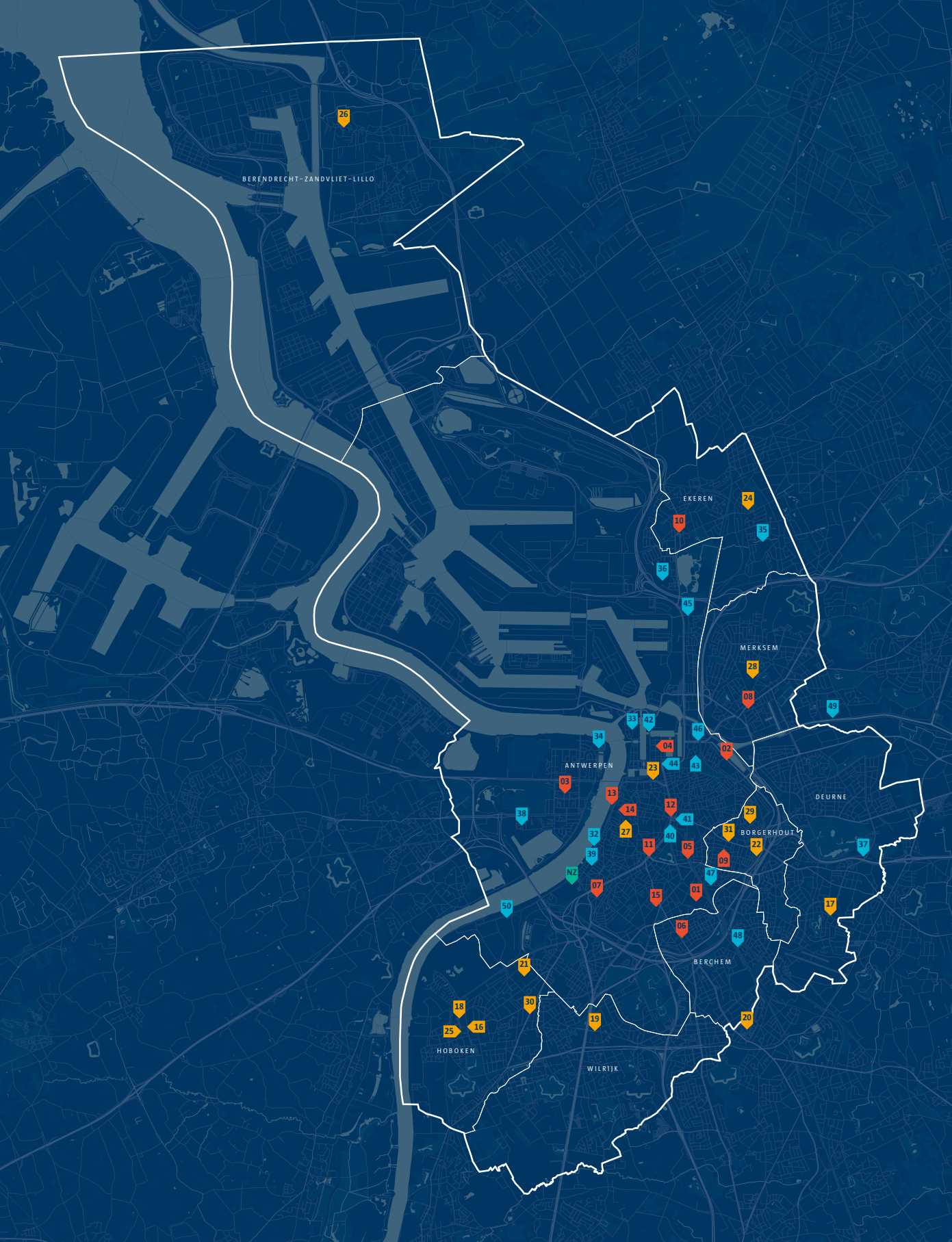




Antwerp city of tomorrow

THE RENEWAL
OF URBAN RENEWAL



LIVING IN THE CITY OF TOMORROW

- 01 Groen Kwartier *p.30*
- 02 Slachthuis site-Noordschippersdok-Lobroekdok *p.34*
- 03 Iglo *p.38*
- 04 Cadix *p.42*
- 05 Kievit II *p.46*
- 06 Districtsplein Berchem *p.56*
- 07 Troonplaats *p.60*
- 08 Bredabaan and Nolfplein *p.62*
- 09 Moorkensplein *p.66*
- 10 Kristus-Koningplein *p.70*
- 11 Keizersbastion *p.74*
- 12 Kipdorp site *p.78*
- 13 Steen *p.80*
- 14 City Hall *p.82*
- 15 Harmonie *p.86*

WORKING TOGETHER ON THE CITY OF TOMORROW

- 16 Master plan for the centre of Hoboken *p.100*
- 17 Eksterlaer *p.104*
- 18 Groen Zuid *p.108*
- 19 Ter Hoogte *p.112*
- 20 Zilverkwartier *p.114*
- 21 Lageweg *p.124*
- 22 Borgerhout Centers *p.130*
- 23 Het Bos *p.134*
- 24 252 CC *p.140*
- 25 Gravenhof *p.140*
- 26 VC De Schelde *p.140*
- 27 Groenplaats *p.144*
- 28 Runcvoorthof *p.150*
- 29 Residential project Passiflora *p.150*
- 30 Multigenerational home, Sint-Bernardsesteenweg *p.150*
- 31 EcoHuis Antwerpen *p.154*

THE STREAMS IN THE CITY OF TOMORROW

- 32 Sint-Andries-Zuid *p.174*
- 33 Droogdokken *p.174*
- 34 Sint-Anneke Plage *p.180*
- 35 Hoekakker *p.184*
- 36 Rozemaai *p.188*
- 37 Park Groot Schijn *p.192*
- 38 Regatta *p.196*
- 39 Gedempte Zuiderdokken *p.200*
- 40 Operaplein *p.216*
- 41 Franklin Rooseveltplaats *p.216*
- 42 Mexicobruggen *p.216*
- 43 Viaduct-Dam *p.216*
- 44 Parkbrug *p.220*
- 45 Havana *p.220*
- 46 IJzerlaan *p.222*
- 47 Cycle street, Grotehondstraat *p.230*
- 48 Berchem waste collection service centre *p.244*
- 49 Albertkanaal industrial park *p.248*
- 50 Blue Gate Antwerp *p.252*

- NZ Nieuw Zuid *p.88, p.160 & p.256*

In Antwerp, the city of tomorrow begins today. The successful renewal of Eilandje, with the MAS museum and Park Spoor Noord, were no reason for us to slow down. Nieuw Zuid will undoubtedly become the next success story. But we are already looking further afield. Towards the districts on the outside of the Singel road, for instance, in the so-called 20th-century belt, where our main goal is to bring renewal without copying the inner city. Or the quays of the River Scheldt, where dreams are starting to turn into concrete realisations. And a number of city cancers that are now being transformed into promising projects that make Antwerp even more attractive for its citizens and for potential new residents and visitors.

Because *that* is the main challenge before us today: how can we prevent people from leaving the city as soon as they have amassed some means

and children come into the picture? Because, while our total population may have grown, middle class urban flight has not yet been countered. And just to be clear: this is not a 'coloured' problem. Analyses of recent relocations clearly show that citizens with foreign roots, too, are attracted to the neighbouring municipalities as soon as they are financially more comfortable. Therefore, the question we ask ourselves before each important decision is: does this bring families, two-income couples, entrepreneurs and visitors to Antwerp and does this thus stop the impoverishment of our city?

We have started major catch-up efforts in terms of amenities for young families. Not a single large project is realised in our city without including adequate nurseries, schools and parking facilities, to name a few examples. If these amenities

cannot be organised within the project itself, the developer is obliged to invest part of his profits in neighbourhood amenities. This global quality improvement and urban spatial evolution is part of the assignment of our Stadsbouwmeester ('city architect'), Christian Rapp. But we have also dealt with a number of city cancers and advanced a number of deadlock-dossiers. Places such as the Borgerhout Centers, Blue Gate Antwerp, IJzerlaan, the Havana site and Gedempte Zuiderdokken are finally getting the future that they deserve, in the interest of all our citizens.

The Groene Singel ('green Singel') project will be finalised this legislature, but the greater Ring road offers even more chances for high-quality urban development. Thanks to Alexander D'Hooghe, the curator appointed by the Flemish government to investigate capping opportunities for the R1 Ring

road, the large-scale dream of capping the Ring road is becoming a realistic option that is slowly coming within our reach. We trust that this approach will end the semi-conflict (because that is what it is) between liveability and prosperity. Again: in the interest of all Antwerp citizens.

We hope that reading this book leaves the reader with an impression of a city that cooperates. With developers and with citizens, with districts and neighbouring municipalities, with great names and local partners. As politicians, we of course do not make the city of tomorrow ourselves. But we do make sure that Antwerp keeps renewing itself and remains a living laboratory for tomorrow's society.



Bart De Wever
BURGEMEESTER



Rob Van de Velde
SCHEPEN VOOR STADSONTWIKKELING

TABLE OF CONTENTS

| | | | |
|-----------|---|------------|---|
| 2 | Foreword | 118 | The city as a living laboratory |
| 8 | The renewal of urban renewal | 120 | Lab XX_Work |
| 10 | The Development of the City | 124 | Lageweg |
| 14 | Urban Development in Antwerp | 128 | Stadslab 2050 |
| 22 | Strategic Spatial Structure Plan | 130 | Borgerhout Centers |
| 24 | Renewal of the Structure Plan | 134 | Het Bos |
| 26 | LIVING IN THE CITY OF TOMORROW | 138 | Building the city together |
| 28 | Lively city quarters and neighbourhoods | 140 | Master Plan for District Cultural Centres |
| 30 | Groen Kwartier | 144 | Groenplaats |
| 34 | Slachthuis site-Noordschippersdok-Lobroekdok | 150 | Innovative housing forms |
| 38 | Iglo | 154 | EcoHuis Antwerpen |
| 42 | Cadix | 156 | Zoominopuwdak |
| 46 | Kievit II | 160 | NIEUW ZUID partners and participation |
| 50 | Public space as a red carpet | 164 | THE STREAMS IN THE CITY OF TOMORROW |
| 52 | Light Plan for Antwerp | 166 | Green and water as a blueprint |
| 56 | Districtsplein Berchem | 168 | Green Plan |
| 60 | Troonplaats | 174 | Scheldekaaien |
| 62 | Bredabaan and Nolfplein | 180 | Sint-Anneke plage |
| 66 | Moorkensplein | 184 | Hoekakker |
| 70 | Kristus-Koningplein | 188 | Rozemaai |
| 72 | A future for our past | 192 | Park Groot Schijn |
| 74 | Keizersbastion | 196 | Regatta |
| 78 | Kipdorp site | 200 | Gedempte Zuiderdokken |
| 80 | Steen | 206 | Strong networks for an accessible city |
| 82 | City Hall | 208 | Renewal of the Ring and Singel zone |
| 86 | Harmonie | 212 | Slim naar Antwerpen |
| 88 | NIEUW ZUID mixing and sharing | 216 | Noorderlijn |
| 92 | WORKING TOGETHER ON THE CITY OF TOMORROW | 222 | IJzerlaan |
| 94 | Opting for the 20th-century belt | 226 | Park & Ride buildings |
| 96 | Lab XX | 228 | Road safety |
| 100 | Masterplan for the centre of Hoboken | 230 | World-class cycle city |
| 104 | Eksterlaer | 234 | The circular city |
| 108 | Groen Zuid | 236 | Climate policy |
| 112 | Ter Hoogte | 240 | Energy renovation |
| 114 | Zilverkwartier | 244 | Waste collection service centres |
| | | 248 | Albertkanaal industrial park |
| | | 252 | Blue Gate Antwerp |
| | | 256 | NIEUW ZUID streaming quarter |
| | | 260 | APPENDICES |
| | | 262 | Who is who |
| | | 264 | Publications |
| | | 266 | Awards |
| | | 268 | Colophon |



The renewal of urban renewal

Spatial planning used to be a static affair, the aim of which was mainly to provide legal certainty regarding the statute and destination of certain zones. The role of the government was to determine, monitor and adapt these destinations. Spatial planning was not actively employed as an instrument to improve the urban environment. However, in the past decades, most European cities have seen a great surge of urban renewal projects. With support from the European and national governments, these cities started to counter urban flight and urban decay. Higher governments provided development funds and programmes. Local governments invested as well and took on active roles as initiators and leaders.

In Antwerp, spatial planning started to aim at improving the city's social and economic fabric through strategic interventions. The city's role evolved into a complex directing role for a score of large and small initiatives from a diversity of public and private partners. The city developed a great variety of instruments, such as the land and property policy, the urban block policy, innovative public-private partnerships, participation programmes and participation charters. Instruments were developed at higher policy levels, too. For instance, spatial execution plans that enable changes to the Flemish Regional Zoning Plan. Or brownfield covenants through which Flanders offers support and guidance for redevelopment projects at abandoned industrial sites.

Some decades later we see a larger-than-expected population growth, while middle-class urban flight continues. There are also a great number of new economic and ecological challenges that Antwerp wants to take on with its urban development policy. This new urban renewal wave does not imply the abandonment of acquired knowledge, instruments and achievements. But the city does take

a new approach to the urban fabric. Whereas, before, interventions in the spatial fabric aimed at social, economic and ecologic improvements and partners were sought to execute these plans, the spatial fabric now *coincides* with the economic, social and ecologic urban fabric. The latter is not scanned for plans but for partners. With these partners, trajectories are initiated, which then result in plans.

This approach has a great number of implications for the role of the government and the possible and necessary instruments for a continued successful urban development policy. This requires not so much a *different* role for the government, as an expansion and diversification of its array of potential roles. The strategic acquisition of property, for instance, will still be relevant, but the aim is to also invest in parcel-boundary-crossing cooperation with as many of the original owners as possible. Also, new legal instruments are not always needed or desired, but often deregulation and flexibility will be the answer.

This book offers a unique overview of the urban development policy of a city that is thinking, debating and experimenting about and with urban development. A historic summary in this introductory part is followed by a selection of plans and projects in different phases and of different types and sizes. These are not the only projects in Antwerp. There are a whole lot more. The projects were selected to illustrate the renewal process in Antwerp according to the three pillars of the actualisation process of the strategic Spatial Structure Plan of Antwerp (s-RSA): *Living in the City of Tomorrow*, *Working Together on the City of Tomorrow* and *The Streams in the City of Tomorrow*.

The economic and spatial development of Antwerp is closely linked to the River Scheldt and has in great part been determined by systematic population growth and a succession of port expansions. What was once a settlement in a curve of the Scheldt, started to develop into a city from the Middle Ages onwards. The medieval stronghold was the starting point of an expanding chaotic pattern of narrow streets, and with each enlargement new defence lines were established. Street names such as Suikerrui, Minderbroedersrui, Steenhoudersvest and Sint-Katelijnevest still refer to these defence works and canals.

In the Golden Century, under Spanish rule, the old medieval city wall was replaced with modern walls and bastions. The increasing port activities and the growing population necessitated the construction of a new city quarter north of the inner city. The new quarter, Nieuwstad, grew into a folksy port neighbourhood and, together with the River Scheldt, became the centre of the Antwerp economy until the Fall of Antwerp in 1585. After the Fall, ships traveling from and to Antwerp were blocked by the Northern Netherlands until the end of the eighteenth century.

In the beginning of the nineteenth century Napoleon Bonaparte turned Nieuwstad into a military base and ordered the construction of Bonaparte dock and Willem dock. With the further growth of the port, Nieuwstad transformed into the landscape of docks that inspired its current name: Eilandje ('the islet'). The fleets and canals in the inner city now often only served as a sewerage system and were gradually covered. With the construction of the Brialmont walls from

1859 onwards, the Spanish walls lost their military function. They were destroyed and on top of the remains, the 'Leien', a major traffic artery around the historic city centre, was constructed. The sixteenth-century citadel disappeared and a new city quarter was born: 't Zuid ('the south').

At the end of the nineteenth century the Scheldt was straightened to accommodate the Scheldekaaien ('the Scheldt quays'). Historic city quarters on the new trajectory were demolished and the quays became the scene of intense port activities, screened off from the city by a fence.

In the same period the Brialmont walls were dismantled. The space was used to accommodate the vast infrastructure of the so-called Small Ring road, which, together with the Great Ring road, was to connect the city and the port to the surrounding international road network. Protests in the region prevented the construction of the Great Ring road and the Small Ring road simply became 'the' Ring road.

The great projects of progress of the 1960s soon revealed their downsides. Further port expansions caused former port areas in the inner city to fall into decline and the new Ring road soon clogged with congestion.

After a municipal fusing operation in 1983, the Ring became a barrier between the city areas on the inside of the Ring road and the new districts in the twentieth-century belt: Deurne, Ekeren, Hoboken, Merksem, Wilrijk, parts of Berchem and Borgerhout and the 'polder district', Berendrecht-Zandvliet-Lillo.



Antwerp before the straightening of the River Scheldt, ca. 1801–1805: Clement; Van den Berghe; Allebé
© STADSARCHIEF ANTWERPEN



Grote Markt on a market day, seen from the cathedral tower, with an undeveloped Linkeroever in the background (1883).
© STADSARCHIEF ANTWERPEN



The construction of the Binnensingel road between the railway embankment and the Ring road in Borgerhout, near Stenenbrug (1960–1962).
© STADSARCHIEF ANTWERPEN



Cargo ships in Willem dok, with the Scheldekaaien hangars in the background (1900).
© STADSARCHIEF ANTWERPEN

In the 1970s and 1980s the city of Antwerp, like almost every other European city, faced the consequences of urban flight and economic scale-enlargement. Practically every level of administration lacked the required vision and capacity to stop the abandonment and deterioration of our cities. After the fusion of 1983 the city undertook a first ambitious attempt at countering urban flight with its Global Structure Plan for Antwerp (GSA).

The GSA contained visions and concepts that are still relevant today, such as 'The suburbs: cores with their own identities', 'A Ring road forest with new gateway bridges' and the well-known concept of 'City on the stream'. However, there were insufficient means for concrete realisations and the city services lacked experience.

At the end of the 1980s, residents and experts strongly appealed to the city administration to take action. They united in the organisation 'City of the Stream' and fought for the renewal of neglected port areas such as Eilandje, Scheldekaaien ('the Scheldt quays') and Nieuw Zuid. The city initially went along with this. An international design contest even resulted in proposals by several renowned designers. But time was not ripe and in 1994 the city administration cancelled the means in the city budget.

In the mid-1990s, Europe, too, became attentive to the problems in large cities and established funds for urban development. The Belgian and Flemish governments followed with their own programmes and funds. Antwerp made good use of these new opportunities and mostly invested the acquired funds in projects with strong social aspects in the north of the city.

Initially, the subsidised projects were coordinated by Stadsontwikkelingsmaatschappij Antwerpen (SOMA), a non-profit organisation that offered a

flexible structure for HR and fund management. The organisation's Planningscel department specialised in area-oriented urban development projects.

But the capacity within the city administration steadily increased as well. In 1996, the city established an advisory committee on architectural quality (Welstandcommissie) and appointed a 'city architect' (Stadsbouwmeester) to monitor the quality of the growing number of plans and projects. The Planningscel department became an internal autonomous entity within the city's overarching company for urban development, which in turn developed specialised departments for spatial planning, mobility, public space, building permits, environment and energy and archaeology and monuments.

The task of acquiring and managing funds was entrusted to a new autonomous municipal company for real estate management and city projects (AG VESPA). AG VESPA became responsible for the city's land and property policy and the construction of public buildings such as nurseries, schools, police stations, museums... The Stadsbeheer ('city maintenance') company now combined its maintenance tasks with the construction and renovation of city buildings.

In 2008, AG Stadsplanning Antwerpen ('autonomous company for city planning in Antwerp') was founded to direct area-oriented projects such as Park Spoor Noord, Eilandje and the Central Station Area. In 2014, reorganisation plans resulted in the incorporation of AG Stadsplanning's area-oriented operations within AG VESPA in the form of a new department for city projects. AG Stadsplanning's generic tasks were incorporated within the city's urban development company and the parking policy, too, was incorporated within the company's mobility department.



A dilapidated house at Melkmarkt, seen from Korte Nieuwstraat (1968).
© STADSARCHIEF ANTWERPEN



Urban decay in Schipperskwartier, corner building between Falconplein and Schippersstraat (1973).

© STADSARCHIEF ANTWERPEN



A draft concept by Toyo Ito for Nieuw Zuid: a playground between apartment buildings (1990).

© STADSARCHIEF ANTWERPEN



Eilandje in 1990, between Kattendijkdok and Napelsstraat.

© STADSARCHIEF ANTWERPEN



The abandoned and deserted Parein biscuit factory in Brusselstraat (1986).

© STADSARCHIEF ANTWERPEN



A design by Manuel de Solà-Morales for Napelsstraat at Eilandje (1988–1994).

© STADSARCHIEF ANTWERPEN



In the Atheneum quarter, a number of dilapidated brothels were demolished and replaced by Designcenter De Winkelhaak in 2002.

© JAN CRAB



In 2008, Park Spoor Noord opened to the public on a former railway yard in the Antwerpen-Noord quarter.

© FRANÇOIS DE HEEL

Eilandje in 2015. The urban quarter keeps evolving and reaching new milestones, such as the opening of MAS Museum aan de Stroom ('museum by the stream') in 2011, the construction of residential towers along Kattendijkdok and the opening of the Red Star Line Museum in 2013.

© WWW.WOODMONKEY.BE.



Up to the mid-1990s, Flemish spatial policy consisted mainly of static zoning plans, but with the 1996 spatial planning decree, the Flemish government made a clear choice for structure planning. The Spatial Structure Plan for Flanders (RSV) was approved in 1997, and soon the Flemish provinces and municipalities started to draft mid-to-long-term visions for their own territory. The strategic Spatial Structure Plan for Antwerp (s-RSA) was approved in 2006, after three years of intensive cooperation with Italian designers Bernardo Secchi and Paola Viganò. The structure plan introduced a three-tier spatial strategy for a *renovatio urbis*: the renewal of the city through punctual interventions in public space.

Generic policy

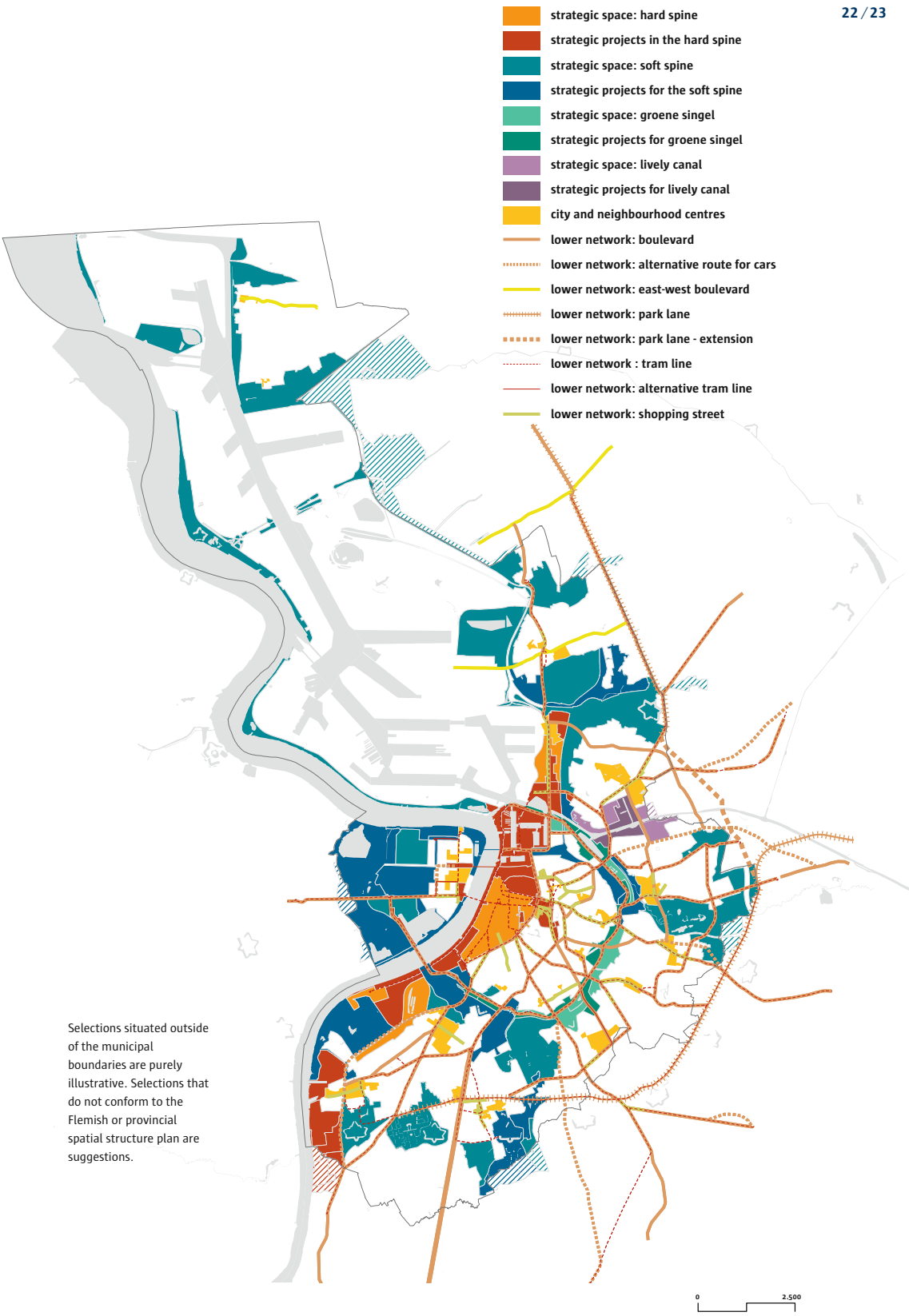
The first strategy is that of the generic policy. Seven ‘inspiring images’ refer to the collective memory of residents and visitors and form criteria for every policy decision and every spatial project. Water City focuses on the role of the River Scheldt and the small waterways and valleys in the future of the city. Eco City guards the city’s ecological infrastructure, from parks to private gardens. Port City emphasises the historic and future importance of the port. Railway City aims to improve access to and mobility in the city with priority for the tram and bicycle networks. Porous City looks for smart opportunities to optimise un(der)used buildings and open spaces. The image of Villages and Metropolis focuses on the spatial relationships of the districts and quarters with the metropolitan city centre. And, finally, Mega City aims to optimise the strategic location of Antwerp on a national, Flemish and European level.

Specific policy

The specific policy is the area-oriented and project-structured translation of the *renovatio urbis* in five strategic spaces. The metropolitan Hard Spine runs from north to south along the River Scheldt and comprises former port areas, the inner city and the Central Station Area. In interaction with the green-blue network of the Soft Spine, it defines the main structure of the city. Groene Singel (‘green Singel’) overcomes the barrier-effect of the Ring road and connects the large park structures of the Soft Spine to the inner city. Lively Canal combines the widening of Albertkanaal (‘Albert Canal’) with the improvement of the canal banks as living, working and recreational environments. Finally, Lower Networks and Urban Centres improves the network of roads, footpaths, bicycle tracks and public transport together with the relevant district, city quarter and neighbourhood centres, shopping streets and railway station areas.

Active policy

The active policy intervenes at the project level in the fields of housing, public space, public functions and mobility through the maintenance, renewal and construction of streets, squares, parks, playgrounds, sites and buildings. Spatial quality at this level is monitored by the city architect (Stadsbouwmeester), the advisory committee on architectural quality (Welstandscommissie) and the departments for permits, monuments, archaeology and environment and energy.



After an evaluation study by OMGEVING and the Catholic University of Louvain, the city initiated the process for the renewal of the strategic Spatial Structure Plan for Antwerp in 2015. Almost ten years after its approval, the structure plan has guided hundreds of spatial plans and projects. But in the meantime, a number of important evolutions have occurred as well. Most notably in terms of energy, the environment and climate, a stronger-than-expected population growth and the need to reintegrate production and employment in the urban fabric. These challenges are addressed in the trajectory for the renewal of the structure plan, which is based on three thematic pillars: Streaming City, Lively City and Cooperating City. After the interactive renewal trajectory, a completely renewed structure plan will be developed from 2019 onwards.

Lively city

The pillar of Lively City comprises everything about living together and integrating functions in the city. Lively City sees the growing and changing population as a driving force behind the further renewal of the city centre and especially behind a new wave of urban renewal in the 20th-century belt. Demographic evolutions have stimulated a quest for new forms of living, working and entrepreneurship in the city and for other ways and scales to integrate housing, employment, businesses, amenities and green spaces, customised and attuned to the needs of neighbourhoods and city quarters.

