childhood is a different holistic experience for every kid. Kids need hands-on learning opportunities outside of the classroom, and community playgrounds can be an enriching space for kids to learn and have fun.

How can you bring kids to a park? Build them playgrounds that excite them. Think thrilling slides and climbing nets. With the latest equipment, kids can play out their adventurous fantasies while they slide and climb through a variety of challenging structures, like those from the XGEN® line.

When planning play areas for kids, remember to account for toddlers and preschoolers who may be too small to reach the equipment on playgrounds built for older children. Consider separate play areas to give these smaller kids thrills designed just for them.

5. Improving Property Values

Homeowners view parks as a desirable amenity. Because of this, property values increase the closer homes are to a recreational space. With increased property values comes the potential to bring in more property taxes, giving your city funds to further enrich the area.

For example, a study conducted on New York City and its several parks showed that park access and proximity helped raise home values by \$15.2 billion in the city. Further, homes closer to the parks increased more in property value, making these locations more desirable to people looking to live in the city.

Prices people will pay for homes closer to parks also increase. People are willing to spend more for an inner-city home located closer to a park because of the health and social benefits it provides. Greenbelts next to residential communities increase the prices people will pay for homes. Natural areas pay in real estate both for the homeowners and the local government, helping boost the local economy and add value to green spaces in cities and suburbs.

6. Conserving Wild Areas

The environmental benefits of parks are equally as important as the health benefits. Public parks give developers the chance to plant indigenous flora and entice native fauna to the area. Residents get to see what plants grow naturally in the region, while caretakers reap the benefits of needing to provide less care to plants adapted to the climate. Conserving wildlife in parks helps to sustain nature, even in the most populated, urban areas.

7. Creating Safe Gathering Places

Residents need to feel safe. If they don't have anywhere to go without feeling in danger, they will remain in their homes. In communities where no one leaves their homes, residents do not get the benefits of outdoor activity or engaging with each other. Here, parks can help solve this problem by providing residents and their kids with a safe place to go.

Studies with different groups and communities in New York City show that parents feel safe at parks with their kids when amenities are available. Parks with regular upkeep, maintenance and services can help create safe gathering spaces for all ages.

Parks give community members a safe location to gather and play. By having a safe place for their kids, parents may be more likely to let their children outside. As already noted, when kids engage in physical activity outside, they enjoy more significant benefits.

Source: www.miracle-recreation.com

8. Including Everyone in Play

For children with disabilities, finding ways to get active can be difficult. A park with an inclusive playground that allows kids of all abilities to play lets everyone in on the fun.

Inclusive playground equipment has a variety of challenges for all ages and abilities. Even those who use mobility devices can play with other kids on the structures. When you group play areas by type, kids can enjoy playing with others, regardless of ability.

Kids who engage with others of differing abilities from themselves increase their positive feelings for others. Playgrounds and parks serve as community spaces where kids of all backgrounds can gather and play together. When kids play with other kids on the playground, they can learn to respect different perspectives, backgrounds and experiences. Parks provide a space where kids with disabilities can play with other kids, helping foster greater senses of empathy and meaningful connections.

Inclusive playgrounds in recreational areas provide the type of social interaction that can lead to kids growing up with more positive, inclusive feelings toward their peers with disabilities.

9. Giving Families Free Activity

Free is always the perfect price, especially for families looking for fun without breaking the bank. Installing recreational areas in neighborhoods offers residents a place to take their kids without spending too much.

It can be difficult to keep kids entertained. Luckily, community parks can be a fun, cost-effective way to keep kids occupied. Parks, especially those with innovative playgrounds, give parents a break from the usual routine, and kids get the chance to release their energy. Regardless of the number of kids in a family, a trip to the park is easy on a family budget.

Free fun fits into any income. While amusement parks and other attractions are exciting ways to get out of the house, they often come at a high price. These options may be off the table for large families looking for a day trip on a budget. Having recreational areas in neighborhoods and local parks for kids ensures all families have the opportunity for a great time outside.

10. Reducing Crime

Access to public parks and green community spaces can help reduce crime. A study by the CDC linked fewer park visits with increased crime in the area. When people have access to green spaces where there is a strong community presence, it can deter crime in the neighborhood. This creates a positive feedback loop

since reduced crime will further increase park activity and help people feel safer in public spaces.

Another researcher argued that increasing green spaces can even decrease gun violence, helping protect communities from specific crimes. Further, she offers advice about how to keep communities safe when designing parks, saying that the keys to creating parks that deter crime are visibility, accessibility and regular maintenance.

Newly renovated parks or recreation areas must have attractive features to inspire pride from the community. When residents feel strongly about keeping their recreational area and use it frequently, they will help take care of it and increase a feeling of community.

Steps To Design Community Park

Parks are critical to a community's spirit. Without community parks, there'd be little social interaction, with no play space for kids and no enjoyable outdoor resting space for adults. From splash parks to dog parks to playgrounds, these public green spaces are recreational areas that serve the needs of community members. If you've been tasked with the job of building park space in your community, or want to persuade your neighborhood to turn an empty public space into a new park, follow this guide to park planning and design. While designing a public park has no set process and may vary based on your community's zoning and ordinances, there are some universal steps you can consider to help make your vision come alive.

1. Understand How to Choose a Park Location

Building a park always starts with identifying the location. If you've got a park location in mind, or are looking at several potential locations, consider these fundamental factors:

Accessibility: Is the location wheelchair accessible, and can it be easily reached by public transport, car or bike? The easier it is to get to the park, the more use it will get. It's important to build inclusive playgrounds to make everyone feel welcome.

Character: Is there a historic location or special area that could attract park-goers for more than just nature? Use your community's unique characteristics and history to drive park traffic and strengthen community ties.

Safety: Is the area you're considering located somewhere that's considered safe, with a low crime rate? Many of today's new parks are developed on lands designated by planning committees. The space could either be unused, and open for development, or it could be an area that is already associated with public property such as school grounds. Likewise, it could even be private property turned public by estate grants or service organization purchases.

Regardless, all parks must have public access if they're going to serve the community's highest and best needs.

2. Know the Market and Community

If you want people to visit your park regularly, it needs to fit with what the community needs, for example, is your town full of couples and young children, and do you have a large school district? Or, do you have a more senior community with older couples? Perhaps a nice mix of both demographics?

You want to make sure your park is engaging for children if the spot you're considering is central to several of the local schools. At the same time, the park should engage local seniors if the property is within walking distance of senior communities or homes. A recent study showed that while seniors represented 20 percent of the population, they were only 4 percent of park users. As a park designer, you want to consider how to build participation and encourage community members across diverse groups to take advantage of their local green spaces.

Look at your community and assess what park needs are under-served. What activities and social opportunities seem the most important to your community members? This question lets you prioritize what design features your park must include. Additionally, see what park spaces are over-served and underutilized. You're sure to end up with a well-rounded list of items you need to consider.

The best starting point in designing your community park is identifying who the park will service. Then, the park's location and size will dictate what space you have to work with and who you'll want to collaborate with. The end users are going to have a lot of influence over what park activities you'll cater to.

3. Engage the Community During the Planning Process

Park design isn't a solitary process — nor should it be. No one knows more about the community needs than its citizens. Bringing the community into the park design phase is critical. Collective community minds will identify strengths and weaknesses in proposed and developing plans. Concerned citizens are also sure to voice likes and dislikes.

If you roll out park plans without community inclusion, you're sure to get opposition. You might encounter the NIMBY (Not In My Backyard) argument rather than strong support. To help prevent this, get community members on board as soon as you start planning. Most will be happy to help and can offer great input on your design.

- Every community has its movers and shakers. Identify them. That goes for local community associations, parent-teacher organizations and service clubs. All groups have natural or appointed leaders who are influencers. Usually, they're respected citizens who rose to prominence from their reputation. They're get-it-done types who work in cooperative spirit, not adversarial approaches. If you have their support of your project, it's likely other community members will be in favor of it as well.

Source: www.miracle-recreation.com

- Public officials are also important for park success. They can be elected officials at the local or state level. Public service involves administrators and bureaucrats who are highly influential decision-makers. These powerful planners can make all the difference in getting a park project approved or rejected.

- See if your community has a citizen advisory groups or boards. They're an important force in shaping public policy and protecting properties. You might also begin with a local survey. It can be door-to-door, mail-out or via online feedback. Surveys often give an indicator of wants and needs. They also identify dislikes and what the community won't support.

- Get a budget approved. Understanding market needs is crucial, and the reality is that to meet those market needs there are going to be budgetary considerations. Designing a park and outfitting it can be an expensive venture, and the funds to accomplish the park's development have to come from somewhere. To obtain funding, you're going to need community support. Having a good understanding of what your community needs most in a park will ultimately sell the vision and solidify the funding for it.

You can also increase your budget by applying for grants or sponsorships. Grants are essentially packages of free money that organizations give to community development projects, so you won't have to pay back any grants you receive.

Some excellent sources for grants include:

Government: Parks and recreation departments at the national, state and local levels frequently offer grants for community playground projects. Sites like grants.gov and your state government's website are great places to start looking for opportunities.

Corporations and banks: Philanthropy is an increasingly necessary part of business for large companies, so many will offer grants to community-building projects.

Local businesses: Make sure to check with small businesses in your area as well as large ones. Oftentimes, smaller companies receive fewer applicants for grants and sponsorships, so there's less competition.

Not-for-profit organizations: Local charities and nonprofits sometimes award grants for projects relevant to their causes. Research any organizations in your area that could align with your project.

4. Factor in Landscaping and Architecture

You can certainly let your creativity run the show when planning the amenities and general layout of your space, but some of your park design will depend on the exact area it's in.

Consider the natural terrain. In many cases, it's best to work with the ground, not against it. Existing slopes, banks and flat spaces enhance the native feel of your park. There are far too many "parking-lot" parks, and this should be the polar opposite of your design.

Vistas or view corridors need protecting, as visual intrigue is a critical element that allows park users to enjoy their surroundings. That might mean placing your playground equipment in an area that doesn't block desirable viewpoints. It could also mean changing or designing park components to screen utility provisions or neighboring buildings.

Sun pattern is another consideration. You can't change the sun, but you can accommodate for time of day and seasonal changes. Shade provision can be natural through best tree use. Or, you can provide shade by artificial screening. This is especially concerning in playground areas where youngsters can be sunburned or scalded by scorching playground components.

5. Provide Options for Multiple Park Activities

Choosing how to develop your park space for various activities or play is often a primary component in virtually all park designs. Will you have open fields for different sports, a pavilion with grills for party rentals and cookouts? Or restrooms on-site? Are you putting in a pond with fountains? Or will this be a smaller space, with just enough room for a few well-selected playground components?

Most parks in residential areas do plan for playground equipment as a must-have feature. There's a massive amount of ingenuity and creativity that goes into designing today's modern playground equipment. Consider these potential features for your park area and park playground:

Playground structures

Playground elements

Inclusive products

Outdoor fitness equipment

Site amenities, such as benches and picnic tables

Shade structures

6. Pick the Right Playground Surface

Your playground surface may seem like an insignificant decision, but it's a crucial part of playground design. Choosing the right playground surface will help protect the kids at your park from injuries and keep the playground looking pristine.

There are two main types of playground surfaces you can choose from:

Loose-fill: Loose-fill playground surfaces consist of many loose pieces of natural materials like engineered wood fiber or rubber. Generally, loose-fill surfacing will be more cost-effective upfront than unitary surfacing and is known to be safe, but it requires regular maintenance to ensure the loose-fill stays at the proper depth.

Unitary: Unitary surfaces are bound together in single pieces. Examples include rubber tiles and poured-in-place (PIP) rubber for indoor structures. These surfaces provide sufficient protection that helps prevent injury but often tend to be more expensive upfront than loose-fill surfacing. However, unitary surfacing is generally more accessible for kids and caregivers because it provides a smooth surface for wheelchairs and other mobility aids.

7. Incorporate the Right Site Furnishings Into the Layout

No community park design is complete without specifying site furnishings. These are features that enhance the visitor experience and make visitors more comfortable and likely to enjoy their time at the park. This is where your imagination might clash with your budget, but there's no dispute that the right amenities worked into your park plan will pay back. When choosing site furnishings for a park, here are some components to consider:

Bike Racks: More and more, bicycles are returning to popularity. It's part of a community fitness and pollution reductions movement. Secure bike racks should be included in your design.

Benches and Tables: Every park needs adequate seating components. That can be standard park benches or combined with picnic tables. The best seating components are durable and made of lasting materials.

Litter Receptacles: You can't go overboard on this. No one likes a trash-strewn park, and the best prevention for litter is having plenty of receptacles.

8. Add Lighting to Your Park Design

Another important component in park design is your lighting. You want your park to be used as much as possible and not unnecessarily restricted to daylight hours. Natural lighting might not seem crucial during summer months when days are long, and nights are short. However, that quickly changes in the fall and as it stays light-restricted until spring.

Like playground equipment, there are a lot of lighting options available for park design. The best advice any park planner can get is to work with a theme. That doesn't only apply to the park's overall theme — whether that's recreating a historical look, capitalizing on natural features or introducing artificial, imaginary worlds. It includes designing your light plan to complement the entire park theme and remain relatively unnoticed. But bright!

There's a lighting design principle called the hierarchical approach. That means your lighting plan should have a top, middle and lower level of how you use light. At the top level, you should have brightly lit high-activity areas like playgrounds and pedestrian walkways. In the middle, focus on accent lighting to highlight certain features like water or artworks. At the bottom are lowly-lit places that would be unsafe or inappropriate in places at night. You'll want to focus on bright levels of light and accent lighting in your park.

Energy efficiency can be an issue when designing your park's lighting plan, too. Conventional incandescent and metal halide lights are falling from favor in park illumination. Replacing them are high-tech Light Emitting Diode (LED) lights. Not only do LEDs save money by using less electricity, but they also give off more attractive wavelengths. You can also tap into technology by using photo sensors and motion detectors as lighting controls.

The Role of Greenery in Community Park Designing

Designing an urban community park is a creative expression that uses analysis tools and knowledge of environmental, urban, architectural and social areas. In this approach we will deal with the design of the park from the historical analysis; observing the evolution of the green spaces of the city, to then dwell on the types of “urban green”. If you are interested in creating the perfect park space, check out HDI’s Park Design course on the topic!

Although, only at the end of the 18th century, green assumed greater importance in many European cities in urban centers, generating the definition of “public garden” and outlining a revolutionary vision, where ornamental vegetation is appreciated as an element of health. public and recognized as a strong contribution to the aesthetic-recreational function.

Currently, urban green can contribute significantly to the improvement of the microclimate; all this thanks to the component of the plant, reducing the environmental imbalances of the contemporary city; for this reason, initiatives are carried out for the structural integration of the vegetation with the buildings.

Types of urban green

Next, in our Park Design course we describe the main types of green areas present in the urban and peripheral contexts of our cities:

Historic gardens

They are green areas of “not recent” design, culturally connected with the development of cities. The management of this typology has as its objective the conservation of the original system and its safe and non-degrading use.

Sometimes, the presence of secular trees requires careful evaluations of the phytosanitary conditions of stability of the specimens present; also to guarantee the safety of users and the integrity of the garden itself. Inside, there are often architectural and artistic elements of furniture (statues, fountains, small buildings), as well as artifacts of historical interest.

Green spaces of urbanizations

They are green spaces present in different points of the urban fabric; Mainly, they are used by the inhabitants of the area for recreational and entertainment purposes.



Figure 2: Photo showing different types of vegetation in a park

Source: www.homedesigninstitute.com

The design criteria for these green spaces should be simple

trees, shrubs, and grassy areas should be located so that shaded areas alternate with sunny areas; paved areas should be provided, equipped for playing and resting.

Urban parks

They are more or less extensive green areas, present in urban areas, which perform an important recreational, environmental and cultural function.

They can be characterized by subdivision into areas with different functions (rest, games, sports activities, services, cultural and recreational centers); In addition, they are designed with native species, making considerable use of grass and some species of acclimatized shrubs and trees.

In peri-urban expansion areas, vegetation can also assume a role of integration and replacement of the agricultural and forestry system; becoming, in addition, an element of environmental characterization and mitigation of the urban climate.

Source: www.homedesigninstitute.com

Residential and private green

The spread of construction activity poses a series of problems related to new developments. In these areas, vegetation must find its place and, in new residential interventions, the appropriate furniture must be considered. In Italy, based on what is happening abroad, many municipalities are adopting a green regulation to create ornamental vegetation.

The rest area is a fundamental function of the urban park. It can be an area for reading and individual or social rest, relaxation, aggregation and conversation. It is important to identify shaded and peaceful areas, as far away from high volumes of traffic as possible.

Green paths for pedestrians must be designed with the following requirements:

- must be easily accessible for disabled people (2m minimum width);
- have adequate lighting;
- connect the spaces of the green area;
- provide adequate access from neighboring streets;
- include rest areas with benches;
- have shaded areas (with trees, pergolas, gazebos, etc.);
- provide sources of drinking water.

paved surfaces, to provide functionality such as pedestrian paths, trails, rest areas, etc. They must be designed and built with the aim of guaranteeing the stability of the pavement over time. They should also be easily accessible for strollers and wheelchairs;

The listed elements are considered in the elaboration of the project with the function of giving the green area a creative and useful identity.

The ground cannot be considered only as a simple horizontal surface. The topographical variations in level, with the creation of hills, the use of sloped routes or steps, gives the park a different dimension and perception and allows its use for different purposes:

The vegetation, suggests the possibility of a visible chromatic variation that can vary both with green surfaces and with flowers; having a theme of colors consistent with the functionalities of the project, inspired by the principles of chromotherapy. Another element to take into account are the seasons, which favor communication with natural rhythms.

Water, still or moving, induces the perception of color variations and sound variations. Regarding the design, with aesthetic and emotional functions, the utility function is associated in the microclimate picture; this contributes to refresh and humidify the environment; thus expanding the possibility of vegetation and taking advantage of it for the citizens.

Shade is considered based on light variations and the need to carefully evaluate the purpose and method of use of the park to allow citizens to find the oasis of well-being.



Figure 3: Photo showing different types of plant species in a park
Source: www.homedesigninstitute.com

Source: www.homedesigninstitute.com

Park's Furniture Manual

Benches

Source: Park design manual book, county of san diego, September 2020

1. The minimum length of a seating section should be six feet (6').
2. Material and type of bench to be used will be dependent on facility.
3. Park benches shall be designed and located to discourage skateboard activity and shall be treated with anti-graffiti coating
4. Provide benches at key locations throughout the park including at the park entry, at regular intervals along the main circulation path, singular and grouped to support gathering, for viewing activities or vistas, and at recreational facilities such as organized play areas, sport courts, etc. for supporting the visual supervision of children.
5. Benches should either incorporate shade or be located near shade trees where possible. Benches should be located to maximize shade opportunities in the summer and sun exposure in the winter
6. Whenever possible, situate benches with back toward a wall, landscape planting, or trees to increase a sense of user security. Benches can be free standing or integrated into walls or other design features.
7. Set benches back from circulation paths of travel to reduce pedestrian obstructions.
8. Benches should be evenly distributed throughout the park.
9. Benches should be located adjacent to a path of travel and should be ADA accessible with adjacent ADA companion seating.
10. Provide benches designed with a center armrest or center break.

Figure 4: Photo showing a sample of bench can be design in the park
Source: www.designboom.com



Park's Furniture Manual

Picnic Tables

1. Picnic tables should be a minimum of six feet (6') long or round 4' diameter minimum top with perimeter seats.
2. Each picnic table should be located in the center of a four inch (4") thick reinforced concrete pad, minimum size of ten feet by nine feet (10' x 9'). Maximum grade two percent (2%).
3. All picnic table should be anchored into concrete per manufactures specifications.
4. Provide a four foot (4') clearance between each picnic table or other obstructions. Concrete pads shall extend four feet beyond the table/bench dimensions on all sides.
5. All picnic tables should be ADA compliant, and accessible from ADA path of travel.
6. Picnic tables at ADA accessible locations shall have one wheelchair accessible end area.
7. The orientation of picnic tables adjacent to walkways shall be perpendicular to the path of travel to discourage skateboard activity.
8. Table material may include precast concrete or metal with vinyl coating. DPR shall determine material required based on location, theme, character and use of the site.
9. Anti-graffiti coating shall be applied to all concrete tables.

