

The Maillerie district

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Address 1 - street: 220 Rue Jean Jaurès 59650 VILLENEUVE D'ASCQ, France

Starting year of the project : 2018 Delivery year of the project : 2024

Certifications :

BREEAM®



10 ha

The LA MAILLERIE project is part of an overall development program for the creation of a new district called LA MAILLERIE. The district itself is inserted in a historic district of VILLENEUVE D'ASCQ, at the municipal limit of the town of Croix, instead of the logistics site of the 3 SUISSES INTERNATIONAL (3SI) which had been present in the town since 1976.

The rationalization of the logistics activities of the 3 SUISSES and their regrouping on the 4 winds business park in Hem freed, in early 2013, the so-called "Flers" site which had become technically obsolete and which generated nuisances incompatible with the urban environment.

Straddling the towns of Croix and Villeneuve d'Ascq, on the edge of rue Jean Jaurès, the Flers site includes two sites separated by avenue Le Nôtre. On the southern part (9ha5) were the old logistics buildings, with imposing volumes, the northern part (0ha7) was, for its part, occupied by an overhead car park which accommodated the cars of the employees.

LA MAILLERIE is inspired by the history of the site which hosted one of the jewels of the northern textile industry: the 3 SUISSES. First spinning, then distance selling giant, the group was born around the act of weaving. An act that LA MAILLERIE aims to perpetuate by no longer crossing woolen or cotton threads, but the inhabitants, passers-by, workers, etc., who rub shoulders with it on a daily basis. A neighborhood, like a spinning mill that would forge human links and provide answers to today's economic, societal and environmental challenges.

Nestled in the heart of the Lille metropolis, a district not quite like the others is indeed about to emerge. Owned by SAS IMMOFLERS (itself a subsidiary of the NODI company), this industrial wasteland is undergoing a complete redevelopment under the impetus of two companies acting as co-developers, the companies NHOOD and LINKCITY.

More than 700 housing units, offices, a hotel, a school, shops, restaurants will notably emerge from the ground. In the heart of the Lille Metropolis and a few minutes walk from the city center of Croix, they will benefit from a prime location and an area perfectly served by public transport and motorway axes. At the beginning of May 2021, the Maison du projet, the O'Stam restaurant, ABEJ Ressourcerie and the Maison ZD (Zero Waste concept store) have already been delivered.

At LA MAILLERIE, it is not only the construction of buildings that is desired but above all to bring well-being to future inhabitants and visitors to the site, and to bring together the conditions for good living together.

The district was designed by LINKCITY and NHOOD as a place of life, creator of social links, which combines cultural, social and solidarity initiatives with commitments in favor of biodiversity and soft mobility. Our desire is to offer a new way of living.

Programme

- Housing
- Offices
- Businesses and services
- Public facilities and infrastructure
- Public spaces
- Green spaces
- Others

Project progress

- Management phase
- Delivery phase
- Operational phase

Procedure type

- Urban développement permit
- .
- .

Key points

- Governance
- Quality of life
- Economic development
- Mobility
- Smart city
- Resources
- Biodiversity
- Energy /Climate

Certifications

- . BREEAM for communities
- Autre

Data reliability

Self-declared

Photo credit

The Maillerie

TERRITORY

Type of territory

Historically, this industrial wasteland housed the former head office and logistics of the company 3 Suisses International (3SI). It developed over a land area of 10 hectares with 33,000 m² of building footprint.

The site, located within a vast industrial reconversion zone, is a strategic location for the Lille Metropolis.

The program is part of a historic district at the junction of the towns of Villeneuve d'Ascq and Croix. It constitutes an economic axis of connection between the two polarities of the city center of Croix and the district of Flers Breucq of Villeneuve d'Ascq.

The blue plan carried by the European Metropolis of Lille defined the main orientations aiming at the partial renaturation of the area by the connection of a natural river to a backwater of the canal system, the Branche de Croix, which will bypass the district and itself will bring nature and biodiversity.

With the support of Agence Nicolas Michelin et Associés, the European Metropolis of Lille and the towns of Croix and Villeneuve d'Ascq are working together with NHOOD and LINKCITY on the site conversion project.

As part of the "intense city" approach, the Nicolas Michelin et Associés agency was commissioned to reflect on a 50 hectare area, to the east of rue Jean Jaurès, where the main building is located. LA MAILLERIE website. In this study, the major challenges of the Blue Plan were taken into account and made it possible to give an overview of the possible developments for the sector, in a logic of "guide plan" in order to guide public action and supervise the private action if necessary.

This urban renewal project is a private project. However, its challenges in terms of urban requalification, hydraulic and environmental developments, integration into the blue and green grid and both economic and residential programming are of a municipal, even metropolitan nature and therefore form part of the policies put in place by communities.

Climate zone

[Cbc] Mild, dry winter, warm and wet summer.

More info

☑ https://lamaillerie.fr/fr

KEY FIGURES

Green areas, roofs included

Green areas, roofs included: 37 619 m²

Office floor area

Office floor area: 15 981 m²

Commercial floor area

Commercial floor area: 5 000 m²

Public facilities floor area

Public facilities floor area: 3 500 m²

Housing floor area

Housing floor area: 49 110 m²

Number of residential units

Number of residential units: 711

Number of social housing units

Number of social housing units: 262

GOVERNANCE

Project holder

Name: FLERS DEVELOPMENT

Type: Private company
General description:

NODI and LINKCITY combine their values and know-how with this major project that is La MAILLERIE by creating SAS FLERS AMENAGEMENT.

