

Welcome to the Circular Walking Route in Leiden's Singelpark!

Leiden is a city rich in history but also one that looks ahead. Through innovation, collaboration, and practical action, we aim to create a healthy living environment where we use our resources and materials responsibly. During this audio tour, we will take you through the fantastic examples of this in Leiden's Singelpark.

The Municipality of Leiden is proud to contribute to these developments and hopes this route shows you what a circular city can look like. Enjoy your walk!

1. Veerplein

Adres: Utrechtse veer 32

You are now standing in front of the Veerplein, a charming and picturesque square just off the Utrechtse Veer street. What you see here is the result of a thorough renovation: the square has been remodeled with more greenery and new paving. However, no new stones have been used in this renovation. The city engineers and designers put a lot of thought into this. What you feel under your feet are what the Dutch call yellow Waalstenen.

The Waalsteen is named after the River Waal, where many brick factories were located in the past, steen is Dutch for brick. Just like Waalstenen, there are also Rijnstenen and IJsselstenen, rijn and ijssel also being rivers, each brick has its own size and character.

Many of the original Waalstenen in this square have been reused—a sustainable choice and budget-friendly. However, there weren't quite enough bricks, so a few red ones were added.

And do you see the colorful chairs? There should be twelve: six fixed and six movable. These can be moved around so friends can sit together or simply to enjoy a spot in the sunshine.

Initially, there was some concern that the loose chairs might disappear. Fortunately, that hasn't been the case. In fact, two chairs were once 'borrowed'

for a birthday party but were politely returned the next day. This not only adds to the square's coziness and sustainability but also reflects mutual trust.

2. Lakenpark & Katoenpark

Adres: Lakenplein

You have now arrived at the Lakenplein. Take a good look at the raised areas of the landscape. They serve a practical and sustainable function: they hide the car park from view. But what's really special is how these small hills were created.

Building hills of this size requires a massive amount of soil. Normally, you would have to buy and transport it, which is neither cheap nor sustainable. But, a clever idea emerged: what if we re-used the soil that had to be removed during the playground redevelopment nearby? A circular solution, but there was a challenge—the renovation of the playground and the landscaping of these hills were planned 18 months apart.

This issue was creatively resolved by accelerating the playground project and slightly delaying the hills, allowing both projects to align seamlessly. As a result, the soil from the playground was directly used for the hills. The outcome? Less transport, reduced air pollution, lower costs, and a great example of circular urban planning.

And speaking of collaboration: this project highlights the importance of working together with your 'neighbors,' even when it's not always straightforward.

How is your relationship with your neighbors? Perhaps this can inspire a joint project with them. Imagine your neighbor digging a pond while you use the excess soil to elevate your garden. Great idea? Sometimes, the best solutions are literally next door!

3. Speeltuín De Doorbraak

Adres: Katoenpark 1

This publicly accessible playground has everything a child could dream of—a place where adventure and sustainability come together. Take a look at the waterfall from the roof—it provides hours of playtime on hot summer days.

What makes this playground special is that almost everything has been given a second life. The play equipment, the pebbles on the ground, an old quay wall from the Hooigracht street, and even sewer pipes have been reused. The designer sourced materials from various places and incorporated them here. Even new equipment is made from leftover wood and old trees.

Doorbraak is not just a playground; it's also a place where children can explore nature. They can build forest huts, climb and scramble, or fish from the jetty. For children growing up in the city, this is a great opportunity to connect with nature.

The circular design has received a lot of praise, and the Doorbraak has even been nominated for the Circular Play Award, judged by a panel of seven children. It's a beloved area where local kids and parents

4. Meelfabriek

Adres: Meelfabriekplein

You are now standing in front of the Meelfabriek, (which translates to flour factory in English) a unique piece of history in the city center. In 1884, the 'Stoommeelfabriek De Sleutels' 'Steam Flour Mill De Sleutels' began production here, laying the foundation for what is now a blend of heritage and innovation.

Beneath your feet is a modern car park, built under the building. Thanks to this smart solution, the area is largely car-free, providing more space for people and nature. The beautiful Meelfabriek Garden sits on top of the garage, with an underground crate system that stores water from rainy periods to keep the plants growing during dry spells.

Look around at the impressive old buildings. Each of them once played a role in the Meelfabriek. The central building will soon be converted into housing. It's fantastic that this iconic factory has been preserved. This was once a bustling hub where ships from France arrived, carrying grain that was suctioned into the factory and processed into flour and flour-based products.