Source: Park design manual book, county of san diego, September 2020



Figure 5: Photo showing samples of table can be design in the park
Source: www.armandesign.com

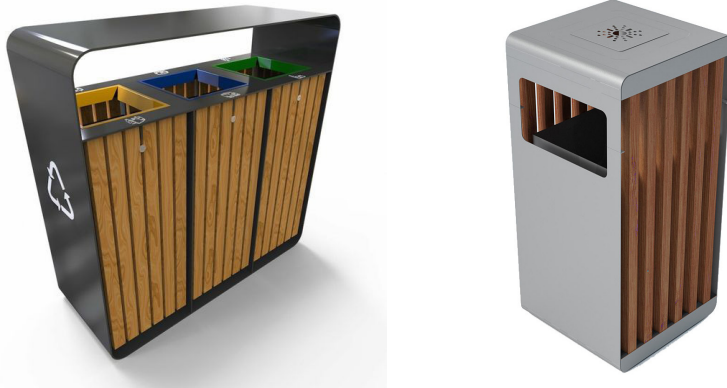
Park's Furniture Manual

Trash And Hot Ash Receptacles

Source: Park design manual book, county of san diego, September 2020

1. Provide an adequate number of trash receptacles through-out the park. At a minimum, the trash receptacles should be located near all parking areas, at the entrances to major buildings and restrooms, playgrounds, picnic areas (at least 1 hot ash receptacle per 2 barbeques), spectator areas, and at sport fields and court and other high intensity recreation areas. DPR may adjust the number of receptacles required based on location and grouping of barbeques.
2. Provide hot coal receptacles no more than thirty feet (30') away from all picnic areas having barbecue grills.
3. Locate hot coal receptacles away from and not under any trees for fire prevention purposes.
4. Trash receptacle design should match park furnishings, wherever feasible.
5. Hot coal receptacles with bottom clean out doors shall be concrete and visible from the barbeque area(s).
6. Trash and hot coal receptacles shall be located on a non-combustible surface such as concrete paving or stabilized decomposed granite; do not locate them in shrub/groundcover areas or mulch areas. Concrete pads must have a twelve inch (12") unobstructed perimeter on all sides for ease of mowing.
7. If located in turf areas, provide a concrete pad with a minimum of eight inches of clearance around the perimeter to accommodate mowers.

Figure 6: Photo showing samples of trash bin can be design in the park
Source: www.artformurban.co.uk



Park's Furniture Manual

Trash Enclosure

1. Trash enclosures shall be located within parking lot areas where feasible.
2. Locate dumpsters away from park users, to minimize offensive odors.
3. All dumpster pads must be positioned to allow the trash truck to approach the containers head on. Ensure that the turning radius, truck length, and angle of approach are adequate.
4. Provide a level access approach, and a minimum ten feet by twelve feet (10' x 12') concrete pad for each dumpster.
5. Provide a securable and gated enclosure around the dumpster pad. Maintain a ten foot by 12 foot (10' x 12') clearance within the enclosure.
6. Trash enclosures shall be sized to house a minimum of two dumpsters; one for trash and one for recycling.
7. The walls of the trash enclosure shall be treated with anti-graffiti coating inside and out.
8. The enclosures shall have solid steel doors or chain link doors with screening slats with locking ability.

Source: Park design manual book, county of san diego, September 2020



Figure 7: Photo showing a sample of trash enclosure can be design in the park
Source: onlydirect.de

Park's Furniture Manual

Water Fountains

Source: Park design manual book, county of san diego, September 2020

1. All drinking fountains must be ADA compliant and positioned so that pathways are not obstructed by the drinking fountain user.
2. One (1) standard and one (1) ADA compliant drinking fountain or one (1) high-low fountain are required outside of each restroom building or located in an alcove.
3. Drinking fountains are required near (with a clear line of sight from) athletic courts, group picnic areas, restrooms, sports facilities, and children's play areas.
4. All drinking fountains located within close proximity to children's play areas should be visible from parent seating areas.
5. All drinking fountains should be vandal resistant.

Figure 8: Photo showing samples of water fountain can be design in the park
Source: www.target.com



Park's Furniture Manual

Shade Structures

1. Prefabricated picnic shelters shall be all steel construction (two tiered if possible) to allow wind flow; unless approved by DPR.
2. The finish shall be an electrostatically applied powder coat (minimum 11mm thick).
3. Roofs shall be standing metal seam or similar, with no exposed screws.
4. Design to reflect park and community character.
5. Ornamental stone or other column additions may be considered.
6. Provide shade structures that are free standing or attached to the play structures.
7. Provide shade structures with steel posts, and rigid metal roofing or shade fabric.

Source: Park design manual book, county of san diego, September 2020



Figure 9: Photo showing a sample of shelter can be used and design in the park
Source: Pinterest

Park's Furniture Manual

Lighting

Source: Park design manual book, county of san diego, September 2020

1. Light fixture locations and plant locations shall be coordinated so that plants do not obscure the lights at maturity.
2. Interior sports lighting systems shall consider the use natural light to minimize electricity use during the day.
3. Consultant or developer shall consider the merits of using occupancy sensors and lighting automatic lighting control systems to switch lights. This includes but is not limited to automatic lighting controls, day lighting controls, and programmable lighting controllers to minimize energy consumption from lighting.
4. All light poles shall be located in shrub beds and mulch areas whenever possible. When light poles are located in turf areas, they shall be adjacent to walkways with a concrete pad per San Diego Regional Standard Drawings.
5. Light poles and irrigation head layout shall be coordinated to allow for full irrigation coverage and to avoid spraying poles.
6. All light pole standards within or near a playing area that are not protected by a fence should have six foot (6') high pole pads.
7. Anchor bolts for light poles shall not be exposed. Anchor bolts shall be covered with grout or a metal shroud provided by the manufacturer.
8. Lights recessed in paving or landscaping are discouraged due to potential vandalism and water damage.

Figure 10: Photo showing samples of lighting can be used and design in the park
Source: www.thecivilengineer.org



Park's Furniture Manual

Fitness And Exercise Equipment

1. At least three fitness stations shall be provided either grouped together or along a walkway or trail. Exercise/fitness stations on walkways should be between 50 and 200 yards apart.
2. Provide shade over exercise/fitness areas.
3. All exercise/fitness areas shall be ADA accessible. Provide a surface material and adequate spacing consistent with achieving ADA access to individual exercise apparatus.
4. Provide durable and vandal resistant equipment for uses of all ages and fitness levels.
5. All exercise/fitness equipment/stations shall be installed on concrete pads pursuant to manufacturer specifications.

Source: Park design manual book, county of san diego, September 2020

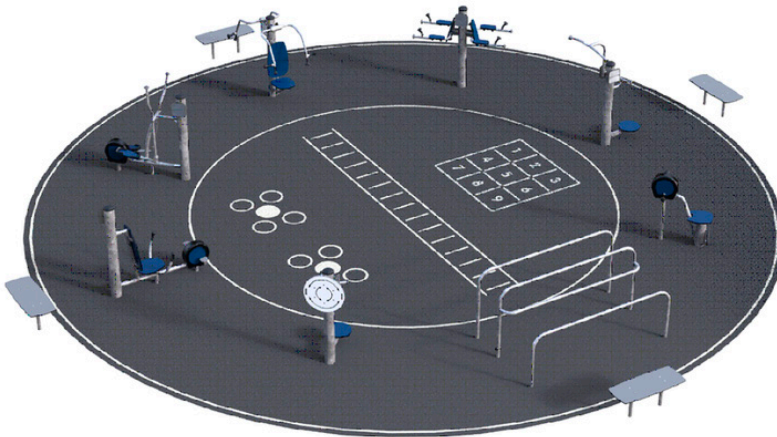


Figure 11: Photo showing a sample of fitness equipment cluster which can be use in the park

Source: www.archdaily.cl

03 CASE STUDY



Figure 12: Photo showing a shot of community engagement in the park of neighborhood
Source: www.sasaki.com



Case Study;

GEENWOOD Community Park

A re-envisioned large neighborhood park and regional destination arises out of robust engagement with the whole Baton Rouge community

At 660-acres, Greenwood Community Park is the largest park in East Baton Rouge (EBR) Parish. Adjacent to the community of Baker and North Baton Rouge, the current park's uses account for only 15% of the total site and are surrounded by 27 holes of golf. The Baton Rouge Zoo is located within the site, but is disconnected from the park, leading visitors to believe these are two separate facilities. In 2018, Sasaki was hired to reimagine the future of Greenwood Park and lead a community process that worked in collaboration with the Baton Rouge Zoo—which underwent a simultaneous master planning process led by Torre Design Consortium, Ltd. Then, in late 2019, the Sasaki and Torre team were asked to lead Phase 1 design implementation of the plan.

Designed with the very best of Louisiana's natural and cultural environments in mind, the new park serves as a place to both get away and come together. The balanced nature-based and active program elements are stitched together by a network of multi-modal trails that connect people to this place. The reimaged BR Zoo, now opening into the park, becomes part of a larger constellation of community uses that serve people of all ages, from all walks of life. The new Greenwood Park will be a neighborhood park for Baker and North Baton Rouge as well as a regional destination for EBR and beyond!

Figure 13: The overall design vision for the park

Source: www.sasaki.com



Source: www.sasaki.com

The design's first phase, which broke ground on December 8, 2020, will include a signature adventure playground, a new entry building and sequence for the zoo relocated within Greenwood Park, AZA re-accreditation for the zoo, a giraffe feeding, a pygmy hippo exhibit, re-routing of the zoo train, an expanded and upgraded J.S. Clark Golf Course, the restoration of Cypress Bayou, and the creation of the Signature Bayou Promenade.

POPULATION DENSITY

There are 4,500 people who live within a 10-minute walk (0.25 mile), and 64,600 people who live within a 10-minute drive (5 miles).



RACE

EBR is home to a diversity of people; the distribution of people by race is concentrated in different parts of the parish.

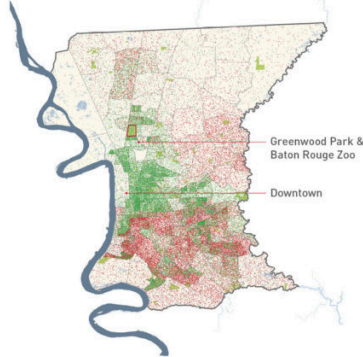


Figure 14: The team considered different social factors, like population density, when designing the park

Source: www.sasaki.com

At the core of the Master Plan process was a site discovery and “uncovery” phase, which utilized detailed mapping to reveal hidden information about the site’s past and present conditions. As a result, the Master Plan is rooted in a deep understanding of Greenwood Park’s ecological, hydrological, and cultural conditions.

Community engagement was an integral part of defining the vision for Greenwood Park. In order to invite as many voices as possible into the process, engagement methods were designed to be broad reaching in terms of age and demographics by using numerous locations and tools. Innovative strategies including analog Instagram boards, a gumball preference game, and a 24’x22’ walkable master plan! In addition to collecting feedback, the engagement was seen as a two-way street—with materials providing analysis of the physical conditions of the existing park in order to spark a deeper connection to the park and its future.

Source: www.sasaki.com

The common themes found in the results of the robust engagement formed the four guiding principles for the Master Plan: Celebrate Louisiana's Nature, A Park for the Everyday and the Big Day, Open Up and Reach Out, and Welcome and Grow. Each of the guiding principles acted as a framework for the creative process.

Figure 15: A series of four guiding principles established early in the process through listening to the aspirations of the community and stakeholders provided a benchmark for success as the design evolved. These four elements can be found in all phases of parks future.

Source: www.sasaki.com

Celebrate Louisiana's Nature



Embracing the ecology of Greenwood Park and creating sustainable opportunities for people to experience the landscape

A Park for Everyday & the Big Day



Providing a balance of everyday neighborhood amenities and destination activities that are a regional draw

Open Up and Reach Out



Providing physical connectivity for walkers, bikers, and drivers alike to make the park a connected heart of the parish

Welcome and Grow



Putting community at the heart of the park's design and implementation

The master plan includes reorienting the Zoo entrance to the parks interior, where it is connected to the Waterfront Building along the new Bayou Promenade ultimately making it part of a larger constellation of community uses that serve people of all ages, from all walks of life. A robust trails system creates new recreational opportunities for walkers, runners, bikers, and horseback riders. An expanded lake and new blue trails both create recreational opportunities while also serving a hydrological function of capturing storm water during flooding events. An iconic adventure playscape will engage people of all ages in outdoor recreation. The park will serve both regional demand for festivals and events, as well as local needs for park access to day-to-day amenities and activities by including major anchors—such as a large concert venue as well as quality-of-life features like community gardens and walking trails.

Source: www.sasaki.com



Figure 16: The final design, shown here, brings together a whole host of technical constraints like flooding, sensitive habitat, and existing site features with a broad set of community desires

Source: www.sasaki.com

Source: www.sasaki.com



Figure 17: At the final public meeting a diverse range of stakeholder holders and community members were present demonstrating the broad reach of the team's community engagement strategy which was foundational to the plan
Source: www.sasaki.com

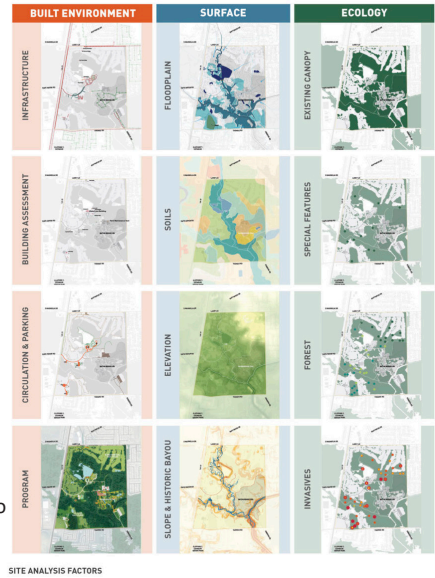


Figure 18: The team referred to three main site analysis factors
Source: www.sasaki.com



Figure 19: The plan establishes a process to transform the 660 acre park and zoo into a space that serves as a community hub for the surrounding neighborhoods and as a destination for the people of greater Baton Rouge
Source: www.sasaki.com



Figure 20: The vision for the site unfolds into a series of programmatic spaces that are tied together by restored bayous and miles of trails
Source: www.sasaki.com



Figure 21: Greenwood's Louisiana Playground offers children of all ages something to do. Elevated walks, large slides, larger-than-life animal play features, and delta-themed water play features weave in and out of mature forest. This feature was the number one priority that came out of the extensive community engagement process

Source: www.sasaki.com



Figure 22: Bayou promenade

Source: www.sasaki.com

Figure 23: Zoo entry plaza
Source: www.sasaki.com



Figure 24: Adventure play
Source: www.sasaki.com



Case Study;

RISE CITY TOD Community Park

Rise City is a TOD (transit-oriented development) community located in Fuzhou on top of a subway (city rail), covering an area of approximately 200,000 square metres (2,152,782 sq. feet). The community park is located in the north of the site for exhibitions and citizen leisure activities.



Figure 25: Photo showing the Rise City TOD park in the context
Source: worldlandscapearchitect.com

DESIGN CONCEPT

The TOD community park is a landscape for young people, paying attention to its spiritual core, experience and participation, over and above design form, space and function. Starting from the needs of young people and combined with the varying terrain of the site, the hope was to create an interactive lifestyle park for the neighborhood infusing vitality into the site.

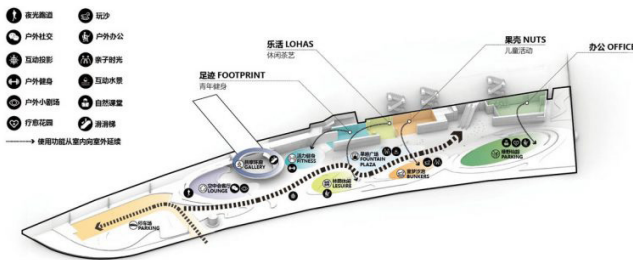


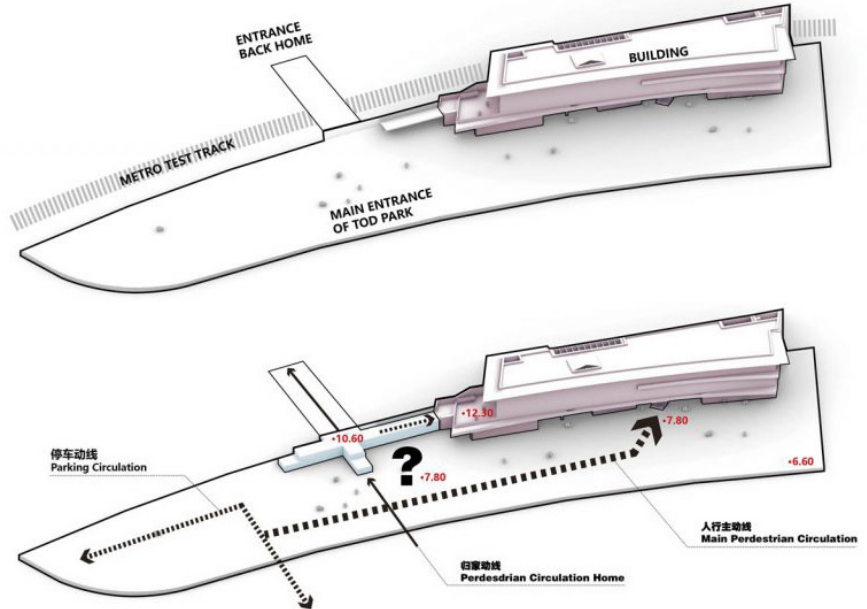
Figure 26: Photo showing the design concept of the TOD community park
Source: worldlandscapearchitect.com

The design uses inclusive circular composition from the plane to the three-dimensional space to form a vivid site card and a strong spatial impression.

DESIGN GENERATION

Resolving the current site conditions including the large height difference across the site was the first step in the design process. The evolution of the pedestrian circulation, focused on reflecting the architectural language, and secondly,

Figure 27: Design challenge diagrams
Source: worldlandscapearchitect.com



The TOD community is built on the subway cover, with complex vertical height difference changes. The main entrance of the park has a circulation directly leading to the entrance of the future community, while the circulation leading to the Exhibition Center crosses the whole site. Therefore, the key point of the design was to solve the problem of height difference in an interesting way and create the best sense of experience and memory. An open circular corridor and spiral sculpture are at the center, combined with stairs and a slide.