Project management

Description:

Name : NODI

NODI is a developer, landowner and neighbourhood captain whose mission is to meet the need to convert urban areas into fulfilling living spaces for people.

Its spearhead is to design living spaces that generate social and economic links... as its name reminds us: in Esperanto NODI means "to link".

NODI's ambition is to create, transform and actively participate in urban mutations by proposing a more responsible city, which fully integrates the energy and ecological transition that is so necessary today. We create neighbourhoods based on the principle of ecosystems, while favouring social ties and offering personalised, affordable housing accessible to a larger number of people, aimed at a multigenerational public.

Name: NHOOD

Born on 26 January 2021 from the merger of Ceetrus and NODI, Nhood is a new real estate services company.

With the energy of a start-up determined to do things differently and the ambition to create shared value, Nhood is at the service of retailers, companies, owners, investors, elected officials and local players to make their projects succeed. Alongside those who make the city of tomorrow, Nhood France manages, animates, co-creates, transforms and regenerates existing sites into new living spaces with a triple positive impact: societal, environmental, economic (People, Planet, Profit).

Name: LINKCITY

LINKCITY is the 4th largest French developer and is present throughout France, close to local and citizen dynamics.

30 years of expertise, combined with the know-how and engineering of the Bouygues group, enable us to guarantee that we will listen to you on a daily basis and respect our commitments for all your projects, whether they are single or multi-product. We work alongside you to create links between all the players, from the design phase through to the operation of the programme.

Our ambition is to carry out sparkling, conscious and committed projects for you, which meet the expectations of residents and defend their ideas of urban living, for streets in which they can find themselves.

Name: IMMOFLERS

NODI and LINKCITY are combining their values and expertise in this large-scale project, La MAILLERIE, by creating SAS FLERS AMENAGEMENT.

NODI, the landowner of the site, is joining forces with LINKCITY to develop the site in partnership with local authorities such as the Lille European Metropolis, the towns of Croix and Villeneuve d'Ascq and Nicolas Michelin's urban planning agency, ANMA. They also rely on the technical expertise of Projex and Urbafolia.

This combination of skills was designed to define a vision and ambitions for the district in order to obtain planning permission, while keeping in mind the values of each party and meeting the expectations and needs of the local authorities and residents.

The role of this grouping as developer is, throughout the elaboration of the operation, to coordinate the interventions and to pilot the project, from the deconstruction to the realization of the various common equipments, to provide the services and to bring the heating network on the site.

NHOOD and LINKCITY, in their roles as founders and developers, also want to create a lively, non-dormitory neighbourhood. In order to give concrete expression to this intention, in 2018 the founders first created the Maison du Projet, a place for production, exchange and experimentation and, more generally, a place designed to bring together the stakeholders (founders, local authorities, partners, beneficiaries, owners and, in particular, the historic owner of the site), to capture and encourage any initiative that will help to prefigure the district.

In order to ensure that the dynamic initiated in the Maison du projet continues, the founders wanted to bring together all the stakeholders who so wished in a common company built around a strong methodological foundation: imagine, realise and bring to life the district, + shared, + appropriate, + collective.

To do this, a SCIC (Société Coopérative d'Intérêt Collectif) is being set up. Its final objective will be to bring the neighbourhood to life by encouraging initiatives, offering services adapted to the people who use them, providing kind attention to everyone and cultivating links between those who live there.

The SCIC will be made up of 3 colleges: the founders (NODI & LINKCITY), the suppliers or employees of the site and the local authorities, customers and residents. In order to provide the necessary impetus for the start-up, it will benefit from the founders' contribution of shared premises, either in full ownership or in use, depending on the case.

These premises will enable it to deploy its proposals and thus take over from the Maison du projet, while building on its experience. The rents generated by the rental of its spaces will enable the SCIC to become financially independent.

One of the SCIC's key initiatives will be the creation of a "captaincy". Managed by an authorised operator, currently being identified, the "Capitainerie" will be the anchor point of the district and will also offer co-working and meeting rooms.

Project management

In the context of the implementation of the ambitions defined for the district, the development and marketing of the programmes as well as the creation of a diversified housing offer, the steering is carried out by:

- Chief town planner: ANMA
- Development company: FLERS AMENAGEMENT
- Project management: NHOOD and LINKCITY are accompanied by NACARAT and BOUYGUES CONSTRUCTION
- Project management team: ANMA, Dhondt & Bajart, Saison Menu, De Alzua, Beal & Blanckaert, Coldefy, Trace, B+B, PROJEX and URBAFOLIA
- Institutional: MEL, Cities of CROIX and VILLENEUVE D'ASCQ
- Social landlords: Norevie, LMH, Vilogia
- Prefiguration: associations, independents, project leaders

Project stakeholders

Nhood

Function: Developer https://www.nhood.fr

Linkcity

Function: Developer https://www.linkcity.com

SOLUTIONS

Axon

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QUALITY OF LIFE

Quality of life / density

Net density: 0.85m² SDP

Culture and heritage

The intentions and ambitions of this site reconversion project are inspired by its history. It hosted one of the flagships of the northern textile industry, the 3 Suisses. First spinning then giant in distance selling, the group was born around the act of weaving.

In this regard, LA MAILLERIE aims to perpetuate this act by interweaving, no longer woolen or cotton threads, but the inhabitants, passers-by, workers, etc., who rub shoulders with it on a daily basis. A district, like a spinning mill, which would forge human links. Each street name and building in the neighborhood refers to the history of the site. Thus in the framework of the district, you will find the alley of the mannequins which will bring you to the Cloth while passing in front of the Cashmere. In the same vein, some buildings have taken on a form of weaving on the facade. We can cite, for example, the building called the Compact, which will house a gourmet hall, a car park, offices and an urban farmhouse on the roof, which will be dressed in different kinds of jacquarts on the facade.