For years, these buildings stood empty, but now the Meelfabriek is once again full of bustling energy. The site is being redeveloped into a lively area with apartments, a hotel, and various creative and innovative businesses. Soon, you will find a café with local products, a sewing studio dedicated to slow fashion, and a gift shop that also functions as a training workplace. There will also be facilities for electric bike rentals and other enterprises contributing to a sustainable city.

This redevelopment proves that sustainability is not just about preserving materials but also about fostering a community. The Meelfabriek is not only a reminder of the past but also a promise for the future.

5. Zijlsingelpad

Adres: Zijlsingel

Welcome to the Zijlsingelpad, a beautiful walking route along the water that takes you from the historic Zijlpoort to the bus stop at Oosterkerkstraat. It is a great example of how community initiatives and smart recycling can enhance an environment.

Thanks to a joint plan, the path has been extended and improved. The old paving stones were replaced with sustainable bricks, which were given a second life here after a redevelopment in the Vogelwijk district. Accessibility has also been taken into account: the slope at the Schrijversbrug has been adjusted so that everyone, from wheelchair users to parents with strollers, can walk here comfortably.

Along the path, there are five comfortable benches where you can take a break and enjoy the view of the Zijlsingel. Additionally, three extra rubbish bins have been installed to help keep the area clean and tidy.

Perhaps the most remarkable aspect of this renovation is its sustainable approach. Instead of using dozens of trucks to transport materials through the neighborhood, all construction materials were delivered via the water using an electric push boat. This reduced the need for thirty truck trips! Not only did this decrease traffic congestion and inconvenience for local residents, but the push boat is also completely emission-free. A smart and eco-friendly solution that perfectly aligns with the sustainable ambitions of this neighborhood.

6. Singelpark verbinding

Adres: Haven 64

The Singelpark Connection - welcome to this special part of Singelpark. On April 11th, 2023, an ambitious project became a reality here. Look around you: everything you see is the result of innovating thinking to improve the climate and connect different parts of the park.

A total of 450 cubic meters of soil was excavated. And that massive pile of gravel? It wasn't wasted. Part of it was reused, playing a new role in the drainage system. Take a close look at the semi-paved surface beneath your feet. Not only does it look good, but it is also specifically designed to allow water to pass through. This ensures that your feet stay dry even during heavy rainfall!

Throughout this project, nature was the central focus. An electric push boat—a vessel powered entirely by electricity and producing zero emissions—was used to transport the soil. Normally, this boat would have docked next to the bridge, but to protect a moorhen's nest, a different location was chosen. Additionally, the blackberry bushes were deliberately preserved to provide shelter for small animals. This way, Singelpark not only supports climate adaptation but also remains a habitat for various species.

No matter how much rain falls, this part of Singelpark is well prepared. Beneath the ground lies a thick layer of gravel, ranging from 4 to 16 millimeters. This acts like a sponge, allowing rainwater to quickly seep deep into the soil. So, the next time you see a downpour, you can rest assured—this area will stay dry!

7. Japanese Steiger

Adres: Blekerspark Leiden

You are standing in the newly renovated Blekerspark, a unique spot along the Herensingel that has undergone a complete transformation. Once known for its dark and gloomy appearance, the park now shines with a serene and elegant Japanese-inspired design. It serves as a great example of how creativity and sustainability can go hand in hand.

The landscape designer was tasked with redesigning the park with a Japanese feel. The result? A park that radiates tranquility, with refined lines and natural materials. Its standout feature is a Japanese-style pier that connects the park to a nearby island.

Originally, the pier was supposed to be built from solid, robust hardwood with imposing pillars and planks as thick as 25 centimeters. This would have required nearly an entire shipload of new hardwood. However, during a construction meeting, a brilliant idea emerged: a large load of dirty, clay-covered sheet pile planks that was waiting to be disposed of could be given a second life. After a thorough cleaning, these planks were repurposed as the new walking surface of the pier.

And to be even more innovative: the 25-centimeter-thick planks are not solid but hollow inside. This saves a significant amount of wood without compromising the strength or appearance of the pier.

The choices made here not only saved thousands of euros but also contributed to sustainability and Leiden's transition to a circular economy.

8. Koningsbrug

Adres: Tweelingstraat 8

This is the Koningsbrug (translated in English to the Kings Bridge). Extensive work has been done on this bridge to ensure it lasts for many more years. Let's take a behind-the-scenes look at the renovation process.