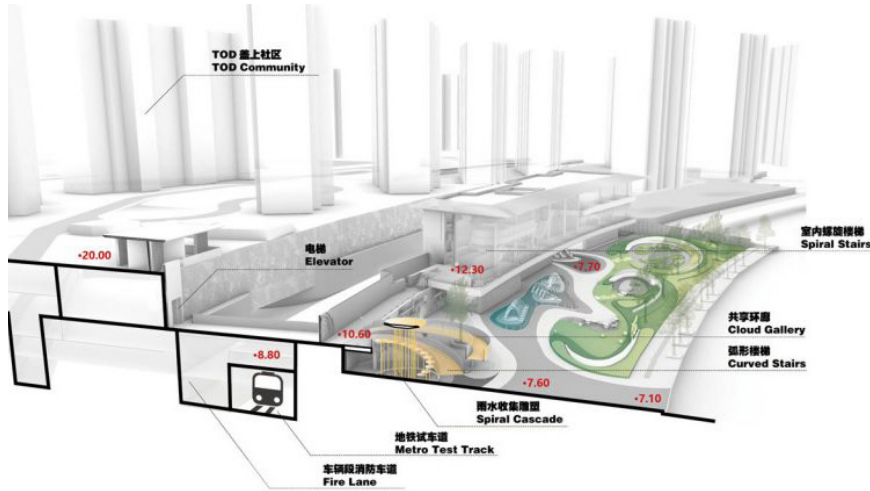


Figure 28: Photo showing the section of the park in corresponding to the city
Source: worldlandscapearchitect.com

DESIGN NODES

Light Plaza

The main entrance of the light plaza includes a ring corridor, RISE cascade sculpture and an open air living room. The ring corridor embraces the central sculpture, connects the stairs and ramps back home, and is a walking path with a panoramic view of the park. As the visual sign of the main entrance of the community and the spiritual totem of RISE CITY, the RISE cascade is a spiral falling water sculpture drawing inspiration from the shape and form of big banyan trees, and has the educational significance of rainwater collection. The star point luminous column supports a ripple shaped disc, like the dense roots of banyan trees extending to the ground.

Figure 29, 30: The light plaza as a node and gathering place
Source: worldlandscapearchitect.com



The Air Livingroom

The open-air living room defines the outdoor social place in the form of stacked raised circular platforms. The warm and inclusive circular wooden chairs connect each other at different elevations, which has more possibilities of intersection and stay. Park visitors are able to engage in passive activities such as reading, leisure and having a cup of tea whilst watching performances on a small stage.

Figure 31, 32, 33: The open-air living room plaza as a node and gathering place
Source: worldlandscapearchitect.com



Vitality Island

The island includes vibrantly coloured exercise equipment to exercise different parts of the body and stretch and relax. Informational signage is provided for people to understand how to use the exercise equipment safely and effectively.



Figure 34, 35: The vitality island as a node and gathering place
Source: worldlandscapearchitect.com

Jump Fountain

There are three groups of interactive fountains for visitors that are activated by infrared sensors. In the hot and humid climate of Fuzhou, they dance with through the water and play in the fountains that bring joy and delight to young and old.



Figure 36, 37: The jump fountain as a node and gathering place
Source: worldlandscapearchitect.com

Children's Sand Pit

Children can play in the sand using their building what their dreams and desires in the white sand. Children's can play in the sand and have fun with their parents and grand parents.

Figure 38, 39: The Children's Sand Pit as a node and gathering place
Source: worldlandscapearchitect.com



Healing Garden

The healing garden provides a sensory garden, rain garden and places to relax. It is also an outdoor nature classroom for children and place for adults to relieve meditate. The rain garden is integrated with the site topography and with educational signage.

Figure 40, 41: The healing garden plaza as a node and gathering place
Source: worldlandscapearchitect.com



Case Study;

SAND GREEK Community Park

In 1996, when Sand Creek Park was originally envisioned and planned, the area around the park was drastically different than it is today. Stapleton Airport had recently been decommissioned, and Fitzsimons Campus had yet to be realized as a bustling medical and university campus.

Today, the City surrounding the park has evolved. What was Stapleton Airport is now a thriving residential community. The Fitzsimons and Anschutz campus has become home to premier medical and university teaching facilities, as well as residential developments geared towards young professionals working at the campus. In 1996, the south border of the park was adjacent to a golf course and open undeveloped land. Today, the south border of the park is bounded by Fitzsimons Parkway. The golf course, although still there today, is planned for new development that would bring office and residential uses to the south side of the Fitzsimons Parkway immediately adjacent to the park's south edge.

The introduction of a light rail station on the south edge of the park was seen by the City as an opportunity to revisit the original park master plan and re-evaluate the plan with regards to the changing context of the City around it.

This master plan amendment represents opinions heard throughout a public outreach process, and creates a vision that preserves the natural character of the park while providing amenities for Aurora citizens that encourage interaction with nature.

Source: City of Aurora Parks, Recreation and Open Space Department

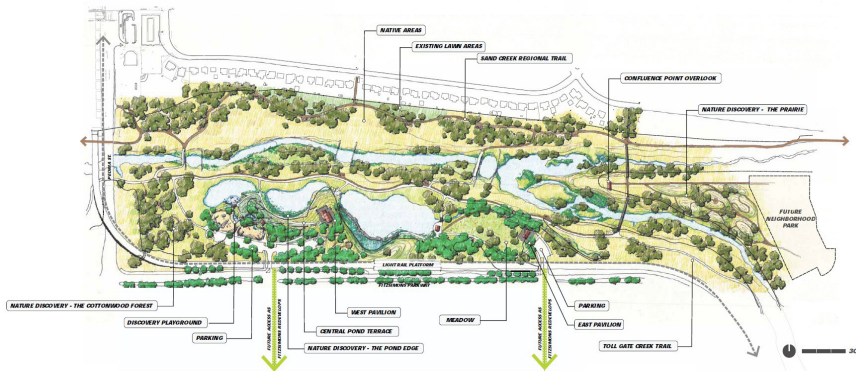


Figure 42: Amended master plan of the park in 2014

Source: City of Aurora Parks, Recreation and Open Space Department

Figure 43: EXISTING CONDITIONS - SAND CREEK PARK TODAY; Several elements from the original master plan have already been built. Central to the master plans vision, three ponds have been built and engineered to hold water year-round, creating the core park's use areas. Trail connections, a boardwalk, a parking lot, and bridges have also been built. Trees and planting have been established along Fitzsimons Parkway and small lawn areas have been incorporated on the North of the Sand Creek Regional trail for use by the Morris Heights neighborhood. Additionally, a future neighborhood park has been proposed on Sand Creek Park's eastern border.

Source: City of Aurora Parks, Recreation and Open Space Department



Figure 44: ORIGINAL SAND CREEK PARK MASTER PLAN - 1996; In addition to preserving the natural prairie ecology along Sand Creek and Tollgate Creek, the original master plan envisioned a series of ponds, making water a central element to the new park and providing a 'connection with water.'

Source: City of Aurora Parks, Recreation and Open Space Department



CONCEPT SUMMARY

The vision for Sand Creek Park accommodates needs for adjacent neighborhoods, the Fitzsimons Campus, and the broader City by combining the park's wonderful natural characteristics with new programs and activities along its southern developed edge.

Two access points, one at Racine (west) and another at Ursula (east), provide gateways to the park's natural areas and nodes of activity and recreation. The gathering spaces are a mix of informal areas for small groups or classes to observe nature and a small lawn area to accommodate larger groups or informal play. The playground is inspired by nature and integrates into the park's prairie landscape.

GATHERING SPACES

- Central Pond Terrace: Wide terrace seats set into the prairie for gathering, laying in the sun, education, and relaxation overlooking the pond.

A small, sloping lawn connects the discovery playground to the terrace and provides places for people to sit with views of the pond and the playground. Existing trees are preserved and integrated into the seating areas.

- Meadow: A clearing in the cottonwood forest near Ursula Street creates a natural outdoor classroom and an informal gathering space situated within an enhanced prairie meadow.

PAVILIONS / STRUCTURES

- West Pavilion: Open air structure with shade and picnic seating. Views are oriented to the east and central pond. A small shelter at the water's edge creates a quiet place to sit and look out at the pond.

- East Pavilion: Open air structure with shade and picnic seating. Views are oriented to the east pond and cottonwoods.

- Confluence Point Overlook: Open air shade structure with benches. Views are oriented toward the confluence of the two creeks and the front range. The overlook gives trail users a place to rest in the shade.

PLAY AREAS

- Discovery Playground: The Discovery Playground will be a large playground with structured play equipment and natural features to climb, run, slide and sit. The playground will be designed to fit within the natural character of the landscape at Sand Creek Park. Play fixtures will be inspired by the trees and rolling hills at the west end of the park.

Source: City of Aurora Parks, Recreation and Open Space Department

- Nature Discovery: Three nature discovery areas are located in the park's natural areas. The discovery areas are connected by a trail network to guide park users through an exploratory adventure through the park. The areas will include interpretive signage to describe the park ecologies:

The Pond Edge - A broad terrace steps down into the central pond where kids and adults alike can engage and safely access the water's edge.

The Cottonwood Forest - A clearing under the trees allows for exploring the understory and looking up at the canopies.

The Prairie - A series of small rolling landforms allows users explore a native landscape.

Figure 45: The photo showing masterplan and conceptual section facing east at the pavilion

Source: City of Aurora Parks, Recreation and Open Space Department

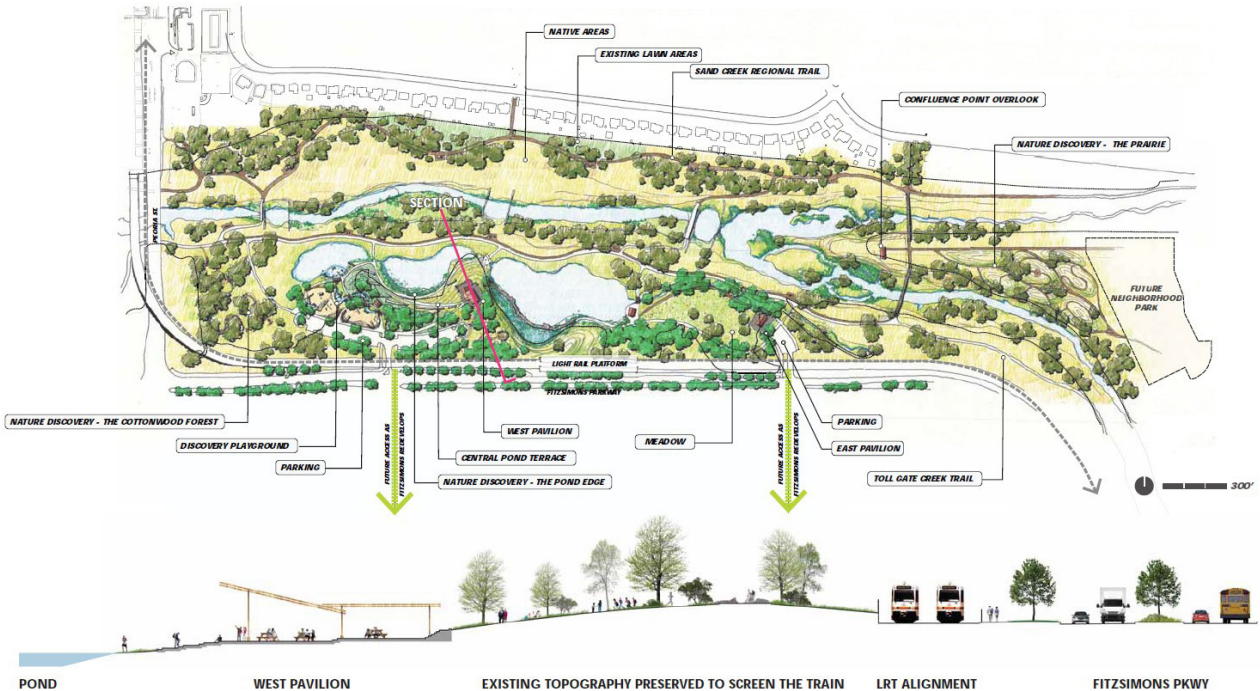




Figure 46: The photo showing different design characters in one frame
 Source: City of Aurora Parks, Recreation and Open Space Department



Figure 47: The artistic photo showing the character of nature discovery playground
 Source: City of Aurora Parks, Recreation and Open Space Department

04

INTRODUCTION TO SITE

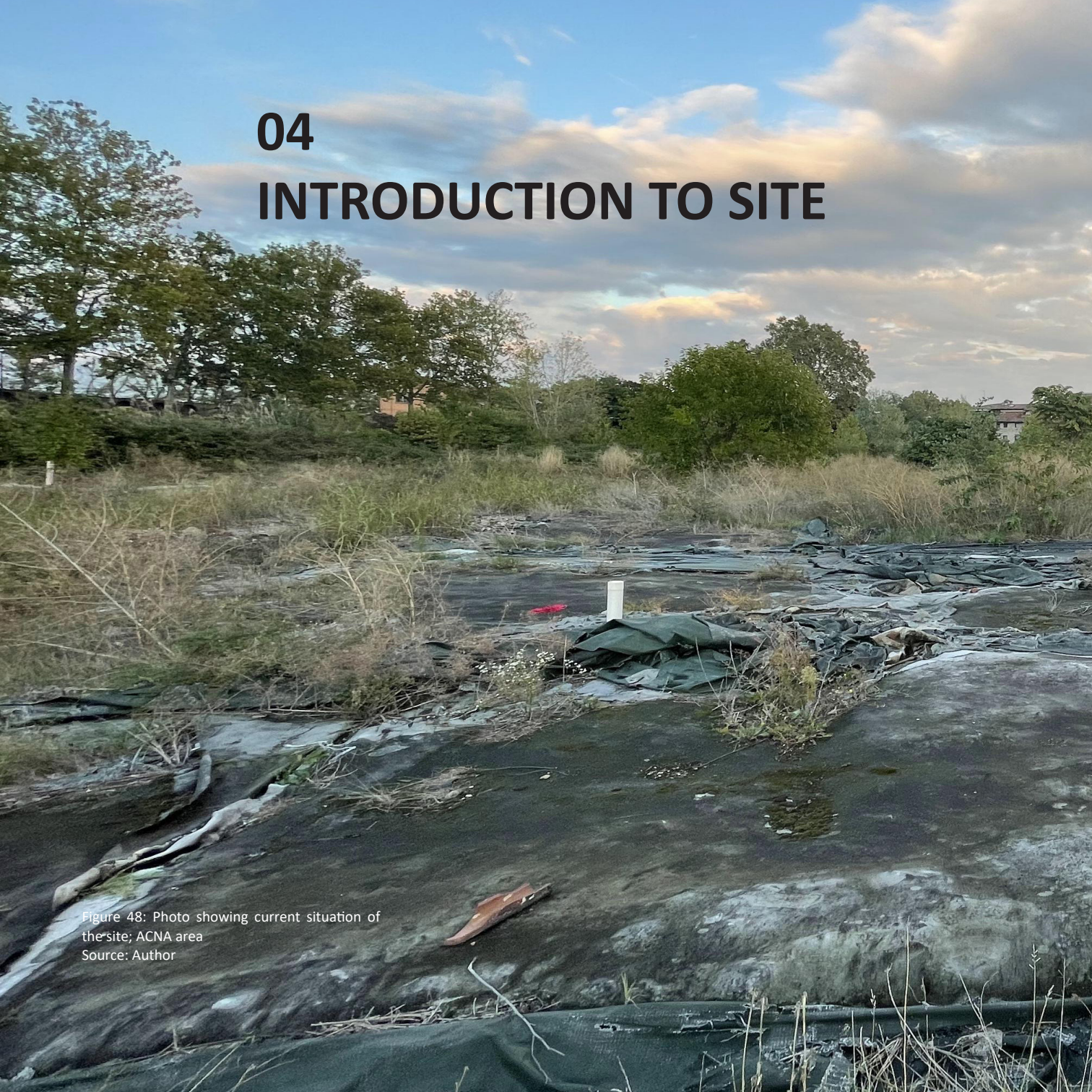


Figure 48: Photo showing current situation of the site; ACNA area
Source: Author



Site Location



Figure 49: Map of Italy, Location of the site
- Map showing the location of the Emilia Romagna region
Source: www.mapofus.org

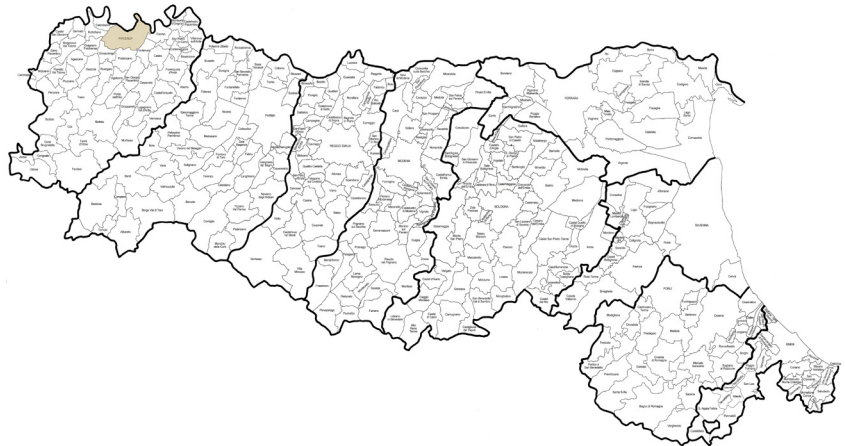


Figure 50: Map of Emilia Romagna, Map showing Piacenza province
Source: www.mapofus.org



Figure 51: Map of Piacenza province, Map showing the Piacenza city
Source: www.mapofus.org



Figure 52: Map of Piacenza city, Map showing the site location (ACNA area)
Source: Author



Figure 53: Map of Piacenza city
Source: google earth



Figure 54: Map of Piacenza city, showing
the location of the site
Source: google earth

Site Introduction

Piacenza, Latin Placentia, city, Emilia-Romagna regione of northern Italy, on the south bank of the Po River just below the mouth of the Trebbia, southeast of Milan. It was founded as the Roman colony of Placentia in 218 BC. After being besieged unsuccessfully by the Carthaginian general Hasdrubal in 207 BC and sacked by the Gauls in 200, it was restored and reinforced. In 187 BC it became the terminus of the Via Aemilia, the great arterial road to Ariminum (Rimini), and was later the focus of other major Roman roads. After the barbarian invasions, Piacenza was governed by its bishops from 997 to 1035. It became a free commune in the 12th century and a leading member of the Lombard League of towns in opposition to the emperor Frederick I Barbarossa. Despite political vicissitudes, it prospered from its control of river and road traffic. A long period of struggle between the Visconti and Sforza families, alternating with papal and French rule, was ended in 1545 by the creation by Pope Paul III of the hereditary duchy of Parma and Piacenza for his son Pier Luigi Farnese. For the subsequent history of Piacenza, see Parma and Piacenza, duchy of.