Cooperating City

Cooperating City combines the themes of working and networking in the city and sees the urban environment as an incubator for knowledge, creativity and innovation. In this view, the city's spatial structure must promote a good economic and investment climate and stimulate entrepreneurship. Spatial projects with these ambitions necessitate flexible cooperation forms and new experiments as well as cooperation across parcel, district and city boundaries and with all the public and private partners involved. From higher governments and other cities and municipalities, to companies, institutions and organisations and, of course, our own districts, residents and entrepreneurs.

Streaming City

Streaming City is relevant for almost literally each and every stream in the city. Not only the Scheldt, the many rivers, creeks, docks, canals and the system of green squares and parks, but also streams of food, traffic, energy and waste, as well as water management, the city climate and the urban economy. This pillar considers all these streams in their mutual relationships as the city's 'metabolism'. The goal is to study this system and optimise its role in a healthy and climate-resistant city that is able to face the dangers of flooding as well as new economic and societal challenges.

Interactive trajectory

The three pillars are tested and improved in a unique exchange between the current and future (renewed) structure plan. Pilot projects or so-called 'projects of A' are implementing the structure plan while testing the significance of and coherence between the three pillars of the renewal process. These projects and further studies provide input for 'city debates', in which stakeholders, citizens and civil society formulate themes for Stadslab2050. One project that strongly embodies this approach is Nieuw Zuid: a development in the strategic space of the Hard Spine as well as a pilot project for the pillar of Streaming City, but also a lively mixed neighbourhood that is getting shape through unique forms of partnerships and participation.



Living in the city of tomorrow

PROJECTS IN THIS PART

LIVELY CITY QUARTERS AND NEIGHBOURHOODS

- 01 Groen Kwartier *p.30*
- 02 Slachthuis site-Noordschippersdok-Lobroekdok *p.34*
- 03 Iglo *p.38*
- 04 Cadix *p.42*
- 05 Kievit II *p.46*

PUBLIC SPACE AS A RED CARPET

- 06 Districtsplein Berchem *p.56*
- 07 Troonplaats *p.60*
- 08 Bredabaan and Nolfplein *p.62*
- 09 Moorkensplein *p.66*
- 10 Kristus-Koningplein *p.70*

A FUTURE FOR OUR PAST

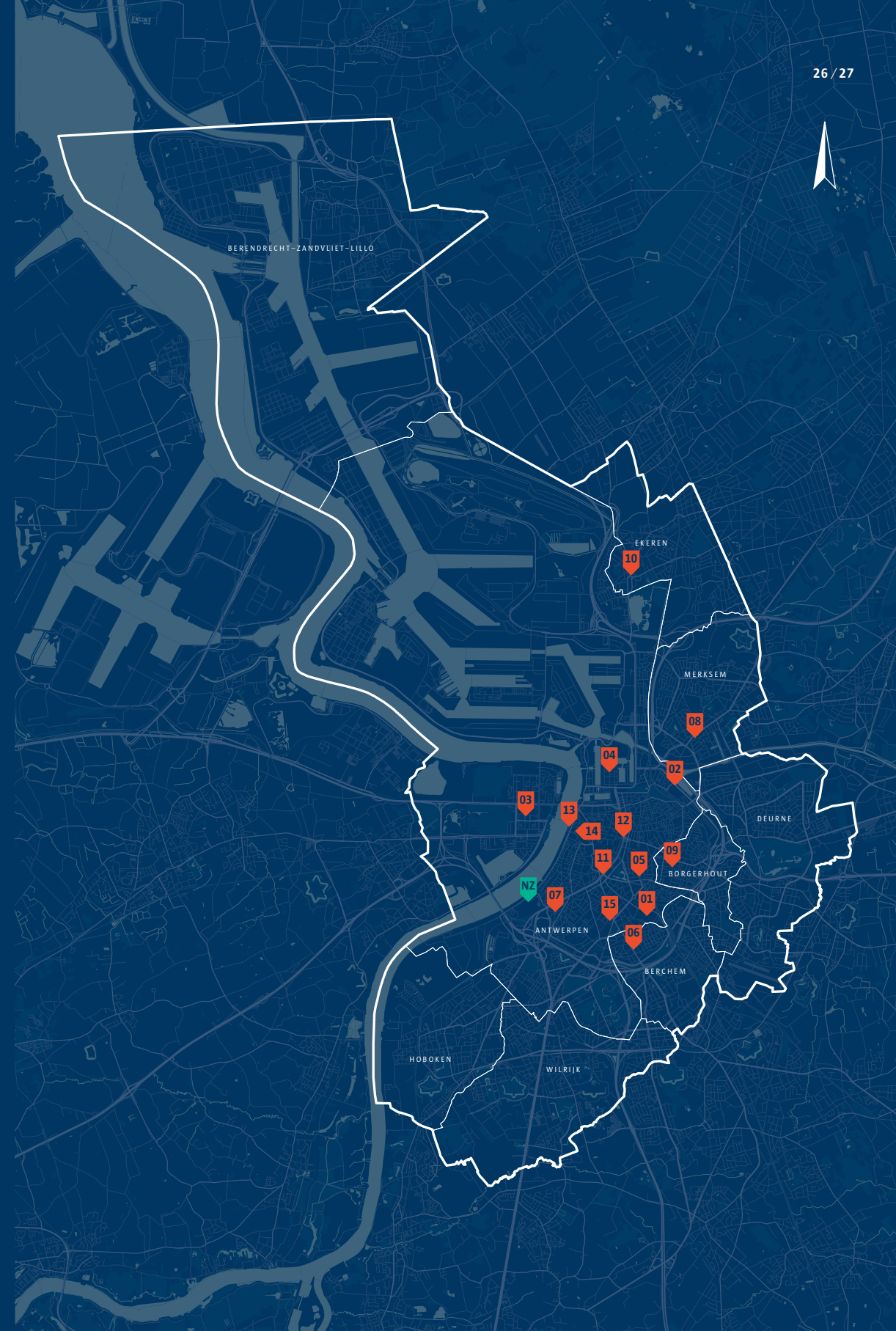
- 11 Keizersbastion *p.74*
- 12 Kipdorp site *p.78*
- 13 Steen *p.80*
- 14 Stadhuis *p.82*
- 15 Harmonie *p.86*

- NZ Nieuw Zuid *p.88*

Life is good in the city of tomorrow. Residents can count on lively neighbourhoods with a good variety of housing opportunities and an accessible, diverse array of shops, schools, public transport, amenities, sport and culture. This makes Antwerp an even more attractive place to work and do business and a much-loved destination for visitors and tourists.

The 'feel' and atmosphere of the city are central in the development of public space. The character of our neighbourhoods must be translated into attractive residential and shopping streets, squares and terraces. Trees, plants, green patches and parks form resting points amidst the bustle of city life and bring nature right up to the front door of Antwerp residents.

The built and archaeological heritage has a special place in the city of tomorrow, not only to be admired but also to be experienced as much as possible.



Lively city quarters and neighbourhoods

Good life in the city begins with a pleasant living environment. The city quarters and neighbourhoods in the nine districts of Antwerp each have their own atmosphere and character. The identity of a city quarter is shaped first and foremost by the people who live, work and conduct businesses there. These dynamics in turn make the city quarter attractive for visitors and new residents and entrepreneurs. This is why every neighbourhood needs a good mix of housing, shops, companies and amenities. Because each neighbourhood is different, this always requires a tailored approach: from large new developments at abandoned sites to small interventions in densely built neighbourhoods.



GROEN KWARTIER

Groen Kwartier (‘green quarter’) is a new residential quarter on the former military hospital site, right on the border between the districts of Antwerp and Berchem. In 1993 the hospital and the convent left the terrains for good. In 2004 the Flemish government protected the site as a monument, but took into account the city’s wish to transform this site into a residential area. The city bought the 7.7-hectare site from the ministry of defence. AG VESPA coordinated the development of the site by MHA nv, a project-cooperative comprising Vanhaerents Development and Matexi (before: Wilma Project Development). The city had high ambitions for Groen Kwartier in terms of green space, quality and sustainability, and incorporated these demands in a ‘conditional sale’.



The monumental site was protected by the Flemish government in 2004.
© KATHLEEN MICHIELS

Green city garden

The concept of ‘city garden’ formed the basis of the development. Almost half of the terrain is public space, which was designed by French landscape architect Michel Desvigne and includes a two-hectare continuous green space. With this city garden, a new public green space was created in the middle of the city. Adjacent neighbourhoods were given their own entrances to the site. The city garden is a new attraction pole for a broad spectrum of potential visitors and thus helps anchor the site in its surroundings. The neighbourhood is car free. The paths only ensure access for special vehicles such as fire trucks. Residents can use underground parking garages. Visitors have to park at the edges of the site.

Dynamic neighbourhood

The architects, Stéphane Beel, Lieven Achtergael, 360 Architecten and Collectief Noord, designed a green mixed quarter. The neighbourhood comprises circa 400 new dwellings. A mix of social (25%), affordable (40%) and high-end (35%) family homes, lofts and apartments aims at several different target groups: young, old, singles and families with children. Shops, hospitality businesses, offices and private practices ensure the integration of life, work and business. The protected monuments are restored and given a new lease of life, and the monuments that are situated at public squares get public functions. The central chapel at Paradeplein, for instance, became an attractive restaurant and the former boiler room became a workspace for creative start-ups.



The concept of ‘city garden’ formed the basis of the development. Almost half of the terrain became public space, two hectares of which form one coherent green zone.
© STÉPHANE BEEL AND LIEVEN ACHTERGAEL



The protected monuments were restored and given new purposes. At public squares, the monuments were given public functions.
© AG VESPA



A mix of 400 housing types appeals to different target groups: social, affordable, residential and single family homes, lofts and apartments.

© KATHLEEN MICHIELS

SLACHTHUIS SITE - NOORDSCHIPPERSDOK - LOBROEKDOK

After the closure of the city's slaughter house in the Dam quarter (or 'Den Dam'), the site ⁰² was left largely abandoned. Den Dam has a unique character and history, in which the slaughter house has played an important role. Its unique identity was further reinforced as the quarter became more and more enclosed by a number of large infrastructures: the Ring road, Lobroekdok, Slachthuislaan and an abandoned rail yard that in the meantime has begun a new lease of life as Park Spoor Noord.

Joint trajectory

The city and AG VESPA are working together with the private owners of the site and with local residents to create a master plan for the transformation of the slaughter house site into a lively city quarter where housing is intertwined with services, recreation and productivity. These ambitions necessitate a vision for the adjacent Noordschippersdok zone and Lobroekdok quay opposite Slachthuislaan. The master plan for the 18-hectare project area will bring a huge impulse to the quarter. Based on a guidance agreement with the private owners and a participation charter with the neighbourhood, a trajectory of workshops and consultations was initiated, involving residents, local traders, hospitality business owners and companies. Local residents hired nvdr bureau to bring the results of the preparatory trajectory together in one document: 'Dam, a neighbourhood in transition'. The project definition and this document provided input for the design contest for the master plan.

New living and working combinations

After a contest procedure and a participation event the city and private partner Land Invest Group appointed a design team. Palmbout Urban Landscapes and De Smet Vermeulen architects are working together with Feddes Olthof landscape architects and Goudappel Coffeng mobility experts. The team must develop a master plan that is focussed on housing, with special care for high-quality, affordable houses, co-housing options and opportunities to share space. The designers must integrate work, entrepreneurship and recreation into the residential fabric in agreeable and creative ways. Finally, there is an important accent on the creative economy. There are interesting opportunities to play into the meat-processing companies that have remained in the area.



The master plan for the 18-hectare project area is to integrate work, entrepreneurship and recreation into the residential fabric in attractive and creative ways.

© PALMBOUT URBAN LANDSCAPES, DE SMET VERMEULEN, FEDDES OLT Hof AND GOUDAPPEL COFFENG



An impression of Kalverwei, a new central neighbourhood park.

© PALMBOUT URBAN LANDSCAPES, DE SMET
VERMEULEN, FEDDES OLTJOF



Europark is a social housing estate ⁰³ with 18 high-rise buildings at Linkeroever (the city's left bank). Many years of intense use had necessitated thorough renovation. In addition, Europark faced social and image problems. The city combines the renovation works with investments in social coherence in project IGLO (intergenerational project Linkeroever). Several different city services coordinate their respective plans and investment programmes in order to guarantee IGLO's success.

Masterplan

In 2005 the city, Zorgbedrijf Antwerpen (the city's 'care company') and social housing company Woonhaven organised a design contest via the procedure of the Open Oproep ('open call') of Vlaams Bouwmeester ('the Flemish chief architect'). Technum was appointed to design the master plan and public space. Technum in turn involved an engineering bureau for the architectural aspects. Densification and mixed functions bring new programmes and services to the area, which are connected to each other by means of a new street, right through Europark. This new central public space opens up the social housing estate towards its environment.

Building projects

The designers of the building projects were strongly involved in the project, which ensured that the building programmes were well-thought-out and anchored from the beginning. For example, the city invested in a nursery with 85 places (De Smet Vermeulen architects), and a sport hall and youth centre (Tom Thys architects). AG VESPA acted as project commissioner for these buildings. Zorgbedrijf built 126 service flats in three new volumes (Tom Thys architects), a residential care home for 125 residents (De Smet Vermeulen architects) and a community service centre (de vylder vinck taillieu architects).

Award

The project received the 2014 Wivina Demeester award. The jury praised the strong directing role throughout the complex but consistent process and the participative mentality and method in the city's role as project commissioner as well as in the city services' relationships with citizens. The architectural achievements and the way the building projects were attuned to each other, were much praised by the jury as well.



Densification and mixed functions create room for new programmes and services that are connected to each other by means of a new street.

© TECHNUM



The building programmes were well-thought-out and anchored from the start: the low-rise building on the right houses a new nursery.



The project won the 2014 Wivina Demeester Award. The jury praised the city's strong directing role, the participation trajectory for local residents and the architectural achievements.



CADIX

Following the renewal of Oude Dokken (the 'old docks') and the Montevideo quarter, Cadix quarter **04** forms the crown on the first phase of the renewal of Eilandje. The dock landscape of the 172-hectare former port area forms the hinge between the historic inner city and the modern sea port. The city and AG VESPA are working closely together with the Port Company. The Port Company remediates the grounds and makes them available for redevelopment by the city. The maritime and industrial past, the great open spaces and water bodies and the mix of small-scale houses, big office buildings, lofts and hangars are crucial aspects of Eilandje's unique character. These elements are therefore key throughout the renewal project.

The maritime and industrial history, the large water surfaces and the mix of houses, offices, lofts and hangars give Eilandje its typical character.

© PT-ARCHITECTEN

From port to quarter

The 26-hectare Cadix quarter has long been a rather unknown part of the city. Apart from mostly port-related companies, there were only a few hundreds of residents in the area. The city, the Port Company and private partners are working together on an energy-efficient, modern urban quarter for approximately 4,000 residents. An extensive housing programme (75% of the new floor space) is complemented by commercial functions and offices (21%) and communal amenities such as a nursery, a primary school, a neighbourhood sport hall and service flats (4%). Social housing company Woonhaven also provides social housing at Cadix.

Ambitions and partners

The building programme consists mainly of new buildings and complementary fill-in projects at the dock edges. The city sells urban blocks to developers in a number of phases. Because the city makes use of the instrument of the 'conditional sale', the buyers immediately subscribe to high ambitions in terms of quality, energy efficiency and environmental friendliness. Their obligations include the provision of collective heating systems and the necessary preparations for a future connection of the quarter to a city-wide heat network.



Cadixplein will be located at the former customs site. The square will have touches of green and offer access to the water via a pontoon.

© PT-ARCHITECTEN



Public space as a red carpet

The renewal of public space works as a red carpet for new projects and initiatives. The streets and dock edges are renewed and the former customs site will be turned into a large neighbourhood square (17,360 m²) with touches of green and with access to the water via a pontoon. Around the square there will be amenities, offices and shops. A new tram line makes the once hidden urban quarter accessible for all. The European Funds for Regional Development supports the development of public space.

The renewal of public space works as a red carpet and attracts new projects and initiatives.
© AG VESPA



The future of Eilandje

The second phase of the development of Eilandje comprises Droogdokkeneiland, Mexico-Eiland and Kempeneiland. Whereas former phases focused on the historic port identity, this next phase centres on the relationship with the modern sea port. The municipal Port Company has built its new headquarters at Mexico-Eiland (Zaha Hadid Architects) and the city is working on an urban river park at Droogdokkeneiland ('dry dock island'), where visitors will be able to experience the tides (Van Belle & Medina Architects and Vogt Landscape Architects).

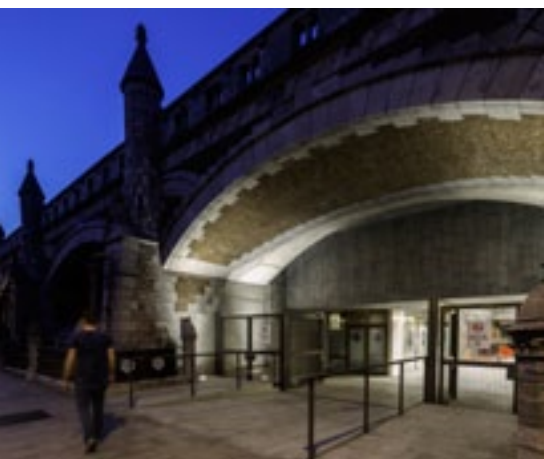
The building programme mostly comprises housing (75%), but also commercial functions and offices (21%) and community amenities (4%).
© AG VESPA



The underground connection for the high-speed train between Brussels and Amsterdam has turned Antwerpen-Centraal into a through station. The station was given a new high-quality entrance at Lange Kievitstraat and a bundle of tracks became obsolete. Next to the new entrance a dense office building complex was realised (Kievit phase I), but Kievitplein ('Kievit square') and the surrounding streets were renewed as well. The city and AG VESPA took firmer charge of the coordination and cooperation in phase II ⁰⁵. Suggestions of local residents and users were gathered as input for the design team of BUUR, HOSPER and ARA. Kievit II provides the Kievit quarter with a new green space, a mix of new homes, offices, shops and hospitality businesses as well as a new events hall.

Ampère events hall was built inside the historic railway embankment and accommodates parties and small concerts.

© ALEXANDRE VAN BATTEL



Unique opportunity

Kievit II offers a unique opportunity to create a green space within the densely built 19th-century city belt. Building the new buildings against the tracks creates space between the surrounding neighbourhoods and the new buildings. The design includes greenery, resting points and play areas for local residents. At the same time the area retains its international character. The protected historic railway embankment and bridges were integrated in the design.

Complex phasing

The biggest challenge of this project is to harmonise the development of private buildings and public spaces as much as possible. The design team for public space and the building designers are continuously consulting each other in order to coordinate the timing, design and execution of public space projects and three new building blocks. The first two blocks were designed by Stéphane Beel and Jaspers-Eyers Architecten and offer a mix of housing, offices, shops and hospitality businesses.

Ampère events hall

On the inside of the railway embankment between Kievitplein and the Plantijn-Moretus bridge, an events hall was constructed. It has a capacity of 900 persons and can host parties and 'modest' concerts. AG VESPA acted as project commissioner. BULK Architecten's design was developed in close consultation with the NMBS railway company and the Flemish agency for heritage property. It preserves the raw character of the inner space and includes a multi-purpose hall, an acoustic airlock entry and a bar. The exploitation of the hall was entrusted to non-profit organisation Ampère, which also provided the finishing touches and dressed the infrastructure.



Constructing the new buildings against the tracks creates space for a new green zone between the surrounding neighbourhoods and the new buildings.

© BUUR HOSPER





The biggest challenge of this project is the coordination of the development of private buildings and public space.
© BUUR HOSPER

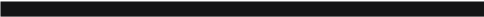


Public space as a red carpet

Public space must serve as a red carpet for residents and visitors. Public space projects ensure that streets and squares are comfortable and attractive spaces that reflect the character of the city quarters and neighbourhoods. Urban renewal consistently focuses on the quality of small-scale public spaces. Residential streets, small parks and neighbourhood squares offer resting points, play areas and meeting space for residents and visitors and create an attractive environment for our retail and hospitality businesses. All these small-scale projects are crucial for the urban fabric. Moreover, the city often combines these interventions with new neighbourhood amenities such as city service centres, schools, police stations or sport facilities.



In order to bring out the best of Antwerp day *and* night, the city asked Stramien/Antico consultants to develop a light plan for Antwerp. Street lighting used to be seen as mainly functional, but the Light Plan for Antwerp offers a unique experience of the city-scape thanks to well-considered, energy-efficient and sustainable lighting. The Light Plan translates the inspiring images and strategic spaces of the strategic Spatial Structure plan into types and degrees of lighting. Each part of the city receives its own nuanced pallet, composed of three ‘layers’. This way the Light Plan breaks with the uniform yellow glow of the old street lights and ensures increased visibility of details and colours at night, while reducing energy consumption and light pollution. The Light Plan is implemented step by step, along with the renewal of public spaces and the execution of large urban development projects.



Comprehensive vision

The Light Plan comprises four parts. In a first part the consultants analyse the current situation and then make the link to the future vision. In the second part a ‘Light map for Antwerp’ visualises possibilities for public lighting in Antwerp. Part three lists all the technical guidelines, allowing policy makers, designers and partners to initiate new projects within the vision of the Light Plan. Finally, the last part contains a case study for Oud-Berchem as a concrete implementation of the plan in a city quarter. The city has learned from this case study that the implementation of the Light Plan entails a balancing exercise between aesthetics and energy efficiency for each part of the city.

Zones and layers

In a dynamic exchange between the images and the strategic spaces of the s-RSA, the Light Plan identifies a number of zones: the metropolitan area, Scheldekaaien (‘the Scheldt quays’), city and neighbourhood centres, Albertkanaal (‘Albert canal’), Groene Singel, the great park structures, monuments and remarkable buildings and the Lower Network infrastructures. These zones each receive up to three layers of lighting, depending on dominant elements such as greenery, water, infrastructure and monuments. The base layer is implemented everywhere and basically consists of the actual street lights. It must be inviting and comfortable and comply with strict energy consumption norms. The second layer accentuates important traffic axes and mainly contributes to road safety. The third layer reinforces the atmosphere of the city quarter, for example by accentuating architecture, monuments, art and urban landscapes.



Small public garden near ‘Den Bell’ administrative offices. The Light Plan increases the visibility of details and colours at night, while reducing energy consumption and light pollution.



Purposely framed lighting of a wall painting and walking path in Villegaspark in the Oud-Berchem quarter.





District service centre of Wilrijk:
one to three layers of lighting
emphasise typical characteristics
and dominant elements such as
greenery, water, infrastructure and
monuments.



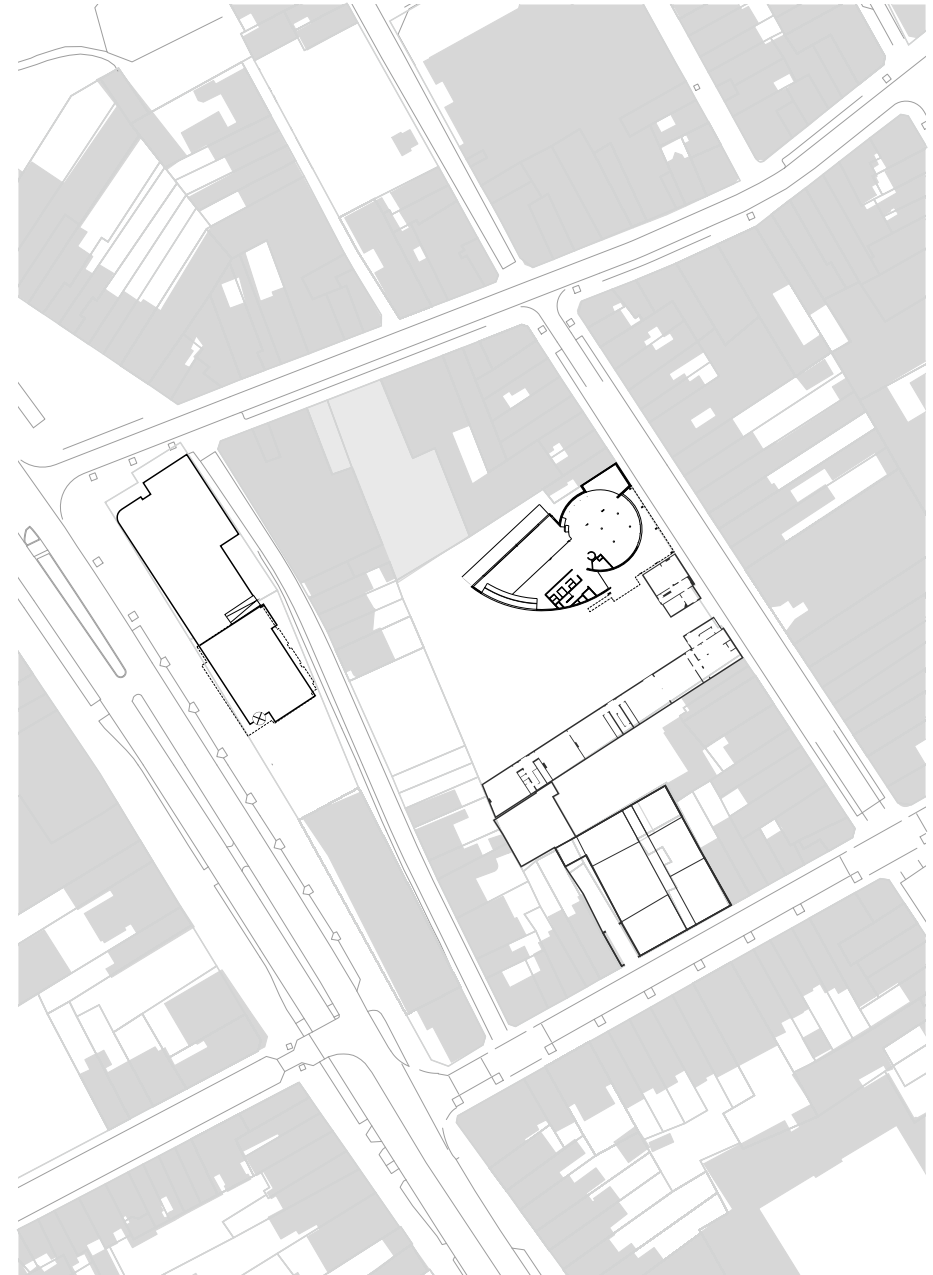
Districtsplein ('district square') Berchem  is an urban block study that aims at maximising opportunities for two urban blocks in the Oud-Berchem quarter in the district of Berchem (*intra muros*). The urban blocks are situated on the intersection between Grotesteenweg and Driekoningenstraat-Statiestraat, an important mobility axis for the city and the main shopping axis of Oud-Berchem, respectively. The site accommodates a unique concentration of amenities: the district service centre, a library, an art academy, a youth organisation centre and a theatre. There is also open space, which is currently underused. Using research-by-design, the city is looking for a spatial reorganisation that benefits the neighbourhood, the owners and other parties involved.

Attraction pole for neighbourhood and visitors

A master plan for both urban blocks will elaborate a supported vision for the future of the site. One of the goals is to provide a new lease of life to the small square in front of the district service centre, increasing its attraction beyond spontaneous use by local residents and attracting passers-by and users of the many functions within the urban block. Newly-weds, for instance, could propose a toast here, after the ceremony in the district service centre, or youth organisations could play here. Soft connections and passages might increase the openness and access to the square. This way the city can create an open and attractive space with plenty of visitors and social control. Hospitality services might contribute to the liveliness of this space.

Concentration and densification

The master plan will also look into possibilities for high-quality densification in order to combine several spatial claims while contributing to the definition and quality of the open space. The district square is also a pilot project for optimal concentration of neighbourhood amenities and public services for residents. The study focuses especially on sharing and optimising the use of space through cooperation and by merging separate parcels. The city looks into better uses for the parking spaces under the district service centre, for instance by adapting the rather narrow entrance or by a partial conversion into bicycle parking spaces.