The pedestrian traffic lanes have been designed and thought in the direction of the history of the district. Thus, they meet at a junction point forming a central place where workers used to meet.

The desire to perpetuate the history of the site over time is one of the major elements of the project, both at the human and material level. During the deconstruction of the buildings, a large number of materials were recovered in order to give them a second life. Tables made with the solid oak parquet from the former 3 Suisses offices were made by a local startup, Dizy, specializing in the recovery and transformation of construction materials and will be offered to future

LA MAILLERIE, is an innovative urban project. It does not hesitate to experiment and initiate new modes of interaction between its inhabitants and local actors while keeping a link with its historical heritage.

Social diversity

One of the strong ambitions of the project is to design a more social, more local and more friendly neighborhood.

THE MAILLERIE, it is not only the construction of buildings that are desired, but above all to bring well-being and bring together the conditions for well-living

together.

The district was designed by NHOOD and LINKCITY as a place of life, creator of social links, which combines cultural, social and solidarity initiatives.

The accommodation will be distributed in three, four or five storey residences, built in a "U" shape and overlooking hanging gardens. In terms of typologies, the apartments will range from studios to service residences for the elderly, including T3, T4 and T5 for families, with various access or rental methods.

With this in mind, we have set up several partnerships in order to offer a wide range of innovations designed to make home ownership easier (dismemberment of property, ownership for life, ready-to-finish housing, co-living, etc.). We are also hosting a participatory housing project with the aim of offering an accommodation solution to a more disadvantaged population.

Work with associations for inclusive housing proposals was carried out with a view to offering an offer adapted to people with disabilities or suffering from Alzheimer's.

Enough to promote generational, family and social diversity and make housing accessible to as many people as possible.

To absorb the population growth generated by our project, a PUP, Urban Partnership Project, was signed to support the transfer, expansion and modernization of the neighborhood elementary school. A crèche will complete the offer for the reception of the youngest.

From the start of the project, we wanted to instill a benevolent, responsible and committed energy in the neighborhood by creating a Project House. This place was conceived as a real place of life, and welcomed actors of the local social and solidarity economy, in particular a resource center, an educational center around zero waste and a tavern. Its purpose is to be a vector of social bond and emulator in the life of the district.

Our desire is to offer a new way of living thanks to places and services that promote meetings, exchanges or even solidarity.

Music Day 2018 - La Maillerie

Social inclusion and safety

The Maison du Projet, a hybrid place, was initiated within the framework of a transitional urban planning and aims to breathe a wind of exchange, sharing, discovery, memory and solidarity, for all generations, in this place steeped in history. The heritage that this wasteland represents was our anchor point to develop the canvas on which we aim to embroider this place of life.

An emblematic site of the textile industry, the logistics warehouses of 3 Suisses International contained a large number of historical pieces and "capsule" collections designed by great couturiers. 2000 pieces were thus bought back in a concern of memory and upcycling.

A museum dedicated to the mail-order giant has been set up in the heart of the Maison du Projet and exhibits models created by the biggest names in fashion: Courrège, Balenciaga, Jean-Paul Gaultier, etc. Not all of them can be exhibited, a donation of 200 pieces was made to the Musée de la Piscine in Roubaix. Others are being appraised and will be put up for auction. A forthcoming book will retrace collaborations with famous couturiers.

To perfect this transmission, we provide a room for an association of retirees of the 3 Suisses so that they can meet, keep the link and share the history of this great company with the youngest.

Since the creation of this Maison du Projet in 2018, life is gradually resuming its rights to the wasteland. Today we can count around 450 events that took place on the site (courses, workshops, music festival, Christmas market, etc.) with the participation of 120 associations, independent or project leaders and more than 15,000 visitors.

These were all opportunities to meet the current and future residents of the site and lead, with their contribution, co-construction workshops on extremely concrete themes which give tangible material to the program.

We are committed to making this dynamic company last. Based on the experience of the Project House, a SCIC will be set up, as mentioned above, to offer services, meet needs and provide premises (at moderate rents) that the neighborhood might need. Its objective will be to keep this liveliness, this energy and facilitate the participation of residents in the maintenance and enhancement of their neighborhood. A "district captaincy" will be managed by a trustee and will be the nerve center during the organization of events, exhibitions, workshops, etc., by the actors present on the site. It will also offer co-working places, meeting rooms, common living spaces, etc., to which everyone will have access and which will participate in the creation of links and exchanges between the inhabitants.

In addition, we have chosen to be accompanied by the agency of architects and town planners ANMA, which advocates mixed use, flexibility and reversibility of spaces. It designs living spaces designed as meeting and sharing spaces where the quality of use prevails over form and is aimed at all types of population.

Our mission is to meet everyone's needs in terms of housing, commerce, entertainment, culture, etc., and it is in this sense that the programming has been knitted so that everyone finds their place.

Ambient air quality and health

The notions of well-being and good living also depend on the proximity of health services. We are committed to proposing solutions to guarantee sustainable and equitable access to local health services for users. The city of the future must include all of these functions within a small radius and it is in this sense that we are completing our offer with multidisciplinary facilities providing care.

It is with this in mind that a health centre will be set up on a 2700 m² site. It will be developed by Medic Global and will aim to bring in medical practitioners from different backgrounds in order to centralise a large number of different specialities. At the foot of the building of this health centre, a commercial offer linked to the health activity (optician, parapharmacy, etc.) will be developed.