No Roman monuments survive, but the rectangular street plan in the centre of the city is Roman. The brick cathedral (1122–1253) is a fine example of Lombard Romanesque style. Other noteworthy medieval churches are the former Cathedral of San Antonino, incorporating an 11th-century facade and elements of the 13th- and 14th-century construction; the restored San Savino (consecrated 1107), with unusual 12th-century floor mosaics; San Francesco (begun 1278); San Sisto (1499–1511), the original home of Raphael's painting "Sistine Madonna"; and Santa Maria di Campagna (1522–28), with frescoes by Perdone. Notable palaces include the Palazzo Comunale (begun 1281) and the grandiose Palazzo Farnese, begun in 1558 for Margaret of Austria and never completed. (www.britannica.com)

ACNA , an acronym for Azienda Coloranti Nazionali e Affini , was an important Italian chemical company active from 1929 to 1999 in Cengio (main plant), as well as in Cesano Maderno and Rho , and known above all for the pollution of land and waters related to its activities (wikipedia). Its factory in Piacenza was located in the north west part of the city and stich to the historic wall. Now, it have been unused and wasted for a long time and somehow made dilemma for city, hence, municipality have been involved in regenerate and redevelop this area to active the neighborhood and get rid of its contamination.(Author)

ACNA area

The altered industrial area in the historic part of the city

In the “EX ACNA” transformation area, an abandoned industrial area, configured as a “neighborhood shopping complex” or “neighborhood shopping mall”, the intended use of neighborhood businesses and the construction of two medium-small structures is allowed of sale, also for the pursuit of the objectives referred to in art. 15 paragraph 2 number 7, exclusively under the conditions set out in Chapter IV of this legislation, and the application criteria of art. 8 of Legislative Decree 114/98 subject to the approval of PUA and within the limits of the sales areas provided for by the P.R.G .. (Commune di Piacenza)

ACNA is an abandoned industrial area at the north west side of Piacenza city and located in the historic part called according to its former function. It was paint factory that have been demolished and now unused and wasted but due to high potentials and great opportunities, it is one of the most desired spaces to regenerate for both municipality and urban designers and planners. It is a 44.000 sq meters triangular area which municipality is owner of only 28.000 sq meters. It has essential location due to being located along with Piacenza historic wall and closing to the city center on south side. The area is stucked to the historic green belt and can integrate also to the northern green and natural network. The distance between Po river and north side of the site is less than one kilometer. ACNA included wild vegetation after many years and can be beneficial in terms of greenery and landscape itself (Author). According to protection codes, ACNA included in indirectly cultural property protection(D. lgs. 42/2004 art.10)



Figure 55: Map of ACNA area
Source: google earth



Figure 56: Current situation of ACNA area
Source: Author



Figure 57: Current situation of ACNA area
Source: www.liberta.it



Figure 58: Current situation of ACNA area
Source: Author



Figure 59: Current situation of ACNA area
Source: Author



Figure 60: Current situation of ACNA area
Source: Author

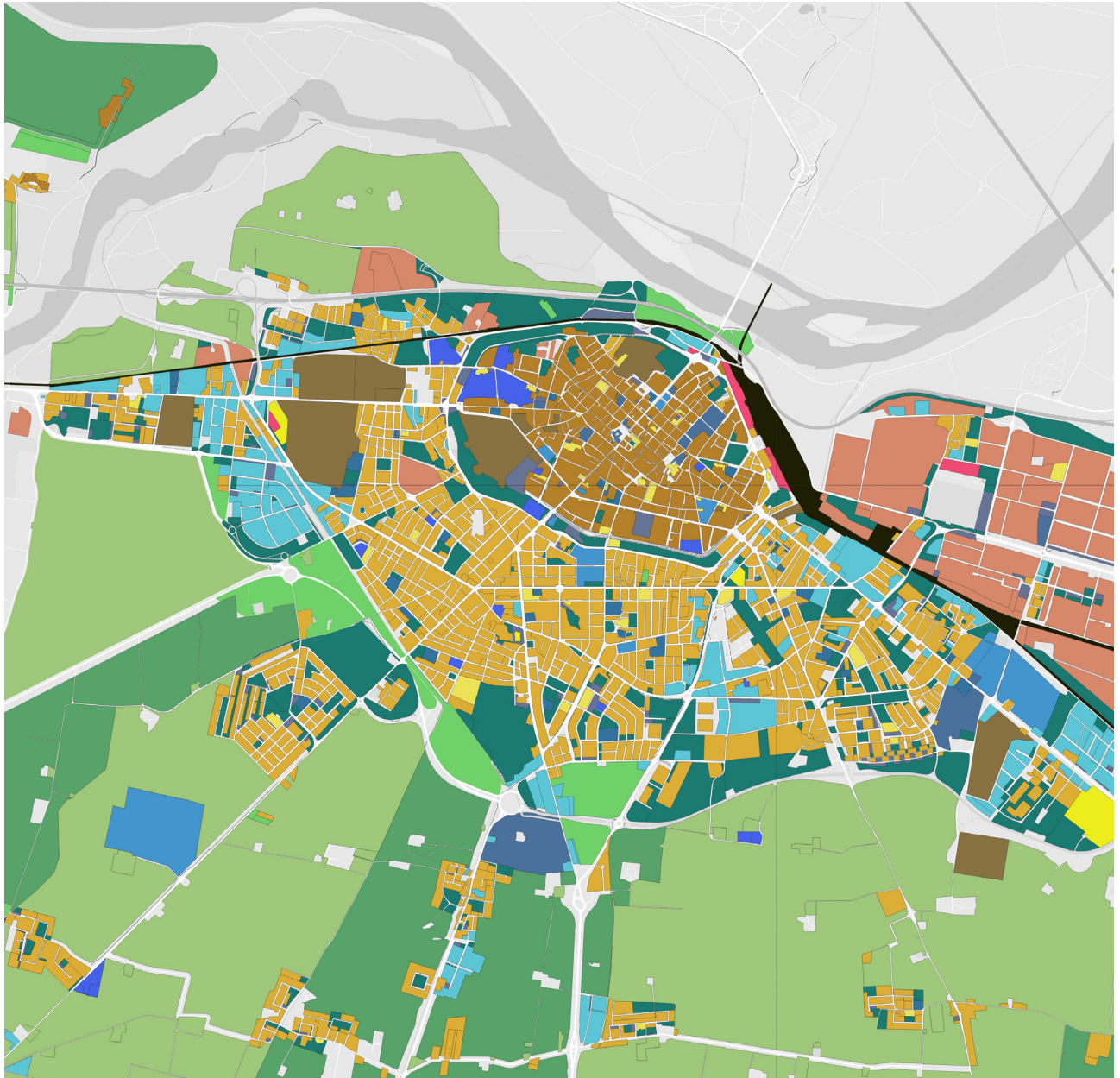


Figure 61: Current situation of ACNA area
Source: Author

05 ANALYSIS

Figure 62: Map showing the city center of Piacenza from bird view
Source: www.emiliaromagnaturismo.it



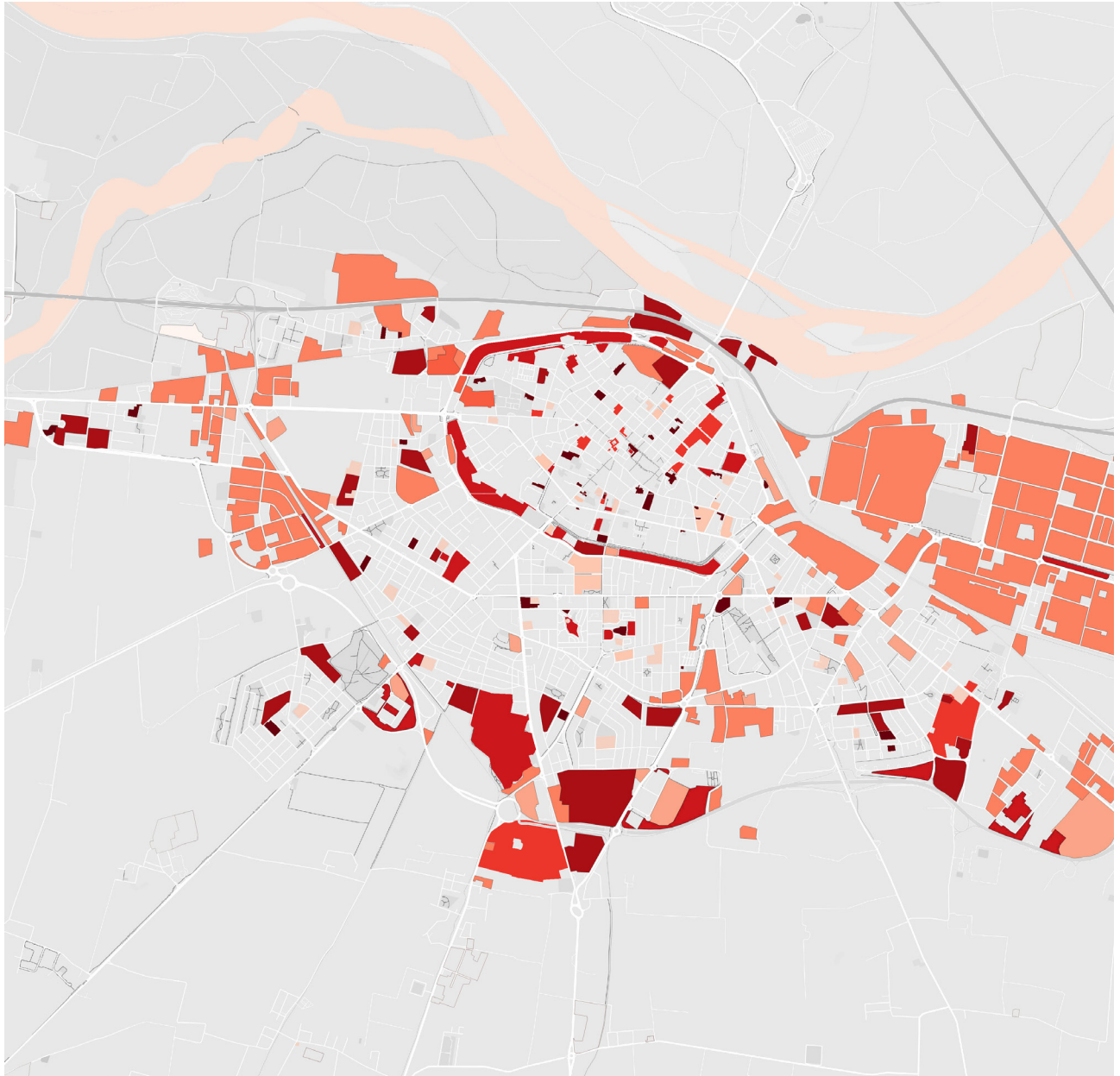


Land use Map



Figure 63: Map showing the land uses of the city of Piacenza in 19 different layers. As it clears, the central and core of the city is mainly historic residential which surrounded by recent residential buildings in south part and somehow has been blocked in north part according to the vicinity with Po river. Normal agricultural areas are covered the city and manufacture zone is located on the east part. What is deserve to attention is the point about ACNA area which is included in the green space layer and also can be imagine as a green ring of the city.

Source: Author

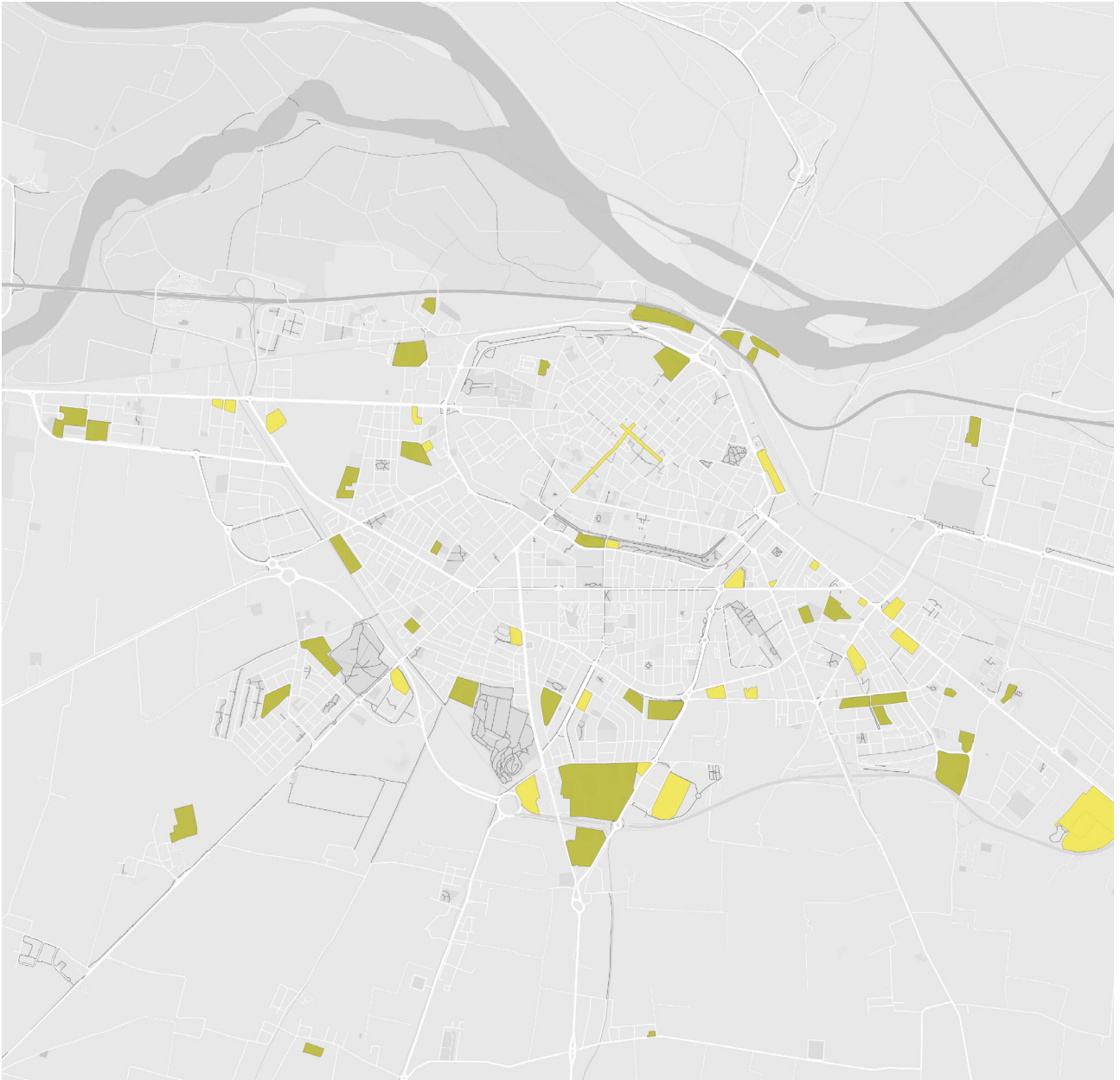


Attractors

-  Golf Camp
-  Po-Trebbia River
-  Educational Spaces
-  Commercial Settlements
-  Factories and industrial
-  Hospitals
-  Public Spaces
-  Public Green Space
-  Sports Areas
-  Religion Spaces

Figure 64: The map showing the types and distribution of attractors in the city. To regenerate and reactive an area in the urban fabric, we have to pay special attention to the attractors of the city and around our site to find out how we can engage and bring to our project. Taking advantage of the most active types of attractors is the main goal of this map. As th map shows, the main attractors in vicinity of the site which we can focus more about them are; sport spaces, public green spaces, riverfront, hospital and religion spaces.

Source: Author

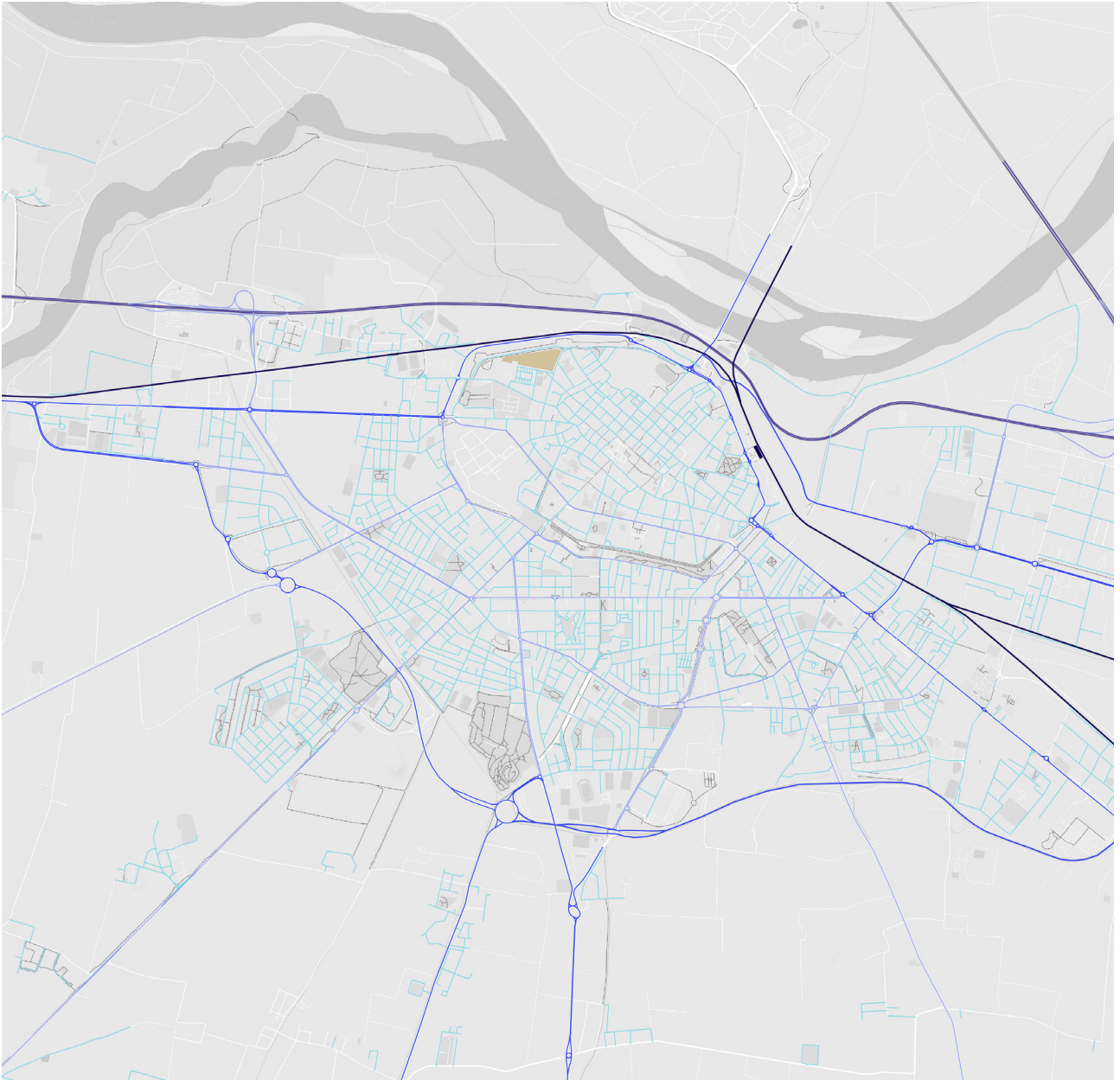


Sport and shopping hub

- Sports Area
- Commercial Areas
- Commercial district

Figure 65: The map showing two factor distribution in the city; sport and shopping services. Sport was one of the main attractors in the previous map and commercial services also indicated in the land use map with its lackage of the vicinity of ste. As the map clearly shows, most of them are located out of the core of the city so these are two services which we want to apply in our community park sicne their needs in the neighborhood.