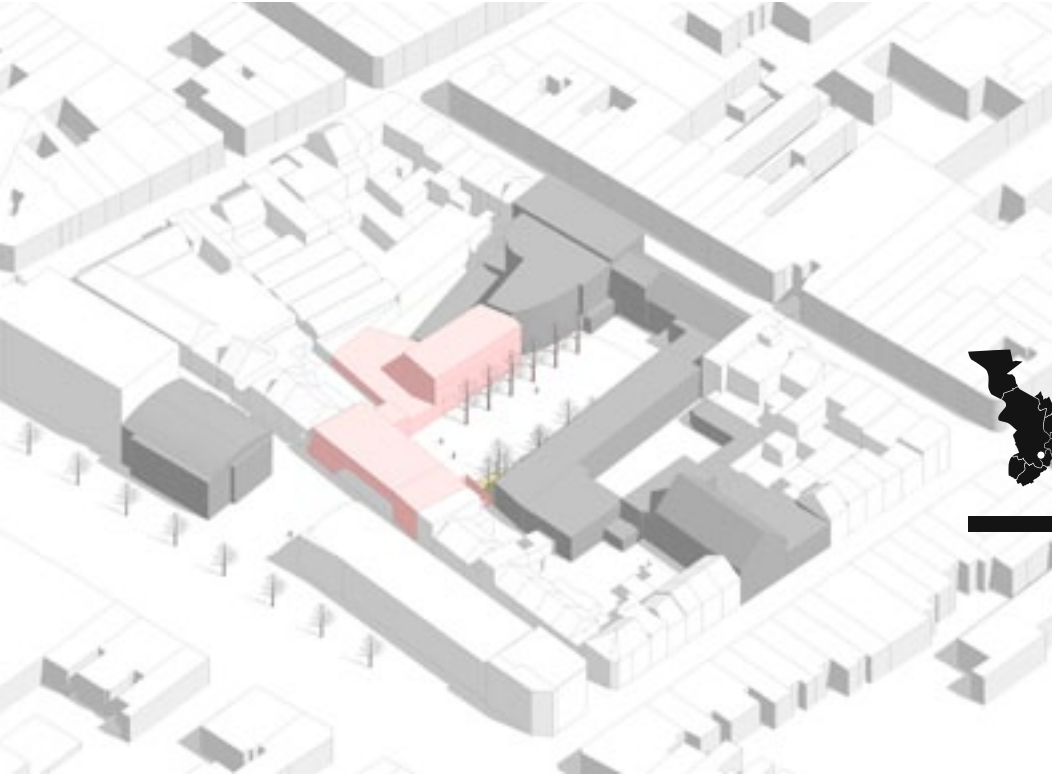


The urban blocks are situated on the intersection of an important mobility axis for the city and the main shopping street of Oud-Berchem and accommodate a unique concentration of amenities.





The site is home to the district service centre, a library, an art academy, a youth organisation centre and a theatre.
© FRANÇOIS DE HEEL



The urban blocks are situated on the intersection of Grotesteenweg and Driekoningenstraat-Statiestraat, the main shopping axis of Oud-Berchem.
© KATHLEEN MICHIELS

Through research-by-design, the city explored densification options that combine several spatial claims and create high-quality open space.

Montignystraat and Brederodestraat form the shopping heart of the Brederode quarter in the district of Antwerp. Troonplaats ⁰⁷ is located in the centre of Montignystraat. The many streets leading out onto the square had created a fragmented space. The small amount of recreational space on the square was cut off from the bars and restaurants around the square. The greenery on the square was in need of structural reorganisation, too. The city wanted to turn the space into a lively and attractive square again, where hospitality businesses flourish, local residents can relax and children can play.

Central meeting space

The new design evaluated and adapted the circulation on the square. By cancelling a number of connections, the relationship between the two central spaces and the edges of the square was improved and the usable surface was expanded. This has freed up space for considerably larger terraces for the hospitality businesses. In order to further improve the relationship with the surrounding shopping centre, Troonplaats was fitted with the same granite tiles as Montignystraat and Brederodestraat, but laid out in a different pattern.

Playful water

In the middle of the square an eye-catching fountain in green-blue mosaic glass tiles and with different spray heights was constructed. Along the lines of the fountains, LED-strips were placed to light up the fountain at night. The fountain doubles as a playful element. Children can play freely in the fountain while their parents enjoy a drink at one of the terraces.

Renewed greenery

The sixteen original trees on the square were replaced. They were no longer growing because they lacked underground space for their roots. The layout of the new green structure was guided by the recreational spaces and the hospitality businesses' terraces. This way, the square remains light and airy but still offers ample shadow.



The city wanted to turn the square into a lively and attractive space again, where hospitality businesses flourish, local residents can relax and children can play.



In the middle of the square, an eye-catching fountain in green-blue mosaic glass tiles and with different spray heights was constructed.



BREDABAAN AND NOLFPLEIN

Bredabaan 08 is an important north-south traffic axis for the province of Antwerp as well as the main shopping centre of the district of Merksem. In past years, the street had deteriorated and no longer offered the quality and attraction of an important shopping street. The street lacked cycle paths and adequate public transport amenities, the street lighting was insufficient and the foot paths were uncomfortable and too narrow. Burgemeester Nolfplein lacked space to sit or play and predominantly accommodated cars. OMGEVING tackled all these challenges in their new design.



The shopping heart of Merksem

Since its renewal, Bredabaan is a green and comfortable boulevard again. An uninterrupted granite floor forms a sober and uniform base, while strategic locations are emphasised. Broad, comfortable footpaths in stone add to the attraction of shopping here. Pedestrians are prioritised over motorised traffic. Cyclists are welcome to cycle and shop here and can use bicycle racks on both sides of the road. Public transport has its own separate, central lane now. Several trees were dispersed over the waiting zone and new lane trees in the separating segments improve the transparency and recognisability of the infrastructure.

Nolfplein as an entrance gate

Burgemeester Jozef Nolfplein forms the main entrance to the shopping zone. The square is home to a church and Merksem's district service centre. The square was stretched out over the street, as an extension of Bredabaan. Moving the tram tracks created space for terraces across the street. A long mirror-like pond with playful fountains marks the entrance to the district service centre. On the side of the district service centre, parking spaces double up as an open space for events. The eye-catchers here are two large circular wooden benches.

Green and play zone

In the green zone around the church, one can enjoy a quiet walk or seek out the sun or the shadow on a park bench. The paths and green strips are laid out in a rectangular pattern with plants that change colour each season. Playing equipment was provided but in the summer children can also have fun in the mirror-like pond.

The design turns Bredabaan into a green and attractive shopping boulevard again, with wide footpaths and cycle paths in both directions and a separate, central lane for public transport.



Since its renewal, Bredabaan is a green and comfortable boulevard again.
© OMGEVING CVBA



Thanks to the Light Plan, the renewed Bredabaan also shines at night.



In the summer, children
can play in the fountains
of the mirror-like pond.
© OMGEVING CVBA



MOORKENSPLEIN

The parts of the district of Borgerhout that lie on the inside of the Singel road are very densely built and lack green public space. The combination of the square, the adjacent urban block and the old city hall offers an exceptional opportunity to create a new open and green public space. The acquisition and demolition of a number of buildings and the incorporation of a street enable the addition to the square of a green zone and a number of neighbourhood amenities. The design was developed by Buro Lubbers-Bovenbouw Architectuur-Korteknie Stuhlmacher.

New lay-out

The design plays into the monumental former city hall. Opposite a new entrance on the west side of the square, comes a remarkable fountain for children. A stone surface provides coherence and recognisability. The square itself accommodates activities such as markets, concerts and street soccer. Several seating areas — in the centre of the square or sheltered, at a table... — offer places to relax in the sun or seek out shadow. In front of the houses around the square a strip is reserved where residents can sit or plant greenery.

Greenery

In-between the houses and on the facades, climbing plants provide a green character. Loosely dispersed trees create a human scale and provide shadow but also leave room for activities. The trees provide coherence between open spaces and mark the transition towards the extended part of the square. This green zone is open for a variety of uses, from sunbathing and picnicking to soccer and other games. The precise functions and lay-out of the extended area will be determined in a later phase.

Building projects

The edges of the green zone are finished off by the construction of a new building. The city is looking into the possibility of a 'broad' school at this location, which would share spaces with the neighbourhood. The shared use of, for instance, a sport hall or music lesson rooms will keep the green zone lively after school hours. The vacant parcel of a former laundrette in Mellaertsstraat is developed by AG VESPA and *Parkeer- en mobiliteitsbedrijf* (the city's parking and mobility company) into a number of new housing units with underground parking spaces. Approximately forty parking spaces for local residents will compensate for the loss of parking spaces above ground. After a contest the city appointed Haerynck Vanmeirhaeghe architecten to create the design.

The acquisition and demolition of a number of buildings and the incorporation of a street enable the addition to the square of a number of neighbourhood amenities and a green zone.

© BURO LUBBERS, BOVENBOUW ARCHITECTUUR, KORTEKNIE STUHLMACHER



In Mellaertsstraat a number of new housing units will be constructed. Approximately forty underground parking spaces for local residents will compensate for the loss of on-street parking spaces.

© HAERYNCK VANMEIRHAEGHE ARCHITECTEN



After a thorough and respectful renovation, the historic city hall will receive a new lease of life as Borgerhout's district service centre.

© KARUUR ARCHITECTEN



District service centre

In April 2016 the city initiated a thorough and respectful renovation of the historic city hall with a view to a new lease of life as Borgerhout's district service centre. After the works, local residents will be served at new public service desks. The Marriage Hall, Reception Hall and Council Hall at the building's *bel-étage* retain their functions and the attic will house supporting functions such as a cafeteria and a storage room.

Temporary functions

The first phase of the development entails the demolition of the acquired vacant buildings and the reorganisation of the inner area. The vacated terrains are then prepared to function as a temporary public space. The city has organised a participation trajectory with the neighbourhood and the surrounding schools. An external partner will provide the finishing touches together with the residents to create a high-quality space on a low budget. The involvement of the neighbourhood in the development of visions and ideas as well as in their implementation is important to stimulate cooperation, broad support and the spontaneous adoption of the space by local residents.

Apart from an underground parking garage, the housing units in Mellaertsstraat also share a collective courtyard garden.

© HAERYNCK VANMEIRHAEGHE
ARCHITECTEN



The square itself offers different seating areas and accommodates activities such as markets, concerts and street soccer.

© BURO LUBBERS, BOVENBOUW ARCHITECTUUR,
KORTEKNIE STUHLMACHER

In the centre of the district of Ekeren, Kristus-Koningplein ¹⁰ was renovated. After having served merely as a parking terrain for a long time, the new square again offers multiple possibilities for local residents. The new design by LAND Landschapsarchitecten creates space for events and relaxation, and around the square there are opportunities for new retailers and terraces. The square is connected to the school in Alfons Jeurissenstraat and the police has found a new home in a new building that finishes off the new edge of the square.

Meeting and games

First and foremost, the square was to become a meeting space for local residents. Benches were provided to enjoy the sun or the shadow of the trees. The trees are visible from the side streets. Nine Crimean lime trees were planted on the square as well and another three different types of trees were planted in the surrounding area. In the middle of the square, a prominent granite square was laid out in an elegant pattern. Seven fountains stand out as a landmark and provide opportunities to play. The locally treasured *De Bierpruver* statue was moved from Driehoekstraat to the square.

Road safety

Road safety and access for persons with a handicap were important aspects in the design. Extra bicycle stalls were provided on the square and at the nearby school. Car traffic was suppressed in the northern part of the square in order to extend the square surface up to the facades. Parking strips were reserved along three sides of the square.

A new façade for the square

A private partner constructed a multi-functional building as a new front for Kristus-Koningplein. The police moved into the ground floor of the building, which also offers space for shops. This way the new building contributes to the liveliness of the square. By bringing variety in terms the building height and materials, the square gained a grand central façade that connects to the surroundings on both sides. The ground floor of the building recedes in order to connect to the school's kiss & ride-zone.



The design creates a meeting space for the residents again, with room to play and benches to rest in the sun or in the shadow.

© LAND LANDSCHAPSARCHITECTEN



In the middle of the square, seven fountains provide opportunities to play and benches offer spaces to sit and enjoy the sun or the shadow.

© LAND LANDSCHAPSARCHITECTEN



A future for our past

Antwerp has a great variety of monumental historic buildings that deserve a place in the city of tomorrow. The medieval Steen castle will become the starting point for visitors to discover the city. City Hall will regain its Golden-Century grandeur. Nineteenth-century parks and monuments are evolving towards a present-day role in all their elegance. But the city's rich history also lies beneath the ground. Central to the city's archaeological heritage are the large-scale spatial figures of the medieval castle and the Spanish defence walls. Large projects such as the Leien road works and the renewal of Scheldekaaien (the 'Scheldt quays') offer opportunities to rediscover, map out and where possible reveal this heritage to our residents and citizens.



KEIZERSBASTION

During the reconstruction works for the southern part of the Leien a large part of Keizersbastion ('the Emperor's bastion') was rediscovered beneath the central reservation. The bastion is part of the 16th-century defence walls that Emperor Charles V built around the city in order to keep out foreign intruders. Even though its location was known, its good condition and architectural quality were surprising. In 2003 the remains were threatened by the construction of a tunnel complex and an underground parking garage, but the Flemish government decided to save the bastion. The only option turned out to be to move Keizersbastion.



Standing on a wooden platform, visitors can admire the bastion remains. The distance to the bastion wall creates the impression of a castle-moat.

Relocation

The excavated part of the bastion was sawn into 250 blocks of three tonnes each and preserved for three years during the construction of the underground parking and tunnel complex. In September 2006 the bastion was reconstructed at level -3 of the National Bank's parking garage, at precisely the same location as before, only six metres underground. The traces of this move were purposely kept visible, as they are now part of the bastion's history. A part of Keizerspoort ('the Emperor's gate') was rebuilt in this space as well.

Exposition

The city had great ambitions for this historic treasure room. Together with the parking garage's exploitation company and with the support from the European IVA-programme *Forten en linies in grensbreed perspectief* ('fortresses and front lines in a cross-border perspective'). A publicly accessible space was constructed in the transition zone between the parking garage and the remains of the bastion, with a large map of the city, glass display cabinets, information panels and a scale model. The bastion itself and the foundations of Keizerspoort can be admired in a specially designed space. They are not permanently accessible but they are visible from the parking garage.

Bastion space

The remains were presented behind a glass wall but can be accessed upon request or on occasions such as Erfgoeddag ('heritage day') or Open Monumentendag ('open monuments day'). The bastion space is accessible through a dark and quiet passageway that marks the transition. Visitors can admire the bastion remains standing on a wooden platform. The distance to the bastion wall creates the impression of a castle-moat. The space behind the bastion is designed as an education room, so that children and youth get the opportunity to discover the history hidden in this piece of heritage.

Keizerspoort in 1860. A part of this gateway was rebuilt in the exposition space as well.

© FELIXARCHIEF





There is a publicly accessible exposition space in the transition zone between the parking garage and the remains of the bastion, with a large map of the city, glass display cabinets, information panels and a scale model.



KIPDORP SITE

The part of Leien between De Keyserlei and Franklin Rooseveltplaats is being transformed from a busy traffic axis into a new low-traffic square: Operaplein. The city and the Flemish government commissioned Manuel de Solà-Morales to draft a design, which included a new partially underground route for car traffic. Thanks to systematic archaeological research during the first phase of the Leien renovation project, it was clear that the new tunnels would cut through the Kipdorppoort site ¹². Together with Keizerspoort, Kipdorppoort was once one of the main gateways to the city. The city and Flanders decided to integrate the remains that would surface during the works into the design.

The ‘outside’ of Kipdorppoort at the time of the original Leien roadworks. Kipdorppoort was once one of the main gateways to the city.



© FELIXARCHIEF

Preventive examination

In 2012, sounding and cone penetration tests revealed information about the construction, preservation status and depth of the archaeological remains at the Kipdorp site. The remains turned out to lie more than seven metres under the current street level. The Kipdorp bridge pillars as well as parts of the flanking bastion and the connected city wall were revealed.

Bridge, bastion and city walls

The bridge over the city’s defence moat was preserved in its entirety underneath the Leien’s pavement. Only the bricks on top of the bridge and much of the stone façade were removed. A part of the flanking Kipdorp bastion appeared as well, including its 19th-century renovation, with still visible masons’ marks. The entrance to the city was guarded from a casemate — a covered artillery platform within the bastion. Below the current street level, 5.5 metres of the once 10 metre high defence walls were preserved. This was a once enormous construction in brickwork, stone clad and founded on a brick base.

Integration in the design

The data resulting from the archaeological soundings allowed for a precise localisation of the historic remains on the current city map. This made it possible to integrate the remains in the plans for Operaplein. The remains will be made accessible and visible from the ground floor and from within the new tunnel and parking space. This way, passengers, motorists and curious visitors get to see the historic remains from several different perspectives.


Perspectives

The ground floor offers a complete overview over the bridge, the curve in the city wall and the bastion. The tunnel’s partially open roof offers reveals the arches of Kipdorp bridge and the bastion corner. In the parking garage and in the tunnel, one can follow the city walls over a distance of 60 metres. The design also integrates the southern casemate of the bastion from where enemies could be taken under fire through gun holes before they could reach the city gates. The casemate floors and the underground access to the bastion (postern-gate) shall be displayed at the open-air Kipdorp bastion site.

The tunnel has a partly open roof and offers views on the Kipdorbrug bows and the bastion corner.

© MANUEL DE SOLÀ-MORALES



Steen  is a unique remainder of the medieval castle on the quays along the inner city. It was protected as a monument in 1936. It is one of the most important architectural relicts of the city. The iconic building is closely related to the birth of the city and is the last clearly visible witness of the castle, which has dominated the city-scape for centuries. But Steen has an important role as a contemporary landmark, too. According to Masterplan Scheldekaaien (the master plan for the Scheldt quays), an improved entrance to Steen and Steenplein square will reinforce the relationship between city and River. The city wants to restore, reuse and reopen the historic monument to the public.

Technical construction research

The city initiated a preparatory trajectory in three large parts: a historic and technical construction study, a management plan and research-by-design. The historic construction study forms the basis of Masterplan Het Steen, which in turn will form the frame of reference for the management plan and the design assignment. Steen has been restored and adapted to new functions several times. The 11th and 12th-century base and the 16th, late 19th and 20th-century renovations and adaptations are firmly intertwined. In the last decades, renovations were mostly *ad hoc* interventions. This has led to the need today for an integrated vision to guide the building's restoration and adaptation to new functions.

Tourist reception centre

The city wants to thoroughly and respectfully renovate Steen and give it a new lease of life as a tourist reception centre. The city wants the reception itself to become an integral part of the visitor experience. Steen will therefore combine a number of services, such as information, ticketing, booking, catering, expositions, a shop with city merchandise, reception areas for groups, professionals and the press and offices for city employees. Steen will not only become a point of arrival for visitors and mooring cruises, but will also put visitors on track for a journey of discovery through Antwerp on foot, by carriage, by bike or by boat.

Waterwegen en Zeekanaal nv (the Flemish waterways and sea channel management agency) is studying the technical conditions and consequences of relocating the cruise ship quay. The new cruise terminal could become an integral part of Steen's new lease of life.

The Steen castle has been restored and adapted several times to accommodate different functions.

© SEPP VAN DUN



Steen is a unique remainder of the medieval castle on the quays along the inner city.



Antwerp's City Hall is the Lowlands' most important example of early renaissance architecture and a unique icon in the Flemish and international architectural landscape. The building was protected as a monument in 1936 and was included in the list of UNESCO world heritage in 1999. For the occasion of its 450th birthday the city decided to restore City Hall to its former glory and charisma as the city's political centre. This way the city wants to enable a leverage effect for the revival of Grote Markt (the main city square). Via the Open Oproep procedure of Vlaams Bouwmeester (the chief architect of Flanders), the city selected the proposal of the design team of HUB, Origin, Bureau Bouwtechniek, Daidalos Peutz, RCR, BAS and FPC.

Heritage and innovation

The cultural-historical value of the monumental City Hall is prioritised, but also provides a framework for an ambitious innovative project and optimal, modern operations. For example, the council hall at the building's *bel-étage* retains its historic furniture, which will be restored where needed and provided with modern voice technologies and individual lighting. Transparent glass ceiling-height divisions partition new spaces on the first and second floor while preserving perspectives on the historic dimensions of the original rooms. On the second floor a glass construction will be placed over the historic dome. The *bel-étage* will be lighted through a new technical space in-between the old and new domes

Public and political functions

The ground floor is preserved for public functions. The gates will be able to open again and the main entrance will once again move to Grote Markt. In cold days the entrance hall will serve as an air-lock entry and in the Summer, when the gates are open, as a covered outside space. The basement rooms will house supporting functions such as a cold kitchen and sanitary facilities. The council hall on the *bel-étage* is preserved and the amenities on the first floor will include meeting rooms. The second floor will become the 'Illuminated Floor' and will house the Mayor's and aldermen's offices. Two double-height spaces — vestibules — will offer loads of day light as well as views on the clouds and the campanile (bell tower). The space under the campanile will be reserved for an important collective function but the historic design of the former city archives will be largely preserved.



Antwerp City Hall is the most important example of early-renaissance architecture in the Lowlands as well as a unique icon in the Flemish and international architectural landscape.

© ELVIRE VAN OOTEGHEM



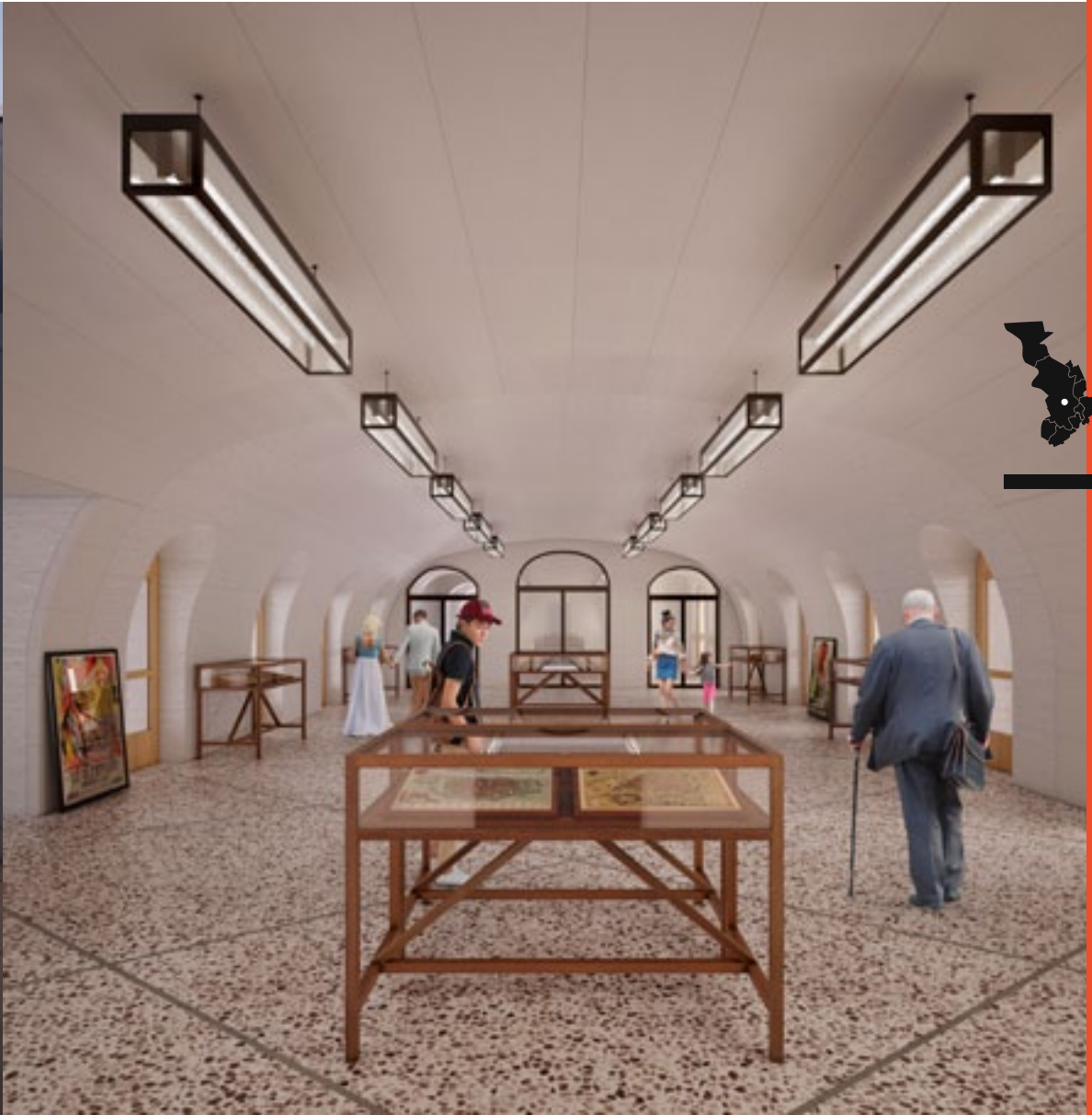
The Light Plan has beautifully framed and highlighted the architecture of City Hall and Grote Markt.

© ELISABETH VERWAEST





The second floor will accommodate the aldermen's cabinets and will have two central 'vestibules'.
© HUB



The ground floor will be a bright, publicly accessible space.
© HUB

Harmoniepark 15 is a 1.8-hectare park in the residential Harmonie quarter in the district of Antwerp. It is surrounded by 19th-century town houses in-between which apartment buildings, a hospital and the provincial headquarters where added over time. In the park lies Harmonie Hall, where many concerts have been organised throughout the years. In 2010, the city used Vlaams Bouwmeester's Open Oproep procedure to find an architect for the renovation of the protected monument and the surrounding park. The winner, Atelier Kempe Thill, joined forces with LAND Landscapsarchitecten to design the park. Harmoniepark received the first award in the park category of the Groene Lente 2015 award ('2015 Green Spring award') of the Vereniging voor Openbaar Groen ('organisation for public greenery').

After a thorough renovation, Harmonie Hall will receive a new lease of life as a district service centre. The design is based on respect for the architectural, cultural and historical value of the building.



Landscape

The typical elements of a 19th-century landscape park were partly preserved and were also cherished in the new design: the 'bowl-shaped' open space with raised edges, the meandering footpaths with different perspectives and a rich variety of trees. But much has changed since the original landscaping of the park. The fountain, for example, is actually a 20th-century addition. Henry van de Velde designed the fountain in honour of Peter Benoit. It was inaugurated in 1934 at its original location at Frankrijklei but moved to the park in the 1950s. The monument will be restored and will remain in the park.

Use

As a public park, the design emphasises new connections with the quarter. Without losing the enclosed feeling of the park, two new entrances were provided, one near the intersection across Albertpark, and one in the north-eastern corner of the park. The lawn and play areas are used intensely by the neighbourhood to have pick nicks and to run around and play. The new design has expanded the play areas and combined them into one comprehensible zone. The main path was widened, so that children can also play on its paved surface.

Harmonie Hall

Harmonie Hall was built in 1846 as the summer location of the "Société d'Harmonie", which was founded in 1814. The building is one of the most important achievements of former Stadsbouwmeester ('city architect'), Pieter Dens (1819–1901) and was protected as a monument in 1997. After a thorough renovation, the hall will begin a new chapter as the district service centre. The design is based on respect for the architectural, cultural and historic value of the ball room and the orangery. It offers a neutral base for a diverse use, but also offers possibilities for very specific functions. The main hall and smaller rooms will be renovated and a new entrance volume will be constructed.

The park lends itself to intense and contemporary uses, but the typical elements of a 19th-century landscape park were lovingly preserved as well.