The increase in life expectancy, disability situations and social changes within the family require the development and multiplication of new reception structures. Today, institutional organisations are saturated and cannot meet all the needs. Based on this premise and our desire for social and generational diversity, we have worked with associations to offer future residents of the neighbourhood alternative and innovative care solutions.

The Ama Vitae association is developing shared houses to support people affected by Alzheimer's disease. One of them will be part of our programme in the LA MAILLERIE neighbourhood. It will allow shared living with care for activities of daily living for tenants who can no longer remain alone at home and who choose to continue living in a house rather than in an institutional setting.

A senior citizens' residence with services will be available in two types: a 120-room complex and 45 social housing units.

In addition, the Homnia and Simon de Cyrène associations will offer innovative living spaces for people with disabilities or in a fragile economic situation. These homes will allow each person to find mutual aid and solidarity in the heart of a community, to find or regain more autonomy and self-confidence through shared or independent accommodation.

We have also paid particular attention to the design of our accommodation and some of them will be labelled Intairieur. This label assesses the quality of the indoor air in housing and is recognised nationally. It is the result of joint reflection by developers, lessors, architects, design offices, researchers, doctors, health and environment agencies and housing consumer associations. It is characterised by the consideration of indoor air quality throughout the project, from design to completion, and provides recommendations for use and operation. This label is part of a voluntary approach, by raising the awareness of those involved, by recommending efficient techniques and materials, in the support and monitoring of the building site as well as in the measurements taken. By awarding it, it makes it possible to obtain a virtuous and innovative building with qualities of comfort and well-being for the inhabitants, which are also a guarantee of preserved health.

Health also means physical exercise. Our environment and the nature that surrounds us play an essential role in our physical and psychological well-being. We are therefore committed to obtaining the Biodivercity label, creating a vegetable garden and an urban micro-farm. A sports trail linked to the "blue plan" and a recreational and heritage trail will be available to local residents.

NHOOD, a property development company, has joined forces with LINKCITY, a Bouygues Group property development company, to design a project whose ambition is commensurate with the urban challenges and expectations of local authorities.

A major study and consultation process was carried out with the metropolitan services and the towns of Villeneuve d'ASCQ and Croix, in order to determine the ways in which the project could fit into the urban planning policy of the Lille European Metropolis. This work resulted in a global project, designed by the Nicolas Michelin et Associés (ANMA) agency, which responds to the metropolitan policy of the Blue Plan, the orientations of the Local Housing Plan and the Metropolitan Economic Development Plan.

The objective here is to absorb an urban wasteland and to promote urban renewal for the economical management of space. The aim of the project is to create a sustainable district with the following main characteristics

- The implementation of a diversified housing programme,
- · Diversification of economic activities,
- Optimisation of the public transport service, which is very present in the sector
- · Reorganisation of school facilities, particularly in Villeneuve d'Ascq.

Following a preliminary consultation carried out and approved in 2013, an agreement between the local authorities on the project was formalised by an objectives agreement. It defines the expectations of the project and the terms of the developer's participation in the creation of public facilities generated by the needs of the future project. These agreements were formalised by an Urban Partnership Project (PUP).

In addition, the realisation of the predominantly housing project required a modification of the PLU. This modification was obtained thanks to a project declaration procedure, which was equivalent to a compatibility of the Local Urban Plan.

Co-construction was also carried out through workshops organised with local residents, with the various local authorities (towns, MEL, etc.) according to the written ambitions but also to the development challenges of the territory.

SOLUTIONS

- Urban project governance
- Citizen participation
- Promotion of cultural/ historical identity
- Urban densification
- Proximity services
- Security
- Air quality
- Noise exposure
- Other
- Business parks
- Circular economy
- Soft transportation
- Electric vehicles
- Parking management
- Digital services
- Water management
- Soil management
- Waste managementCitizen-awareness
- Management of natural areas
- Other
- Climate adaptation
- Renewable energies
- Urban Lighting
- Low-carbon materials/ infrastructure

Local development

The developers have joined forces around a common ambition which is to make the reconversion of the site a "demonstrator" project, which outlines the features of the city of tomorrow.

The district is designed in the spirit of the "quarter-hour city" where everything will be close and accessible on foot or by bike. It will serve as a weaving point between the town center of Croix and the Flers -Breucq district of Villeneuve d'Ascq.

The territory already offers neighborhood commercial polarities and food engines, as well as a certain number of public facilities.

The two micro-centralities that constitute the city center of Croix in the North and the Flers Breucq district in the South are linked by the rue Jean Jaurès (becoming the rue du Professeur Perrin in the town of Croix). Beyond rue Jean Jaurès, the area is characterized by the establishment of monofunctional and isolated buildings. In order for the urban graft to take hold, the project therefore wishes to promote a great mix of programs by relying on the dynamics of rue Jean Jaurès

Particular attention was paid to the offers already present in this sector, both in terms of sales and services.

In line with the ambitions of the district in favor of local roots but also the creation of links between residents, the commercial offer integrated into the project responds to a need for proximity, particularly in the sector of food products including the presence has greatly diminished in the city center of Croix.

The HALLES DE LA MAILLERIE commercial project benefits from a program mainly consisting of a food offer, in order not only to complete the existing commercial fabric, but also to support future population growth in the area.

The only building that can be rehabilitated as part of the deconstruction work of the district of the former logistics building of the 3 Suisses called the "COMPACT building" has therefore naturally established itself as the future commercial heart of LA MAILLERIE.