Source: Author



Accessibility








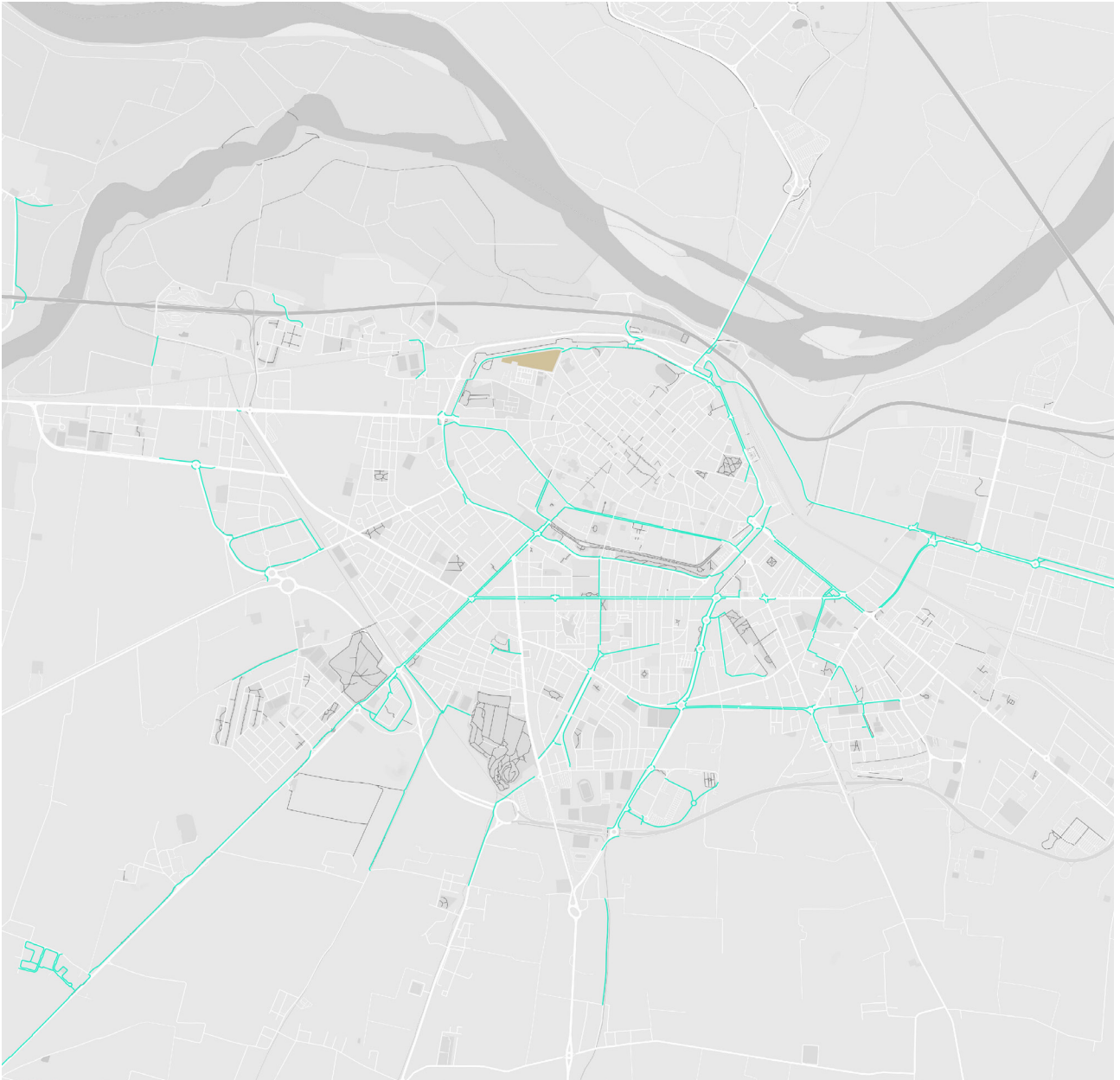
-  ACNA area
-  Rail station
-  Railway
-  Highway
-  Primary
-  Secondary
-  Urban street

Figure 66: The map showing accessibility and connections to site which is one of the main and initial factors in each urban project that should taken into consideration. According to the location of the site, primary road is clearly close to the project and the railway is cross in parallel with it while blocks the access to riverfront. In addition, several urban streets are reaching to the site in a systematic network which it can be a high positive potential of the site.

Source: Author



Accessibility

- ACNA area
- Bike path

Figure 67: The map showing the bike pass network of the city which fortunately our site is also included in this types of infrastructure as most important types of transportation in the urban designing and planing to make it sustainable as mutch as we can.

Source: Author

Figure Ground Map

- Private Area
- Public Area



Figure 68: Map showing the property condition of the city in the small scale which covering the historical center including site project. Private spaces which we are not allowed to intervene are defined in black color and public areas that we can take advantage of their space are in white color. As the map shows, we have sufficient public spaces around our site that we can somehow intervene and integrate it to the project.

Source: Author

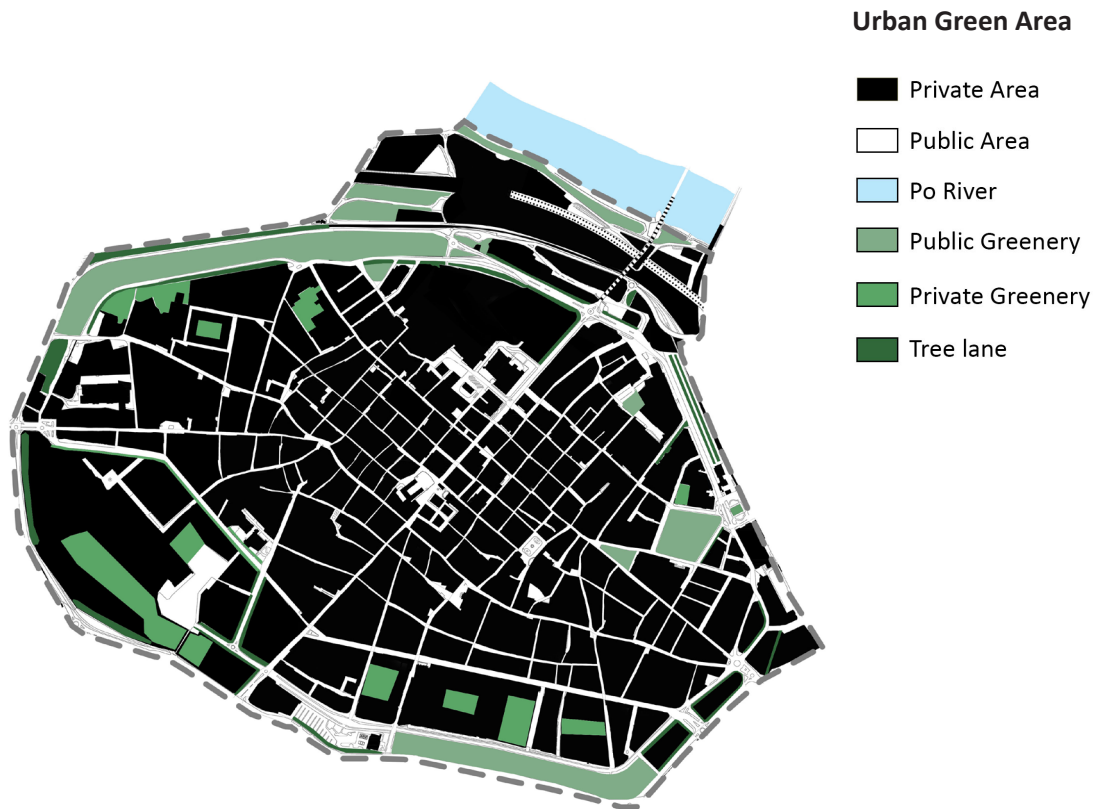


Figure 69: Map showing the types of green spaces of the core of the city in addition to the figure ground map which we can take advantage for our park. As it clear, green areas can build a green belt around historic part of city and include our site project.

Source: Author

Historical Value Elements

— Historical Connection

■ Historical Elements

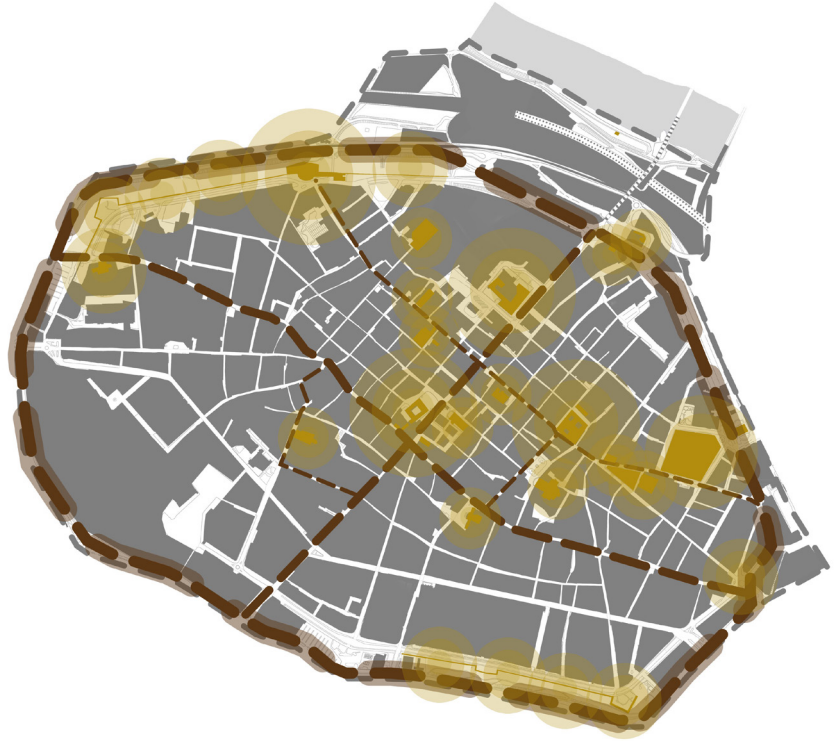


Figure 70: Map showing historic elements of the city in small scale which most of them has religious function. history and historic element always have value for citizen and are considered as important urban element for both planing and design. Hence, to active ACNA area and regenerate it, we can attract and use this elements and their visitors to our community park. To integrate these historical values, we have to apply historical connection between them which reach to our site fortunately.

Source: Author

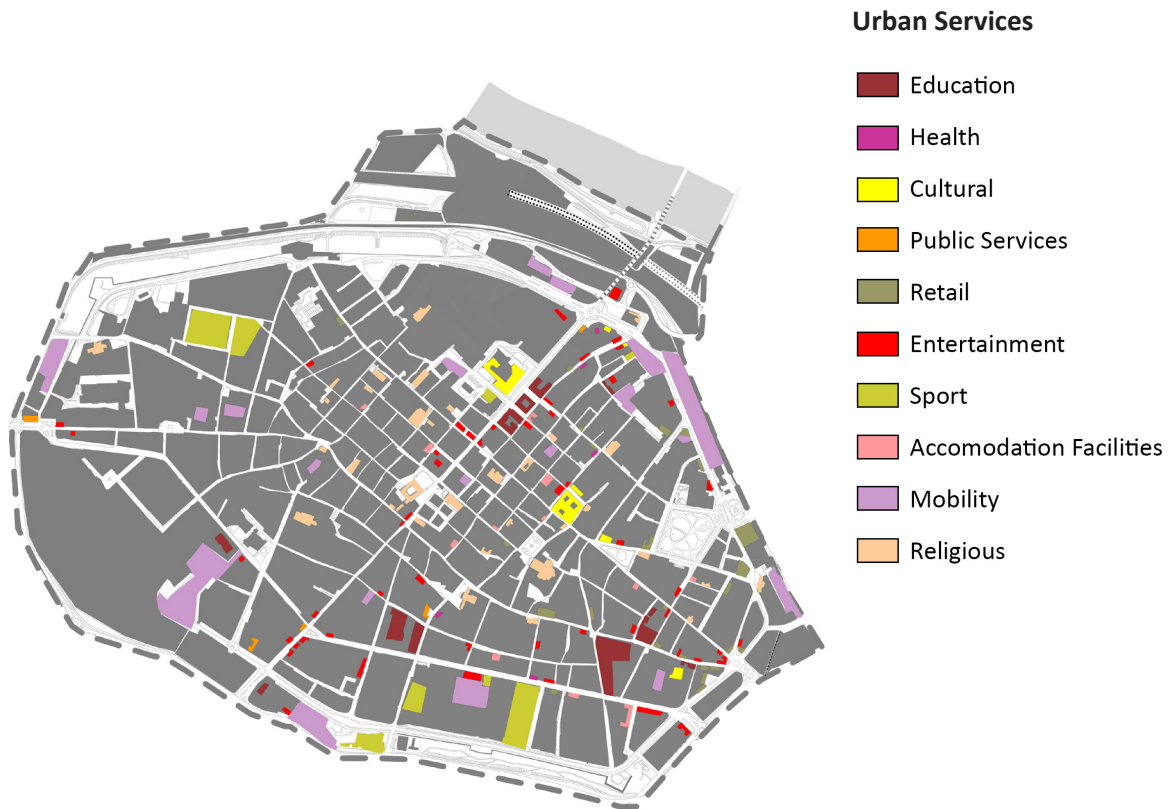


Figure 71: Map illustrates urban service in small scale to find out the shortage and lackage of any service in the vicinity of site. In spite of its excelent location and position in the city, the neighborhood feels the lack of sufficient and proper services such as; recreation and entertainment, retails and cultural services.

Source: Author

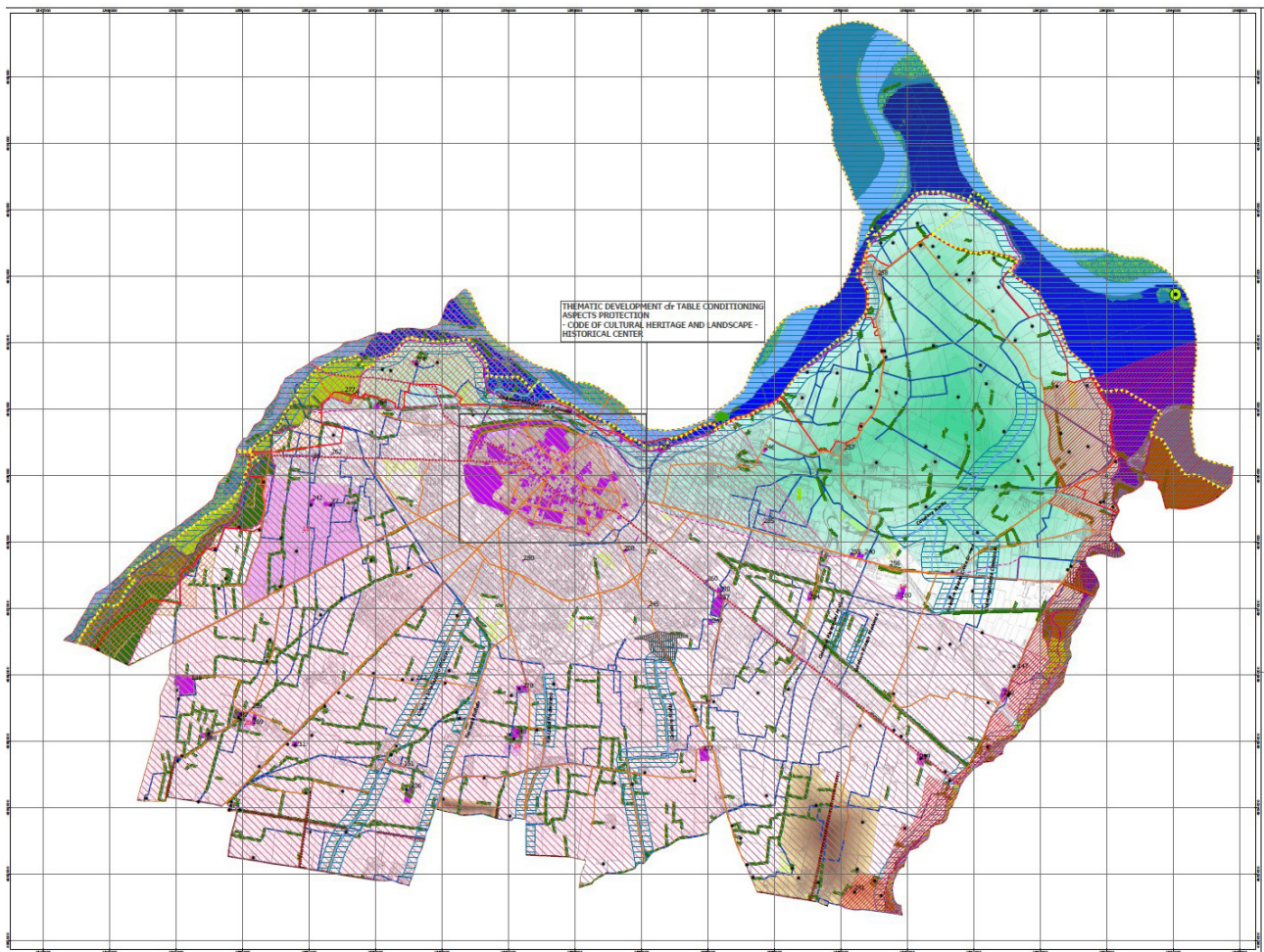


figure 72: Map of protection codes and reservation status for the municipality of Piacenza

Source: Piano Strutturale Comunale Di Piacenza



Protection Status Map



Protected Zone A for water courses
(art.29,30,31 PAI)



Rivers, streams and public waterways
and its protection zone (D.lgs. 42/2004 art.142)



Historical center
(art.24 PTCP)(art. 5.12, 5.13 PS comune di Piacenza)



Directly cultural property protections
(D.lgs. 42/2004 art.10)



Indirectly cultural property protector
(D.lgs. 42/2004 art.10)



Archeological asset protection
(D.lgs. 42/2004 art.10)



Local Historical Road Network
(art. 27 PTCP) (art. 5.15 PS comune di Piacenza)



Via Francigena
(art. 5.16 PS comune di Piacenza)

Figure 73: The map showing protection status of the area to find out about probability of protections and restrictions of intervention in the site. As we saw in larger scale, ACNA is located in the historic protected area so to be more direct and in more detail, we have to know about exact protection code and status to do relevant interventions. As we can see, it has indirectly protection rules which give us permission of intervene but being careful about codes. On the other hand, it is surrounded by historic wall and some other historic places which directly protected and most of interventions are forbidden.

Source: Piano Strutturale Comunale Di Piacenza - Author

Attractor's Timeline

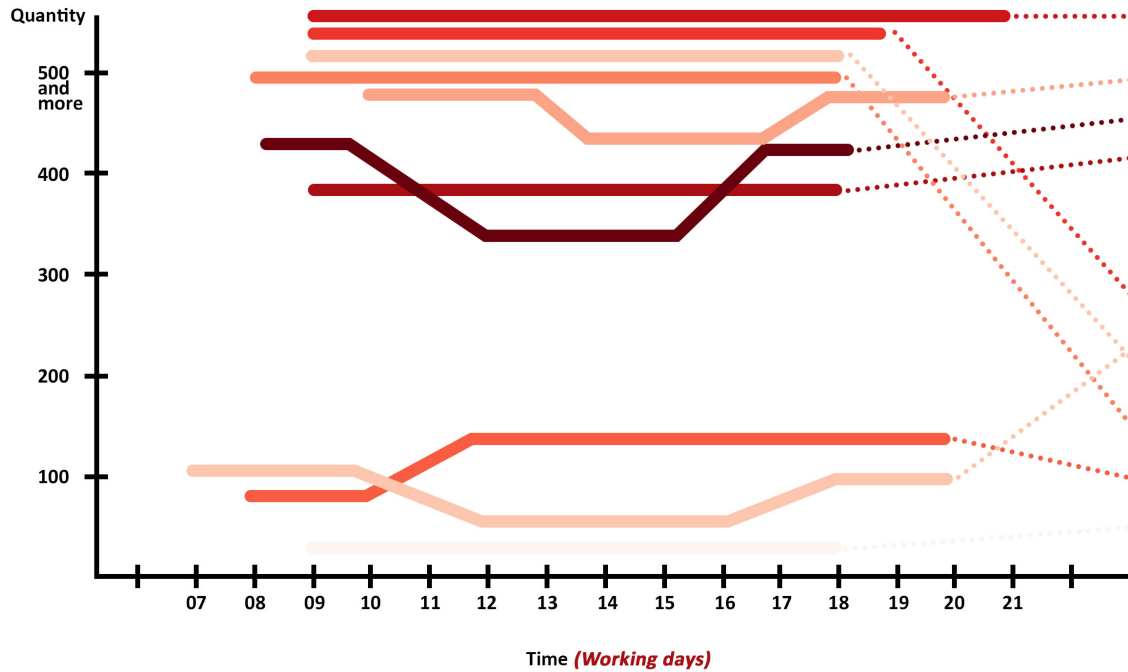
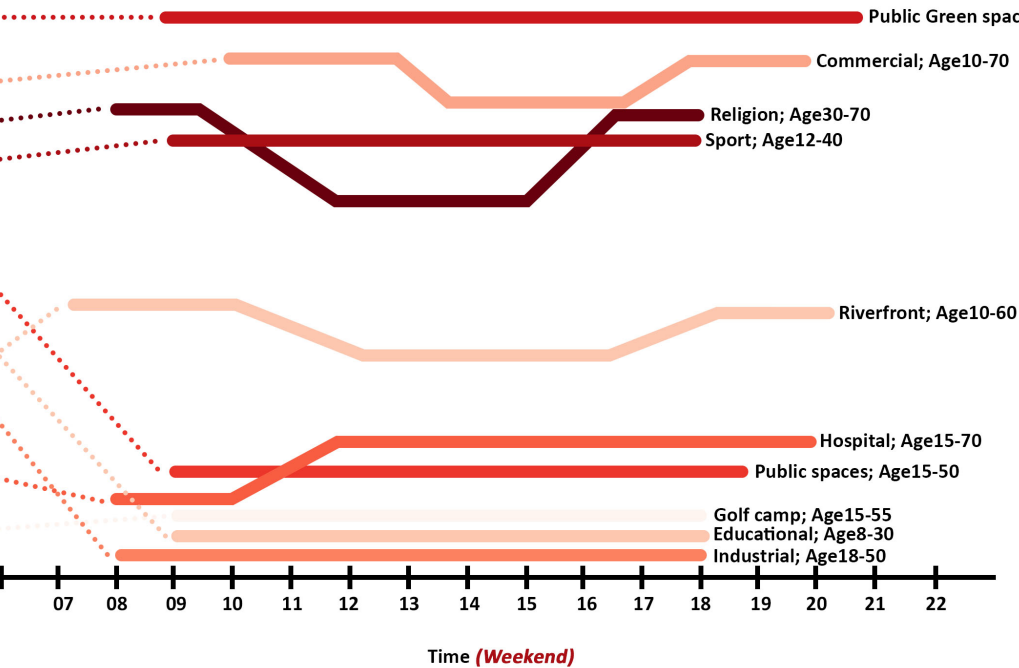


Figure 74: The chart showing the time, the type and the quantity of visitors and attractors of the city in both working days and weekend. We have analyzed this factor to realize which type of attractors and in what hours can absorb to our site. As the chart shows, religion, public green space, commercial, sport, public spaces, educational places and industrial spaces offer big volume of visitors in the working days. but to make conclusion we have to check them in weekend as well.