© SIGRID SPINNOX

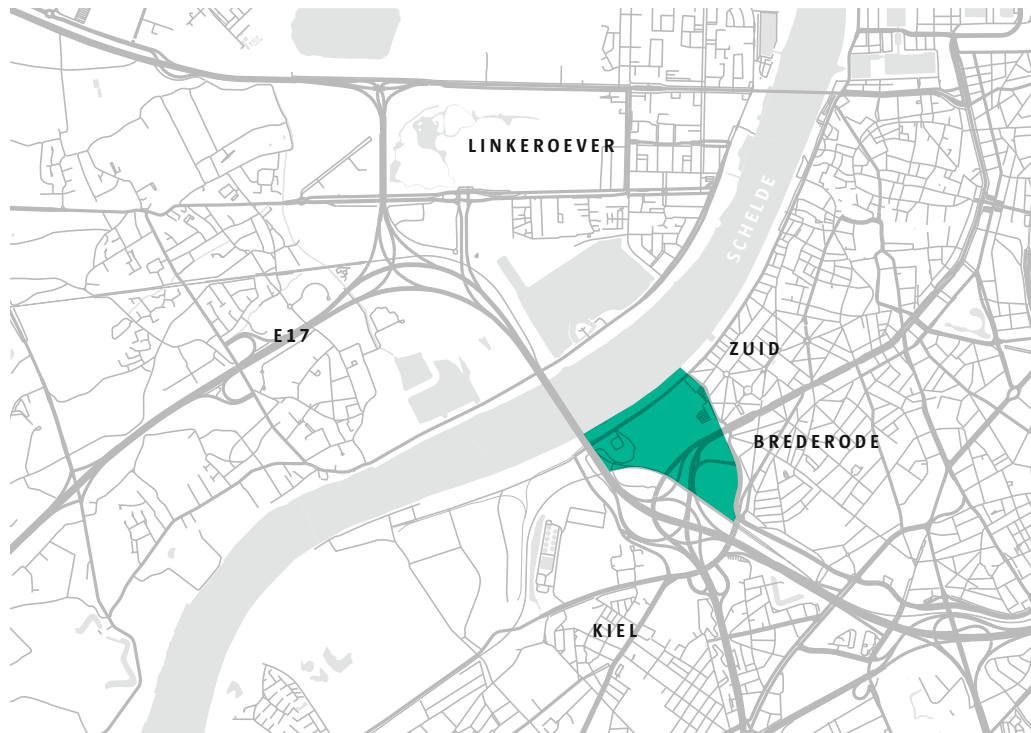


NIEUW ZUID mixing and sharing

Nieuw Zuid is an abandoned railway yard located between the Scheldt and the Ring road's so-called 'spaghetti' complex. The site is situated just north of future innovative industrial site Blue Gate Antwerp. Bernardo Secchi and Paola Viganò have based their master plan for Nieuw Zuid on five pillars: a green urban quarter by the water, an attractive and lively city quarter, customised traffic infrastructure, a healthy and ecological living environment and a flexible development strategy. Nieuw Zuid was selected as a pilot project for Streaming City, but the project illustrates each of the three thematic pillars of the renewal of the strategic Spatial Structure Plan.

Nieuw Zuid will become a lively, mixed neighbourhood with views over the River Scheldt. The most important organising principle is that of the *Striga*, which enables an optimal orientation of the buildings on the River and allows for flexibility in the organisation and layout of the streets and urban blocks. The perpendicular orientation towards the quays also follows the pattern of the old railway tracks. There will be 2,000 new homes, with great varieties in sizes, types, budget and specific locations. There is also space for innovative housing types.

Nieuw Zuid is located directly south of the city centre and north of Blue Gate Antwerp, the future innovative industrial park.



Nieuw Zuid will be a green, healthy, attractive and lively urban quarter by the water, with customised traffic infrastructure.

© TRIPLE LIVING

20,000 to 40,000 square metres of local amenities will fulfil the new residents' and the surrounding neighbourhood's needs in terms of schools, nurseries, sport facilities...

And 40,000 to 70,000 square metres of offices and other supra local functions shall create employment and attract visitors. Finally, some 20,000 square metres of commercial space is reserved for local shops and amenities.

The design concept for public space at Nieuw Zuid is 'urban living in the park'. Bureau Bas Smets continued the park concept over the streets, squares and alleyways of Nieuw Zuid. The design of public space was also inspired by the notion of sharing space and creating space for 'meetings' between

residents and between Nieuw Zuid and the surrounding neighbourhoods. Both ideas are combined by providing amenities that are lacking in the surrounding quarters, such as green, schools, nurseries...

On a larger scale, Nieuw Zuid forms a hinge area between the residential quarters within the Ring and Singel roads and the quarters on the outside of these infrastructures. The master plan reduces the barrier effect of the Ring road by extending the park over the infrastructure, as such improving the connections between both parts of the city through a network of foot paths and cycle tracks. Places for sport, play and tranquillity are scattered throughout the landscape as stepping stones.



Working together on the city of tomorrow

PROJECTS IN THIS PART

OPTING FOR THE 20TH-CENTURY BELT

- 16 Masterplan for the centre of Hoboken *p.100*
- 17 Eksterlaer *p.104*
- 18 Groen Zuid *p.108*
- 19 Ter Hoogte *p.112*
- 20 Zilverkwartier *p.114*

THE CITY AS A LIVING LABORATORY

- 21 Lageweg *p.124*
- 22 Borgerhout Centers *p.130*
- 23 Het Bos *p.134*

BUILDING THE CITY TOGETHER

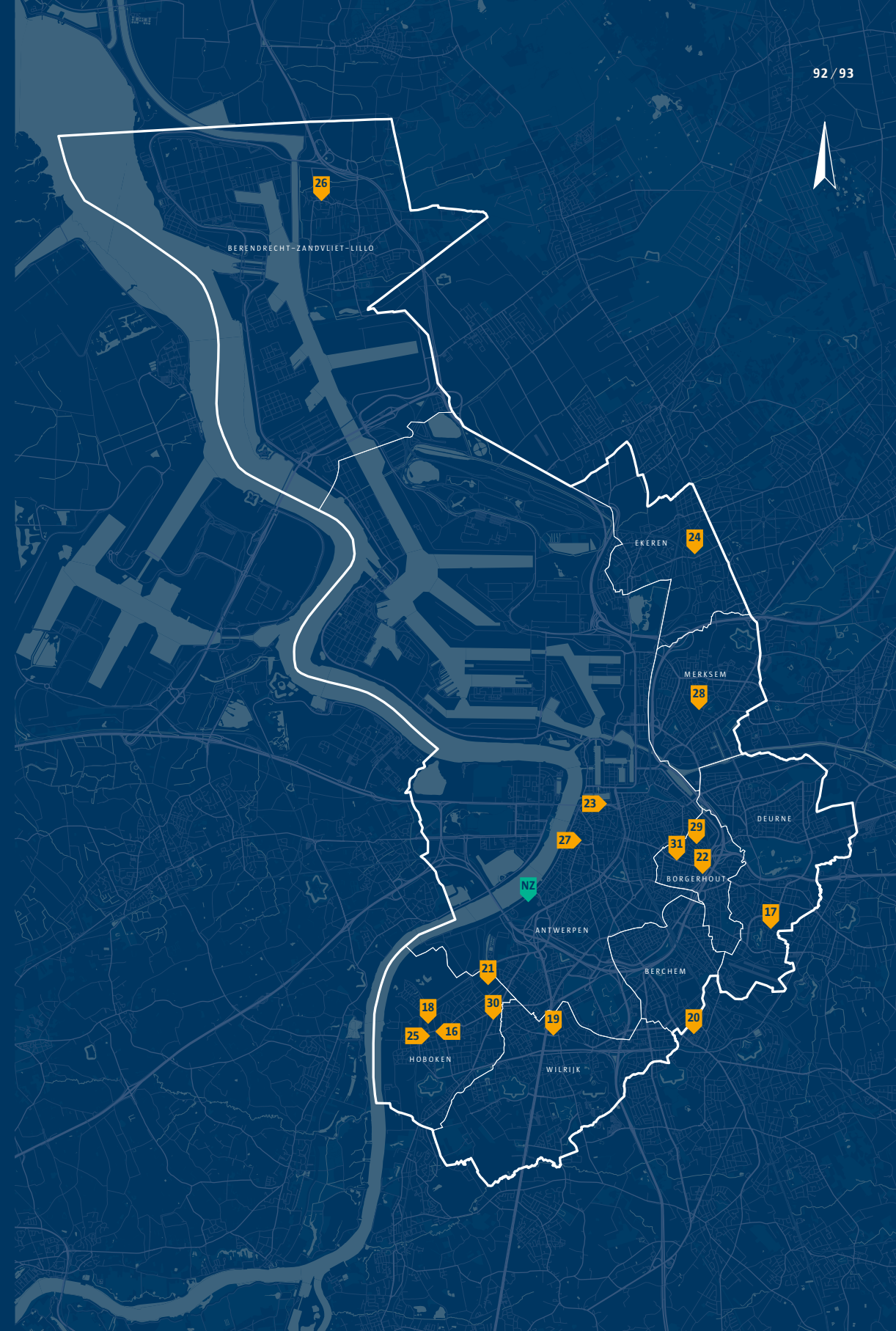
- 24 252 CC *p.140*
- 25 Gravenhof *p.140*
- 26 VC De Schelde *p.140*
- 27 Groenplaats *p.144*
- 28 Runcvoorthof *p.150*
- 29 Passiflora residential project *p.150*
- 30 Multigenerational home,
Sint-Bernardsesteenweg *p.150*
- 31 EcoHuis Antwerpen *p.154*

NZ Nieuw Zuid *p.160*

Today, urban renewal in the city of Antwerp confidently ventures out over the Ring and Singel roads properly for the first time. The 20th-century urban fabric will be renewed and prepared to accommodate extra housing, amenities and employment. The city wants to preserve the unique character of the districts and counts on cooperation with the districts and neighbouring municipalities.

One of the main challenges is to create room for employment, production and creative enterprises. The city dedicates several special trajectories and forums to these themes, such as the experimental Labo XX_Work project and urban laboratory Stadslab2050. Together, residents and entrepreneurs are taking on pilot projects and experiments that combine economic growth, creativity and sustainability.

But we are also literally building the city together. The city develops an array of high-quality amenities, supports sustainable building among its residents and entrepreneurs and stimulates the development of innovative forms of housing. From the renewal of the largest public spaces to the smallest private renovation project: all these initiatives are contributing to the city of tomorrow.



Opting for the 20th-century belt

Apart from the River Scheldt and the 19th-century Leien around the inner city, the Ring road, too, has an important impact on the history and future of the city. The areas outside of the Ring road were developed later than the inner city. There are more green spaces and streets and houses often are more generously proportioned. Because of this, large companies and institutions such as hospitals and schools have settled here. Projects in the 20th-century belt thus require a different approach on a different scale and based on different assumptions than projects in the inner city. With the overarching project of Lab XX, the city, Flanders, residents, entrepreneurs, owners, districts and neighbouring municipalities have signed up together for the rediscovery and renewal of the 20th-century belt.



Renewal of urban renewal

Lab XX is more than a quest for space to build more houses, amenities and workplaces. The design teams mainly looked for new urban renewal strategies and instruments, adapted to the challenges of the 20th-century belt. The team of BUUR and Futureproofed worked on mobility and sustainability, with its concentric tram line or 'rocade' as a guiding concept for new developments. Palmbout Urban Landscapes, de Nijl architects, Feddes-Olthof landscape architects and Blauwdruk urban planners linked densification to improved quality for the 20th-century belt's green areas. Maat designers, Posad spatial strategies, 3E and Shinsekai worked on interweaving living, working and amenities within a network of new centres, and 51N4E and Connect & Transform experimented with new partnerships, processes and financial strategies.

City-regional cooperation

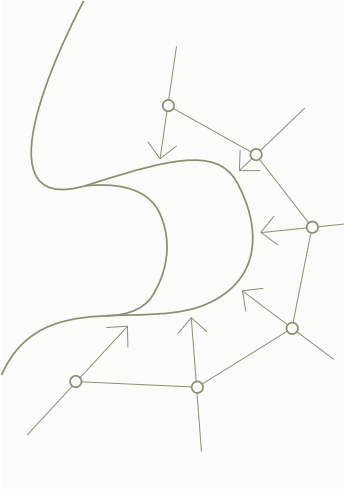
An analysis of the historic development and urbanisation of the urban region soon pointed out that the basic assumptions for Lab XX are also relevant for municipalities surrounding Antwerp. By accommodating further urbanisation within the historic development patterns, other municipalities can be spared from further fragmentation or benefit from improved connections and levels of amenities. With support from Flanders, the city initiated a city-regional cooperation platform in 2015, bringing fourteen municipalities in the south-east periphery of Antwerp together to debate and tackle the spatial challenges of population growth.



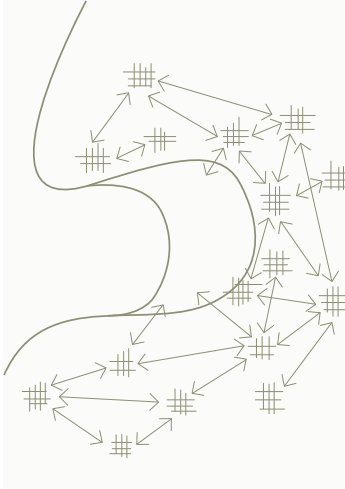
© 51N4E, CONNECT & TRANSFORM



Mono-centrality



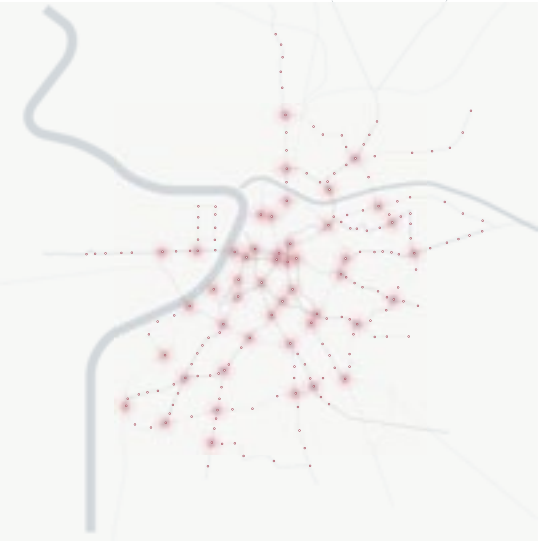
Poly-centrality



Micro-centrality

With their concept of micro-centrality, Maat, Posad spatial strategies, 3E and Shinshekai focused on interweaving housing, employment and amenities in a network of new centres.

© MAAT ONTWERPERS, POSAD SPATIAL STRATEGIES, 3E AND SHINSHEKAI



Buur and Futureproofed's team worked on mobility and sustainability, with a concentric tram line or 'rocade' to guide new developments. On the left: existing tram stops. On the right: proposed new tram stops.

© BUUR & FUTUREPROOFED

Lab XX international

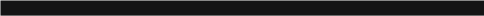
In 2015 the city also took the initiative for a European cooperation project about the Lab X theme within the URBACT III programme. Transforming 20th-century urban areas into attractive mixed zones and thus countering increasing urbanisation and fragmentation of the landscape is a European challenge. The city leads the *sub>urban. Reinventing the fringe* project, within which Antwerp, Solin, Düsseldorf, Casoria, Oslo, Baia Mare, Brno, Barcelona M.A. and Vienna share their knowledge about and improve their insight into development strategies for 20th-century urban areas through consultations, local visits and workshops. At the end of the trajectory, in 2018, each participant must come to a concrete local action plan.

Palmhout Urban Landscapes' team focused on green structures and on the coherence of open space in the 20th-century belt.

© PALMBOUT URBAN LANDSCAPES, DE NIJL ARCHITECTEN, BLAUWDRUK STEDENBOUW, FEDDES OLTJHOF LANDSCHAPSARCHITECTEN



With the master plan for Hoboken, the city and district want to reinforce the centre of the district **16**. The district is better known for its heavy industry than for its cosy former village-centre, its many green havens and its wonderful location by the River Scheldt. In 2012, Brut architects developed the master plan for the centre of Hoboken together with Landinzicht and Vectris in order to change this. The master plan will improve the integration of housing, work and recreation, reaffirm the coherence of the centre and optimise Hoboken’s location by the Scheldt as an asset. The typical character of Hoboken will be preserved in a new balance between industry, recreation, landscape and living.



Central spatial figure
The heart of Hoboken is reinforced by means of a new spatial figure that interlinks central district square Kioskplaats, the green church yard, the Kapelstraat shopping axis and the Gravenhof, Broydenborgh and Sorgvliedt parks by means of a ‘ribbon’ of high-quality and accessible public spaces. Parallel to this main figure, a ‘youth cluster’ brings coherence to the scattered pattern of schools in the area — including a lyceum and an academy. The schools get a new ‘façade’ towards Oudestraat, from where soft connections are created with a local youth organisation, a youth centre, a sport hall and a child day care centre.

Access to Hoboken
Hoboken is actually well-connected and has no major issues with through-traffic or parking pressure. Still, access to the centre is not ideal. There is no harmony between the different modes of transport. With ‘Access to Hoboken’ the master plan aims for comfort and safety for pedestrians and cyclists and attractive public spaces. A new network of paths makes the centre navigable for pedestrians and cyclists. Special attention goes to green short-cuts and public transport, but a possible new location for the ferry and even water taxis are considered as well.



Important locations within the central figure are linked by a ‘ribbon’ of high-quality and accessible public spaces.



The district service centre and the orangery in Sorgvliedtpark.
© WALTER SAENEN



Hoboken to the Scheldt

The master plan expands the network for pedestrians and cyclists all the way to the Scheldt banks. In the strip along the Scheldt, public space is used as a buffer between housing and industry. This can even come to represent and promote the image and green aspirations of the industrial sector in Hoboken. A large-scale ecological corridor connects the greater green areas: the Hoboken Polders, Fort 8 and Schoonselhof. A new location can turn the ferry into an attraction pole.

Execution projects

The three basic pillars of the master plan will provide direction and coherence to a multitude of different projects in the coming years. Apart from new residential developments such as Groen Zuid and Cockerilhof, numerous public spaces are being renewed, such as Kioskplaats and Marneflaan. The castle in Gravenhof park has begun its new life as a cultural centre. Broydenborgh park is being reaffirmed as the green link between the centre, Sorghvliedt park and Fort 8. A new management plan for Sorghvliedt park will focus on nature heritage and user-value. The coach houses are renovated and reused, the Belvédère will be repaired and visitors have already experienced the summery atmosphere of a pop-up bar in the orangery.



The renewal of central square Kioskplaats is one of the implementation projects of the master plan for the centre of Hoboken.




With 'Access to Hoboken', the master plan promotes comfort and safety for slow traffic and attractive public spaces.



The master plan extends the network for slow traffic all the way up to the Scheldt banks.



In the strip along the Scheldt, public space serves as a green, landscaped buffer between residential functions and industry.
© DRIES LUYTEN

The Eksterlaer  project area lies in the district of Deurne and is becoming a new mixed residential neighbourhood. The development is realised by Vooruitzicht, Matexi and Woonhaven, in close consultation with the city, via autonomous municipal company AG VESPA. The master plan and land parcelling plan were developed by POLO architects and Jan Velaert. Both will also deliver the building plans for the individual residences. Works commenced in April 2016.

POLO Architects and Jan Veelaert drafted the master plan and designed the building plans for the individual houses.
© POLO ARCHITECTS AND VEELAERT ARCHITECTEN



Varied array of housing

On the 15-hectare site a varied array of 560 to 580 dwellings will offer different-sized apartments in small and large buildings, patio houses, terraced houses and adaptable homes that can be used for multigenerational co-habitation. This will stimulate great variety among the owners-residents in terms of age, family composition, and financial means. In addition, 65 social housing units will be built. Space was reserved for fourteen commercial activities, such as a hairdresser, a magazine shop or a dentist. The city provided a temporary school at Kerkhofweg and some of the grounds within the project area were sold to a school at Herentalsebaan, enabling it to expand.

Low-traffic and green zone

The entire project is low-traffic and is designed as a home zone. There are multiple private underground parking garages for the owners-residents. Also planned is an approximately three-hectare public park with a large water feature. In order to make this transformation possible, the district of Deurne and the city of Antwerp have altered the destination of the nearby Drakenhof area, which was destined to become a residential area but will now become a park with space for allotment gardens and korfbal clubs.

The entire project area will be a low-traffic area designed as a home zone. There will also be an approximately three-hectare public park with a large water feature.
© POLO ARCHITECTS AND VEELAERT ARCHITECTEN



The 15-hectare site will offer a varied array of 560 to 580 homes, including apartments, patio houses, terraced houses and adaptable homes.

© POLO ARCHITECTS AND VEELAERT ARCHITECTEN



At the beginning of 2006 the activities at the former Scanfill industrial terrains in the district of Hoboken halted. The site ¹⁸ is situated right between the district centre on the one hand and Polderstad quarter and the Scheldt on the other. The approximately 10-hectare site forms the largest part of an urban block enclosed by two residential streets and a railway line. It was the private owner of the site who expressed the wish to develop the site. Because of its strategic location and in the public interest, the city took on a directing role. A cooperation agreement between the city and the owner stipulated great ambitions for a high-quality new residential quarter.



Vision for the surrounding areas
Crepain Binst Architecture drafted a master plan for the wider area, across property boundaries. The public domain was designed by Stramien. Groen Zuid (‘Green South’) is a mixed residential development with almost 500 homes, a park and a care cluster. A wide walking and cycling path runs right through the middle of the quarter and forms the ‘spine’ that connects all these elements. A new tunnel for cyclists and pedestrians underneath the tracks connects Groen Zuid with park Gravenhof and Polderstad.

Mix of housing types
The main accent lies on housing, with a varied array of almost 500 family homes and apartments for young and old. 25% will be social housing to buy or to rent, realised by social housing company Woonhaven. Small neighbourhood retailers and liberal professions such as doctors and dentists help ensure a lively quarter that is connected to the surrounding neighbourhoods.



By grouping the residential functions on the east side and providing height to the care cluster buildings, space is freed up for a four-hectare neighbourhood park.
© CREPAIN BINST ARCHITECTURE



Groen Zuid is a mixed residential development with almost 500 new homes, a park and a care cluster.
© CREPAIN BINST ARCHITECTURE

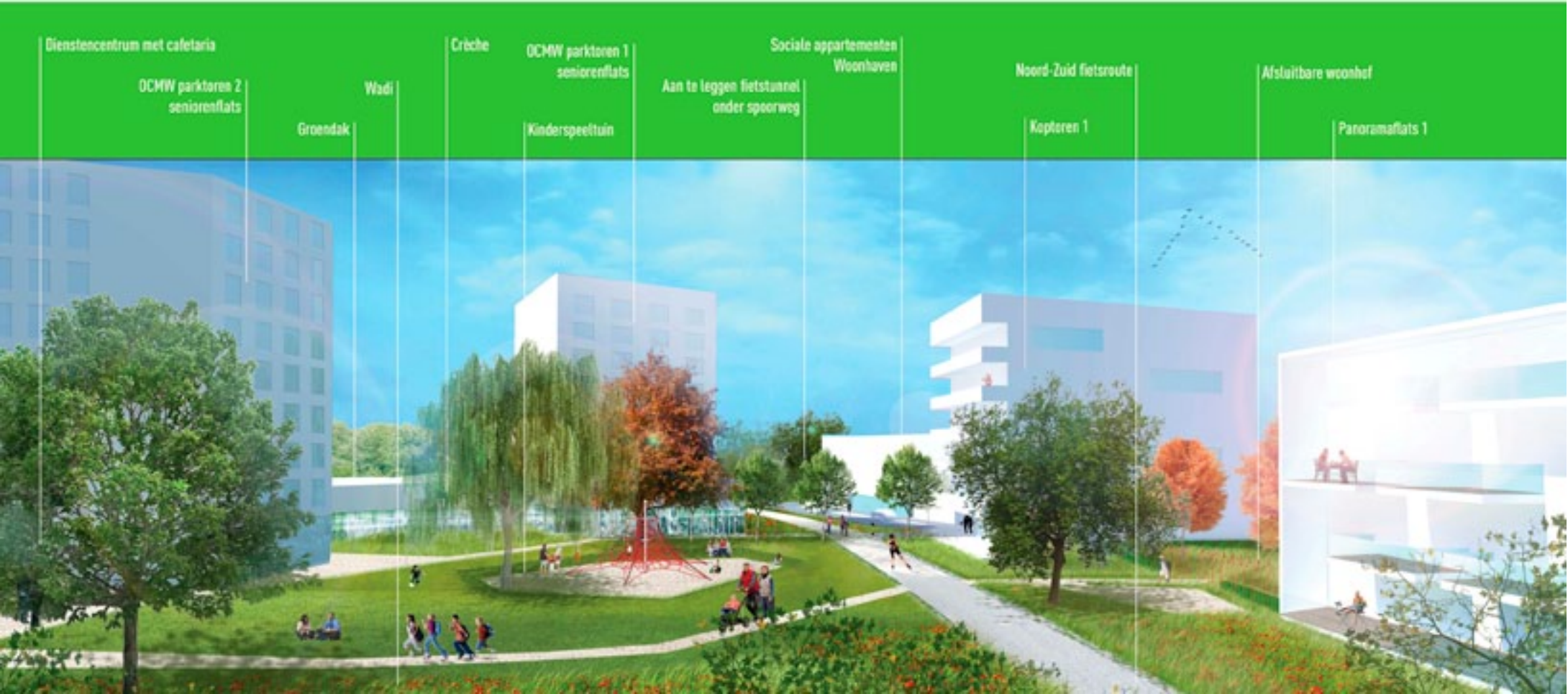
Public amenities

Three towers with a maximum of twelve floors will accommodate neighbourhood amenities: 118 service flats, a neighbourhood service centre and a nursery for 110 children. The service flats enable elderly residents in the surrounding neighbourhoods to remain in their own neighbourhood. The nursery is meant to attract new families and offer solutions for current shortages in the vicinity.

Neighbourhood park

By concentrating housing on the eastern side of the zone and because of the height of the care cluster buildings, the west side of the terrains can become a four-hectare neighbourhood park that also solves shortages in the surrounding neighbourhoods. The park design includes wadis, play equipment, a pétanque court and a grass plot. The existing (private) sport hall is preserved and is maximally embedded in the park by means of a spacious terrace.

Three towers with a maximum of twelve floors will accommodate neighbourhood amenities: 118 service flats, a community service centre and a nursery for 100 children.
© CREPAIN BINST ARCHITECTURE



When it comes to finding the residential areas of the future, Flanders, too, is looking at the 20th-century suburban areas. At the end of 2013 the minister of Housing and Cities, the Team of the Flemish Chief Architect, the Flemish Housing Agency, the Urban Policy Team and the Flemish Social Housing Society selected five thematic pilot projects to guide the desired developments in Flanders. For Antwerp this meant the selection of a site ¹⁹ in the district of Wilrijk and the theme of ‘the oversized urban block’. The site is being developed by AG VESPA, the city’s autonomous municipal company for property management and city projects.

Block within a block

A design team led by Office Kersten Geers David Van Severen drafted a master plan for approximately 120 homes. The site is cut in two parts by Dokter Veeckmanslaan, a very busy road. There is a lot of residual space and inaccessible greenery. In order to prevent the two sites turning away from each other, the designers propose to construct a block of new buildings within the existing block. The new facades are on the inside of the new block and are looking out on a new park. The backs of the new buildings and the new private gardens look out onto an informal green space, which can be appropriated by local residents as a shared public space. The park forms a soft buffer for traffic noise, while the inner block and informal green space form buffers for the outside block.

Renewal of the city quarter

The city is looking for ways to reduce traffic on Dokter Veeckmanslaan. Traffic safety in the wider surroundings can be improved by providing a comfortable and safe crossing for pedestrians and cyclists and by discouraging cut-through traffic. Thanks to the neighbourhood park and the integration of other amenities, the new block of buildings is connected to its surroundings. A nearby school, for example, is looking to expand. Housing for the elderly can stimulate relocations within the area, freeing-up older residences for renovation and habitation by new families. The project allows for further typological research into vertically stacked family homes and offers ample critical mass for large-scale applications of sustainable techniques such as collective heat production.



A building block is placed within the existing building block to avoid the two parts of the site turning away from the busy lane and thus from each other.

© OFFICE KERSTEN GEERS DAVID VAN SEVEREN



The Zilverkwartier ('silver quarter')  project entails the development of a number of factory terrains on the border between the Antwerp district of Berchem and the city of Mortsel. The boundary runs right through one of the two building blocks on the project site. The terrains are occupied mainly by industrial company AGFA-Gevaert, a former flower company, a closed-down water purifying station, an energy plant and terrains belonging to the Antwerp water company. The local governments want to join forces with the owners to combine the existing and new economic activities and create a mixed working and living environment. The cities organised a design contest and selected Palmbout Urban Architects and De Smet Vermeulen architects to draft a master plan across municipal boundaries.

Quirky character

The buildings at Zilverkwartier were added rather spontaneously throughout the years and were built according to the possibilities and fashions of their time. Here, one finds an amalgam of styles and architectures, installations and infrastructures. Roads and above-ground pipes connect all the elements to each other. The terrain has grown outward from the inside, which has caused the site to become partially enclosed by office buildings, houses and walls. The design is now steering developments in the opposite direction, allowing the city to infiltrate the factory site. The designers want to preserve the central part of the terrains as a cultural-historical framework for all these new developments.

Public space

On top of the structure of the built space, a north-south-axis is grafted as a spine and access axis. Crosswise, a wider, green cut-through path interacts with the new public spaces and connects to an existing school. Public space creates unity and identity throughout the entire project area. The site will be a low-traffic area and parking is integrated in the new buildings as much as possible with underground facilities. Other basic principles for the design of the terrains are water buffering, minimising paved areas and a varied use of space.