Indeed, this building is intended to become the emblematic building of the district, and will house, not only in its floors 768 parking spaces plentiful on the scale of the district, but it will also be intrinsically mixed in its uses by offering office, catering, retail and a landscaped roof open to residents, office users and customers of the Halle.

This is how we wanted to revive the spirit of a lively village square on the ground floor of the COMPACT building.

In addition to its mixed program in its floors, car park, offices, its ground floor of more than 5,000 m² will be dedicated to local shops conveying the spirit of "lively village square". He will understand:

- a gourmet hall, covering an area of 1,774 m², with 27 stands run by independent craftsmen and which will be developed by Biltoki, a specialist in this type of establishment.
- a craft brewery and locavore restaurant of 809 m2,
- shops and services on 600 m² of sales favoring bulk sales, responsible consumption and local products.

Beyond retail, our program includes a health center, a nursery, a 96-room hotel combined with a 104-room student residence, among others.

Our axiom has therefore been to develop a complementary offer, in correlation with the ambitions and values embodied in the project.

The commercial offer can be summed up as "creating a new local shopping district open to its district and its users"

In line with the district's ambitions in favor of local roots, we have therefore designed a program of an offer in order to not only complete the existing commercial fabric but also support future population growth in the area.

Circular economy

From the deconstruction of an industrial site to the construction of a neighbourhood, the circular economy applied to LA MAILLERIE.

Concerned with preserving the history of the site, the project team took up the challenge of reusing the existing buildings, thereby preserving part of the site's history and facilitating its appropriation by the inhabitants.

The implementation of such a strategy on an operation of this scale is unprecedented, and it has enabled the creation of new approaches to design and deconstruction likely to give rise to new sectors in the deconstruction industry.

The 3Rs principles were applied to waste management during the deconstruction phase of the site:

Reduce by keeping part of the existing buildings

Reuse furniture and ancillary materials from the site via re-use channels

Recycle structural materials from the existing site

The presence of the same actors in all phases of the project is an advantage for monitoring and implementing the actions envisaged in the upstream phase.

The objective was "zero waste demolition", or how to transform into a resource 100% of the products of the demolition: revalorisation of all the material, equipment and materials resulting from the deconstruction-demolition beyond the traditional channels of reuse (metals, wood, etc.).

Our premise was to approach deconstruction-demolition in a collaborative way by weaving partnerships with the associative sector, to benefit from the support of the ADEME (Agency for the Environment and Energy Management) and its expertise, while developing partnerships with building manufacturers.

Most of the existing buildings were destined for demolition, and they represent no less than 30,000 tonnes of concrete, 10,000 m² of oak flooring, 4,500 light fittings and several kilometres of shelving. After extensive identification, diagnosis, reuse and careful removal, the materials are recovered by solidarity associations or industrialists who offer them a second life, all within a secure legal framework.

The concrete was recycled according to a complex process developed in partnership with Neo-Eco Recycling and the Ecole des Mines de Douai. Depending on the grain size, it will be used to produce tiles, aggregate for roads and even new concrete for the construction of future buildings in the district.

The solid oak floors were taken over by the flooring manufacturer Tarkett and then cut into thin layers and glued to a pine board. These new boards will be sold as

a limited series in the Nordic countries

The Roubaix-based collective "Zerm" has recovered IPN beams, industrial lighting and other storage racks to fill the stocks of "Parpaing", the first "depot-sale" of second-hand materials intended for building professionals and individuals. This new type of recycling centre was integrated into the demolition schedule to allow the greatest possible number of objects to be recovered.

We also recovered 500 m² of parquet flooring for the future site. As direct resale to private individuals is an original and effective way of recycling materials, this process was optimised to the maximum on this site.

In parallel, a wide variety of products and materials were recycled in various ways (reuse, recovery, etc.). It is remarkable to note the second life offered to about thirty suspended toilets, a dozen dock doors associated with their levelling docks, 8 metal staircases, 1 site bungalow, 3 cold rooms, 150 fire extinguishers or 45 rows of storage racks.

Among the atypical uses, it is worth noting that a spiral staircase over 20m high that served as an emergency exit for the bulky building has been transformed into an observation tower for birdlife.

The efforts of this virtuous path continue with actions developed in the design phase. For example, the roads and pavements will be made from the site's aggregates. During the construction of two housing buildings, the volume of concrete made from recycled aggregates was 37% for one and 50% for the second, compared to the theoretical maximum volume.

Zero waste site

SOLUTIONS

Circular Economy Diagram



The Compact - La Maillerie

TRANSPORT

Mobility strategy

The "mobility framework" deliberation, which outlines a transport policy, is in line with the region's sustainable development objectives aimed at reducing car dependency, increasing the supply of public transport and ensuring the right to mobility for all.

These objectives involve in particular improving the comfort and safety of local travel by bicycle and on foot, increasing the performance of the public transport network by adapting the offer to the areas served and reducing the role of the car in a modulated way depending on the area.

The aim of the project is to create the conditions for simple, clear, pleasant and safe accessibility, not only from the public transport stations outside but also from the residential parking areas inside the district.

The sector is relatively well served by public transport (Croix Centre metro station and the various tramway stops along the Boulevard). However, the large land enclaves (Club hippique, Résidence Flandre, etc.) as well as the Croix branch and the Marque river create breaks in the pedestrian routes, sometimes requiring major detours. The main challenge for the sector is therefore to make the routes more fluid in order to facilitate access to public transport stations and, in general, the use of active modes of transport (bicycles, pedestrians).