Source: Author



- Golf Camp
- Po-Trebbia River
- Educational Spaces
- Commercial Settlements
- Factories and industrial
- Hospitals
- Public Spaces
- Public Green Space
- Sports Areas
- Religion Spaces

Since our goal is to regenerate and active the site for all days and most times, the service's attractors can be involved in the site which are active in high quantity in both weekend and working days. According to the chart, only four of them have this character which follows as: public green spaces, commercial, religion and sport. Hence, we should focus and engage mostly these attractors.

Source: Author

Prospective Map

[7] Istituzione del **FRANCIGENA HUB**, centro per la ricerca sulla Francigena, museo e accoglienza dei moderni pellegrini all'interno delle strutture dell'ex convento di santa Maria di Campagna come strumento per la promozione dello slow travel e la valorizzazione delle vie di pellegrinaggio.

[1] Creazione di una **NUOVA PORTA DI ACCESSO AL CENTRO STORICO**, dotata di un'ampia area parcheggio accessibile da Barriera Torino e via Campagna e di un'apposita navetta per il collegamento veloce con Piazza Cavalli e Piazza Cittadella: zona di scambio intermediale per favorire l'accesso alla città storica dalla provincia.

[2] Ampliamento del **PARCO DELLE MURA** come strumento per la valorizzazione dell'esistente cinta muraria rinascimentale, del convento di S. Maria di Campagna e della villa Liberty che oggi ospita la casa della donna. Continuare dunque questo "flume verde" verso l'arsenale e il nascente Castello Visconteo.

[3] Creazione della **RESIDENZA NEL VERDE** nella zona del policlinico esistente, sfruttandone il piano interrato come parcheggio. Strumento per poter coprire in parte le spese di demolizione, nuova costruzione e recupero dell'edificio in progetto e creare spazio per la continuazione del Parco delle Mura in città.

[4] Istituzione di una **CASA DELLA SALUTE** per Piacenza come presidio sanitario all'interno della città storica, facilmente raggiungibile tramite mobilità dolce e in grado di mantenere viva gran parte delle attività commerciali legati all'attuale funzione ospedaliera.

[6] Creazione di **RESIDENZE ASSISTITE** per colmare il crescente bisogno di alloggi adatti alle fasce più fragili della popolazione: casa protetta e polo per l'emergenza urgenza psichiatrica. Questa trova nell'area nord, di fronte alla Casa Protetta Vittorio Emanuele IV, la sua collocazione ideale.

[5] Creazione di un nuovo **POLO DELLA CULTURA E DELL'INNOVAZIONE** tra i padiglioni novecenteschi e la corte del Santo Sepolcro. Punto d'interesse centrale per la città e la vicina provincia, dotato di un'ampia biblioteca, sale studio, mediateca, sale riunioni, uffici per il co-working e un incubatore per start-up.

Figure 75: The map showing new life and rethinking of the hospital of Piacenza. This is the project we presented for the architectural contest "Nuova vita all'ospedale". Here we developed a design made by 7 different projects to retrain the all area of the actual hospital of Piacenza. In fact it will be moved soon and all the area needs to be kept alive (Source: divisare.com).

As an initial and important issue for each urban planning and designing, the future plans and prospective decisions of the organizations and stakeholders should be taken into consideration to have maximum success in the project and have maximum adaptation with future. Actually it is one of the key factors that should be done to guarantee the sustainability and the character of being endless, at least for many years. The main change and prospective map in the vicinity of the site is relevant to the hospital of Piacenza which is going to move to a new place and we have to analyze its effects. The main effect that occurs after this action is decreasing the traffic load of the neighborhood, because the hospital is a big attractor which has lots of visitors each day and they increase the traffic load and park their cars in the surroundings like our site. Another effect refers to the new functions of the hospital after transformation. Although in this proposal we face with a variety of 7 new functions, but at least according to the municipality's desire, probably it will be replaced with a university campus. Anyway, we will have new attractors and visitors which are positive for the site to engage as much as possible and increase the community engagement in all ages and types in the space like a community park to regenerate and activate it more and more. (Source: Author)

STRENGTHS

- * Being close to main attractive areas such as; historic wall, Palazzo Farnese and religion spaces
- * Sticking to the main access ring of city
- * Locating on the axis of commercial district and city center
- * A huge area with accessibility from all sides

WEAKNESSES

- * Semi-far from city center
- * Mainly blocked access to riverfront by railway
- * Being deactive like a peri-urban area for a long time

S

W

O

T

- * Locating on historic network connection
- * Locating on green belt
- * Diversity of vegetation
- * Making new jobs
- * Being in the historic part of city without directly protection rules and codes
- * Being close to the riverfront

- * Decreasing safety at some hours as a huge unused area
- * Chemical contamination due to old function

OPPORTUNITIES

THREATS



Figure 76



Figure 77



Figure 78



Figure 79



Figure 80



Figure 81



Figure 82



Figure 83



Figure 84



Figure 85

Source: Author

SWOT Description

This study undertaken to identify site's internal strengths and weaknesses, as well as external opportunities and threats. SWOT analysis is a technique for assessing these four aspects in the project and a tool that can help to analyze successful strategy for the future. The main factors are indicated in the chart of previous page, but to refer more detail, the strenght of loation is also can be seen in figure 76, 78, 79, 83 which is accessible aslo from all sides and it is an important factor for a park. In addition, it is clearly close to the historic wall and green belt of the city (Figure 77). Poblico passeio is in parallel with the site which can effect and be beneficial for the project (figure 83). Due to being unused for a long time, it owns a rich begetation and greenery that valuable and interesting for a park and specially community park that the engagement of people is high and can make them familiar with this valuable plants (figure 80, 84, 85). Another oppurtunity is locating in front of the Ciano neighborhood which is a residential complex with low middle class and can engage and involved in the project to increase both quality of the park and also their life (Figure 82). As it referenced in the introduction of the site, ACNA was a chemical factory in past, so its chemical remains can be seen currently which have been covered to avoid spreading the contamination (figure 81).

Source: Author

06 CONCEPT / STRATEGY STEPS



Figure 86: Map highlighting greenery values of Piacenza and future park of the walls

Source: www.dicarlosgandurra.net





Figure 87: The photo of sparkler
Source: brighamhealthhub.org

Manifest / Concept

The ACNA area is recognized as a high potential space after all the analysis. The main positive potentials are about location, position and vegetation. Furthermore, the area and vicinity is clearly lack of some public services which have caused to be off and make some problems. In this project, the aim is to use these positive potentials as the main actions in the strategy. Due to being inactive for a long time, it have been affected not only itself but also surrounding in a larger scale. Hence, the concept is to inspire by SPAEKLER to active both ACNA area and vicinity in larger scale, but by focusing on main space. The main actions are; connectivity, environment and urban services. The green diversity exist in the area by taking actions and establishing urban services will connect to the green belt and Piacenza ring to activate all the space which was off and dim for a long time and especially after sun set, so these actions and strategy wants to turn the light of ACNA on and give vibrancy as a neighborhood hub while its sparks reach to the city center as well. This neighborhood hub is mainly for neighbors and can support citizens up to city center by providing commercial and shopping, entertainment, eating and also social interaction needs in best way. All in all, the area will be active and on not only in day hours but also after sunset, like a sparkler

Figure 88: The actions of connectivity and environment are engaged with the sparkler in the center
Source: Author



Figure 89: The third action of strategy; Urban services clipart illustration
Source: www.resilientneighbourhoods.ca



Mental Strategy Illustration

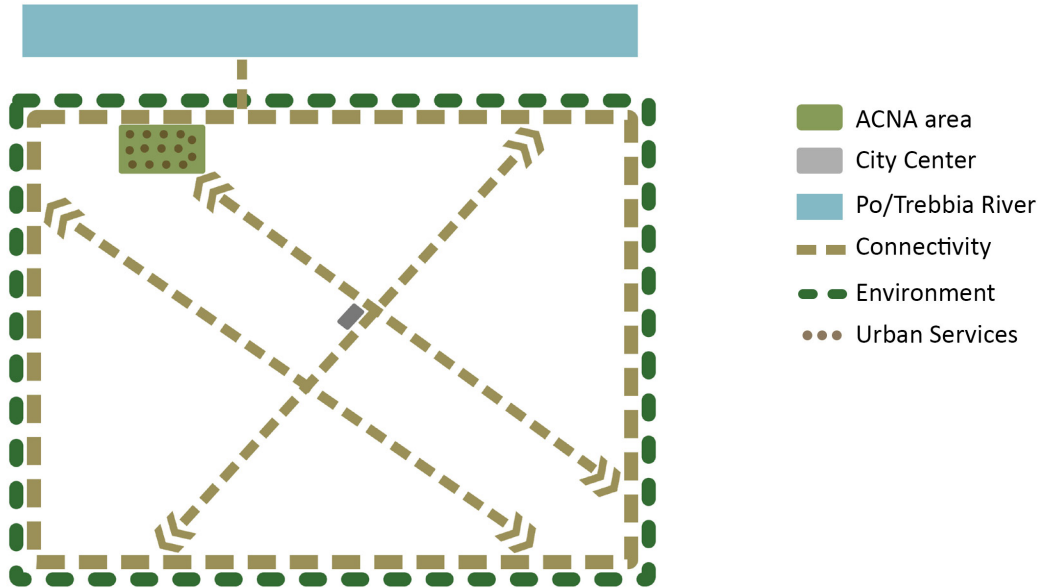


Figure 90: This drawing is a simplified strategy which called mental illustration to have better realization of what going to happen as strategy. The ACNA area is showed in the north-western of the map that urban service are taking place in this scale as one of the actions of strategy. Two other strategies are connectivity and environment which can be seen like a ring and belt. Furthermore, three axis are connecting sides of the ring to amplify connectivity. Finally, riverfront is seen in the north part which connected to the actions as environment.

Source: Author

Strategy map



Figure 91: The map showing the base plan of the city to reach and show strategy process in different steps. In this map, the site (known as ACNA area) is indicated in the north-western of the map and Piazza Cavali is also illustrated in the center of the map as city center and commercial hub.

Source: Author

Strategy map



Figure 92: The first action of strategy is connectivity which build by different connections as different layers. The first one is main historical ring that cross along with historic wall of city.

Source: Author

Strategy map



Figure 93: The next connectivity element is historical axis which connect to side of the ring and the most important one reach to the Porta Borghetto beside ACNA area.

Source: Author

Strategy map



Figure 94: Commercial axis added in this step to have better connection and connect city center to almost integrate with site at the most direct way.

Source: Author

Strategy map



Figure 95: Public spaces, specially public passages, are big attractors which are exist already in two trail which are seperated. By connecting these two path with the network of the connections we can enhance the connectivity.

Source: Author

Strategy map



Figure 96: The last connection path which should take into consideration is sustainable transportation like bike path. In this step we have connected and integrated its network to the strategy action.

Source: Author

Strategy map



Figure 97: The second action of the strategy is environment which covered by green spaces in different spots of the city and making green belt.

Source: Author

Strategy map

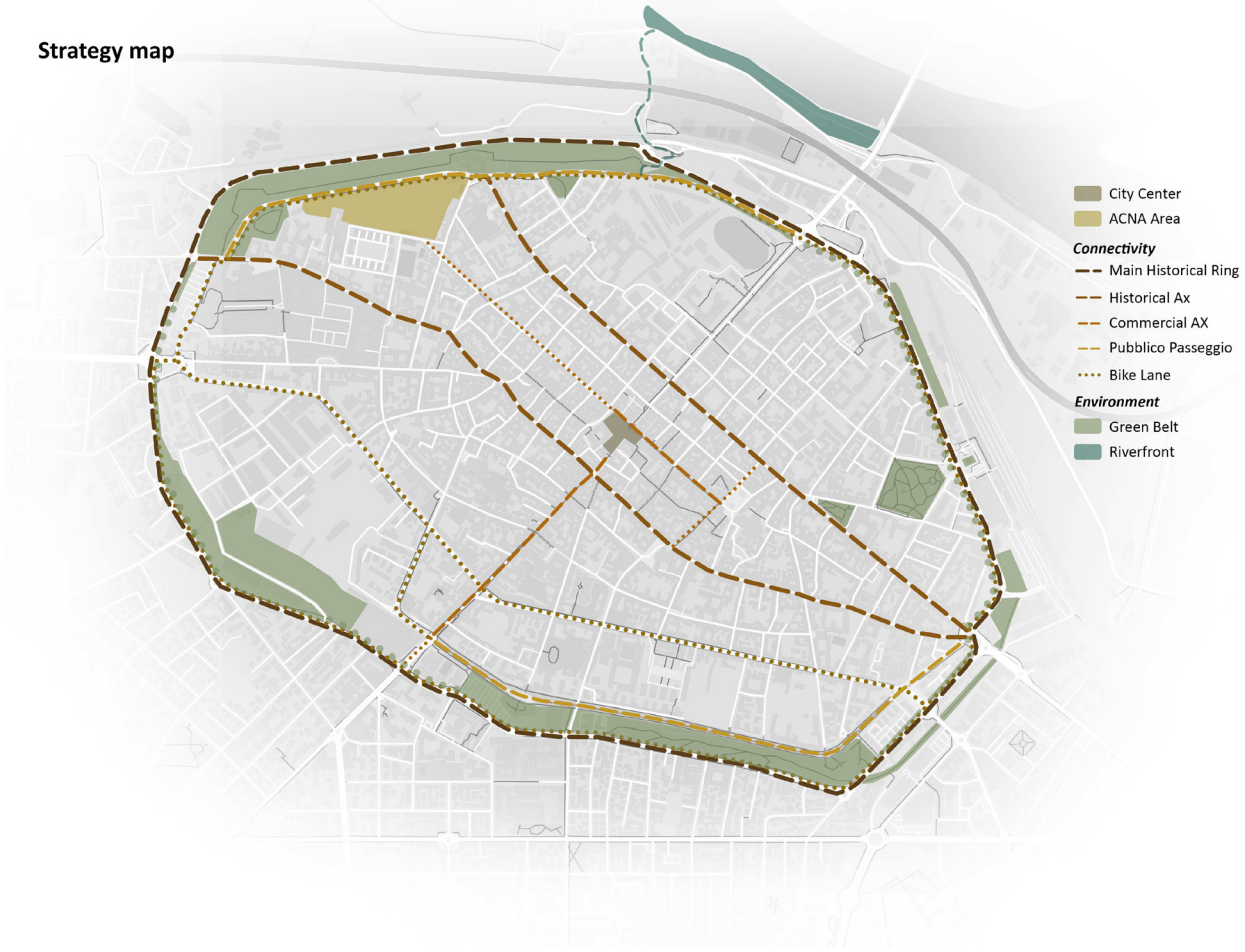


Figure 98: The other element which included in the environment action is riverfront to enforce this action of strategy.

Source: Author

Strategy map

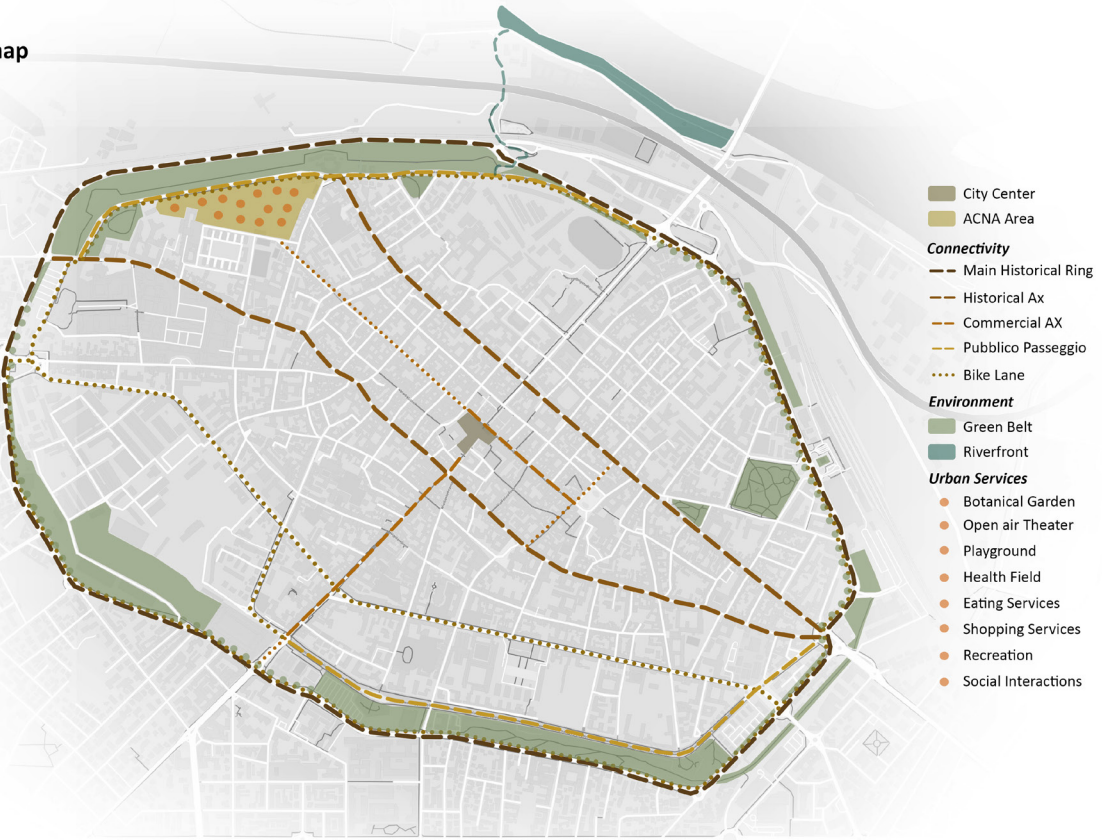


Figure 99: The map showing final **strategy plan** for this thesis. The final action which take place in small scale and specially in the site is urban services. This services and function have been selected precisely according to the analysis.

Source: Author

Strategy map



Figure 100: After reaching to the final strategy, in this map, five sparks are indicated in vicinity of the park called sparkler to realize how each one works with the site and use the strategy.