Programme

A diverse programme for the existing and new buildings can help assure that densification and renewal mutually reinforce each other. This also involves optimising the differing scales and heights of the factory buildings, labs, technical installations and surrounding buildings. Functions such as nurseries and school playgrounds support the combination of living and working and create connections to existing amenities in the neighbourhood — the local residential care centre, for example. The old energy plant will become a larger attraction pole and can possibly accommodate a hospitality business or a theatre.



The Zilverkwartier project comprises the redevelopment of factory grounds located on the border between the Antwerp district of Berchem and the city of Mortsel.

© CVBA PALMBOUT URBAN LANDSCAPES, FEDDES/OLTHOF LANDSCHAPSARCHITECTEN, DE SMET VERMEULEN ARCHITECTEN, TIEM

Possible future impression of the built space. With a diverse programme for the existing and new buildings, densification and high-quality urban renewal projects can reinforce each other.

© CVBA PALMBOUT URBAN LANDSCAPES, FEDDES/OLTHOF LANDSCHAPSARCHITECTEN, DE SMET VERMEULEN ARCHITECTEN, TIEM





Possible future impression of the built space.
Public space promotes unity and identity
throughout the project area.

© CVBA PALMBOUT URBAN LANDSCAPES, FEDDES/
OLTHOF LANDSCHAPSARCHITECTEN, DE SMET
VERMEULEN ARCHITECTEN, TIEM

The city as a living laboratory

In recent years, Antwerp has become a real incubator for new and innovative initiatives and enterprises. The city keeps looking actively for the added value of partnerships and participation. Antwerp wants to offer a springboard for entrepreneurs and enterprising citizens to launch an idea, a project or a business. The city creates room for citizens' and entrepreneurs' initiatives in its own projects as well. With Lab XX_Work, the city, designers, experts from the building and finances sectors and civil society have initiated a trajectory to reweave production and employment into the urban fabric of the 20th century again.



Complementary to the research-by-design assignment of Lab XX, Lab XX_Work researched strategies and instruments to bring production to the city again. The city organised a competition and selected three teams to further refine their ideas: BUUR/WES/Connect & Transform, Maat/Idea/Ldr and Plusoffice/ArcK. Flanders financed one third of the research and co-directed the trajectory. Progress was discussed monthly in workshops, where the debate was opened up to include academics, other governments (e.g. neighbouring municipalities) and similar projects.

Maat's 'dynamic fringe' is created by adding functions for the residents and companies in the buffers of industrial sites.
© MAAT/IDEA/LDR

The company environment in terms of dynamics
Team BUUR / WES / Connect & Transform sees the wider environment of the company as a dynamic interplay between actors and factors. The team distinguishes four 'patterns' with different process models for the stakeholders. For areas with one dominant mono-functional programme, the question is how smaller activities can be attracted. In other areas the mission is the reinvention of old industrial fabric, and the question is how incubator-initiatives can help. The third type of pattern aims at jointly optimising the potential of large-scale institutions in coherent zones. Finally, for 'hybrid', socially deprived areas spatial and supportive frameworks are sought to help starters. The results of the process vary according to the chosen level of ambition: from forms of joint purchases and sharing, to formal cooperation structures and shared business models.

Strategies countering local suppression
Team Maat / Idea / Ldr wants to prevent companies from moving out of the city. Under the motto 'industry as city-maker', spaces are developed where productive and residential functions reinforce each other, for example by sharing space with the neighbourhood and introducing low-regulation zones for companies. The 'dynamic fringe' promotes exchanges between companies and provides soft transitions towards the neighbourhood through new programmes at underused company sites and in the fringes of the industrial zone. The productive neighbourhood forges sustainable relationships with local companies within co-creative networks and chains. Finally, there is the strategy of the yo-yo-broker, who accommodates instances of growth and shrinkage by matching suitable company sites to the right businesses, which also prevents the suppression of abandoned company sites.

Plusoffice/ArcK sees 'clustering' as a stepping stone towards a pragmatic and efficient form of 'coworking 2.0' for the smallest entrepreneurs in the residential fabric.
© PLUSOFFICE/ARCK



Clustering and coworking 2.0.

Plusoffice / ArcK sees the clustering of the smallest enterprises as a stepping stone towards 'co-working 2.0'. Specific types of clustering offer pragmatic and efficient forms of co-working for a wide array of enterprises. Sector-specific clustering, for instance, is based on a shared market and clientele in a local network. Activity-specific clustering enables pragmatic cooperation with regard to a shared activity (e.g. stocking, repairing...). Domain-specific clustering builds bridges between

education, research and businesses in one common realm of society such as art, technology or science. While chain-specific clustering aims at promoting a specific product throughout the different production phases, life-cycle-specific clustering is based on the phases in the 'life' of a product: from production and sale to repair and recycling. Finally, infrastructure-specific clustering allows small companies to grow without having to relocate through sharing infrastructures or materials with local companies and residents.

In 'hybrid' zones in socially deprived neighbourhoods, stimulating start-up initiatives is essential, for instance by using pop-up stores.

© BUUR/ WES/CONNECT & TRANSFORM



Lageweg is an approximately 30-hectare area in the southern periphery of the city in the district of Hoboken. It is a mixed area with housing, productivity, partially abandoned industrial infrastructure and soiled terrains. The city wants to transform the site into a high-quality mixed living and working environment and has initiated an explorative trajectory towards co-creative cooperation with the individual owners. Other important partners are Kenniscentrum Vlaamse Steden ('Flemish urban knowledge centre') and OVAM (Flemish public waste company). The project's goal is twofold. On the one hand it must result in concrete realisations for Lageweg and have positive effects on the surrounding neighbourhoods. On the other hand, Lageweg is a pilot project and must lead to a new toolbox for cross-parcel-boundary, co-creative projects without a land position for the government and with a focus on mixing employment and production into the urban fabric.

An interactive model enabled the visualisation of design ideas.



Lageweg as a pilot project

Lageweg was selected as a pilot project to put insights from the Lab XX research into practice through 'learning by doing' and by constant interaction between project and research. The potential and the opportunities for the stakeholders were explored in 'mind opening dialogues' focusing on four groups of spatial ambitions: lively urban fabric (amenities and circular economy), new living experience (diverse housing types), and smart living environment (intelligent and sustainable energy consumption approach). An interactive scale model helped visualise the design exercises. A 'site safari' enabled a direct experience of the site and its possibilities within three timeframes: one, five and twenty years. At least as important was the clarification of the project's financial-economic potential. The actors jointly appointed an agency to draft a financial calculation model in order to make the return for each partner tangible.

Coalition — statement of commitment — financial-spatial model

The pilot project forges a coalition between the owners within a broad 'pentagon' of societal actors: government, citizens, companies, knowledge centres and financiers. The interests and priorities involved were mapped out in conversation rounds, in which wins-wins were key. By working with a financial model from early on in the process, progress is insured, whereas financial calculations after the drafting of the master plan often lead to delays. The model brought transparency in terms of costs and benefits for each owner. The owners also financed the creation of the financial model themselves, in proportion to their share of property. This approach helps keep capital in the area and allows societal benefits to overflow into the surrounding neighbourhoods.

Vision forming phase and master plan

At the end of 2015 the exploration phase was concluded. 2016 saw the start of the vision forming phase. Co-creative work is done to elaborate a spatial vision to help anchor current companies in the neighbourhood and to attract new businesses. Apart from drafting the project definition, a cooperation agreement will be signed to create a land bank and possibly file a joint request for a brownfield covenant and extra financial support from Flanders. Throughout this phase, the city wants to speed up the appropriation of the project site and promote involvement and support among local residents by stimulating local activities and using abandoned terrains and buildings for local initiatives.

Lageweg is a mixed area with houses, productivity, partially abandoned industry and polluted soil.





A micro-credit hub for entrepreneurs as a possible new function for an empty hangar.
© 51N4E



A neighbourhood bar as a possible function for an empty factory building.
© 51N4E



A skate hangar as a possible function for an empty building.
© 51N4E



Since 2013, Antwerp has its own urban laboratory for thinkers and doers. Stadslab 2050 ('City Lab 2015') brings creative actors from within and from outside of the city together to initiate joint experiments with a view to the future of the city. Government, companies and organisations venture out on joint trajectories to turn ideas into concrete actions and projects. From innovative financial models and technical innovations to complex combinations of technology and behaviour experiments. Initiators can go about it on their own but there is also a pool of guides who are assigned to projects selectively. The city also provides financial support to a number of initiatives through a project fund. By simultaneously working on several trajectories with different partners, Stadslab 2050 ensures strong dynamics of knowledge sharing and networking. Because of Stadslab 2050's success the city is experimenting with the expansion of the concept to other services and organisations.

Energy profits for shopkeepers

'Energy for the Heart of Antwerp' was one of the first Stadslab 2050 trajectories. The trajectory won the 2015 Belfius Smart City Award and kept going. The project 'Client in, loss out', for instance brings together shopkeepers, retailers, an energy distributor, a technical company a market research agency and an association of undertakings to take joint action against loss of heat through open shop doors. Other projects are the 'Pop-up store for energy renovation' (a temporary location for shopkeepers who renovate their shop), the Smart Box for smart cooling and heating, the low-impact supermarket, energy performance contracting (for schools and in the Diamond Quarter) and sustainable shopping street *Quartier National*.

Circular economy

The Fashion Flows trajectory focused on the circular economy in the fashion sector. The city, Flanders Fashion Institute (FFI) and Plan C (circular economy centre) closely scrutinised the fashion chain from raw products to waste materials. Six panels with experts from the clothing and textile industry, fashion designers and retailers exchanged ideas about closing the fashion cycle and sustainable retailing and consuming. Among the many ideas were a clothing library, an adaptable high heel and innovative textile collection methods.

Access to energy renovation

One of the goals of the 'Living and rebuilding sustainably together' trajectory is to bring the advantages of sustainable energy renovations to disadvantaged groups. By bringing owners together in 'neighbours' clusters', the city and its partners want to make cost-efficient and sustainable renovations achievable here as well, and break through the cycle of higher energy bills or higher rent prices. The city, several architects' bureau, an energy agency, *Samenlevingsopbouw Antwerpen stad* (Flemish 'society-building' services for the city of Antwerp) and KBC bank developed a pilot project together for seven homes in Dam Quarter.

Campaign image for Fashion Flows. The Stadslab partners initiate experiments for a circular fashion chain.



Antwerp-ITCO and UNIZO Antwerpen organised a contest between shopping streets for the title of 'sustainable shopping street'.



In the district of Borgerhout a brick railway embankment was built in 1899 on the edge between the Singel road and the inner city. Against the original structure with arched underpasses (so-called 'centers' ²²), an earthen wall was built at the beginning of the 20th century in order to construct a new railway track. The arches themselves were bricked up on the side of Engelselei, some retained an entrance to be used as storage spaces, others were completely closed-up or even filled in order to enable the construction the underground tram line. The city works together with its autonomous company AG VESPA on a city project for the renovation and exploitation of the centers. The city cooperates closely with Infrabel, the owner of the railway infrastructure, and receives support from the Flemish Urban Renewal Fund. NU Architectuuratelier won the design contest for the renovation project. In the coming five years, a few dozens of centers will be transformed.

Integrated project

The centers and their surroundings are improved together. On the side of the row of houses, AG VESPA initiated two thorough renovation projects: Engelselei-Hogeweg (completed) and Engelselei-Oudstrijdersstraat. The AROP company site was sold for private development. The district of Borgerhout is reconstructing the Engelselei axis in 2017, which will provide pedestrians' and cyclists' connections between several sport and play areas in Borgerhout. The railway tunnels also provide a connection with the renewed cycle tracks of the Groene Singel ('green Singel'). The centers themselves will be renovated and will accommodate new functions such as production, creative ateliers, hospitality businesses and local entrepreneurship. This is made possible by a new 'spatial execution plan' (RUP) that changes the ground floor strip's destination from a zone for 'public use and community amenities' to a mixed development.

Phasing

In a first phase, there are 'test centers' which are temporarily furnished by local initiators with simple means and using recuperated materials. AG VESPA supports this by providing the utility infrastructures. Studio Start vzw uses its expertise as a manager. In a second phase AG VESPA renovates approximately twenty centers near Engelselei-Hogeweg. Three types of centers are planned: centers with a protruding structure at the front, made out of steel and glass and possibly connecting different centers, centers with a protruding part of steel only, without glass, and centers without protruding structures. Thanks to these experiments the city can test different degrees of completion. By renovating twenty centers in one go, AG VESPA is hoping for a dynamic start of the project, with new activities that reinforce each other and that attract visitors to the street.



Some centers will have a protruding structure in steel and glass that allows connections to other centres.

© NU ARCHITECTUURATELIER



After their renovation, the centers are converted in order to accommodate new functions such as production, ateliers, hospitality businesses and local businesses.

© NU ARCHITECTUURATELIER



The city is working together with the owner of the railway infrastructure on a city project for the renovation and exploitation of the centers.

© NU ARCHITECTUURATELIER



The city warehouse at Ankerrui in the district of Antwerp was transformed into youth culture zone Het Bos ²³ by BEL Architects. The industrial character of the building is an asset and had to be preserved as much as possible, while the youth of Antwerp had to be given a space to experiment, create and exchange ideas.

Because of its location in densely built residential fabric, ample acoustic measures were provided in the design of youth culture zone Het Bos.



Concept

BEL Architects started from an integrally ‘empty’ infrastructure in order to achieve a rough but inspiring environment to create and experience culture. This enabled the accommodation of a multitude of ideas and projects and a dynamic and lively project with lots of potential for growth. The spaces had to be made functionally and structurally sound (electricity, heating, sanitary installations, flooring, lighting, safety...). The interior design of the rooms is taken care of by local youth organisation Scheld’Apen, according to their different functions.

Programme

Music, theatre and graphic art form the main part of the programme. Each of these aspects was given a specific room with its own character: a concert hall (200 people), a theatre room (80 people) and a workshop/exposition space. The building was transformed and partially demolished in order to create the required spaces. Because the youth culture zone is located in densely built area, ample acoustic measures were taken. The concert hall, for example, is a box-in-the-box construction.

The industrial character of the building is an asset and had to be preserved as much as possible.





BEL Architects started from an integrally 'empty' infrastructure to achieve a rough but inspiring environment where culture can be created and experienced.

Building the city together

The city wants to make sure that every building and renovation project in Antwerp contributes to the vision for the city of tomorrow. For this, the city counts on strong but flexible planning frameworks, thorough partnerships and diverse forms of participation. For instance, the city is expanding its array of amenities and high-quality housing and offers its citizens advice, services and guidance in their building and renovation projects. Indeed, the best urban renewal projects are those initiated by the citizens and entrepreneurs themselves. Another example is the city's exploration of new ways to give Antwerp citizens a decisive voice in the historic renewal project for Groenplaats.



MASTER PLAN FOR DISTRICT CULTURAL CENTRES

With POLO Architects’ Master Plan for District Cultural Centres, the city improves its array of cultural activities for residents in all its districts. Until recently, Hoboken, Berendrecht-Zandvliet-Lillo and Ekeren lacked cultural centres. The master plan brought new cultural centres to these three districts, in new or thoroughly renovated buildings. This required specific attention for the particular context, modern (theatre) techniques and multifunctional use. By the beginning of 2016, for the first time each district had its own cultural centre.

The castle in Gravenhof park now accommodates several new functions, including new offices for city employees, meeting rooms, creative workshops, a multimedia room, a cooking classroom and a café.

© DRIES LUYTEN



252 CC 24

In 2014, 252 CC officially opened its doors after the complete renovation of Hof de Bist, a small neo-classical castle in the district of Ekeren. The building was renovated with attention for sustainability, accessibility and the technical requirements for a modern cultural centre. The historic value of the interior was preserved and restored as much as possible.

CC Gravenhof 25

The district of Hoboken was looking for a new function for the castle and coach house in Gravenhof park for some time. The buildings were thoroughly renovated and a new building was constructed. The new building complex accommodates several different functions, including offices for the culture and youth services, meeting rooms, arts and crafts workshops, a multimedia room, a cooking classroom and a café. At the end of 2015 Gravenhof cultural centre was festively opened.

In 2014 252 CC opened its doors in Ekeren after the complete renovation of neoclassical castle Hof de Bist.



The renovation transformed Hof de Bist into a sustainable and accessible cultural centre that meets all the technical requirements.



VC De Schelde 26

At the beginning of 2016, leisure centre VC De Schelde opened its doors in Zandvliet. The design combined newly built additions with the renovation of the former village school and the headmaster’s residence. The new building complex has a modern equipped theatre hall with 135 seats and a foyer that forms the heart of the cultural centre. There are also an arts and crafts room, a cooking classroom, meeting rooms and an office for the district’s culture, youth, senior citizens’ and sport services. This layout enables multifunctional use by different organisations.



VC De Schelde is open for all ages and organisations and accommodates a modern theatre, an arts and crafts room, a cooking class, meeting rooms and offices for city employees.
© FREDERIK BEYENS



The design for VC De Schelde combines new additions with the renovation of the former village school and headmasters’ residence.
© FREDERIK BEYENS



The renewal of Groenplaats ²⁷ is a unique project for the city. The square is located right in the middle of the city centre, near the Scheldt Quays, the Cathedral, Meir and Grote Markt. Together with the surrounding heritage, this square symbolises the city itself for many Antwerp citizens. In addition, the renewal offers opportunities for the introduction of greenery in the dense city centre and to achieve positive effects in terms of water management and the urban heat island effect. After a participation trajectory that resulted in more than 1,800 completed questionnaires and 195 video messages, the city assigned the team of Chris Poulissen through an Open Oproep procedure to design the new Groenplaats.

Unique design process

Chris Poulissen and NP-Bridging are working together with Atelier Veldwerk, Arcadis, Moritz&Simon Architects and Ney+Partners. Their concept showed a strong feeling of responsibility. The design of public space always happens within a certain time frame and context, but determines the use of the space for many people and often many generations. The designers want to be very mindful of this in their design. For this unique assignment the team had an equally remarkable concept. The team namely assumes that not the design but the process of the joint renewal of Groenplaats, should take centre stage together with all actors. The underlying principles of the concept implement and feed this design process.

Perspectives and atmospheres

Chris Poulissen's concept included a façade-to-façade lay-out to improve the legibility of Groenplaats as one coherent space. The concept proposes terraces for hospitality businesses and an open space for events in the north, a forest-like Green Spot in the centre and a multimodal hub with a tram stop in the south. The tree mass of the Green Spot offers an intimate atmosphere that contrasts with the open space and open views on icons such as the Cathedral, Boerentoren and the Grand Bazaar's façade. The Rubens statue takes centre stage. The designers propose a water feature here.



Groenplaats today, with the Rubens statue and the Cathedral in the background.

© SIGRID SPINNOX



Possible overview of a renewed Groenplaats, concept from the design contest.

© CHRIS POULISSEN, NP-BRIDGING, ATELIER VELDWERK, ARCADIS, MORITZ & SIMON ARCHITECTS, NEY+PARTNERS



Possible future impression. The design contest's winning concept proposes a forest-like Green Spot in the south of the square.

© CHRIS POULISSEN,
NP- BRIDGING, ATELIER
VELDWERK, ARCADIS,
MORITZ & SIMON
ARCHITECTS, NEY+PARTNERS



Possible future impression. In the north, the design contest concept proposes terraces for hospitality businesses and an open space for events.

© CHRIS POULISSEN, NP- BRIDGING, ATELIER VELDWERK, ARCADIS, MORITZ&SIMON ARCHITECTS, NEY+PARTNERS



The city and AG VESPA are expanding the city’s array of alternative housing forms in order to address the fast population growth, the rapid growth of the eldest population groups, the changing family configurations and the need for affordable and high-quality housing. The city experiments with projects to stimulate enthusiasm for innovative housing types among Antwerp citizens and to convince the private sector of the many possibilities. The focus lies on the 20th-century belt, affordability, quality and the collective ‘in-between’-scale between the individual home and large residential projects such as Groen Kwartier and Regatta.

A complete renovation will transform the historically valuable Runcvoorthof site in the district of Merksem into a high-quality residential project.

© AG VESPA, ILSE PELEMAN



Collective development

The historically valuable site of Runcvoorthof ²⁸ in the district of Merksem will be completely renovated and transformed into a diverse and high-quality residential project. The design by Collectief Noord integrates a multitude of housing types that interact with the surrounding public park. Some of the homes are destined for the rental market. Another part of the site will be sold without fixtures and fittings to families that want to realise a joint residential project. This adds a positive social dimension to the collective project and to the neighbourhood.

Collective living

AG VESPA bought an abandoned and neglected site in the heart of the district of Borgerhout and realised the Passiflora project, ²⁹ designed by B-Architecten. An old warehouse was renovated and transformed into ten lofts without fixtures and fittings. Along the edge of the street seven new houses were built, six of which complying with the passive house norm. In this collective housing project, all housing units share one communal inner area, a beautiful polyvalent room with a kitchenette and a garden.

Collectief Noord’s design integrates a multitude of housing types that interact with the surrounding public park.

© COLLECTIEF NOORD



Multigenerational living

At Sint-Bernardsesteenweg in the district of Hoboken, Burobill designed a multigenerational house; ³⁰ a family residence with an integrated smaller apartment that is suitable for persons with special needs. The apartment on the ground floor is accessible for wheel chairs and has adapted sanitary installations. The first-floor family apartment has direct access to the garden via a terrace and stairway. The entrance to both units is communal so that families can live in close proximity but still separate.

Optimal prefabrication

AG VESPA is investigating how high-quality houses can be built collectively as well as technically cheaper and faster. Maximal prefabrication must lead to a shorter building time but also to improved budget and risk management and a lower guidance cost. In order to facilitate the concrete implementation of the project, a site was chosen with few restrictions in terms of neighbouring properties, allowing further experiments.

Adaptable house

This concept plays into changing residential needs and financial possibilities of starters: AG VESPA assigned RADAR architects to design a very compact and simple starters home that would be easy to expand into a real family home later by the residents. The expansion options are designed and approved by planning permit services from the start. The design is aimed at a phased and orderly implementation of the expansion works, during which the home remains inhabitable.

Burobill designed a multigenerational house with an integrated smaller apartment that is suitable for persons with special needs.

© BUROBILL



B-Architecten created the design for the Passiflora residential project, which entails the renovation and conversion of an old warehouse into ten lofts (sold without fixtures and fittings) and a collective polyvalent space.

© AG VESPA, BART GOSSELIN

Antwerp households tend to use less energy than the Flemish average. But we can always do better. For example by making sure that used energy is not lost. Insulation still offers a lot of potential gain in this respect. An important instrument that was created by the city to promote both aspects among its residents is EcoHuis Antwerpen ³¹: an advice and demonstration centre in the district of Borgerhout



EcoHuis Antwerpen is a centre for advice and demonstrations about sustainable urban life.
© JAN CRAB

Support centre for residents

EcoHuis provides advice and support in the fields of building and renovating, energy and water consumption, greenery in and around the home and a sustainable lifestyle. EcoHuis is also the main centre for information about subsidies for energy-efficient measures or to obtain an energy loan of up to 10,000 euro at a 2% or 0% interest rate. Also, residents can obtain information at EcoHuis about other governments’ regulations and subsidies for climate-proof building and renovation works.

For social target groups, there is the ‘energy coupon’, which can be used for a free audit at home, including the installation of aids such as energy-saving light bulbs, radiator foil, a water-efficient shower head or pipe insulation. In 2014, these actions together resulted in a 13,077 ton CO₂ emission reduction.

Example for other cities

With EcoHuis and the housing service offices as satellites, the city has developed a strong network for citizens who are looking for advice about sustainable building and renovation projects. The project received Flemish and European support via Interreg IVB. In Lille, Ludwigsburg, London and Delft, initiatives to create centres for energy-efficient and sustainable building were advised by EcoHuis Antwerp.

Thanks to its environmentally friendly renovation and its conversion into the city’s public service centre for environmental and energy issues, EcoHuis is an inspirational project in the context of Livinggreen.eu (www.livinggreen.eu). This project involved nine cities which, with the support of Europe, worked together on the sustainable renovation of heritage buildings, new technologies, informing citizens about sustainable building and launching a tool kit for sustainable renovations.



Thanks to its environmentally friendly renovation and its new function as a centre for information and advice about energy efficiency and the environment, EcoHuis is an inspirational project for other cities.

In urban environments, citizens' roofs offer great opportunities in terms of the implementation of insulation, solar energy systems, green roofs and roof gardens. The city maps out the potential of Antwerp roofs with *zoominopuwdak* ('zoom-in-on-your-roof'). Earlier initiatives involved a thermographic map that visualised heat loss and insulation opportunities for the roofs in Antwerp. This map has now been refined and enriched with a solar potential map and a green roof map.



Solar potential and green roof maps
The first themographic map campaign (2009–2010) attracted more than 120,000 unique visitors to the zoominopuwdak.antwerpen.be website. 60% of the Antwerp residents knew the website and 25% indicated their willingness to insulate their roofs. The city wants the renewed website to convince even more people to thoroughly insulate their roofs and to even go further. A solar potential map visualises the potential for hot water provision and electricity production based on the orientation and size of the roofs. In addition, a new green roof map roughly calculates the cost of the implementation of a green roof, by linking the size and surface of flat roofs to other data such as available subsidies.

Advice and services
In order to entice Antwerp citizens to make sustainable investments, the website offers calculation tools for the placement of roof insulation, the implementation of green roofs and the acquisition of solar-energy-driven installations. This way insight is gained into the cost, the payback period, savings and financing opportunities. Via the website citizens can also ask for (an appointment for) building and technical advice, find contractors and gain advice on quotes. EcoHuis and the housing service offices assist in interpreting the maps, calculators and results and offer ecologic, building, technical and financing advice on subsidies and loans.



The first thermo-graphic map campaign (2009–2010) attracted more than 120,000 unique visitors to the zoominopuwdak.antwerpen.be website.



EcoHuis and the housing service centres offer help with the interpretation of the maps, the calculators and the results.



In urban environments, citizens' roofs offer great opportunities in terms of the implementation of insulation, solar energy systems, green roofs and roof gardens.

© JONATHAN RAMAEL

NIEUW ZUID partners and participation

Private developer Triple Living owns two thirds of the Nieuw Zuid ('new south') project area. The other owners are the J. Van Breda bank, the Flemish department for roads and traffic, the federal police and Antwerp social housing company Woonhaven. These actors have committed to a joint integrated planning process and participation trajectory for Nieuw Zuid. Even without a strong position as a land owner the city has taken up a strong directing role in light of the status of the project as a 'private project of public interest'.

Nieuw Zuid illustrates the theme of 'working together on the city of tomorrow' in its approach of 'sustainability through participation'. Sustainability was anchored into the master plan at the level of the spatial structure as well as in

the architecture and technology of the individual houses. However, the plan goes one step further in that it assumes that true sustainability will only be achieved by and thanks to the future residents of Nieuw Zuid. The participative sustainability projects for Nieuw Zuid are unique in that they combine awareness with community building.

The participation trajectory is based on three pillars: informing, listening and involving. Interviews and workshops with different city services, the designers and the project developer have produced concrete results. A communication plan was drafted (informing) and a monitoring and feedback

method was devised for the integration of social and technical user aspects and the organisation of temporary functions and community-building activities (involving). Finally, recommendations were made to facilitate community building and stimulate social cohesion throughout the design process (listening and involving).

In the coming years, these plans and recommendations will be further put into practice and the first residents and employees will be invited and stimulated to participate. The goal is sustainable behaviour, supported and reflected by an activating local community. Mid 2016 the city started a trajectory for Nieuw Zuid within Stadslab2050. The trajectory creates space for the entrepreneurs of the future to experiment, in the hope that they will find their place at Nieuw Zuid. The city wants the reserved space for commercial functions, offices and hospitality businesses at Nieuw Zuid to be snatched up for sustainable and innovative functions.



With the Stadslab 2050 trajectory for Nieuw Zuid, the city wants to attract innovative and sustainable entrepreneurs to use the reserved space for commercial functions, offices and hospitality businesses at Nieuw Zuid.