The project has been designed to reduce the number of cars in the area and to encourage soft mobility. The new road will be designed as a two-way street and treated as a 30 km/h zone. All other paths on the site will be dedicated to pedestrians and cyclists. Only the east-west path and the technical accesses will remain accessible to delivery vehicles and firemen.

In the central part of the district, a north-south pedestrian walkway is located on the right-of-way of the old building where the workers used to meet. A structural axis of the new district, it provides access to the various programmes that are addressed to it. A true backbone of the urban project and a support for active modes of transport, this alley is intended to be extended beyond the LA MAILLERIE district, to the south towards the Jean Jaurès school group, and to the north as far as the metro station and the town centre of Croix, in order to irrigate the entire district.

Perpendicular to the three axes (Park, Alley, Street), transverse paths serve the buildings. These paths are mainly pedestrian, with the exception of the new road which, from Rue Jean Jaurès, serves the new district up to Avenue Le Nôtre.

The LA MAILLERIE district is above all a pedestrian district. However, the site must meet the parking needs of cars, bicycles, two-wheelers and electric cars of the various users of the future site.

In this way, all the flows in the district will be represented and will have the necessary space. With an environmental aim and in order not to contribute to urban sprawl, it was decided to create the future car park in a silo on several levels, which will be shared between the various users (offices, housing, shops, restaurants, hotel, etc.)

The majority of the project's parking needs will be covered by the silo car park with 768 spaces, which will be shared between the various users and located on the upper floors of the HALLES DE LA MAILLERIE. It will be associated with 6 other car parks integrated into the site, on the ground floor or semi-overhead.

In concrete terms, the parking offer is therefore shared between the neighbourhood's residents and the employees who come to work on site during the day, so that day or night, the offer proposed is sufficient for all. By analysing data on the use and behaviour of users in other neighbourhoods near the Maillerie, the right number of spaces could be modelled. The residents therefore have a right of use, not ownership, which has made it possible to avoid creating 300 additional parking spaces and to offer more and better public spaces. Bouygues Bâtiment Nord-Est calculates that this has reduced the carbon impact of the project on the Maillerie district by around 1,000 tonnes.

In addition, the flow of light and heavy vehicles will be optimally managed in order to accommodate travel. In order to secure the site, these flows are separated. In order to encourage alternative mobility, 7 spaces will be equipped with recharging stations for electric vehicles (and 37 pre-equipped with electricity in order to respond to the evolution of practices) on the R+2 level dedicated to the public.

RESOURCES

Water management

On the roof of the car park / commercial hall (green roof), a drainage complex is positioned under all the planted areas. The complex is composed of a 4cm thick agrodrain and a geotextile holding the substrate.

The draining complex is composed of a water redistribution mat making it possible to store excess rain or watering water and redistribute it, via the mat, to the plants by capillary action.

Drip irrigation is set up on perennial areas, apart from lawns, shrubs, red fruits, fruit trees, shrubs and trees.

A humidity probe regulation will optimize water consumption for watering planted areas.

These provisions make it possible to manage the water on the roof of the building in a more responsible and efficient manner, the water remaining and destined to become even more intensely a precious resource.

Waste management

In the construction phase

A "ZERO WASTE" SITE:

As previously developed, a zero waste site has been set up for the demolition of the existing buildings on the site. This effort can only be truly effective at the level of the overall project if it is coupled with a real reflection on the management of waste from the activity, and the need to study the issue over the entire life of the project. is an essential element of this management strategy.

In commercial operation phase

The waste generated by the activities could be cardboard, plastics, food products from restaurants, pallets, waste generated by customers, paper from offices, etc. Equipment will be put in place to enable sorting and storage, which can be supplemented by specific management programs for the brands.

We have also decided to offer La Maillerie traders the possibility of total sorting of waste from shops, with the creation of a loop for recycling bio-waste, cardboard and glass. This will allow them to reduce as much as possible the tonnages of industrial waste collected during community collections and therefore reduce the ecological impact of the neighborhood.

This involves the creation of a very large sorting area and a compactor for the boxes within the Compact building, which accommodates most of the neighborhood's businesses. The presence of an ecoguard on site is also envisaged, in order to be able to have someone on site who would take care of the surveillance and prevention with the users of the district.

Underground bins will also be developed within the district, in order to reduce the negative aesthetic effect of the presence of these areas within a living district.

An exchange process with the company Servipac — Salazie was undertaken in order to benefit from their assistance and expertise for the management of the site's waste

In addition to the sorting required of store operators, the installation of waste collection points and ashtrays for customers will allow them to be involved in the overall approach.

BIODIVERSITY

Biodiversity and natural areas

On the scale of the district, the overall development plan aims to requalify a brownfield site and in so doing considerably improve the environmental quality of the site:

- By improving the biotope coefficient per surface,
- By greening many areas, particularly on the roof (more than 2,500 m2 of green space on the roof of the Compact Building),
- By improving the permeability of the soil,
- By restoring the site's fauna and flora qualities included in the framework of a Biodivercity label for the entire district.

The overall biodiversity reflection is based primarily on the green and blue grid, which is a real land-use planning tool. This makes it possible to identify issues such as: ecological corridors, major biodiversity centres, etc.

Indeed, the hanging garden project plans to recreate varied ecological environments adapted to the context of the building, by reproducing as much as possible the existing ecological environment. The landscaping of the roofs will integrate certain plant varieties found on the site before the project.

Within the framework of the "Metropolitan Blue Plan", the Branche de Croix sector has been identified as an area with significant potential. It is a pivotal sector of the green and blue network, and has a large number of mutable rights of way. This is why a study on the reopening of the Petite Marque has been carried out by the MEL in order to respond to hydraulic and environmental issues, but also to urban development issues. The two hectares of public spaces handed over to the MEL will be used to restore biodiversity corridors.