Source: Author

Urban Services selection Criteria

Botanical Garden



Figure 101: A sample of botanical garden; Ooty botanical garden

Source: englisharchives.mathrubhumi.com

Figure 102: Highlighting the element and action of strategy which working with botanical garden

Source: Author



Why Selected? Variety of vegetation and different plant species existing in the site, focusing on greenery due to location on the green belt

How actives by strategy actions? Green belt and riverfront are two elemnts of strategy actions to connect it with site

How works and generate the projects? It can inspire of the past of the site which was agriculture and also gving vitality to the park

Source: Author

Urban Services selection Criteria

Open Air Theater



Figure 103: Regent's Park Open Air Theatre's stage is built out of timber from scratch each year, and sits atop a concrete base which was part of the original 20th-century design
Source: londonist.com

Figure 104: Highlighting the element and action of strategy which working with open air theater
Source: Author

Why Selected? Existing of Porta Borghetto tower as most close cultural element and needs of such services in the neighborhood

How actives by strategy actions? It can be integrate with the site by historical ring and publico passeggio

How works and generate the projects? Increasing cultural aspect by involving Palazzo farnese and othe cultural elements in the city

Source: Author

Urban Services selection Criteria

Playground



Figure 105: A sample of playground in the park; Penny Playground

Source: www.chronline.com

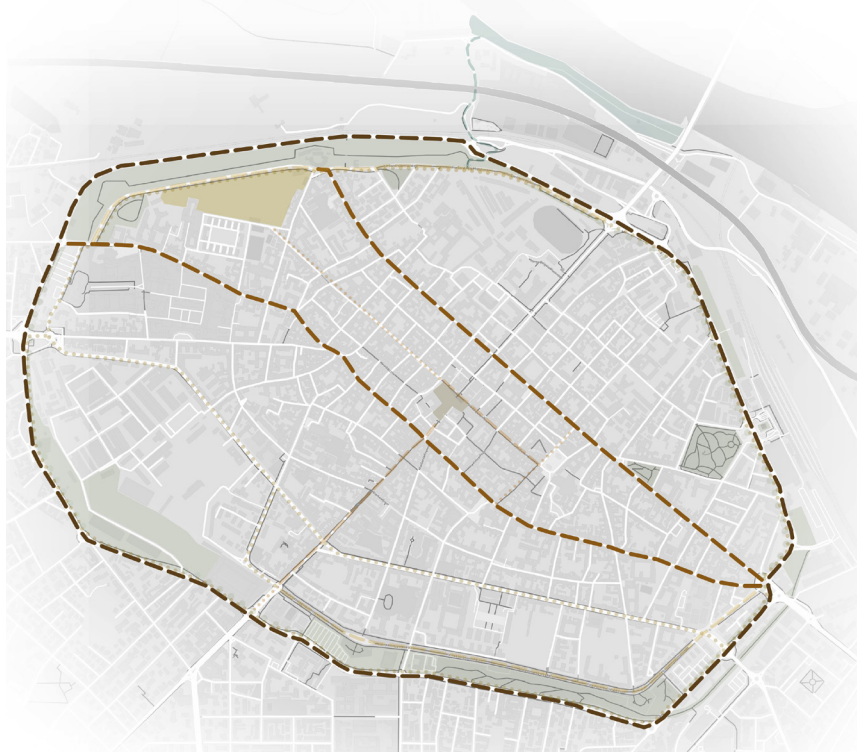


Figure 106: Highlighting the element and action of strategy which working with playground

Source: Author

Why Selected? Lack of adequate playground or other children entertainments in the neighborhood and also historic center

How actives by strategy actions? Historical ring and historical axis can bring them to the site

How works and generate the projects? people combination and mix of ages in the neighborhood

Source: Author

Urban Services selection Criteria

Outdoor Sport



Figure 107: The photo showing a type of outdoor sport field in the park with different fitness equipment

Source: www.premierparkplay.com

Figure 108: Highlighting the element and action of strategy which working with outdoor sport

Source: Author

Why Selected? Feeling this need by the neighborhood

How actives by strategy actions? Pubblico Passeggio and riverfront are two strategy subaction that generate lots of athlete in this network

How works and generate the projects? Attract athletes from riverfront and green belt

Source: Author

Urban Services selection Criteria

Eating Services



Figure 109: Photo showing a place like restaurant or coffee shop which can engage people in the community park as well
Source: www.iconparkorlando.com

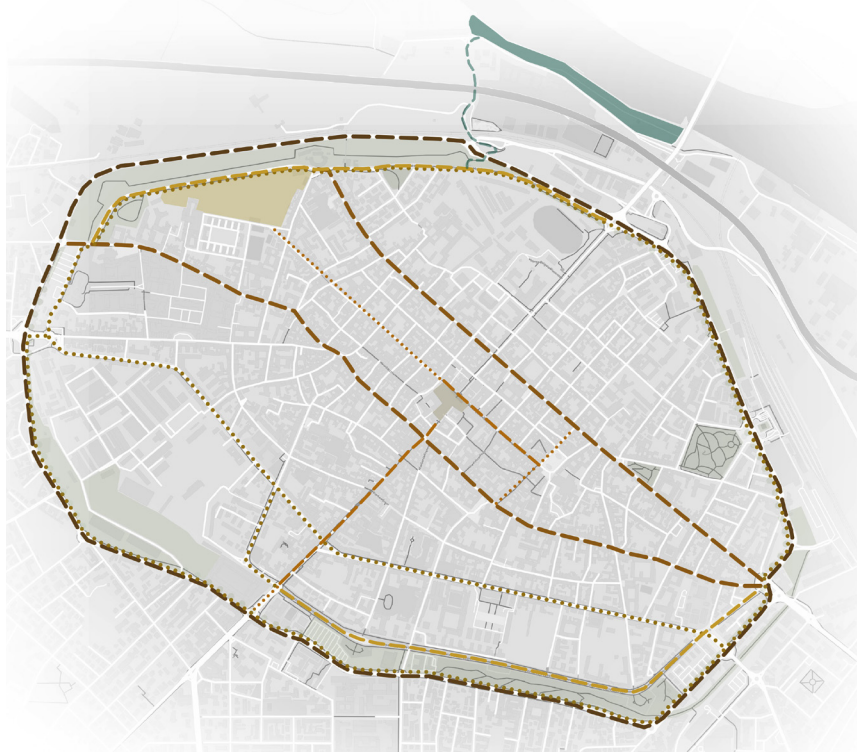


Figure 110: Highlighting the element and action of strategy which working with eating service
Source: Author

Why Selected? Community park and specially the location of the ACNA area gives the nice view and pleasant atmosphere to the visitors for eating

How activates by strategy actions? All connections from the center and vicinity and even from riverfront

How works and generate the projects? Giving vitality and being active after sunset

Source: Author

Urban Services selection Criteria

Shopping Services

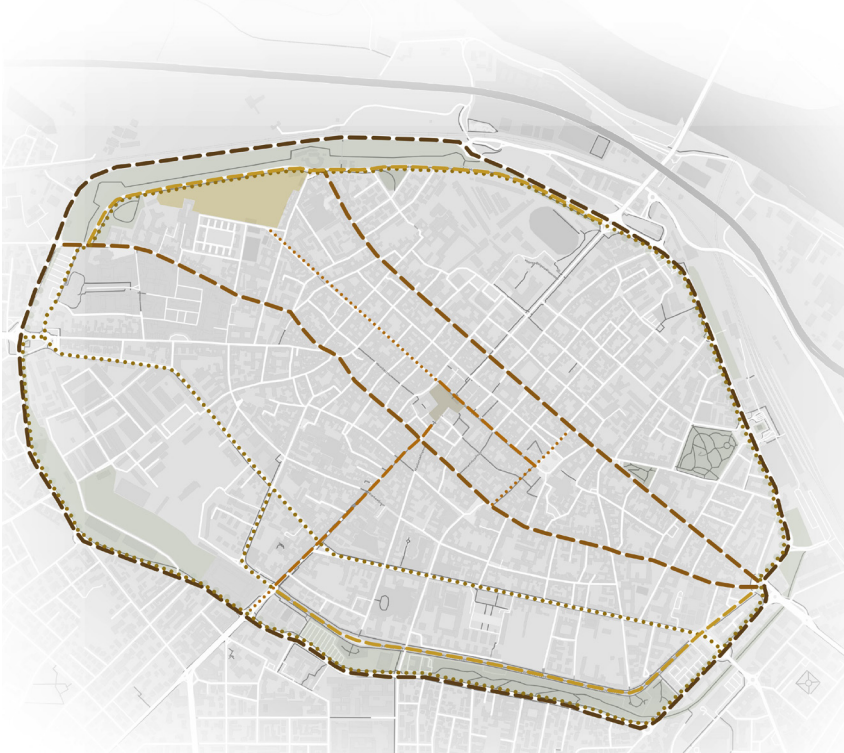


Figure 111: The photo showing people while shopping in the commercial district of a community park

Source: www.scientology-fso.org

Figure 112: Highlighting the element and action of strategy which working with shopping service

Source: Author

Why Selected? Lack of adequate in the neighborhood and being located on the most direct ax from commercial hub of the city to integrate with.

How actives by strategy actions? All connections from the center and vicinity

How works and generate the projects? Attract people from neighborhood and somehow from city center and active the park in most hours

Source: Author

Urban Services selection Criteria

Recreation



Figure 113: Photo showing several type of different recreation activities in a neighborhood park
Source: www.asla.org



Figure 114: Highlighting the element and action of strategy which working with recreation
Source: Author

Why Selected? Lack of suitable recreational spaces in the vicinity

How actives by strategy actions? All connections up to city center can generate this service to site

How works and generate the projects? Connect to the riverfront and attract its users, attract local people and active for most hours

Source: Author

Urban Services selection Criteria

Social Interaction

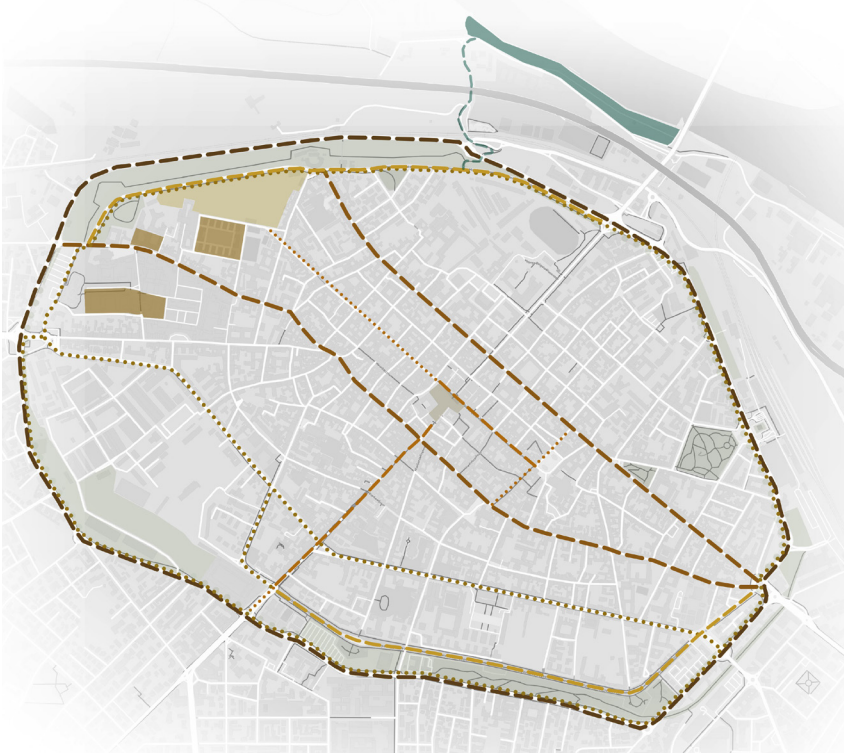


Figure 115: The photo showing a hub for social interaction which Curtin Innovation Street Curtin University's did for Innovation Street to be realised according to the aims and ambitions of gathering people in 2014

Source: landezine-award.com

Figure 116: Highlighting the element and action of strategy which working with service

Source: Author

Why Selected? Strongly needed in the neighborhood

How actives by strategy actions? All connections up to city center

How works and generate the projects? Mix of population and variety of ages in the neighborhood; attract from elderly house, ciano neighborhood and future university campus

Source: Author

07 DESIGN PHASE



Figure 117: Blurred image showing relaxation plaza of the project

Source: Author



Design Description and Inspiration

The design goal is to build a strong relation between the site and the context through history and a Systematic Design approach. The proposed project will promote the local neighborhood engagement while fulfill the the needs and services and also make maximun activation by human activities. As an urban design project, it can not be success without identity and paying attention to context and its visitors. Hence, author after loodking for history and culture and background of the citizen and city, found a historic element called' historic bronze liver of Piacenza' which exist and protect in the museum of Palazzo Farnese.

The bronze liver of Piacenza. Late II-first half of the first century. B.C. It is possible to reconstruct the Etruscan cosmological vision also thanks to this precious source; the hypothesis of the persistence of Etruscan groups that survived in Piacenza until Romanization cannot be excluded. Its function remains uncertain and various hypotheses have been put forward: it was considered a didactic tool for teaching hepatoscopy, a professional reminder for haruspices and divinations, or an element belonging to an honorary statue as funeral equipment, given its excellent conservation (Source: artslife.com).

This historical object that is lokks like liver, has several lines and drawing on whcih author took inspire of its internal lines and also outer line and form to have an initial concept for drawing the park. This step is just about giving identity and recalling somehow the history for the citizen, but this factor can not guarantee the siccess of the project while it is unable to respond the context. Hence, to have maximum adaptation with context and offer a responsive plan, author had research about the trail network of city to take inspire of its systematic design. In the plan of the city, what catch the attention is axis. So, it tried to have and also follow axis in the proposed plan for the community park. The design also aims to link strategy action path and city center ax to the site. All these factors and inspirations involved and get mixed together to have perfect design for park which responsive and attract people to have fun and joy and interaction.



Figure 118: Historical bronze liver of Piacenza
Source: gastropod.com



Figure 119: Centralist segments of the Liver
Source: Author

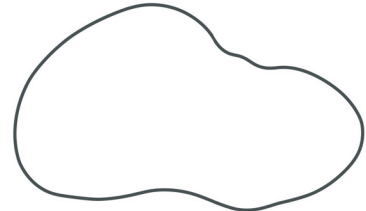


Figure 120: Outerline shape of the Liver
Source: Author



Figure 121: Central and historical map of Piacenza
Source: google map



Figure 122: Systematic network for trails
Source: Author

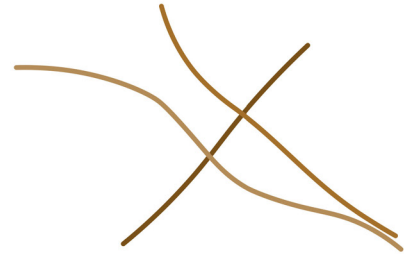


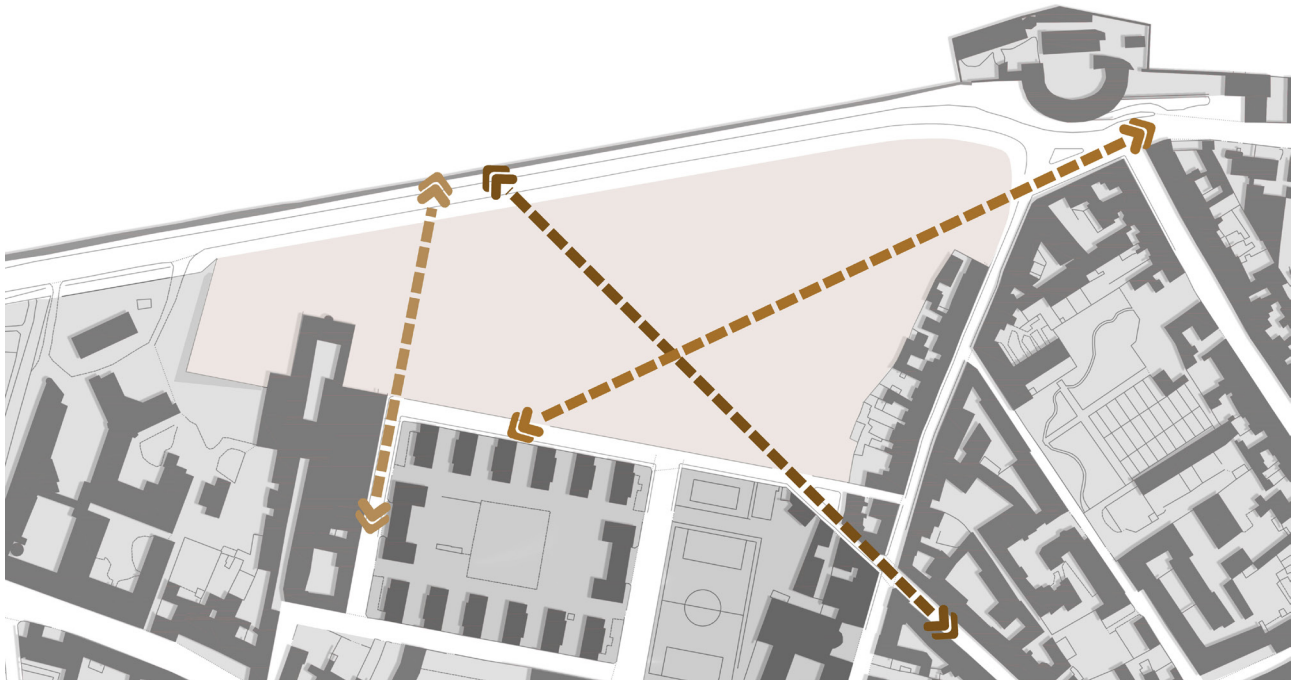
Figure 123: Main connective axis of the city
Source: Author

The initial design was inspired from centralist segments of the historic liver for base. Also the outer shape of the liver was used for some parts of the design as a separate segment. To adapt the design with context, the systematic network for trails of the city was extracted from the map of the city. Apart from that, the axis of the city was also used to link the design and project in a larger scale with the city.