© TRIPLE LIVING



The streams in the city of tomorrow

PROJECTS IN THIS PART

GREEN AND WATER AS A BLUEPRINT

- 32 Sint-Andries-Zuid *p.174*
- 33 Droogdokken *p.174*
- 34 Sint-Anneke Plage *p.180*
- 35 Hoekakker *p.184*
- 36 Rozemaai *p.188*
- 37 Park Groot Schijn *p.192*
- 38 Regatta *p.196*
- 39 Gedempte Zuiderdokken *p.200*

STRONG NETWORKS FOR AN ACCESSIBLE CITY

- 40 Operaplein *p.216*
- 41 Franklin Rooseveltplaats *p.216*
- 42 Mexicobruggen *p.216*
- 43 Viaduct-Dam *p.216*
- 44 Parkbrug *p.220*
- 45 Havana *p.220*
- 46 IJzerlaan *p.222*
- 47 Cycle street, Grotehondstraat *p.230*

THE CIRCULAR CITY

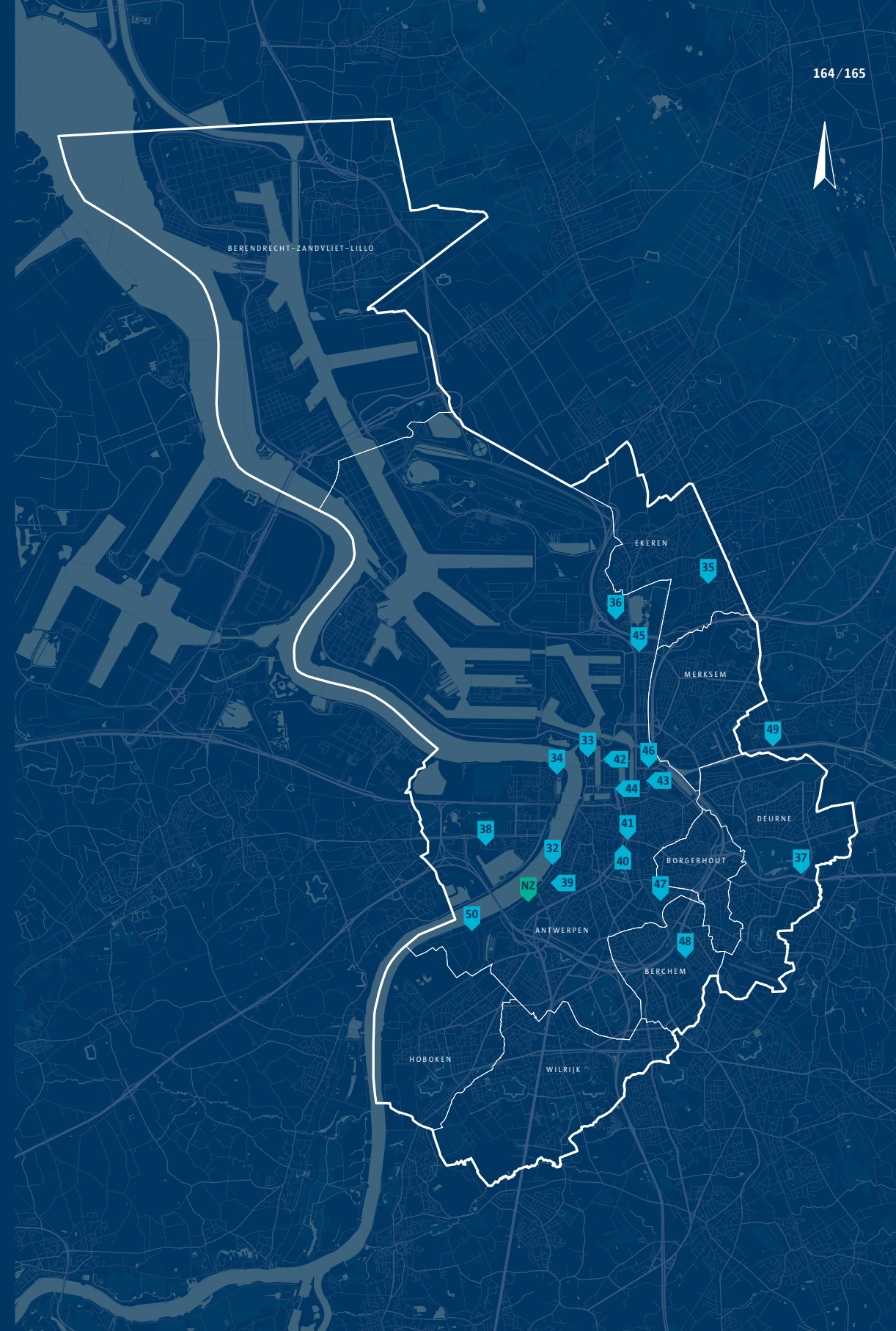
- 48 Berchem waste collection service centre *p.244*
- 49 Albertkanaal industrial park *p.248*
- 50 Blue Gate Antwerp *p.252*

- NZ Nieuw Zuid *p.256*

The River Scheldt has always taken centre stage in the development of the city of Antwerp, and it keeps this pivotal role in the city of tomorrow. Moreover, the city of tomorrow focuses on all kinds of streams: the green-blue network of creeks, rivers and valleys, the streams of energy, waste and traffic, the urban economy, the urban climate and water management. All these streams have to be optimised and 'closed' in a healthy city where economy and ecology reinforce each other.

For example, in Antwerp, large projects are mostly green projects, and economic projects can bring innovation as well as new green spaces. Likewise, water and green can offer economic opportunities in the tourism or hospitality sectors. Mobility projects often include green elements, too. The city is even planning to construct a new canal in the context of a large mobility project.

Antwerp also sees all these water and green elements as assets in the quest for a healthy climate and good water management. The city mobilises residents and companies to reduce CO₂-emissions together and increase efficient and green energy consumption. The city supports the sharing of amenities, space and energy and creates environments where companies stimulate each other and help each other grow.



Green and water as a blueprint

The city gives space to water and green elements so that more citizens and visitors can enjoy open spaces and nature. In the city, these are often uniquely combined with terraces, events, sport facilities and play areas. Water and greenery are also important aspects of climate adaptation: they have a cooling effect and allow rainwater to slowly infiltrate the soil instead of ending up in the overburdened sewer system. The urban heat island effect is already causing differences in temperature of up to 8° between city and periphery. Moreover, growing precipitation intensities and the rising sea level increase the risk of floods. The city is therefore always looking for ways in which projects can contribute to the green-blue network and to a climate-resilient city. Antwerp has drafted a Green Plan that will be translated into local green plans in the coming years, and the city is also working on a Water Plan.



In the context of the development of the Green Plan, all the city’s green areas were mapped out. It was revealed that 45% of the Antwerp territory consists of either greenery or water. This is comparable to well-known European green cities such as Stockholm and Hamburg. With its Green Plan, the city wants to ensure an optimal role and function for all these spaces in the green-blue network of the city. Green spaces must continue to offer a high-quality living environment for a growing population. At the same time, this constitutes an important adaptation measure in light of the climate challenges. After the approval of the definitive Green Plan for Antwerp, the districts and port area will receive their own green plans.

The polders in Hoboken form a varied landscape with lots of greenery and water.
© DRIES LUYTEN



Vision

The supra local Green Plan is based on a vision that in turn has resulted from extensive analyses of the city’s green spaces from an ecological, environmental, historic and users’ perspective. The main principle is ensuring ample, resilient and sustainable green spaces with an important ecological and climate-supportive function. The city has four basic ambitions for these green spaces: they must be adventurous spaces that can be truly experienced by citizens, but they must also bring tranquillity and cosiness, promote biodiversity everywhere and form structuring focal points in the urban fabric.

Basic structure

The Green Plan is based on a number of major green spatial figures that in part define the structure of the city, such as the Scheldt-embankments, valleys, fortresses, castle domains and the strategic space of Groene Singel, as well as smaller green spaces or ‘freckles’ that bring green into the neighbourhoods and streets. For this basic structure, the preservation of green masses and the stimulation of shared use are key. In addition, there are connective green ribbons such as Leien and more local green axes such as Grotesteenweg. Here, continuity is crucial: visually but also in terms of creating ‘green carpets’ for slow traffic. This global green structure also encompasses an ecologic network and recreational clusters, for which the Green Plan proposes guidelines.

Landscapes

The Green Plan translates the city’s global green structure into fourteen coherent landscapes that sometimes transcend the city boundaries. Each landscape fulfils specific roles for the city, and the Green Plan wants to reinforce and improve these roles. Scheldeland (‘Scheldt lands’), for instance consists of ‘wet spaces’ such as the embankments and the polders of Hoboken, or Linkeroever’s sandy plains with forests and lakes and the historic castle domain landscapes. The Green Plan selects inspiring current projects and new strategic cases. These cases and projects in turn provide input for the development of a green strategy and concrete guidelines.

Today, Munthof, a formerly neglected inner area in the city centre, is one of many small-scale green oases in the urban fabric.
© JAN CRAB



Local green plans

After the approval of the supra local Green Plan, the city started to draft local green plans for the nine districts and for the port area as a special case. These plans, too, begin with mapping out the existing green zones at the level of the quarter, neighbourhood or street: small parks, play areas, streets with lots of green facades, green tram lanes... Based on these analyses, a vision note will be drafted for the local green plans as well.





The natural embankments of Linkeroever contrast with the inner city and the hard-surfaced Scheldekaaien on the opposite side.

© SIGRID SPINNOX





‘Den Botaniek’ is a tranquil haven for plant lovers and strollers in the middle of the busy shopping and theatre quarter.
© SIGRID SPINNOX



Art and leisure at Middelheimpark, one of the stately castle domains in Antwerp.
© KATHLEEN MICHIELS



At the end of the 19th century, the River Scheldt was straightened to make way for the Scheldekaaien ('Scheldt Quays'). The quays became the scene of heavy port activities. In the second half of the 20th century the port moved to the north of the city and the quays were left behind aimlessly. In 1978 the current 1.35 metre concrete flood defence wall was constructed as a measure from the Flemish Sigma Plan against flooding in the Sea Scheldt basin area. The quays themselves became an informal public space and a free parking terrain. In 2005, it became apparent that the flood defence level needed to be raised up to 2.25 metres, but simply raising the current wall was never an option for the city and Flanders. They therefore joined forces and selected PROAP and Wit architecten via an Open Oproep procedure in order to develop an integrated master plan for the renewal of the flood defence system and public space. Meanwhile, the first sub projects have been initiated under the direction of AG VESPA: Sint Andries-Zuid ⁸² and Droogdokkeneiland ⁸³.

PROAP and Wit architecten divided Scheldekaaien ('the Scheldt quays') into seven zones that reflect the character and address the needs of the adjacent neighbourhoods. Left to right: Droogdokkeneiland, Rijnkaai, Bonapartedok and Loodswezen, Schipperskwartier and City Centre, Sint-Andries and Zuid, Nieuw Zuid, Petroleum Zuid (Blue Gate Antwerp).



Integrated plan

A dyke or a slope create different possibilities for public space than a pontoon, a building or a fixed or mobile wall, while floodable public space has different possibilities than dry space. The form and location of the flood defence system and the design of public space are therefore implemented together: the ambitions for public space determine the type of flood defence solution and the flood defence system influences the use and design of public space. In addition, the quays were divided into seven zones so that the renewal projects reflect the character and needs of the adjacent urban quarters. In any case, the openness, recognisability, spontaneous use and historic port character are preserved throughout the different zones.

Sint Andries-Zuid

The flood defence takes on the form of a dyke at a couple of dozens of metres from the water. Behind the dyke, on the quays, an open plain provides magnificent views over the River Scheldt. The dyke itself is designed as a long, green park. The side of the city will accommodate green spaces and play areas, a cycling and walking boulevard and a square for pop-up bars, book sale markets or smaller events. At the side of the water, the city preserves the maritime atmosphere, for instance by reusing the original cobble stones. The quay surface will accommodate sport fields. Near Zuiderterras (the most southern one of two raised promenades), larger events can take place. At three locations, mobile gateways will only close in case of flooding danger. At Zuidersluis ('southern sluice') a lowered surface serves as a beach in the summer and allows close contact with the water. The other side of the flood defence will become an urban square.



Droogdokkeneiland

Van Belle & Medina and Vogt landscape architects won the design contest for Droogdokkenpark ('dry dock park'), which articulates the northern transition from quays to natural banks along the curve in the Scheldt. The flood defence solution is integrated in soft curves and marks the transition from natural to cultural landscape. The grass plains, meadows and trees form a green lung for Eilandje. The natural tidal banks with mudflats and salt marshes allow for an intimate experience of the Scheldt. In the park, there will be space for recreation, events and more urban activities. The protected historic Droogdokken ('dry docks') will become a maritime museum. At the northern end of the quay walls a viewing platform (Belvédère) will have an important role as a meeting point. In order to safeguard the port activities, the development is planned in phases.

At Droogdokkeneiland, the flood defence solution is integrated in the soft curves of a park that forms a green lung for Eilandje.

© VAN BELLE & MEDINA AND VOGT



In Droogdokkenpark, at the northern end of the quay walls, a viewing platform (Belvédère) will have an important role as a meeting point.
© VAN BELLE & MEDINA AND VOGT



Sport fields at Sint-Andries- Zuid: the openness, recognisability, spontaneous use and historic port character are preserved throughout the different zones.
© PROAP



The dyke along Sint Andries-Zuid is designed as a long, green park, with green spaces and play areas.
© PROAP



In the pronounced curve of the River Scheldt at Linkeroever ('the left bank'), lies Sint-Anneke 34. From the end of the 19th century onwards, this has been an attraction pole for short-stay tourists and eventually for weekend breaks and even vacations. In the summer, the Scheldt and mus-sels still create a unique holiday atmosphere in the city. But in the evenings and in winter, life comes to a halt here. The city and the retail and hospitality businesses want to turn this place into a real attraction pole again. At the same time, the city and the Flemish government are working on the required heightening of the dykes as pre-scribed by the Sigma plan to prevent flooding in the Sea Scheldt basin area.

High-quality pavilion-architecture will add to a varied, attractive and innovative setting.



Star in the Scheldt Park

The ambitions shared by the city and its partners all fit into an overarching vision for the wider area as a 'Scheldt Park'. With its unique past as a holi-day destination and with amenities such as the open-air pool, the horse stables, the hospitality businesses and the marina, Sint-Anneke has every-thing to become the 'star' in this Scheldt Park. The key is to arrange, repair or optimise these building stones. The city uses research-by-design to com-bine the different spatial claims and opportunities for Sint-Anneke. The city is drafting a master plan for Sint-Anneke, with a widely supported compre-hensive vision, a development strategy and actions in the short, middle and long term.

Landscape

The beloved sand beach, the Robinson garden and the marina form three large entities in Sint-Anneke's landscape. Key ambitions for this land-scape are the repair and reinforcement of its iden-tity and visual quality. Systematic enrichment of the soil has caused the underlying reclaimed sandy soil of Linkeroever to disappear. But the city wants to give new chances to the dune vegetation through applied maintenance. Within this land-scape, a spatial execution plan must offer opportu-nities for a well-considered expansion of the hos-pitality zone and the optimisation of the marina. All the developments have to complement Sint-Anneke's identity and offer benefits for the direct environment.

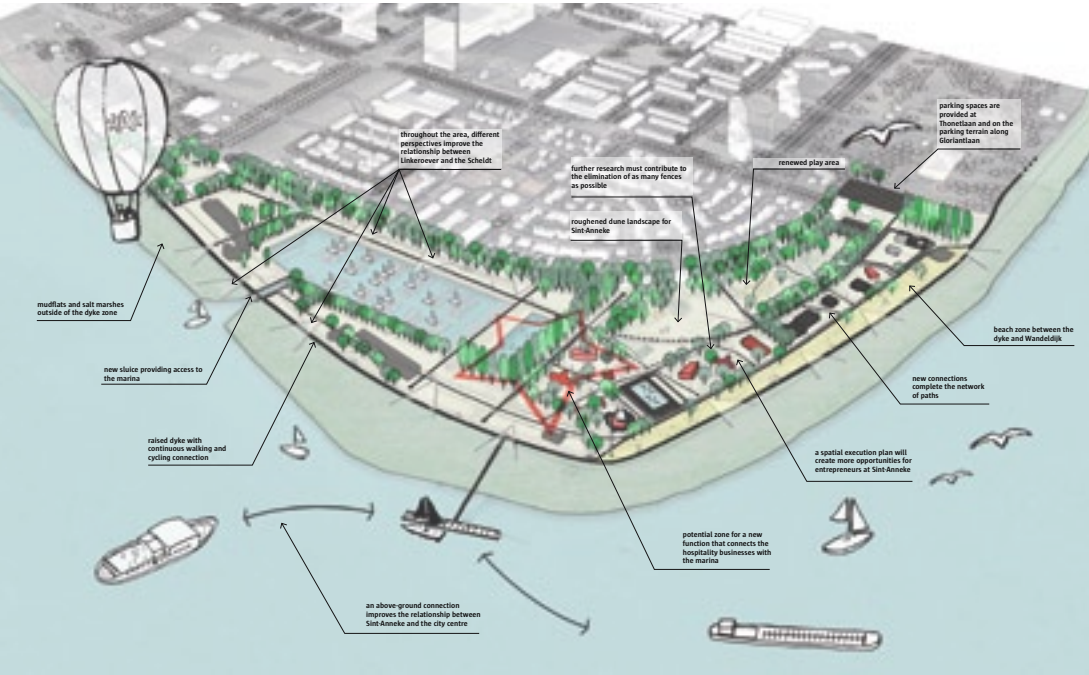
Vacation-architecture

The buildings, too, are part of the open, naviga-ble and lively landscape, with several perspectives on the Scheldt. Physical demarcations are limited to small private spaces instead of entire parcels and barriers are avoided as much as possible. New additions have to highlight the characteristic, his-torically grown vacation-architecture again. High-quality pavilion-architecture will bring variation, attraction and innovation into the recreational zone.

Experience and recreation

A new walking path on the raised dyke ensures a continuous promenade alongside the Scheldt and fills in the missing link between the marina and the Scheldt. The dyke path is part of a network of paths that creates new longitudinal as well as transversal connections. Walkers enjoy fantastic views over the port and the city. At the beach, the path connects to Wandeldijk ('walking dyke'), the main axis of the hospitality strip.

Sint-Anneke has everything to become the 'star' of the Scheldt Park. The key is to arrange, repair or optimise these assets and building blocks.





Key ambitions for Sint-Anneke's landscape are the repair and reinforcement of its identity and visual quality.

Hoekakker is situated in Donk Quarter in the district of Ekeren. Close to two thirds of the approximately 18-hectare area are owned by property developer Vooruitzicht, while the other third belongs to social housing company De Ideale Woning. Hoekakker is an open and green area with meadows and fields. Three brooks run through or near the project zone. Access to the area is limited to one walking and cycling path. Greenery and water management are central elements in the master plan that Vooruitzicht and De Ideale Woning have commissioned and which is drafted by BUUR urban design agency.

Rural character

The ambition of the city, the developer and the social housing company is to combine housing with the peaceful and rural character of the landscape. This identity must be preserved as much as possible. To this end, a master plan is drafted, which will be translated into a spatial execution plan (RUP) afterwards. The city takes on the role of director of both the master plan and the RUP. Most of Hoekakker remains open and green. Of the 14 hectares of planned public space, approximately 12 hectares will be green.

Water landscape park

The largest part of Hoekakker will become a water landscape park with ample buffering space for water. The design will be developed in an intensive participation trajectory with the neighbourhood. BUUR makes suggestions that serve as input for this trajectory, such as ecologic corridors and clear points of entry into the landscape at the park entrances. Rainwater buffering and drainage

would be organised in a linear system of wadis. Via a network of soft connections, the park will be connected to the surrounding residential quarters. In addition, paths, decking and bridges can be provided as well as, for instance, natural green play zones, seating areas and a dog zone... Play and meeting areas can be provided at the entrances as well. There is also space for garden allotments or urban farming.

Housing and amenities

The buildings are grouped along the edges of the zone and aim at a high-quality finishing. The houses will contribute to social safety in the park due to their location and orientation. New amenities are oriented towards Donk Quarter. There is room for a neighbourhood shop, hospitality businesses, child day care, services... Some of the buildings will provide accents in the landscape. Visitors park at the edges and residents use underground parking facilities, so that the park can be free from motorised traffic.

For the most part, Hoekakker remains an open and green area, with 14 hectares of public space, of which approximately 12 hectares of green space.

© BUUR





The location and orientation of the houses, new amenities and connections provide links between Hoekakker and Donk quarter.
© BUUR

The main part of Hoekakker will be a landscape park with ample buffering space for water.
© BUUR

Rozemaai ³⁶ is a residential quarter in the district of Antwerp, on the border with the district of Ekeren. In the 1970 and 1980s, mainly social rental apartments and a couple of dozens of purchasable social houses were built here, on top of the old valley of the Donkse Beek brook. The terrain was raised approximately two metres for this, and the connection with Donkse Beek was lost. The broad streets were designed with cars in mind. Parts of the green spaces are purely aesthetic and others are inaccessible because of fences or overgrowth. Residents mostly depend on the centre of Ekeren for shops and amenities.



Master plans for Rozemaai

The city wants to improve the quality of Rozemaai as a place to live. It wants to bring Donkse Beek and the valley back to the forefront again and achieve a green, varied and lively quarter. In 2012 the city approved Architectenbureau Jan Maenhout, Keppler Consulting and Ontwerpbureau Pauwels’ Masterplan Rozemaai. In 2013 Buro Lubbers and Infrabo were commissioned to develop a Masterplan for Public Space. Together, these plans have ensured that the current and future residents of Rozemaai will live in a comfortable and varied setting, framed by a beautiful landscape.

Houses and amenities

New developments in a number of new and existing building zones will create a new balance and allow for a more diverse offer of houses and neighbourhood amenities. Streets and paths will be better attuned to pedestrians and cyclists and improve access to different parts of the quarter and to the green zones.

Lead role for Donkse Beek

Donkse Beek will once again play the leading role in the residential quarter. A network of ditches brings rain water from the building zones to the brook. Bridges and paths make the embankments accessible for pedestrians and cyclists. In the valley, the forest area and within the building zones, new native types of greenery will be introduced. Between the buildings and the valley, there is room for local functions such as garden allotments, a dog zone, sport fields, barbeque, playing equipment... A central events terrain can become the place for local residents to meet and organise neighbourhood parties and activities.



The city wants Masterplan Rozemaai to improve the residential quality of the neighbourhood and to bring Donkse Beek and the valley to the forefront again.

© THV GROEP INFRABO NV - BURO LUBBERS BV



Donkse Beek will once again take centre stage in the residential quarter. Bridges and paths will bring the embankments within the reach of strollers and cyclists.

© GROEP INFRABO NV



Developments in a number of new and existing building zones will provide a more balanced and diverse array of housing and amenities.

© ATELIER KEMPE THILL



PARK GROOT SCHIJN

Project Park Groot Schijn ³⁷ in the district of Deurne encompasses the provincial domain of Rivierenhof, the city's terrains at Ruggeveld and the residential quarters of Boterlaar and Silsburg. The 83-hectare site is being transformed from a patchwork blanket of sport clubs, communal gardens, organisations and forgotten pieces of nature into a coherent and dynamic park. The park is home to several clubs and organisations. There are also garden allotments, a trailer park, an ice-skating rink and a skiing slope. The city wants to develop a coherent landscape park that combines and reinforces the recreational and ecological value of the area.

Unique participation process

Thanks to the many users of this large and diverse area, a unique participation process has developed. The current Park Groot Schijn project in fact was born out of old conflicting spatial claims and protests of dissatisfied residents and action committees. In 2009 the city and local residents signed a participation charter and started to look for ideas for the park together. Ideas about shared and multiple use of space have succeeded to create a pivotal moment in the planning process. Maxwan Architects, 1010, Karres and Brands landscape architects and Goudappel Coffeng have integrated the input from the participation trajectory into a master plan. In 2013 the design team of BUUR, HOSPER, BULK and ARA won the design contest for the further refinement of the plans.

Valleys and green joints

Schijnvallei ('Schijn valley') and Koude Beek valley form the heart of the park. By making the valleys rougher, their ecologic and educational value increases. Around this heart, the park consists of green joints and programmed rooms. The green joints connect the valleys with the programmed rooms and are characterised by grass, trees, paths and typical park elements. They run from north to south and from east to west through the park. They infiltrate into the periphery and invite passers-by to visit the park. The main axis of Rivierenhof leads to Park Groot Schijn where it widens into a green sport field. Here, park visitors can rest and play in the summer. In the winter this space can transform into an ice skating rink. An eco-tunnel will connect the northern and southern part of the park underneath the E313 motorway.



In the spring of 2016 the children's forest in Park Groot Schijn was festively opened to the public by Deurne's youth organisations.

Lively programmed rooms

The rooms offer space to the several different users of the park. They are delineated by high grasses, bushes and fences. This way they fit into the landscape but also allow specific designs according to the needs of the users. For instance, the rooms can accommodate allotment gardens, sport, youth, dog schools, a play forest and a trailer park. Also, a sport complex and a number of new head quarters for clubs and organisations are being built. The buildings are designed to fit their rooms and merge with their green environment. A visual quality plan stipulates design principles for the park and the architecture. The goal is to give the buildings a number of common elements (e.g. canopies, alleyways, green roofs...), so that they clearly belong to the same family without losing their own identities.

The park stretches out as a green lung in the 20th-century belt of Antwerp.

© MAXWAN ARCHITECTS





The park square forms the heart of the plan. It is a large open green space where everything comes together.

© MAXWAN ARCHITECTS



The new Regatta residential quarter ⁸⁸ at Linkeroever (the 'left bank') is situated between Blancefloerlaan and Galgenweel sailing lake. Vooruitzicht project developer owns the terrains and is responsible for the design and realisation of the quarter, while the city takes on a directing role in the development. The urban design was created by awg architecten. The seamless combination of green, water recreation and housing with diverse urban functions and amenities results in a type of urbanity that is unique for Linkeroever. And Linkeroever's special character makes Regatta a unique project for the city.

Living, working and enterprising

Regatta is a mixed residential quarter with 1,500 houses and approximately 3,500 new residents, 40,000 m² of offices, amenities and a 12-hectare park. A varied array of homes is expected to attract different types of families. In order to break through the ever growing offer of apartments, 25% of the houses must be single-family homes with ground-floor access. There are different neighbourhoods within Regatta, which are all mixed, but to different extents. Where urban functions contribute to the residential quality in the 'inner neighbourhoods', small-scale commercial functions are encouraged, for instance by providing central neighbourhood squares. In more mixed zones in the periphery, slightly larger functions can be accommodated.

Green, water and recreation

In other transition areas, the concept of living in a green landscape (in the southern park edges) and recreation, sport and public functions (in the eastern periphery of the project) are key. The new Galgenweelpark along Galgenweel lake was designed by Bernardo Secchi en Paola Viganò. It functions on the scale of Linkeroever but offers many recreational possibilities for the neighbourhood. The main elements are spontaneous nature development, walking and cycling paths, 5,200 m² of play areas, a sunbathing field, pontoons and wadis for natural water management. A limited number of slightly larger public functions can mark the transition from the mixed zone to the inlet dock. Here a metropolitan recreational programme can be accommodated. The inlet dock itself articulates the transition between Galgenweel and the built environment but keeps its open and landscaped character.



awg architecten designed the urban concept for the new mixed residential quarter with 1,500 homes, 40,000 m² of offices, amenities and a 12-hectare park.


© AWG ARCHITECTEN

A varied array of homes with 25% of single-family homes with ground-floor access will attract different types of residents and families.



Galgenweelpark is conceived on the scale of Linkeroever, but also offers recreational activities for the local neighbourhood.



In the Zuid ('south') quarter in the district of Antwerp, three docks were constructed in the 19th century: Kooldok, Schippersdok and Steendok. After the relocation of port activities to the north of the city, the docks  were filled in. They were used as a parking zone and became the home of the Sinkenfoor fair up to 2014. Because of its location in Zuid quarter — which has become quite trendy — hospitality businesses and retailers have sprung up all over the edges of the square. *Parkeer-en mobiliteitsbedrijf* (the city's parking and mobility company) has started the construction works for two underground parking garages underneath Steendok and Kooldok. Because cars will disappear underground, space is freed up above ground for the citizens of Antwerp. This enables the city and AG VESPA to finally provide a new lease of life to the urban square itself.

Participation trajectory

The renewal of Gedempte Zuiderdokken ('filled-in southern docks') entails an exceptional and successful participation trajectory. In the summer of 2015, more than 3,000 people went online to communicate their ideas about the future of the square, and in autumn and winter the city specifically targeted children, youth, retail and hospitality businesses. The results were debated in an information meeting and then communicated to five competing design teams that had been selected through a design competition. At the beginning of 2016, the design teams presented their proposals anonymously in Zuiderpershuis. More than 500 visitors came by and more than 1,700 people gave their opinions online. The results were provided to the jury by a curator, Aglaée Degros. The jury selected the design 'Dok Zuid' from ADR Architects, Georges Descombes and Technum (CH + BE). The design team then started to work on a definitive design based on the continuing participation trajectory.

View of Gedempte Zuiderdokken.