This group of business parks, which is currently undergoing change, is still marked by its history, particularly industrial. The presence of waterways has allowed the installation of heavy industries which have left their mark on the layout of the land and the built heritage, but also on the soil and the water.

The Blue Plan has defined the major orientations in the more or less long term aiming at the partial renaturation of the area by connecting a natural river, the Marque, to a dead arm of the canal system, the Croix branch.

Today, a real territory in the making, hinge of the blue and green network of the metropolis, it has undeniable assets to constitute a real piece of attractive city. The idea of rediscovering the Petite Marque and linking it naturally to the Croix branch, thus creating an island of city-nature, is a strong idea on which the La Maillerie project is based.

Within the framework of the green plan, the territory must be in line with the ecological continuity of the territory. The links with the major landscape elements of Barbieux Park and Warwamme Wood must be strengthened, thus creating continuous areas for walking and leisure activities, which support biodiversity.

The wooded area around the horse riding club and behind Rue Jean Jaurès should be preserved and enhanced. The visual openings can indicate its presence from Jean Jaurès Street.

On the eastern and northern fringes, the project takes advantage of the opportunity provided by the Blue Plan supported by the MEL to create a large linear park on the banks of the Marque, to which new constructions along the rediscovered river are addressed.

The waterways can provide the inhabitants with a local public space, a place to meet and relax, but also an inter-communal leisure facility, supporting safe, gentle traffic.

Biodiversity areas and their sustainability, as well as the connections between them, are also important issues at La Maillerie:

Greening of public spaces

Choice of local species for the majority of the plants (70%) to encourage biodiversity in the area

Integration of urban furniture that allows residents to create "micro gardening areas" on the site

Lighting designed to be adapted to needs and to avoid light pollution, to avoid disrupting the life cycles of the species present on the site: lighting with movement detectors, cut-off between 10pm and 7am, amber-coloured light sources (less disturbing for the fauna)

The proposed plant species will provide refuge and shelter for the fauna, ecological niches and reproduction zones, as well as feeding zones for the various species

Insect hotels, bird and bat nesting boxes, piles of dead wood for ecological purposes and beehives will be placed on site, in line with this desire to preserve and support the development of the local fauna and flora at La Maillerie.

A Biodivercity label has been awarded to the entire district. This approach integrates both design principles allowing the development of biodiversity and maintenance principles allowing the maintenance of the ecosystem in place.

This approach will also be carried out on the scale of each of the lots in the district. Thus, the main objective of the project is to offer a new "life" to this site. Biodiversity will be one of the means of bringing people closer to nature in the broadest sense.

The Biodivercity Label

This label, created in 2013 by the International Council on Biodiversity & Real Estate (CIBI), evaluates and promotes real estate operations that take into account biodiversity in built-up areas, for the well-being of users.

It is based on a multi-criteria approach and organises its analysis around 4 main areas (see Biodivercity diagram).

The label is also based on a precise and educational content, a set of specifications to impose a requirement on a complex subject, while leaving the actors the freedom of the project. This framework accompanies the design, helps with the implementation and prepares the maintenance. The analysis grid explains how to approach the theme in its multiple facets. But, above all, it allows the performance of the approach to be measured on an objective basis.

The approach requires the intervention of a new expert in the form of an ecologist-evaluator. He studies, explains and makes proposals. His role is to steer the approach, evaluate the initiatives and gather evidence. The ecologist-consultant service reinforces the role of the landscape designer.

Finally, the Biodivercity label displays the ecological performance of buildings using a label. Each axis is independently rated from "A" to "E", with "A" representing excellence in addressing the axis' concerns. The label can be obtained provided that there are no "D" or "E" grades and at least one "A" on one of the axes.

SOLUTIONS

Biodivercity scheme

ENERGY/CLIMATE

The objective is to put in place efficient and sustainable solutions with regard to respect for the environment. These buildings will have to meet at least the regulatory obligations of RT2012.

According to the energy supply feasibility study, the first calculations show that the solutions proposed allow compliance with this regulation in terms of the bioclimatic need coefficient.

Reducing the need for artificial lighting by natural light allows:

- · Better comfort for building users;
- To limit the internal contributions caused by this same lighting, undeniably increasing the air conditioning needs

This is why, within the framework of BREEAM certification and user comfort, the project brings about an architecture designed for the contribution of natural light.

Because it is possible to assess the contribution of natural light, the project was modeled using the PLEIADE COMFIE software. The quantification of this light input is carried out by the "Daylight Factor" index. In this context, BREEAM certification identifies and rewards the brightest shops, the threshold of which is set at 2% on 35% of the sales area. This allows the design team to measure their project against the best environmental performance standards, which are the requirements of BREEAM certification.

Energy mix

TYPE OF LIGHTING

For exterior lighting, the equipment will be chosen according to the BREEAM environmental approach, i.e. with high energy efficiency quantified in lumen/Watt, probably LED lighting.

HEATING / COOLING

Following the energy supply feasibility study, the benefits of generating heating and cooling from air/air heat pump derived systems are highlighted. Rooftop PAC systems for cells, and more generally any cell close to or larger than 1,500m2, are particularly suitable.

The operation of these systems is that of a reversible heat pump. The heat pump recovers the calories present in the air to heat (or cool) the building via an external module: a heat transfer liquid in a closed loop. At the end of this loop, there are indoor units that release the calories (or frigories depending on the operating mode) inside the volumes served. Its performance is defined by its COP (the higher it is, the better its efficiency). The COP is a coefficient that specifies the number of kWh of heat obtained from 1 kWh of electricity spent. The performance of the systems mentioned will exceed the COP of 3, which guarantees low energy consumption.