The bridge was moved to a workshop, where skilled professionals inspected and restored the steel beams. They were then coated with a protective zinc layer to prevent rust, extending their lifespan by several decades. For additional strength, reused steel beams from a demolition project were incorporated into the structure.

The white railings also received an upgrade. Instead of replacing them, they were reinforced with a special resin, making them as good as new. Finally, the bridge was given a new, durable surface layer made from innovative materials, some of which are wood fibers from residual waste.

But why choose renovation over new construction? The answer is simple: Everyone benefits. By preserving and reusing existing materials, we save resources and reduce waste. And another important factor: no new greenhouse gases were emitted from the production of new steel.

It was also financially smart to do things this way. The renovation cost approximately €56,000, whereas building a completely new bridge would have cost around €80,000. The result? A future-proof bridge that continues to connect people—while saving a significant amount of money, without compromising on quality or sustainability.

9. Uniper

Adres: Tussen Langegracht 70A en 70B

Welcome to the Uniper Power Plant, or as the residents of Leiden call it: the Lichtfabriek. (which in English translates to the light factory)

In front of you stands the iconic chimney that has towered over Leiden since 1952. This is the tallest structure in the city. There was a time that this power plant was the beating heart of electricity production in the region.

But this place is more than just a monument from the past. At the end of 2021, the Lichtfabriek took on a new dimension: a light art installation that now illuminates Leiden's nighttime skyline. This project was realized through a collaboration between the municipality and Uniper.

The Uniper Power Plant is not just a glimpse into the past but potentially a vision of the future of Leiden's heating supply. The city is striving for sustainable alternatives to natural gas. For example: residual heat, aquathermal energy, or geothermal energy. District heating networks could utilize these sources to supply energy to homes and businesses.

What this will look like in 2050 is something we will determine together: residents, entrepreneurs, and experts. Perhaps this power plant will still play a role then—not with natural gas, but with innovative technologies such as using hydrogen as a heat source.

10. Bierbrouwerij Pronck

Adres: Tussen Langegracht 70A en 70B

If you look to the left of the Lichtfabriek, you'll see a historic building which is home to the Pronck Brewery. Here, beer is not only brewed, but sustainability is also a key consideration in handling the by-products. One such by-product is the brewer's spent grain, a nutrient-rich residue from the brewing process.

Instead of treating it as waste, approximately 95,000 kilograms of spent grain per year is sent to Elzahoeve, a local farm where it is processed into animal feed. To facilitate this, the brewery, with support from the municipality, has invested in special transport containers.

11.Morspoort Garage

Adres: Bloemfonteinstraat 2

If you look across the street from the Morspoort, you will see the Morspoort Garage. What makes this parking place unique is its forward-thinking design. This garage is not permanent and has been designed to be dismantled and reassembled elsewhere instead of being demolished.

This smart design not only conserves resources but also prevents a significant amount of waste. It's a sustainable example of how construction methods contribute to a circular economy. The future location of the garage is not yet certain, but one option is the Bioscience Park nearby. This means that the components will only need to travel a short distance to their new destination. No matter what, this garage is designed to move with the future—sustainable and flexible!

11.Arsenaalplein

Adres: Arsenenaalplein

Welcome to the Arsenaalplein. This is a special place in the heart of the city, where play, social interaction, and community gardening take center stage. Once a paved-over space, the square has been transformed thanks to a creative design and the efforts of the local residents.

The transformation began with a design competition organized by the Municipality of Leiden, in collaboration with the Friends of Singelpark Foundation and the local residents. Since the setup is temporary, moveable plant pots were chosen. What you see here is the winning design brought to life. The square has been arranged with fifty 3D-printed hexagonal flower and tree planting pots, made entirely from recycled plastic—partially sourced from Leiden itself. Ten of these planters have wheels, allowing visitors to rearrange them as they see fit. In a few years, renovations for Leiden University's Humanities Campus will begin here, and the planters will be relocated elsewhere in the city

The planters contain various native plants, vegetable gardens, and shelters for insects and small animals like hedgehogs. Insect hotels further promote biodiversity, while wooden benches—made from recycled wood—invite relaxation and socializing. These benches were crafted by employees from a social workplace. The playground equipment that was already on the square has been kept.

Arsenaalplein proves that even a temporary solution can leave a lasting impact and transform a paved space into a vibrant and green environment!