Design Process

Figure 124: The map showing the area of the site in the context and three axis which we like to get continued and reach to the other part of the site. The commercial ax comes from city center(Piazza Cavali) and reach to the other street. Another ax which get originate from freen belt in larger scale, strated from Porta Borghetto and continue to reach the Ciano neighborhood on the other part. The last ax is the neighborhood ax which we like to connect neighborhood to the Pobblico Passeggio by most direct and short path. (Source: Author)

- Commercial Ax
- Green Ax
- Neighborhood Ax



Design Process

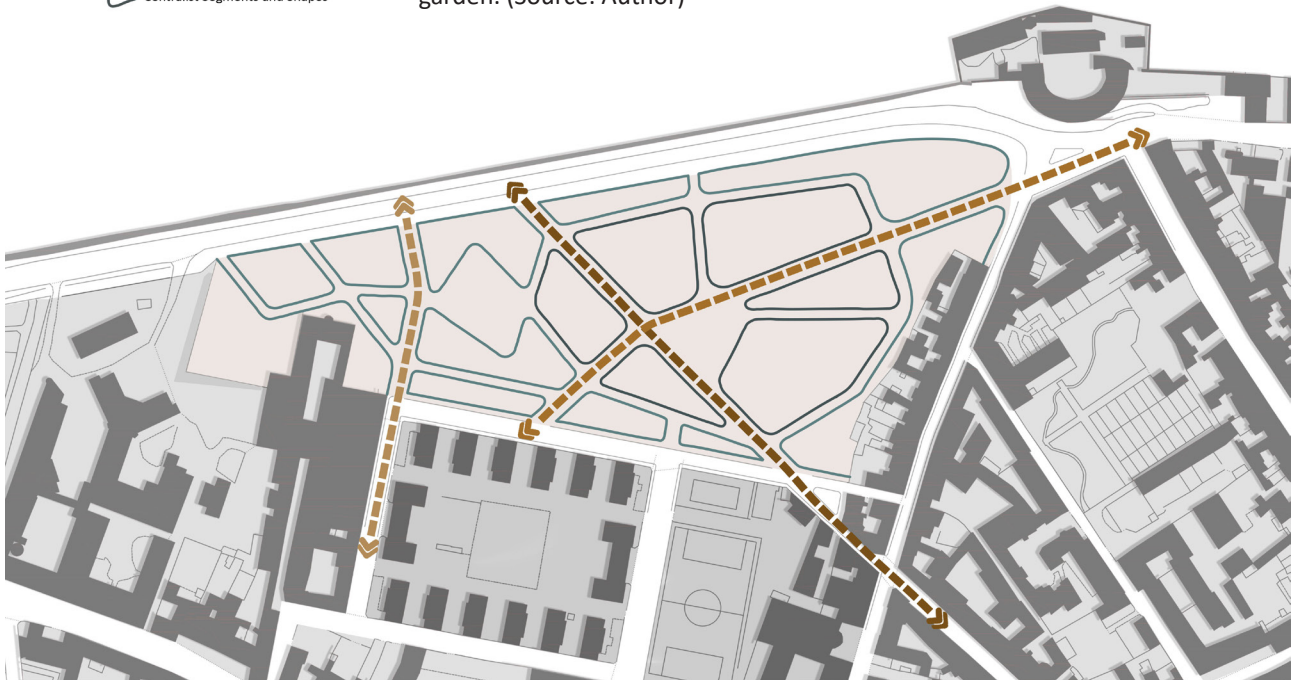
Figure 125: In this step of design, the centralist segments and outline shape of the liver have been drawn on the site to have initial concept and form of the project. (Source: Author)



Design Process

Figure 126: In the final step of the design, author transformed organic shapes of drawing according to context and base on the systematic design. At the center of the centralist segments, and at the intersection of the two main axis, a node have been designed to have the role of gathering place and calling the image of Piazza Cavali at the center while the ring path of the segments recalling the historic wall of Piacenza. The green ax went out of being direct by intention to give the visitors from Porta Borghetto gate the vision of the park, not the building in the neighborhood. The neighborhood ax also followed two shape and segments that look like bracket to get concentration on their center and dedicate another node by the function of relaxation and interaction hub. The author make differentiate of the brackets segments intentionially, to not only focus on the social interaction hub, but also to concentrate on its shape which going to dedicate for botanical garden. (Source: Author)

-  Commercial Ax
-  Green Ax
-  Neighborhood Ax
-  Centralist Segments and Shapes



Master Plan

Figure 127: The map showing final masterplan after design process and by considering all the analysis and phases. In this design, author tried to respond maximum needs of the neighborhood by paying attention to context and all other principles of designing. The functions and services are indicated on the map to find out what is happening in this community park. (Source: Author)



08 MASTERPLAN



Figure 128: Image showing masterplan adaptation in the context.
Source: Author



Layers of the PiCo Park

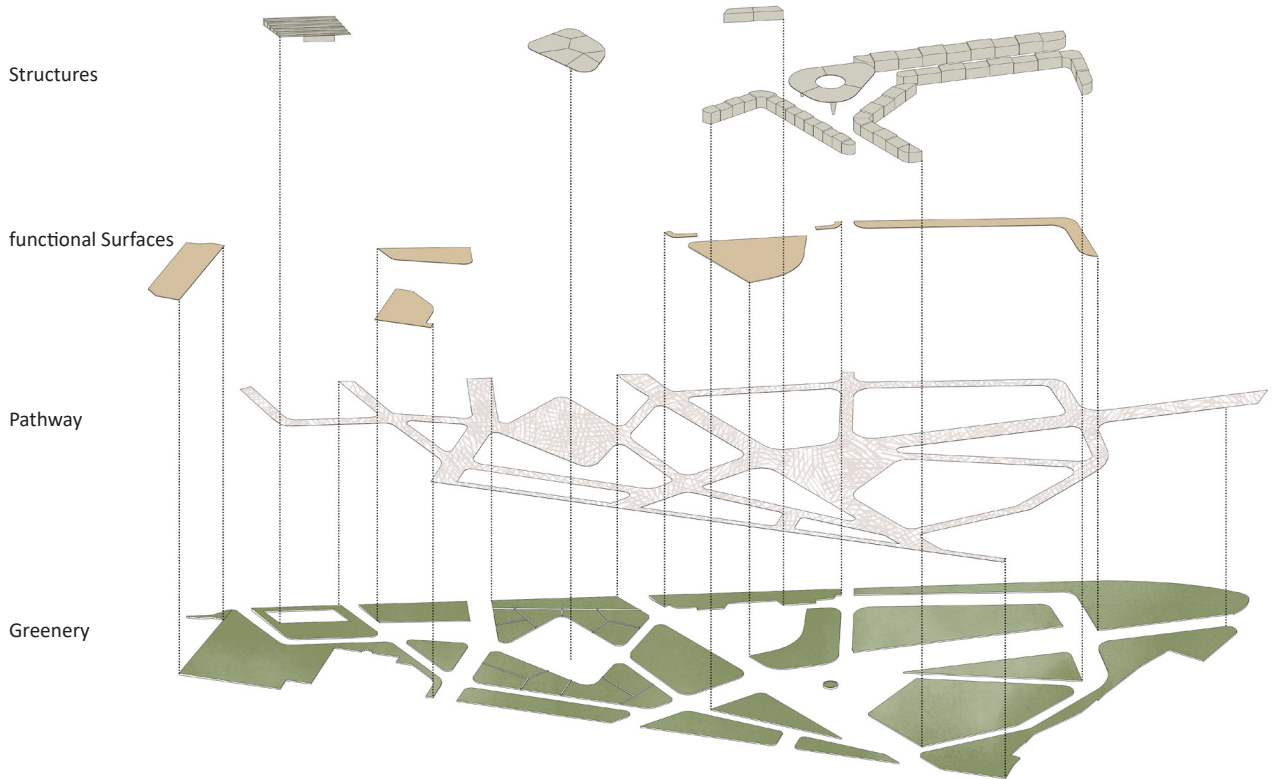


Figure 129: Exploded diagram of the PiCo park
Source: Author

Nodes of the PiCo Park

Figure 130: The image illustrates main nodes of the community park as gathering place and interaction. (Source: Author)



Design's Textures

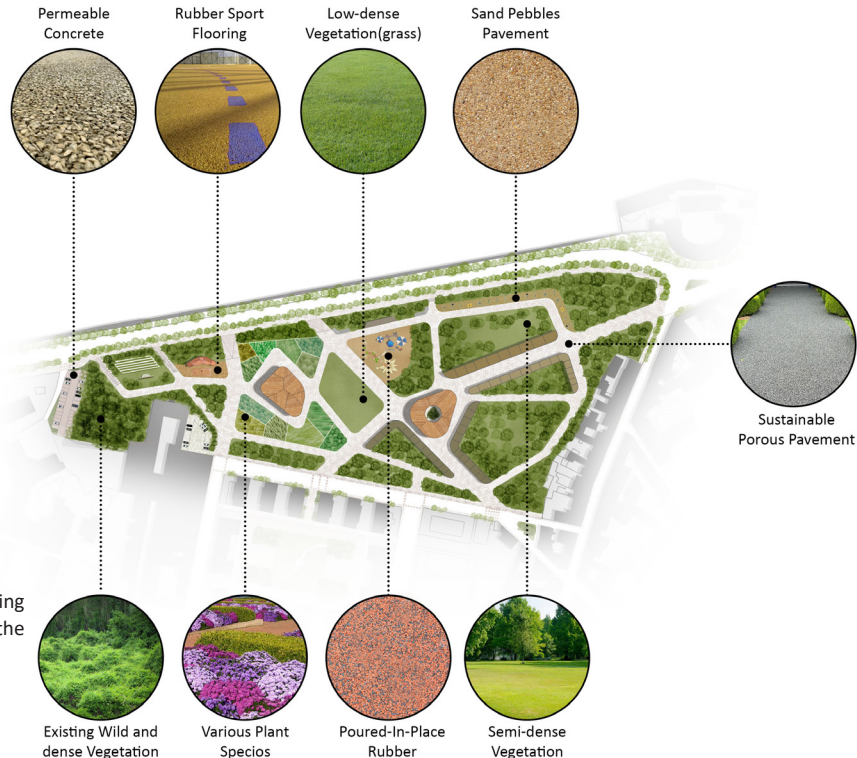


Figure 131: The image showing different textures used in the park

Source: Author

Porous pavement is a paved surface with a higher than normal percentage of air voids to allow water to pass through it and infiltrate into the subsoil. This porous surface replaces traditional pavement, allowing parking lot, driveway, and roadway runoff to infiltrate directly into the soil and receive water quality treatment. All permeable paving systems consist of a durable, load-bearing, pervious surface overlying a stone bed that stores rainwater before it infiltrates into the underlying soil. Permeable paving techniques include porous asphalt, pervious concrete, paving stones, and manufactured “grass pavers” made of concrete or plastic

A major advantage is that the systems can function without compromising the amenity of above-lying floor area, with products available to suit everything from lightweight requirements for covering areas around tree roots and roof gardens to heavy duty durability for car parks and driveways.

Other benefits include erosion control, creating low-maintenance floor areas and eliminating tree roots from lifting and cracking concrete pathways. (Source: megamanual.geosyntec.com)

Plant Species

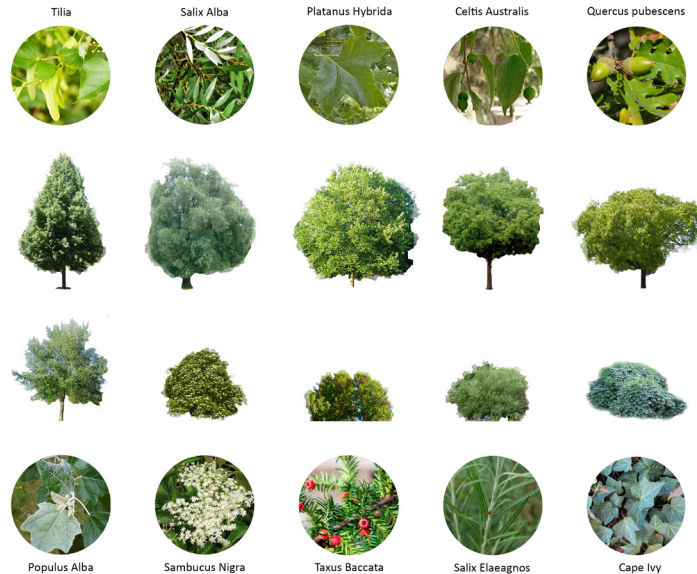


Figure 132: The image showing different plant species exist in the context
Source: Author

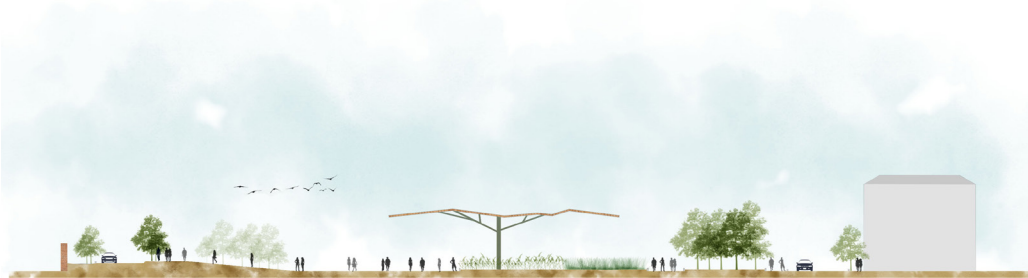
In the most urban and peri-urban area there are several types of plants species which have been grown organically or artificial, Italy as a rich country in terms of vegetation, due to its specific climate, included various plants organically. Hence, Piacenza and specially the area around ACNA is rich of vegetation thanks to be close to river. Here, we have recognized most popular plant species in the vicinity of the site to not only being familiar but also use them in our design and specially apply for botanical garden. (Source: Author)

A botanical garden is a semi-natural urban green area, where a managing organization creates landscaped gardens and holds documented collections of living plants and/or preserved plant accessions containing functional units of heredity of actual or potential value for purposes such as scientific research, education, public display, conservation, sustainable use, tourism and recreational activities, production of marketable plant-based products and services for improvement of human well-being. (wikipedia)

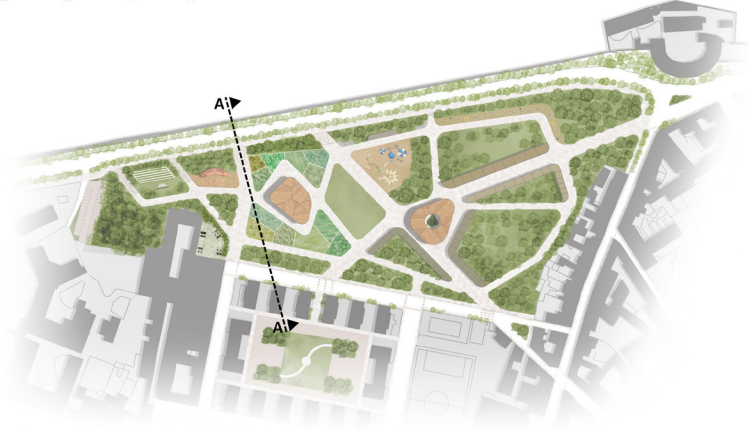
After looking at the history of botanic gardens, with a focus on the purpose/design relationship, examining design guidelines suggested in and inferred from the literature, and presenting habitat conservation principles and sustainable construction guidelines from other areas of practice, the author developed conservation design guidelines for botanic gardens focused on conservation. The guidelines address the following five categories: (1) Mission Statement and Site Character, (2) Presentation of Native Habitats, (3) Presentation of Native Plants in Man-made Landscapes, (4) Sustainable Practices in Daily Operations, and (5) Educational Components. (digitalcommons.usu.edu)

Section

Figure 133: Section crossing the neighborhood ax and reach to the Ciano neighborhood. The defferences in levels between PiCo park and Pubblico Passeggio is visible by proposing a ramp of 8-10% slope.
Source: Author



A - A section

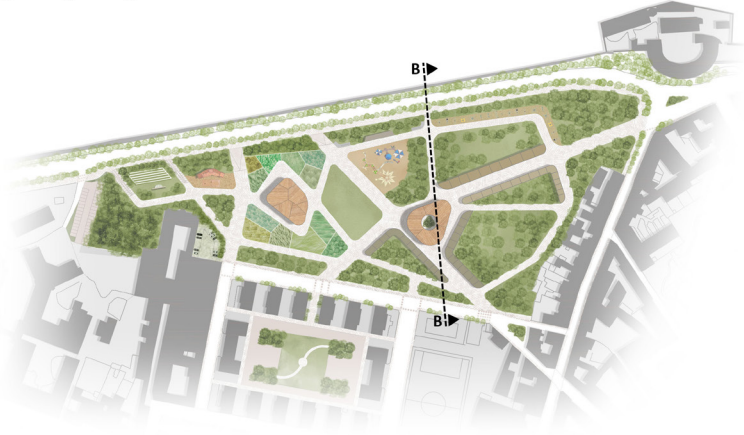


Section

Figure 134: Section crossing the node of gathering place, illustrates commercial activities and communication of visitors together.
Source: Author



B - B section



Section

Figure 135: Section crossing both node of gathering place and social interaction hub to illustrates the main activities in these two plazas. Open air theater is also visible as a cultural hub in contiues to the other hubs.
Source: Author



C - C section

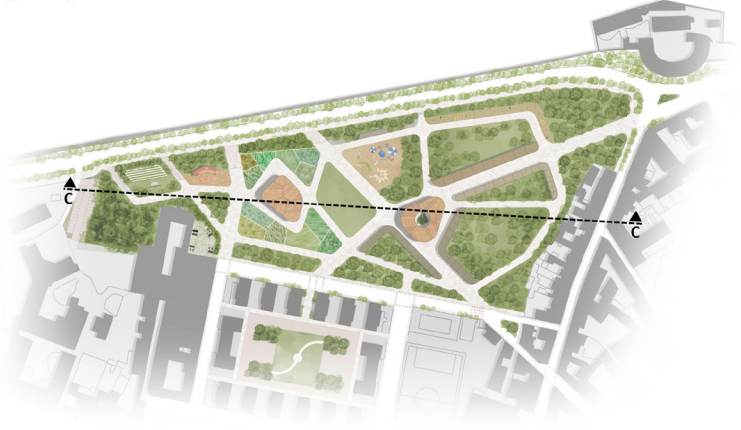




Figure 136: The image showing the current situation of the site before applying PiCo park
Source: Google earth



Figure 137: The image shows applying the project into reality and the adaptation of PiCo park in neighborhood scale after regeneration
Source: Author



Masterplan Adaptation In Prospective Plan In City Scale

Figure 138: The map showing future proposal and plan for park of the wall which create a green belt along with historic wall of the city. Pico park aslo have been adapted to this futer plan to show its responsiveness in larger scale and for long time.

Source: cargocollective.com / Author





Figure 139: The image shows real visualization of PiCo park in the context
Source: Author



Figure 140: The image shows real visualization of PiCo park in the context
Source: Author



Figure 141: The image shows social interaction and relaxation plaza
Source: Author



Figure 142: The image shows social interaction and relaxation plaza
Source: Author



Figure 143: The image shows social interaction and relaxation plaza
Source: Author



Figure 144: The image shows social interaction and relaxation plaza
Source: Author



Figure 145: The image shows intersection of commercial and green axis which called as neighborhood plaza

Source: Author



Figure 146: The image shows intersection of commercial and green axis which called as neighborhood plaza
Source: Author



Figure 147: The image shows intersection of commercial and green axis which called as neighborhood plaza

Source: Author



Figure 148: The image shows intersection of commercial and green axis which called as neighborhood plaza
Source: Author



Figure 149: The image shows cultural plaza
Source: Author



Figure 150: The image shows cultural plaza
Source: Author



Figure 151: The image shows
playground
Source: Author



Figure 152: The image shows outdoor fitness
Source: Author



Figure 153: The image shows a visualization of PICO park in the context along the commercial ax from Piazza Cavall
Source: Author



09

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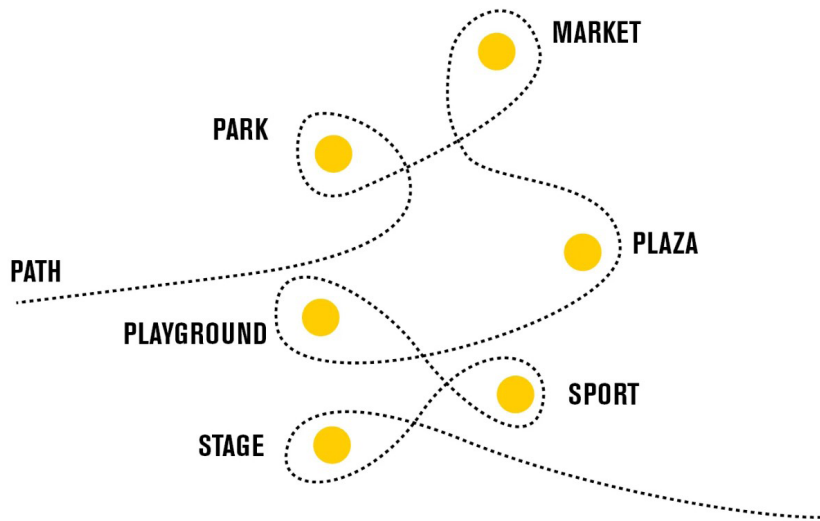
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“In public spaces, you are directly present. You can interact with other people, you can watch them with your own senses – as opposed to seeing pictures on TV.”

Jan Gehl



Soran Hanav



24th November 2022