© PATRICK HENDERYCKX



Green-blue destination

Zuiderdokken offers the opportunity to design a great open space in the middle of the densely built city. The design team was asked to preserve lots of space for green and water. The project is this becoming an important measure of climate adaptation for the entire city. The vast open plain is perfect for water buffering, which involves slowly leading rain water to the River Scheldt. Apart from flooding, the green-blue design also counters heat-stress, which is a common issue in densely built urban quarters. For instance, a crown of trees and bushes around the square forms a cooler urban space, which also accommodates terraces and activities.

The meadow

On top of Schippersdok, the 'meadow' offers room for relaxation, sport, play and picnics to local residents and visitors. This is the most generous open space in the plan. Street furniture and loose chairs and tables will make this space attractive throughout the seasons. At the side of the Scheldt, a long water basin enables the infiltration of rain water. On one side there will be broad stairs of which the old quay wall forms the last step. On the other side river bank greenery will be planted. Across the basin, a 'Scheldt axis' with two new water structures will make the connection with the Scheldt.

The garden

On top of Kooldok, north of the meadow, a 'garden' will provide a more intimate character. The garden will be twice the size of the botanical garden in Leopoldstraat and will become a place to rest and walk between a wide variety of trees, bushes, grasses and flowers. Kitchen gardening can be a theme, or edible plants, fruit trees, berry bushes and nut trees. Elements such as benches, picnic tables, wooden decking, a pergola and playing equipment stimulate a diverse use and smaller activities. Between the gardens and the meadow, the M HKA and KMSKA museums will be connected through a 'museum axis' with a central water feature.





Along the square edges, a 'crown' of trees and bushes provides a cool urban spot with room for terraces and activities.

© ADR ARCHITECTS, GEORGES
DESCOMBES AND TRACTEBEL



The meadow is a generous open space where residents and visitors can relax, do sport, play or have picnics.

© ADR ARCHITECTS, GEORGES
DESCOMBES AND TRACTEBEL

Strong networks for an accessible city

Mobility is one of the most important streams in the city. The city is characterised by short distances, but this is only an advantage if short trips are smooth and safe. In order to remain a source of creativity and innovation, the city must also be reachable from the outside. It is crucial that the coming years bring a breakthrough in the field of car-access to the city. During the execution of the many planned projects, alternatives will be provided as well as fast and interactive information. At the same time, the city invests in innovative Park & Rides at strategic locations in order to ensure a pleasant and attractive city centre. But tram lines and bicycle routes are also of crucial importance in the city's mobility network. The city's road safety policy focuses on quick and smart interventions and on the quality of routes, with extra attention for children.



The city has elaborated a vision for a Groene Rivier ('green river') in the Singel and Ring road-side spaces within the s-RSA's Groene Singel ('green Singel') programme. The city wants to transform these overburdened and underused spaces from a barrier between the core city and the 20th-century belt into a new centrality for the city: a generous green space which is as iconic and beneficial for Antwerp as the River Scheldt. At the same time, the city and Flanders have been planning a number of crucial mobility projects for the Ring road itself for some years now. Today, the city, Flanders and a number of action committees are striving towards an integrated project for improved mobility and liveability together.

The optimisation of planned and new projects of different actors in this area will progressively contribute to a green, high-quality and central meeting space that connects the inner and outer city.

© TV MAKH



Groene Rivier

With the vision for the Groene Singel, the city and AG VESPA want to optimise the unique character and potential of the landscape, the infrastructures and the buildings in the Ring road space. The city wants to optimise the role of the slopes and road-side vegetation in a coherent and open green-blue landscape that functions on the scale of the city. At the same time the city wants to provide smaller green spaces for relaxing, playing or sport and integrate a number of modest buildings to accommodate amenities that are lacking in the surrounding neighbourhoods. Park connectors bring the large park structures of the 20th-century belt within the inner city's reach. At supra local hubs, a limited number of remarkable buildings with supra local functions will reinforce the identity and attraction of the city. The Groene Singel vision is implemented mainly by the optimisation and harmonisation of new and planned projects from several different partners. Examples of projects that help realise the Groene Singel in this way are IJzerlaan, the Ring and Singel cycle paths and the sand catcher at Schijnpoort.



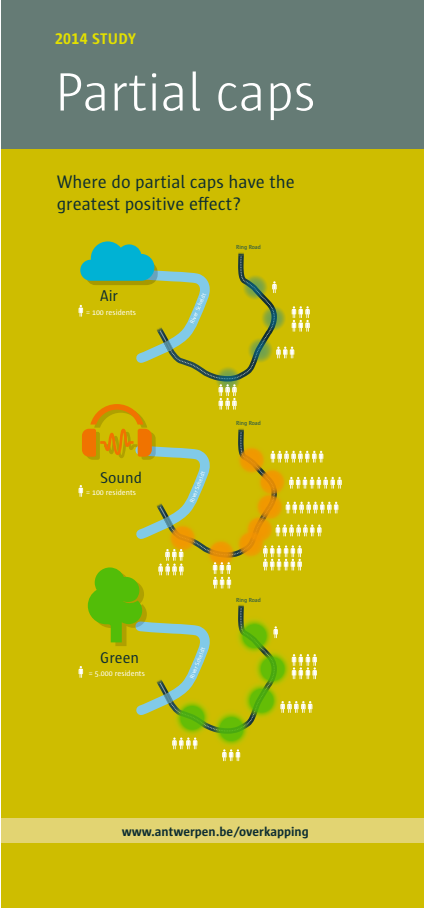
The new Ring and Singel cycle paths form part of a navigable and tangible Groene Rivier ('green river') between the inner and outer city.

© TV MAKH

Oosterweel connection

Masterplan 2020 contains a whole range of projects for the improvement of mobility in and around Antwerp. Apart from new tram lines and cycle paths, large road works are being implemented. The Oosterweel connection will 'complete' the northern part of the Ring road. Action committees have been pleading for years to maintain the highest norms of liveability in this project. In 2009 sufficient autographs were collected to organise a referendum in which the Antwerp

citizens pronounced their preference for a tunnel instead of a bridge. The action committees and the city both studied other possibilities to reduce the negative effects of the project. Soon, the focus shifted towards capping the lower lying parts of the Ring roadside. At the end of 2015 Flanders appointed a curator to gather all the different studies and make proposals for the improvement of the liveability and quality of the urban environment.



In 2014, the city studied feasible caps that would create the greatest effects in the short term.

The city's capping study

In 2012 a first study into capping possibilities for the Ring road confirmed the positive effects of a full cap on air quality, noise pollution and green shortages. But it was also clear that the relocation of polluted air would have negative effects for citizens living near the open parts of the cap. Extra measures remain important, such as electric cars. Also, a full cap turned out to be impossible in the short term due to the complexity of the Ring infrastructure, with its heavy load of (heavy) traffic and with multiple in and outward movements. In 2014 the city studied partial caps that would be possible in the short term and create the best possible effects, as a first step towards a full cap. The city asked Flanders to investigate the possibility of a full cap in phases, through successive partial caps, starting where needs are most pressing. Mid 2016 a first formal cooperation within the scope of the curator's assignment led to a partnership between the city, Flanders and the action committees for the renewal of the southern part of the Ring road, from Kennedytunnel to (and including) the entrance and exit complex at Sportpaleis. In 2017 a design competition will be organised to further shape the joint process and the many sub projects for a liveable and high-quality Ring zone.



With its plans for a sand catcher in the River Schijn the Flemish government avoids the usual concrete box and opts for an ecologic design and integration in the green landscape of the Singel road.

© TV MAKH

The spring of 2016 was the start of a whole range of infrastructure works in and around Antwerp. Large projects such as IJzerlaan, Noorderlijn and Noordersingel will have a considerable impact on traffic in and around Antwerp. But since 1 February 2017 the Low Emission Zone brings great changes for motorists as well. The city, Flanders and all their partners want to keep Antwerp accessible and offer optimal alternatives for citizens, entrepreneurs, visitors and commuters to enjoy smooth and efficient trips to and in the city in the coming years.

Interactive platform

Slim naar Antwerpen ('Smart ways to Antwerp') first and foremost maps out and coordinates the many works in the city as efficiently as possible in order to maximally reduce nuisance. The partners have developed alternatives for all the transportation modes, which are always communicated beforehand. Citizens and visitors can consult all available information interactively as well, via www.slimnaarantwerpen.be. Apart from an up-to-date overview of the works there are route planners for every type of transportation. There is also a special zone for entrepreneurs looking for information about commuting and logistics in and around the city.

Every mode of transport

The city and its partners involve every mode of transport in the story of *Slim naar Antwerpen* because there is a lot of potential in smart combinations between car, bicycle and public transport. At www.slimnaarantwerpen.be, motorists find information about carpooling, car sharing and parking. The Park & Rides and transfer possibilities at the edges of the city are particularly promoted. But there is also information about taxis and the taxi-app. Cyclists discover everything about cycle routes, cycle highways, cycle parking, cycle rental and the Velo bike sharing system, which will be extended to users in the districts throughout 2016-2017. The tariffs and possibilities of trains, trams and buses are highlighted, as well as combinations with cycling or driving.

The interactive platform includes an up-to-date overview of all the works and route planners for the different modes of transport.



The campaigns put the spotlight on the free Park & Rides and the transfer possibilities at the edges of the city.

The city and its partners involve all the modes of transport in the *Slim naar Antwerpen* ('smart ways to Antwerp') project.



Low Emission Zone

Antwerp is an important city with a world port and a central location within a very dense European road network. Traffic is thus a major source of pollution. From 1 February 2017 onwards, the inner city (between the Scheldt and the Ring road) and Linkeroever are turned into a Low Emission Zone (LEZ). Lorries and cars will have to meet certain euro norms in order to be allowed into the inner city. Whoever enters the city without conforming to these norms, will receive a fine. Antwerp is the first Belgian municipality to introduce a LEZ and has closely cooperated with Flanders to complete the necessary preparations and regulations. Antwerp citizens find all the information they need and can test the compatibility of their car online at www.slimnaarantwerpen.be/LEZ.



Traffic sign that indicates the beginning of the low emission zone.

Image from the communication campaign for the Low Emission Zone, which will keep the most polluting vehicles out of the city centre and will help improve air quality.



The north of the city will be the scene for a great number of large mobility projects for some years to come. The city and the Flemish government are combining a great part of these works in the Noorderlijn project. Noorderlijn comprises three large projects with a great impact on mobility and liveability in the north of the city: the reconstruction of the northern part of Leien and the underground and aboveground works for a new Operaplein ('opera square') 40, the construction works for a new tram line at Eilandje and the complete reconstruction of Noorderlaan, including a tram line extension up to Ekersesteenweg.

Traffic between De Keyserlei and Korte Winkelstraat will be led underground, creating room for 'Operaplein', a new low-traffic square.

© MANUEL DE SOLÀ-MORALES

Northern Leien and Operaplein

After Leien Phase I, which entailed the reconstruction of the southern part of Leien, it is now the northern Leien's turn. Frankrijklei and Italiëlei will both have a safe and wide cycle path in both directions. Manuel de Solà-Morales created the underground and aboveground design for a new square: Operaplein. The underground Opera tram station receives a new entrance with a skylight and a new -3 level with tram platforms and extra parking spaces for 370 cars and 300 bicycles. Traffic is led underground between De Keyserlei and Korte Winkelstraat, thus creating space aboveground for a new low-traffic square that prioritises local traffic and especially pedestrians and cyclists. The archaeological Kipdorpbrug site is integrated into the parking garage. Travellers can see the remains from a unique tram bridge and parts of it will be visible from the car tunnel. The busy Rooseveltplaats 41 can be unburdened and will have safer crossings, less bus platforms and more open space.



Eilandje

For the first time, Eilandje will have its own fast tram connection with Central Station and the historic city centre. The 2.4 kilometre long tram line requires a great deal of adaptation works in the historic port area. Apart from several road works, the old bridges over the docks need to be adapted. Mexicobruggen 42 will have separate lanes for car and tram traffic and Londenbrug will be replaced with a new and wider version. Hardenvoortviaduct 43 remains reserved for cars and trams and busses will be guided towards Noorderlaan via Kempenstraat.

Hardenvoortviaduct will still be reserved for cars, while trams and buses will be led to Noorderlaan via Kempenstraat.





The busy Rooseveltplaats zone will be unburdened, intersections will be made safer and the number of bus platforms will be reduced, creating more open space.

© MANUEL DE SOLÀ-MORALES

Noorderlaan

Noorderlaan is being renewed over a total distance of 2 kilometres and in its entire width. Bus zones and tram lanes are moved and extended towards Ekersesteenweg. New footpaths and cycle paths are constructed and trees are planted in the central reservation strips. The renewal of five crossings aims at safer crossings for pedestrians and improved access for local companies and retailers. There will also be a parallel road for traffic to and from the companies situated at the west side of Noorderlaan. In June 2016, Parkbrug ⁴⁴, a new bridge for pedestrians and cyclists, was installed by AG VESPA at the beginning of Noorderlaan. The bridge was designed by Ney & Partners and connects Park Spoor Noord to Eilandje. The end point of Noorderlijn is the Havana-Luchtbal Park & Ride ⁴⁵, one of the innovative parking buildings Antwerp is planning and building at the edges of the city in the coming years.



Parkbrug, the bridge for pedestrians and cyclists, was designed by Ney & Partners and connects Park Spoor Noord to Eilandje.

© AG VESPA



Albertkanaal ('Albert canal') is being widened and the bridges between Meerhout and Antwerp are being raised in order to achieve greater capacities in terms of shipping. Via Vlaams Bouwmeester's Open Oproep, Antwerp and Flanders have selected uaps consultants to develop Masterplan Bruggen Albertkanaal for the city. This way, Antwerp and Flanders are combining infrastructural works with projects for the revaluation of the canal banks as living and working environments and the reinforcement of the relationship of citizens of the districts of Merksem and Deurne with the water. IJzerlaan ⁴⁶ is one of these projects and illustrates the great ambitions of the partners involved.

Cycle bridge

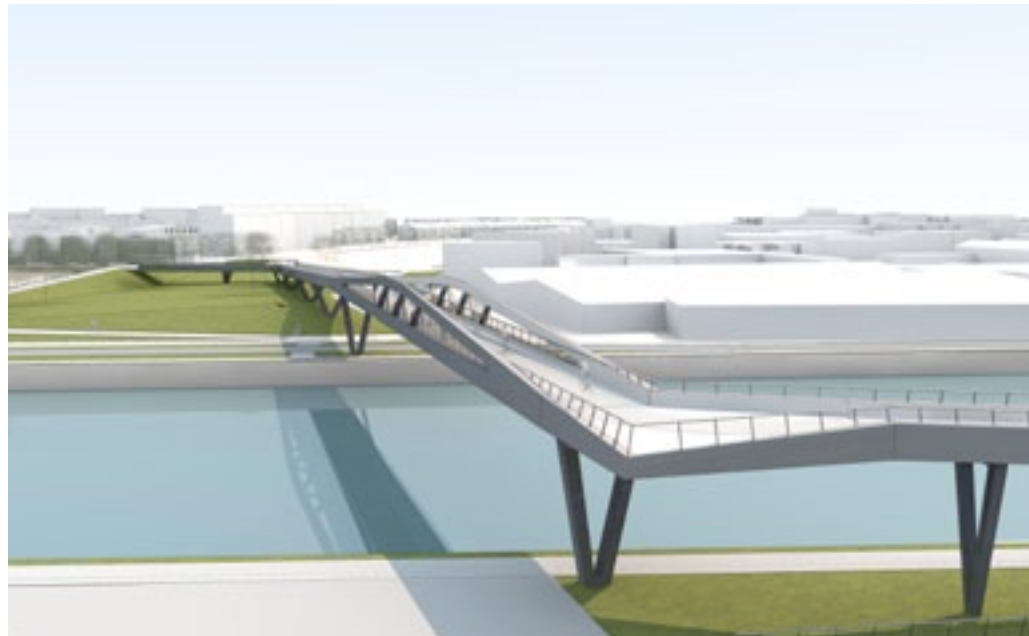
The current bridge, IJzerlaanbrug, is being replaced with a bridge for pedestrians and cyclists. This will take up less space and provide a connection between the Singel cycle path, the cycling routes to Merksem and Brasschaat and the cycle highways of Antwerpen-Essen (alongside the railway tracks) and Antwerpen-Herentals (along Albertkanaal). The cycle bridge will be placed at the current location of IJzerlaanbrug. The level part over Albertkanaal is almost 100 metres long and 4.7 metres wide. On the side of the district of Antwerp, a cycling slope will run parallel to Albertkanaal and connect to the cycle path along IJzerlaan. On the side of Merksem, the entrance and exit ramps of the cycle bridge will be integrated in a new park zone.

Canal

The deconstruction of the current bridge is an opportunity to completely renovate IJzerlaan, with a new road profile, new tree rows and adapted crossings. IJzerlaan will thus become an integral part of the Singel road, which in turn now connects to Noorderlaan. IJzerlaan will even get its own canal. The new canal will provide drainage for Lobroekdok and forms a connection with Asiadok.

Simulation of the new cycle bridge over Albertkanaal.

©THV ROTS



The canal is not suitable for ships but will become an attractive meeting space, with floating plant cases, pontoons and stairs that double as a seating area. There will even be a small park, with benches and small playing equipment. The old sluice and quay walls of Kempische Vaart, the canal that once connected Antwerp to Herentals, lie beneath the crossing with Noorderlaan and are partially reused for the new canal. After the underground works, the crossings themselves are renewed and prepared for the new tram through Noordelaan.

Eco quarter

Because the long run-up ramps disappear together with IJzerlaanbrug itself, space is freed-up in Ingenieur Menneslaan. Part of this space will accommodate the on and off-ramps of the cycling bridge and the new park zone. Between Campiniastraat and Taxandriastraat, a whole new residential 'eco quarter' will develop in a number of years. In the meantime, Ingenieur Menneslaan is used as a temporary connection between Vaartkaai and Groenendaallaan in the context of the Oosterweel construction works.

The demolition of the old bridge creates room for green spaces at both sides of Albertkanaal.

© BEHEERSMAATSCHAPPIJ ANTWERPEN MOBIEL





The new canal will become an attractive meeting space with floating plant boxes, pontoons and steps that double up as seating areas.
© TV MAKH



PARK & RIDE BUILDINGS

Park & Rides are an important aspect of the city's mobility and parking policy. High-quality Park & Rides can indeed convince visitors to leave their cars at the edges of the city or the inner city. In order to entice even more car users, a considerable expansion of the currently available high-capacity Park & Rides is necessary. However, in order to create 1,500 parking spaces, one needs approximately 7.5 soccer fields. This is why the city opts for strategically located Park & Ride buildings with multiple floors. This way the city wants to receive more people in a better way, offering them the luxury of smooth access, fast tram connections and attractive facilities. In 2012, the city organised a competition for ideas, after which four selected teams further developed their proposals. The Havana-Luchtbal Park & Ride ⁴⁵ building is one in a score of Park & Ride buildings that will be realised from 2017 onwards and illustrates the city's ambitions.

Success factors

Fast, frequent and comfortable public transport is a critical factor in the success of the Park & Ride buildings. Preferably, trams have their own separate lanes and are prioritised at crossings. The quality and comfort of the transfer itself, too, must be guaranteed. The architecture of the building must therefore contribute to its recognisability, accessibility and legibility as well as to logical walking routes, attractive platforms, day light and air. Social control is provided by creating a lively space with diverse functions. The buildings can become true hubs of sustainable mobility, with facilities such as electrical charging poles and car sharing and bike sharing facilities. The location near great traffic axes into the city and important bicycle and public transport connections is perfect for supporting amenities such as small supermarkets or pick-up points, hospitality businesses and parcel collection points. This way the buildings will also create benefits for the neighbourhood. Finally, a communication strategy that attracts users is key to ensure the success of the infrastructure and optimise the role of the Park & Rides in the city's parking policy.

Luchtbal-Havana Park & Ride

The first innovative Park & Ride building is being built at Luchtbal quarter on the Havana site, on the border between the districts of Antwerp and Ekeren. This site will be transformed in the coming years from a rather forgotten space accommodating mainly historic military barracks, the local police and a number of city services, to an integral part of the city. Havana will have new amenities, including a new super market, a waste collection service centre, lots of greenery and walking and cycling paths. The Park & Ride building site thus becomes a lively place with good connections for all modes of transport. The site will become the end station of the renewed Noorderlaan's tram line and offer connections to the Essen-Antwerp cycle highway and the A12 and E19 motorways. The parking building offers space for some 1,750 cars. All the parking spaces will be shared with the adjacent large-scale retailer. At weekdays, 1,000 parking spaces are expected to be used in the context of the Park & Ride. There is also a covered bicycle parking space for 440 bicycles. Travellers reach the platforms via a pavilion over the tracks, where they can wait comfortably for trams and buses.



Simulation of Luchtbal-Havana Park & Ride seen from Noorderlaan.
© HUB



The city also plans a Park & Ride building at Linkeroever.
© HUB



Since 2008, Antwerp is the only Flemish city to have its own *stedelijke Staten-Generaal voor de Verkeersveiligheid* ('States-General for Road Safety in Antwerp'), which coordinates and harmonises all the efforts in the field of road safety of the city services, districts and partners. In the meantime, Antwerp has developed a strong road safety policy, based on structural cooperation, overarching campaigns, educational and infrastructural projects and temporary and quick win measures. The *Merci om trager te rijden* ('Thanks for slowing down') campaign received the 2011 *Sinterklaas Award* from the organisation *Ouders van Verongelukte Kinderen* ('parents of traffic accident victims') and the IMC European Award from the *Integrated Marketing Communications Council*. In 2016, Antwerp won the *Vlaamse Verkeersveiligheidsprijs* ('Flemish road safety award') for its *Speelweefselplannen* ('play tissue plans') project.

The States-General brings together all relevant data and statistics for the congress and drafts an evaluation report or a white paper.
PHOTOGRAPH © ELISABETH VERWAEST



States-General for Road Safety

The city's States-General for Road Safety builds bridges between the city services in order to create a safer city for all road users. The States-General also brings together all partners twice per year for an evaluation of efforts made and a prognosis of the years to come. This results in feedback and input from the city's employees and the Antwerp traffic police, representatives of Flemish public transport company *De Lijn*, Antwerp schools, the Flemish region, public utility companies, *Fietzersbond* ('cyclists' union'), *Ouders van Verongelukte Kinderen*, the Belgian road safety institute (BRSI) and many other partners. In preparation for the congress, the States-General gathers all the data and statistics and after the congress it drafts an evaluation report or a white paper.

Temporary and quick win measures

In addition to structural cooperation, yearly campaigns, road works and educational initiatives, the city launches short-term initiatives or temporary and quick win road safety measures. In streets where speed limits are not respected, traffic cushions, plateaus and road narrowing slow down traffic. Each intervention is evaluated and adapted if necessary. The city is continuously looking for new ways to improve road safety, which sometimes results in experimental procedures and original solutions. For Paardenmarkt, for instance, the city joined forces with young designers and artists to create original designs for road traffic measures. Also, maintenance works in the districts often form opportunities for the implementation of small but effective measures, such as moving poles or traffic signs, widening curbs or providing zebra crossings. In addition, 30km/h-zones are expanded and, where needed, redesigned or signalled more clearly.

Play tissue plans

Play tissue plans map out the network of low-traffic or car-free cycle and walking routes in certain neighbourhoods or quarters. A play tissue plan starts with a screening of the routes that children take to go to school or areas where they can play. The city uses questionnaires to map out the routes that are effectively used. This allows for the identification and prioritisation of problematic spots. Where there is also a need for more space to play, the interventions are combined as much as possible with new opportunities to play. Not only does this stimulate children to go outside and play more often; it also increases children's independent mobility. This is important because the increasingly hectic traffic has decreased children's independent mobility throughout the past decades.

Play tissue plans want to stimulate children to play outside more often and to move around more autonomously in the city.
© DRIES LUYTEN



Antwerp has developed into a real cycle city in recent years. Testimony to this are the title of Flemish Cycle City in 2012, the appearance on the 2013 Copenhagenize index and the 2015 nomination for Flemish Cycling City. The city's four-yearly mobility questionnaire is also clear: whereas in 2010 only 23.9% of Antwerp citizens took their bikes to work, this had risen to 29.5% by 2014. The city is determined to continue its efforts and even raises the stakes with its new bicycle policy plan and bicycle action plans. Antwerp opts for a decidedly network-oriented approach and focuses on the quality of cycling routes in their entirety. An exemplary measure to illustrate this approach is the implementation of cycle streets.

The city is planning a considerable expansion of the Velo bike-sharing system in 2016–2017.
© JOLANDA KRAUS

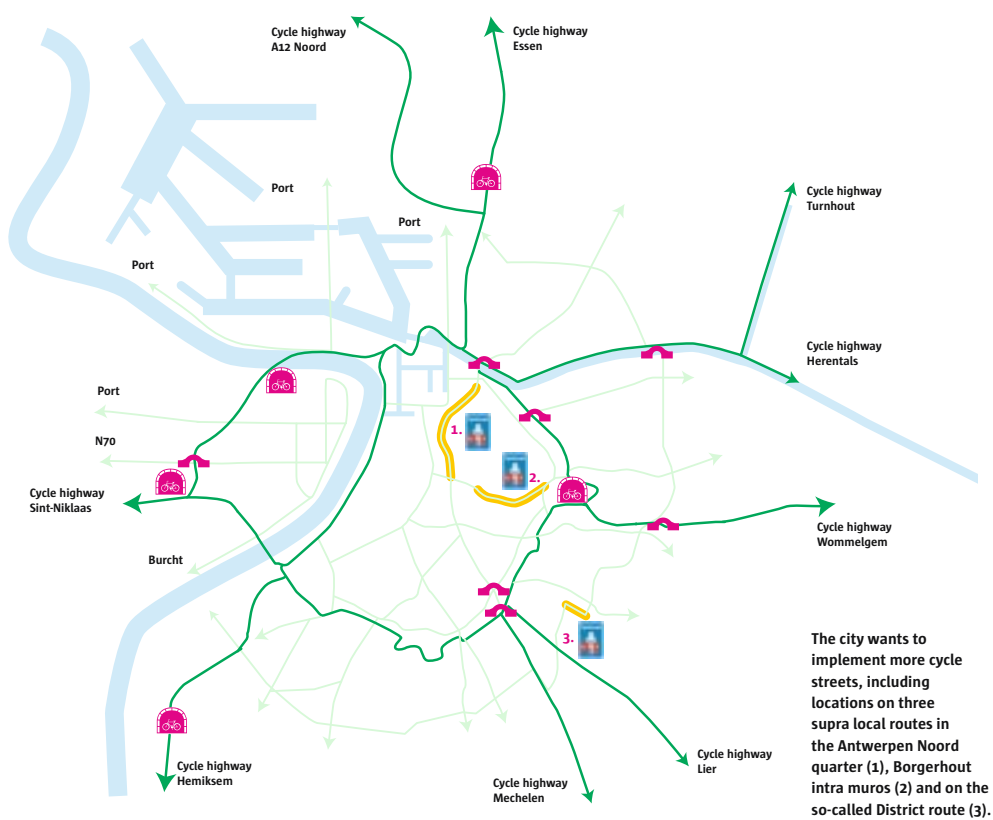


A first-class cycle network

The bicycle policy plan formulates the vision, the level of ambition and the fundamental guidelines for the city's bicycle policy in the mid-term. The policy plan is in turn further detailed in bicycle action plans that are updated on a yearly basis. The bicycle policy plan zooms in on the most important infrastructural 'keys' to the development of a first-class bicycle network. For instance, the city solves each missing link with the most suitable instrument, such as cycle paths, cycle strips, cycle streets and bicycle bridges. The city also creates 'super links' at multimodal hubs, for example by bicycle parking buildings and Velo bike-sharing stations. In 2016–2017, for instance, a considerable expansion of the Velo stations will bring bike sharing to the areas on the outside of the Singel road. Finally, the city implements an active and proactive bicycle parking policy, for instance by providing mobile bicycle racks at events, turning unused spaces into neighbourhood bicycle parking facilities and stipulating bicycle parking norms in the city's Building Code and in spatial execution plans (RUPs). All this should contribute to a logical, readable and comfortable network of cycle routes and amenities.

First class cycling

In addition to infrastructural investments in the cycle network, the city is working on measures that allow an optimal use of this network. Safety is key and is approached at the level of entire routes where possible. Good examples of this are the play tissue plans for safe routes to schools and play areas. The large planned infrastructural works necessitate and stimulate the further promotion of the bicycle as an ideal mode of transport for cities, for example by providing a new bicycle map and information at www.slimnaarantwerpen.be. Several other initiatives, too, contribute to a good bicycle climate and a city-wide bicycle culture, such as the Bicycle School for adults and the regulatory framework for taxi bikes.