The roof-tops will be equipped with hot water batteries, connected to the sub-station supplied by the district heating network. The storerooms, technical rooms and social rooms will be heated by fan coil units or hot water radiators, also connected to the sub-station supplied by the district heating network.

Installation of wind turbines on the roof

As part of an innovative approach to sustainable development, the developer has carried out a feasibility study with UNEOLE for the installation of three wind turbines on the roof of the programme. Following the various developments of the company's proposed products, it will finally be an energy mix platform combining wind and photovoltaic power that will be set up, the aim also being to be able to verify and test the qualities of this solution that will be implemented at La Maillerie

Installation of solar panels on the roof

In addition to this wind energy, Nhood and Linkcity also wish to test the possibility of producing photovoltaic energy on the site. The installation of a photovoltaic plant of more than 700 m² by the company Helexia on the roof of the Compact building, so that this energy can be used for the needs of the car park located under the roof. This plant should provide more than 130,000 kWh of energy per year, which will be re-injected into the car park for self-consumption. District heating network

The objective of connecting the Maillerie district to Dalkia's district heating network was a real desire on our part from the outset, in order to be able to offer residents ways of heating that are based on clean and 65% carbon-free energy sources, as well as on energy whose cost is under control. The Maillerie district will be supplied by Dalkia's heating network developed within the Lille metropolitan area, and more specifically by an extension of the heating network developed in Roubaix.

This network is supplied by a household waste incinerator located in Halluin, which therefore represents a source of "waste" heat that needs to be developed and optimised, as well as by a wood-fired boiler room that uses biomass processes. Being able to offer the residents of La Maillerie clean and responsible energy is therefore part of Nhood's and Linkcity's overall commitment to future users, in line with all the measures presented to promote a neighbourhood with the lowest possible environmental impact and to ensure energy, global and territorial coherence.

The integration of the EDEHC student campus, a senior citizens' residence and a 540-unit condominium into the project makes it possible to share usage, and thus to propose, in conjunction with Dalkia, the extension of the network, which was made possible in particular by the physical proximity of the new users. Dalkia has installed no less than four kilometres of heating networks in a dense urban environment, enabling the Maillerie district to enjoy the benefits of this more responsible energy.

BUILDINGS

Buildings

The project relies on the potential of existing buildings to offer a mixed district of offices, activities and diversified housing on flexible surfaces.

The existing buildings fit naturally into the new urban fabric. The large volume of the Compact building benefits from a relatively flexible concrete column-beam structure and offers unique potential. Restructured (the last two levels have been demolished), it accommodates LES HALLES DE LA MAILLERIE as well as a

large silo car park and a landscaped roof with generous surfaces. The CIDAL office building will also be restructured and will host La Maison du Projet in the animation and prefiguration phase of the future district.

New buildings will complete these constructions, with a gradual spread of heights from North to South (from R + 6 to R + 3 or even R + 2). An emergence in R + 8 will thus mark the address of the project on Avenue Le Nôtre in order to constitute a landmark in the urban landscape.

The **first ambition of the buildings** is the architectural and urban quality of the district, namely compliance with the architectural, urban and landscape specifications and the lot sheet. Without this list being exhaustive, the key elements which appear there are as follows:

- A pitched roof project, in which the volumes under the roofs constitute atypical inhabited spaces
- A project of green islands on the ground floor or on vegetated terraces (% of green spaces)
- A bright project (% of glazed surfaces, orientations, private exterior surfaces)
- A requirement on materials
- Balconies and garden or planted terraces on many elements of the project
- New buildings lower than previously existing buildings
- · Common principles of alignment and leeway
- Anticipation of the scalability needs of each building led by the project architects
- A landscaped project for each lot, as important as the built project

These different invariants make it possible to guarantee an architectural coherence, of implantation and of positioning of the various buildings of the Maillerie. However, a lot of freedom is left to each development "object" as to the construction methods chosen.

For environmental quality, responsible construction principles, construction processes and materials will be implemented on buildings, environmental and health impacts will be mastered and controlled.

The reuse of a large part of the existing structure of the Compact building will help to control resources and minimize the environmental impact of the materials used. The materials resulting from the deconstruction of the existing structure will be recovered and reused on another site.

As part of the BREEAM certification, an assessment of the environmental and health quality of materials will be carried out with the aim of implementing:

- products that are healthy for the environment and the health of staff and customers, in particular with regard to emissions of Volatile Organic Compounds (VOCs) including Formaldehydes relegated by materials. Glues, paints, varnishes and stains will justify limited VOC emissions.
- materials whose impact in terms of embodied energy, CO2 emissions, etc., is known and better controlled. The environmental impacts of construction products will be quantified using the Elodie software and the labels will be used.

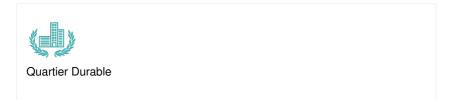
As part of the desired BREEAM certification for the operation, an in-depth analysis of the life cycle of the materials constituting the project will be carried out. In order to carry out this analysis of the life cycle of materials, it will therefore be preferable to use materials with Environmental and Health Data Sheets, specifying the environmental and health impacts of each product.

Contest

Reasons for participating in the competition(s)

- Un chantier « zéro déchet »
- Un urbanisme transitoire avec la Maison du projet
- Réaliser un quartier du XXIème siècle en s'appuyant sur son histoire

Building candidate in the category







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