The city wants to implement more cycle streets, including locations on three supra local routes in the Antwerpen Noord quarter (1), Borgerhout intra muros (2) and on the so-called District route (3).



Safety is crucial for the promotion of a good cycle climate and a city-wide bicycle culture.
© NOORTJE PALMERS

Cycle streets

A cycle street is a quiet residential street where road marks roll out a red carpet for cyclists. Cars are allowed but must stay behind cyclists at all times. After a positive evaluation of a first project in Grotehondstraat ⁴⁷, the city drafted a policy note in 2016: *Cycle streets in Antwerp. First class cycling. A red carpet for cyclists*. The note contains general design principles for cycle streets and short term plans to fill in missing links at three supra local routes in the Antwerpen Noord and Borgerhout *intra muros* quarters and on the so-called District route. The cycle street will complement known and trusted instruments such as cycle paths and cycle suggestion strips and further prove itself as an important tool for the implementation of the network-oriented approach of the city's bicycle policy.



Bicycle parking building at Berchem Station. The city and its partners are developing 'super links' at multimodal hubs.

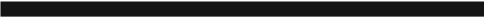
© ELISABETH VERWAEST

The circular city

Antwerp wants to optimise the role of different urban streams in a city that resists heat stress and flooding risks as well as it takes on economic and social challenges. The city wants to use locally produced and renewable energy as much as possible and wants to make sure that streams of energy and investments are optimally used by as many people as possible. The city offers guidance and support for water and energy projects that cross parcel and company boundaries. This way, Antwerp citizens and companies are empowered to sign up for the circular city in their own ways. The city also wants to improve the sustainability of waste streams with high-quality, sustainable and user-friendly waste collection service centres.



In the context of the 2009 European Covenant of Mayors, the city drafted a first local climate plan in 2011. The plan contained high ambitions in the fields of CO₂ reduction and renewable energy and stressed the importance for the city administration to set the example and of involving the urban community. The 2012 emission inventory showed that Antwerp was on course for a number of its objectives but also indicated the need for optimisation. The renewed 2015–2020 climate plan evaluates past efforts and formulates new and improved measures. A special focus lies on behavioural change, financing the local climate policy, the trade and services sector and adaptation and urban development.



Climate-aware urban community
By 2020, the city’s own buildings and vehicles must reduce their CO₂ emissions by 50% and by 2050, the city wants to achieve climate neutrality. The city sets the example, for instance by thoroughly implementing insulation, installing energy-efficient heating systems, maintaining a sustainable purchasing policy and optimally striving for a sustainable car fleet. By 2020 and together with the citizens and companies of Antwerp, the city wants to achieve a general 20% reduction in CO₂ emissions and a 13% share of local renewable energy for the entire city territory. EcoHuis offers support and advice and via Stadslab2050, residents and entrepreneurs can join forces to develop and launch ideas together. The city is also working on a specific toolbox for the trade and services sector. But there are also large-scale infrastructural measures such as the construction of the largest wind-mill park of Belgium in the port and the phased development of a city-wide heat network.

Adaptation and urban development
In time, adaptation measures must make the city ‘climate resilient’ and enable the city’s infrastructure to resist flooding, for instance, or heat stress. The best-known project is the renewal of Scheldekaaien (‘the Scheldt quays’), which entails raising the flood defence level to resist storm surges and accommodate the rise of the sea-level. Other great city projects that include adaptation measures are Nieuw Zuid, the Cadix quarter, Zuiderdokken, Groenplaats, Blue Gate Antwerp and the Albertkanaal industrial zone. Also crucial are the many smaller interventions in public space. Green tram lanes and parking spaces, for instance, or strategically placed greenery and wadis for water buffering. Thanks to the Building Code, residents’ and entrepreneurs’ individual building projects, too, contribute to these ambitions, for instance by means of mandatory green roofs and porous gardens and driveways. And, finally, there are also city-wide plans that focus specifically on preparations for climate change, such as the Green Plan and the Water Plan.



Small green spaces, too, are crucial in the city’s adaptation strategy.
© ANS BRYN



By 2020, the city wants to achieve a 20% reduction in CO₂-emissions and a 13% share of renewable energy together with Antwerp residents and companies.



EcoHuis informs citizens about green roofs, which were made mandatory in the Building Code for new buildings and certain impactful adaptations.



In order to achieve the long term climate goals, the speed of and approach to the renovation of existing homes must improve. The city thus supports the 2020 Flemish Energy Renovation Programme, which is, however, mainly aimed at single-family homes. But seeing as more than 60% of the buildings in the city are apartment buildings, which require a specific approach, the city, Passiefhuisplatform ('passive house platform'), real estate agents, building managers, local residents and co-owners are working together on special energy renovation trajectories.

Street and neighbourhood renovation

In Langbaanvelden quarter EcoHuis, the district of Deurne's housing service office and Onder1dak ('under one roof') organised a group purchase of roof insulation for 25 identical terraced houses. In addition to a beneficial price, the owners could also obtain the city's 'energy loan'. The residents also received guidance for the invitation to tender, the selection of the candidate and the application for subsidies. In Bosuil quarter there were 78 terraced houses involved, with individual owners as well as a building manager. The project resulted in good cooperation with the building manager and the co-owners' organisation. This opened up perspectives for a shift from neighbourhood renovation to apartment building renovation.

Apartment building renovation

The city created an unburdening team to give advice to building managers and co-owners' organisations about investments in thorough applications of insulation, high-yield glass and collective heating. An energy renovation coach guides the trajectory, the city also consults the *Bouwunie* ('construction union') and the *Vlaamse Confederatie Bouw* ('Flemish building confederation'). The city wants to realise five to ten energy-efficient renovations for entire apartment buildings (each preferably involving twenty or more units) and five almost-energy-neutral apartment building renovations per year.

Berchem sets the example

In the district of Berchem, the owners of 150 apartments at Borsbeeksebrug decided to simultaneously renovate their properties. The owners obtained a loan which was created especially for co-owners' organisations by a financial institution (VME-loan). The works comprise roof insulation and the renovation of the façade and the terraces. The existing facades are replaced and insulated. After the insulation, the flat roofs are designed as green roofs for rain water buffering.



In the Langbaanvelden quarter, EcoHuis and partners organised a group purchase of roof insulation for 25 identical terraced houses.





More than 60% of the buildings in the city are apartment buildings, the renovation of which requires a specific approach.
© PATRICK HENDERYCKX

WASTE COLLECTION SERVICE CENTRES

The city has started to renew its waste collection service centres a number of years ago. The city also developed a vision for five new centres. The renewed waste collection service centres were designed by Bovenbouw architects. The centres in the districts of Berchem ⁴⁸, Wilrijk and Deurne were already implemented within the contours of the new concept. The completion of the centre in Luchtbal quarter is planned for 2017.



Innovative concept
By applying one and the same concept to different waste collection service centres, the city wants to create recognisability and uniformity for the centres on its territory. Moreover, the centres have an exemplary role in the field of ecological, energy-efficient and sustainable building. It is a sustainable project in every aspect: from design and implementation to the choice of materials and the application of techniques. The administrative buildings, too, are adapted to current demands and will not only offer work spaces for employees, but also information points for visitors.

Efficiency and user-friendliness
Because the current nine centres no longer have the capacity for the increasing number of users, the new concept strongly invests in the optimisation of user-friendliness and capacity. For instance, great attention went to circulation and flow within the centres. In order to reduce traffic nuisance on the terrains and guarantee efficient circulation, the designs all provide a long waiting queue with a turning loop. The circulation of users and collection services is fully separated, which increases comfort and safety. The waste containers will be organised around an elevated square; the height difference will make the use of the containers easier.



“Here, we dump the things that have surrounded us for years.”
© LIESBETH GOETSCHALCKX



The waste collection service centres are good examples in terms of ecologic, energy efficient and sustainable building.
© LIESBETH GOETSCHALCKX

Applying the same concept for all the waste collection service centres promotes recognisability and uniformity.

© LIESBETH GOETSCHALCKX



ALBERTKANAAL INDUSTRIAL PARK

The second largest industrial park in the province of Antwerp stretches out alongside Albertkanaal ('Albert canal') through the municipalities of Schoten, Wijnegem and Antwerp. The industrial park faces important challenges in the fields of mobility, spatial planning, social coherence, economics and climate. The province took the initiative to develop *De Kanaalkant* ('the canal embankment'), a joint plan for the future of the terrain, which also includes climate measures. The partners aim at achievable and high-quality solutions to these challenges by means of a conceptual study, pilot projects and a sustainability vision.



Concrete project: companies sharing solar energy.

Conceptual study

The conceptual study focused on two themes that are specifically relevant for this area: energy and water. It wanted to achieve immediate effects through pilot projects and launch a long-term strategy for the entire industrial site as well. The study made an inventory of all the energy and water streams and studied the potential of alternative energy and water systems. Based on this, four concrete and financeable projects were developed, each contributes to the climate challenges and a sustainable industrial park and each positively affects the nearby residential areas.

Energy and water

The study investigates collective systems for the production of renewable energy and for the exchange of heat between companies and with the surroundings. Local production promotes security of supply and reduces dependency of import. The study also looks for alternatives for groundwater abstraction in order to counter drought and promotes the collection, buffering and infiltration of rain water to avoid flooding. Both strategies increase operational safety by reducing economic flooding damage and increasing the availability of water for industrial processes.

Further trajectory

The public partners and a number of companies developed two project cases per theme. The technical and economic implications of the projects were accounted for in a complete project plan, which serves as a starting point for a vision on the sustainability of the entire industrial park. This way, design practice is used to find ways to upscale financeable and feasible projects. During the project, new partners are sought to join the Kanaalkant network. After that, the commitment of the companies and public partners will be formalised. The government joins forces with a number of companies and continues the trajectory for sustainability.



The four concrete projects on a map: heat, water, solar energy and climate-resilient space.



Interventions for water buffering/infiltration.



Albertkanaal industrial zone faces important challenges in terms of mobility, spatial planning, social problems, economy and climate.
© DRIES LUYTEN



Blue Gate Antwerp ⁵⁰ is a new industrial park on the former Petroleum Zuid (‘southern petrol’) site, where a petrol cluster started to develop in the early 20th century. Petroleum Zuid would evolve into the largest petrol cluster in Europe and the second largest in the world. When the port moved to the north, the site was largely abandoned, save for a few remaining petrol companies. The city and Flanders want to put the industrial park back on the international map. The location by the water and the principles of the circular economy form the guiding principles for the development. The further refinement and coordination of the public-private cooperation are closely monitored by the city, AG VESPA, PMV and Flanders, together with the Blue O’pen consortium of DEC, Dredging International and Bopro.

Blue Gate Antwerp will be developed in phases over multiple years. In 2015, the first production company settled on the site.



An asset for the city and companies

The location of Blue Gate Antwerp close to the city centre, next to the Nieuw Zuid residential development and along the Ring road and the River Scheldt offers an ideal living and working combination and exceptional possibilities in terms of transport. These possibilities are optimised by providing city-regional, water related distribution opportunities and a logistics zone. Both the companies and the city benefit from this, because of reduced traffic nuisance and noise and air pollution. Blue Gate Antwerp itself will be at least CO₂-neutral. A heat network and solar energy production are provided. But Blue Gate Antwerp will also be a source of employment opportunities: from higher educated, technical and low-skilled jobs in the new businesses to social employment in the context of park management. Finally, Blue Gate Antwerp also entails a new green corridor from Nieuw Zuid to the polders in the district of Hoboken.

Innovation and eco-effective production

At Blue Gate Antwerp, companies can initiate research and development (R&D) in an incubator, set up pilot installations and develop into fully-fledged, autonomous production factories. Blue Gate Antwerp wants to offer these unique opportunities to companies that share the city’s and Flanders’ strong ambitions in terms of sustainability and quality. Blue Gate Antwerp welcomes companies that achieve at least the BREEAM ‘very good’ level. Also important are innovation and water-related activities. Blue Gate Antwerp can thus accommodate progressive and eco-effective production companies, international headquarters, research and development institutions and logistic actors, preferably with a link to the River Scheldt.

Progress and phases

In 2014, the partners within the Interreg IVB C2C BIZZ project developed a charter that confirms the strong ambitions for sustainability that new companies at Blue Gate Antwerp have to subscribe to. A feasibility study and a business plan for the development of an incubator and accelerator for open entrepreneurship and sustainable chemical industry in Flanders were completed as well. Blue O’pen, the city and Flanders will implement all aspects of the project together with specialised partners: logistics, energy, park management, R&D, support, spatial planning and permits. The complex phasing of the implementation includes attuning real estate developments and marketing initiatives to the remediation of the soil, the Sigma Plan flood defence works and infrastructural works. The complete development will take several years. But in the fall of 2015, the first production company already opened a new plant on the Blue Gate Antwerp site.



Blue Gate Antwerp offers a logistic zone and possibilities for city-regional distribution over the water.
© STUDIEGROEP OMGEVING





Because of its location, Blue Gate Antwerp promises ideal living and working combinations and exceptional transportation possibilities.

© PATRICK HENDERYCKX



NIEUW ZUID streaming quarter

Considering the strong link of Nieuw Zuid with the River Scheldt and the partners' great ambitions in terms of sustainability and ecology, the project was selected as an 'A-project' to refine the theme of 'Streaming City' in the context of the renewal of the city's spatial structure plan.

The 33-hectare green public space in the new residential quarter includes a park (15 hectares), paths, green squares, green spaces scattered all over the neighbourhood (2 hectares), a forest with wadis for slow water infiltration (10 hectares) and public space on the quays (6 hectares). Native plants are given preference. Sound buffering is an important aspect of the design because of the close proximity of the Ring road. A landscaped hill will shield the quarter from the Ring road acoustically as well as visually.

Water has been a structuring element in the design of the new residential quarter. Wadis and green roofs will help collect water for slow infiltration. This contributes to the goal of rain water neutrality and to the reduction of the urban heat

island effect. The natural water management system stimulates the formation of new habitats and creates stepping stones for plants and animals on their way to the Scheldt, the polders of the district of Hoboken or the Groene Singel ('green Singel').

noAarchitecten integrated the design of a local energy central for Nieuw Zuid into the landscaped hill. The energy central will unfold itself to strollers in the park as part of Nieuw Zuid's story as a sustainable urban quarter. The local energy central will use gas at first, but will switch to residual heat from the nearby companies at Blue Gate Antwerp or to other renewable energy sources as soon as possible.

The measure with the greatest impact on the residential quarter and the city as a whole is the Nieuw Zuid heat network. The construction of a heat network on the scale of an entire residential quarter is a first in Belgium. For Antwerp, it is a first step in a strategy towards a city-wide heat network.



Water has been a steering element in the design of the new residential quarter. Wadis and green roofs will collect water for slow infiltration.

© TRIPLE LIVING





Appendices

Stadsontwikkeling

Stadsontwikkeling ('urban development') is a multi-disciplinary city company. Based on qualitative and quantitative spatial research, the department for space prepares the city's spatial policies and develops the structure plan and individual spatial plans and projects. The planning and environmental permit services help implement the spatial vision and goals by scrutinising building and exploitation permit requests. The department for built and archaeological heritage advises other departments but is also responsible for (mostly archaeological) research and for promoting public access to and awareness of our monumental patrimony.

Parkeer- en mobiliteitsbedrijf (the city's parking and mobility company) implements the parking and mobility policy at the network and route level, but also implements projects (e.g. Park & Ride buildings) and operational aspects (e.g. parking enforcement). The departments for public space implement projects in public space and follow up with management and maintenance. The States-General for Road Safety in Antwerp coordinates the several different road safety initiatives in the city.

The department for energy and the environment, too, has a coordinating role and makes sure that every project optimally contributes to the city's environmental, energy and climate policy.

Grote Markt 1
2000 Antwerp
sw_communicatie@stad.antwerpen.be

AG VESPA

AG VESPA is the city's autonomous company for real estate management and city projects. AG VESPA works on a liveable and attractive city as an expert and public entrepreneur and through the implementation of real estate, building and city projects.

AG VESPA carries out exemplary building projects for Antwerp. The land and property policy entails the replacement of neglected buildings with new homes and businesses that provide new impulses to neighbourhoods. AG VESPA also realises several public buildings as a project commissioner. Sustainability and strong architecture are crucial points of attention. In addition, AG VESPA manages a property portfolio. The rental, sale and maintenance of buildings and sites generate income, which the city uses to implement its policies.

AG VESPA also has an important role in the implementation of city projects. The combination of legal, financial and technical expertise allows AG VESPA to support the city, its subsidiary companies and private investors in the preparation of complex city projects.

Generaal Lemanstraat 55 bus 4
2018 Antwerp
info@vespa.antwerpen.be
www.agvespa.be

Stadsbouwmeester

Stadsbouwmeester (the 'city architect') advises the board of mayor and aldermen and the city services on spatial quality. The city architect ensures good choices in terms of spatial designers (architects, urban and landscape developers...) for every city project. He monitors spatial quality for private building projects, too, via the building permit procedure.

The city architect presides the Welstandsc commissie, the city's advisory committee for visually impactful projects in the city. Finally, the city architect's team facilitates the exchange of knowledge about urban space and architecture with other (international) cities and organisations.

The city architect has a five-year mandate. Current Stadsbouwmeester, Christian Rapp, was appointed in January 2016.

Grote Markt 1
2000 Antwerp
stadsbouwmeester@stad.antwerpen.be

Stadsbeheer

The Property pillar of the city's Stadsbeheer ('city maintenance') company manages and maintains the city's own buildings. The departments for development, exploitation and technical maintenance analyse the distribution of public amenities, aim for high-quality architecture and sustainable techniques and convert, restore and renovate the city's buildings. The departments also manage and maintain these buildings.

Grote Markt 1
2000 Antwerp
sb_communicatie@stad.antwerpen.be

**Antwerpen, Herwonnen Stad. Synthesenota
Globaal Structuurplan Antwerpen**

Vanreusel, J.; Vermeulen, P.; Koschak, L.,
Planologische Dienst Stad Antwerpen, 1990

Stadsvernieuwing in beweging

Knops G.; van den Broeck J.; Koning
Boudewijnstichting, Brussel, 1992

**Taking sides. Antwerp's 19th-century Belt: ele-
ments for culture of the city. / En marge des rives.**

**La ceinture du XIXe siècle à Anvers:
éléments pour une culture de la ville.**
Uyttenhove, P. [ed.], Antwerpen Open Stad, 1993

Spoor Noord. Een stedelijk park in zicht

Ludion, Antwerpen, 2003

Spoor Noord. A City Park off the beaten Tracks

Ludion, Antwerpen, 2003

**Antwerpen Ontwerpen. Strategisch Ruimtelijk
Structuurplan**

stad Antwerpen, 2006

**Inspirerende renovaties in de stad. Nieuw leven
voor Antwerpen-Noord en Oud-Borgerhout**

Lannoo, 2006

Een rode draad voor het Schipperskwartier

stad Antwerpen, 2007

Bouwblokkenboek

University Press Antwerp, Antwerpen, 2008

Antwerp, Territory of a new Modernity

SUN, Amsterdam, 2009

**Den Bell. Het verhaal van een legendarisch
gebouw**

Canfyn, F., Linkeroever Uitgevers, Antwerpen, 2009

**Groene Singel. Geschiedenis van de Antwerpse
ringruimte. Plannen, verhalen, dromen
1906 — 2009**

Ludion, Antwerpen, 2009

**Het Eilandje. Urban Renewal towards a Dynamic
Neighbourhood by the Water**

AG Stadsplanning Antwerpen, 2011

Kaailand. Langs de kade van Antwerpen

Antwerpen: Ludion, 2009

**Antwerpen innoveert. Out: Petroleum Zuid. In:
Blue Gate Antwerp**

Uitgeverij Snoeck, Heule, 2011

Anvers, « Faire aimer la ville »

Masbounji, A. [ed.], Groupe Moniteur,
department Architecture / Meddtl, Paris, 2011

Masterplan Scheldekaaien. Tussen stad en stroom

AG Stadsplanning — W&Z, 2011

**Park Groot Schijn. Een spraakmakend pad naar
een nieuw park**

AG Stadsplanning, 2011

Park Spoor Noord. Van idee tot park

AG Stadsplanning, 2011

Urban Renewal in Antwerp. Designing Antwerp

Stad Antwerpen, 2012

Lab XX: Opting for the twentieth-century Belt

Stad Antwerpen, 2014

**Antwerp, City of Tomorrow. The Renewal of Urban
Renewal**

Stad Antwerpen, 2017

**Lab XX_Work. From Research-by-Design to
Mission for the City**

Stad Antwerpen, 2017

Lab XX Pilot project the Lageweg

Stad Antwerpen, 2017

**Levendig Landschap. Antwerpen groene stad van
morgen.**

Stad Antwerpen, 2017

| YEAR | PROJECT | AWARD | CATEGORY |
|------|--|---|--|
| 1992 | Urban renewal in regeneration areas | Agora Award | |
| 2002 | De Coninckplein area Thuis in de Stad-prijs | Spatial project | |
| 2003 | Designcenter | Belgian Building Award | Best corporate building |
| 2003 | Gezondheidshuis in Sailor’s Quarter | Johnson & Johnson Medicine Award | |
| 2003 | Designcenter | Bouwheer Award New construction | |
| 2003 | Re-opening of De Roma | Thuis in de Stad award | |
| 2003 | Tweemontstraat Square in Deurne | Publieke ruimte, kinderen toegelaten (‘public space – children allowed’) | |
| 2005 | Gezondheidshuis in Sailor’s Quarter | Project commissioning Award | New construction |
| 2005 | Sailor’s Quarter | Thuis in de Stad award | Spatial project |
| 2006 | Sailor’s Quarter | DIFA Award | Special Award |
| 2006 | Land and property policy | Provincial Award for Architecture | |
| 2006 | Droom de stad | Thuis in de Stad award | Resident, neighbourhood or quarter initiative |
| 2006 | AMUZ | Flemish Monument Award | |
| 2006 | Sailor’s Quarter | Flemish Spatial Planning Award | |
| 2007 | Felix Archives | Belgian Building Award | Cultural heritage |
| 2007 | Property policy | Bouwheer Award | Integrated contract |
| 2007 | Felix Archives | Bouwheer Award | Reuse and redesignation |
| 2007 | Opsinjoren | Thuis in de Stad award | Resident, neighbourhood or quarter initiative |
| 2008 | Strategic Spatial Structure Plan for Antwerp | ISOCARP Award for Excellence | |
| 2008 | Theaterplein, het dak op de markt | Thuis in de Stad award | Spatial project |
| 2008 | Groene Singel research trajectories | Master Plan Flemish Spatial Planning Award | |
| 2009 | Den Bell Corporate Transport Plan | Business Mobility Award | |
| 2009 | Central Station Area | Le Palmarès des Mobilités | |
| 2009 | Park Spoor Noord | Bouwheer Award Public space | |
| 2009 | New administrative centre in Hoboken | Energy- efficient new construction Bouwheer Award | |

| YEAR | PROJECT | AWARD | CATEGORY |
|------|---|---|--|
| 2009 | Scheldekaaien Participation Process | Thuis in de Stad award | Resident, neighbourhood or quarter initiative |
| 2009 | Park Spoor Noord | Thuis in de Stad award | Spatial project |
| 2009 | Park Spoor Noord | UDITE Knowledge sharing Award | |
| 2009 | Veldstraat swimming pool | Flemish Monument Award | Redesignation |
| 2010 | Master plan for Lillo | Provincial Award for Architecture | |
| 2010 | Park Groot Schijn | Flemish Spatial Planning Award | Participation |
| 2010 | Scheldekaaien: www.onzekaaien.be | Website Monitor Local Authorities | Most innovative municipal web initiative |
| 2011 | ‘Urn forest’ at Schoonselhof | Funeral Awards | Redesignation |
| 2011 | ‘Thank you for not speeding’-campaign | OVK Sinterklaas | Award Road safety initiative |
| 2011 | ‘Thank you for not speeding’-campaign | IMC European Awards | Best non-profit activation campaign |
| 2012 | Driekoningenstraat-Statiestraat | Public Space Award | |
| 2012 | Fietsstad (‘cycle city’) 2012 | Flemish government, Flemish Foundation for Traffic Knowledge | |
| 2012 | Design research as a methodology | Flemish Spatial Planning Award | |
| 2012 | European City of the Year | Academy of Urbanism | |
| 2013 | Green façades and urban agriculture | Belgian Energy and Environment Award | Cities and municipalities |
| 2013 | Masterplan Scheldekaaien | International Awards for Liveable Communities | |
| 2013 | Neerland Park | Green Spring 2013 | Park |
| 2014 | IGLO project | Wivina De Meester Award for excellent project commissioning 2014 | |
| 2014 | ‘Het Bos’ youth centre | Wivina De Meester Award for excellent project commissioning 2014 | |
| 2015 | Gate 15 (student centre) | Belgian Architecture Award | Non-residential, public use |
| 2015 | Passive-standard houses, Prins Leopoldstraat | Belgian Architecture Award | |
| 2015 | Stadslab2050 — Energy for the Heart of Antwerp | Belfius Smart City Award 2015 | |
| 2015 | Harmonie Park | De Groene Lente 2015, Vereniging voor Openbaar Groen | Park |
| 2016 | Park Spoor Noord | ISOCARP Sam van Embden Award | |
| 2016 | Play tissue plans | Flemish Road Safety Award 2016 | |

Editor & translator

Alix Lorquet

Editorial committee

Marijke De Roeck, Patricia De Somer,
Hardwin De Wever, Katrien Embrechts,
Filip Lenders, Alix Lorquet, Kristof Peeters,
Pieter Tan, Katlijn Van der Veken,
Johan Veeckman, Jan Verhaert

With cooperation from

Katrijn Apostel, Elisabeth Baeten, Tim Bellens,
Mieke Belmans, Valérie Blanckaert, Tinne Buelens,
Sammy Cappaert, Bert Claes, Rozemie Claeys,
Nicolas Cleeremans, Maud Coppenrath,
Walter De Backer, Johan De Herdt, Leen De Jan,
Greet De Roey, Bert De Vos, Ivan Demil,
Koen Dockx, Ouardia El taghdouini, Griet Geerinck,
Els Gepts, Michel Gerits, Annemie Gommers,
Iris Gommers, Kitty Haine, Cheryl Horemans,
Ellen Lamberts, Griet Lambrechts,
Eveline Leemans, Filip Lenders, Sandra Lintermans,
Klaas Meesters, Nancy Meijsmans,
Elisabeth Mercelis, Isabel Michielsen, Kris Peeters,
Ilse Peleman, Johan Pieraerts, Filip Pittillion,
Veva Roesems, Karina Rooman, Elisabeth Smet,
Filip Smits, Linda Snoeys, Sarah Soontjens,
Philippe Teughels, Nathalie Thilleman,
Ine Van de kerkhove, Gert Vandermosten,
Jo Van de Velde, Valerie Van de Velde,
Michael Vanhove, Dirk Van Regenmortel,
Johan Veeckman, Sam Verbelen, Gerda Vercammen
Yrsa Vermaut, Tom Vinck, Kathleen Wens,
Caroline Wijckmans, Liesbeth Wouters

Maps

© OpenStreetMap-authors

Images

© city of Antwerp, unless otherwise indicated

Cover image

Woodmonkey

Graphic design & typesetting

Benjamin Martijn, Duall

Printer

KH Drukwerken, Tessenderlo

Legal depot number

D/2017/0306/38

Responsible publisher


Patricia De Somer
Grote Markt 1
2000 Antwerpen

ISBN 978 90 826 3413 6

The editing of this book was completed on 5 September 2016. The responsible publisher is not accountable for information that might have become incorrect due to later changes. Save for exceptions expressly provided by law, nothing in this publication may be multiplied, saved in automated data systems or made public without the responsible publisher’s prior and written consent.

Claims regarding image copyrights may be addressed to the responsible publisher.





This book offers a unique insight into the urban development policy of Antwerp. The city is eagerly thinking, debating and experimenting together with its citizens, entrepreneurs and many other partners, in search of 'the city of tomorrow'. A selection of projects illustrates this unique process, structured around the three pillars of the actualisation process of the current spatial structure plan: *Living in the city of tomorrow*, *Working together on the city of tomorrow* and *The streams in the city of tomorrow*. These projects are implementing the structure plan while at the same time testing and deepening its renewal process. They can be particularly representative for one of the pillars, but always contain aspects of the other two. The Nieuw Zuid project illustrates this coherence and interaction throughout the book.



9 789082 634136