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Passengers In Time

Architectural and landscape design of llot 130, Brussels



For Whitewood Capital - City Forward, 20 September 2024

AFE

Introducing informality: the Urban Forest concept

Project introduction

Project ILOT 130 is part of a broader ambition to transform the European neighbourhood into a more liveable and vibrant area.

The team followed the theme "Passengers in Time". By studying the urban landscape history of the site and Brussels, while observing the current architectural language and materials, we sought to merge past and present influences. Our vision emphasizes preserving and reusing existing structures, while introducing new elements to create a more dynamic, climate-resilient urban block.

On the urban scale, the spatial intervention is based on the concept of "Urban Forest". By opening up the block and introducing new spatial typologies – a central public square connecting the metro with the rest of the block, and a semi-public mews street linking the residential buildings – we created new informal pathways in the European district. These interventions contrast with the existing rigid urban fabric that currently defines the area, offering a new approach to its development.

How do we live? How do we work?

The llot 130 project aims to reshape how we live and work by shifting away from traditional office architecture to a more informal, green environment that encourages interaction with nature. Instead of confining activities indoors, the design promotes an inside-outside experience, where open spaces invite people to connect with their surroundings. Additionally, by incorporating informal connections through the urban block, we seek to break down its rigid structure and cultivate a more organic, nature-driven environment. These spaces, rich with greenery, foster a more casual, sociable, and vibrant atmosphere, softening the urban edges and creating welcoming and dynamic spaces.





Arrival



Meeting on the rooftop



Lunch at EU courtyard



Weekend at the square



Office view to the outside



Daycare at mews

Observations and interventions

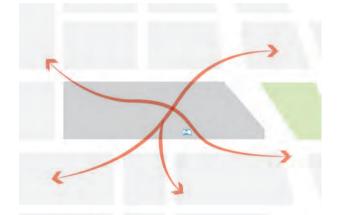


Residential

Site block

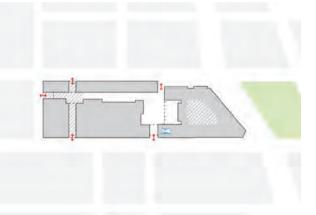
EU towers

Intervention steps

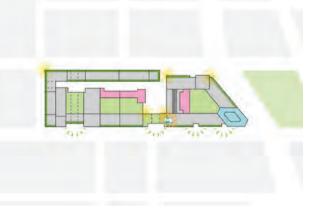


1. Incorporating the interior plot in the urban context

Enhancing the urban experience by making the interior of the site actively contribute to and interact with the surrounding cityscape.

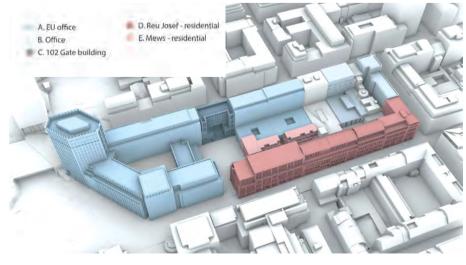


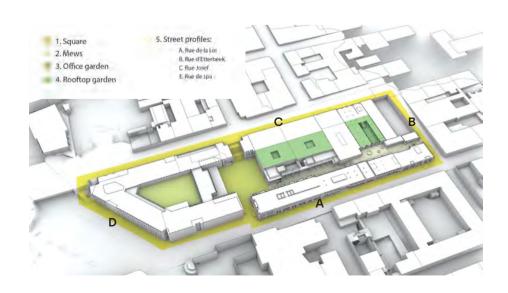
2. Integrating the site to the urban network Removing volumes and introducing gateways to open up the block, creating seamless connections with the surrounding streets.



3. Creating a welcoming and dynamic block Adding new small volumes and tower in relation to the surrounding urban scale. Variation of the facades and integration of greenery are used to break up the rigidity of the large block.

10 focused design opportunities



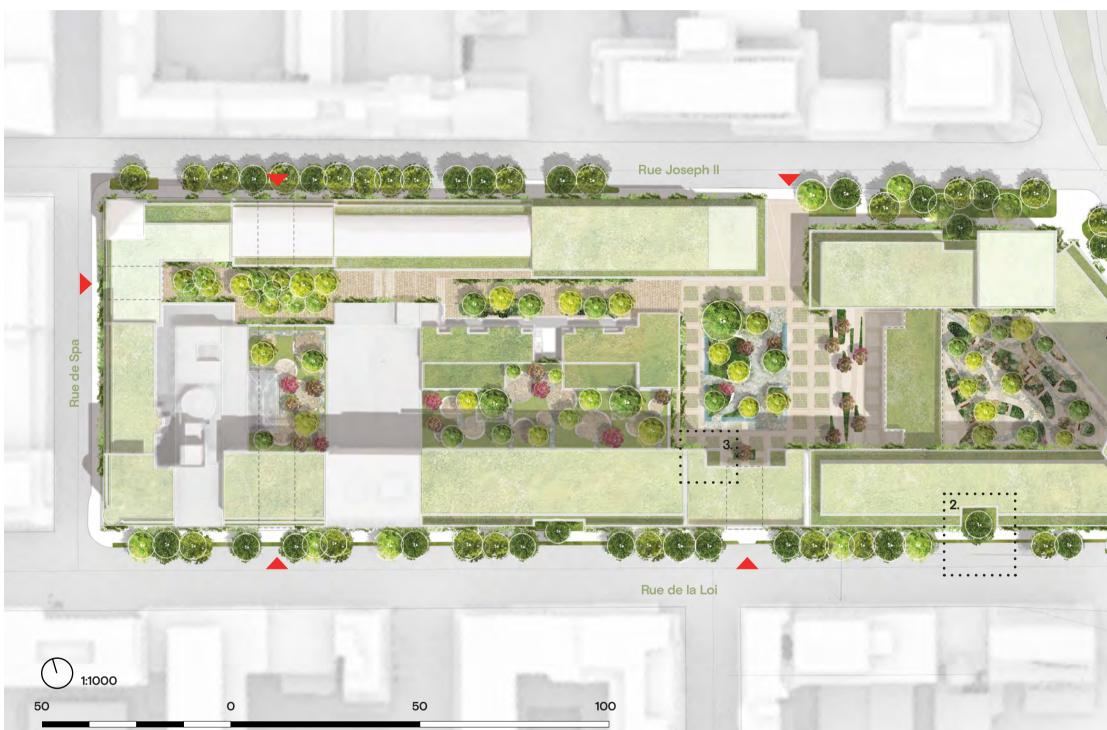


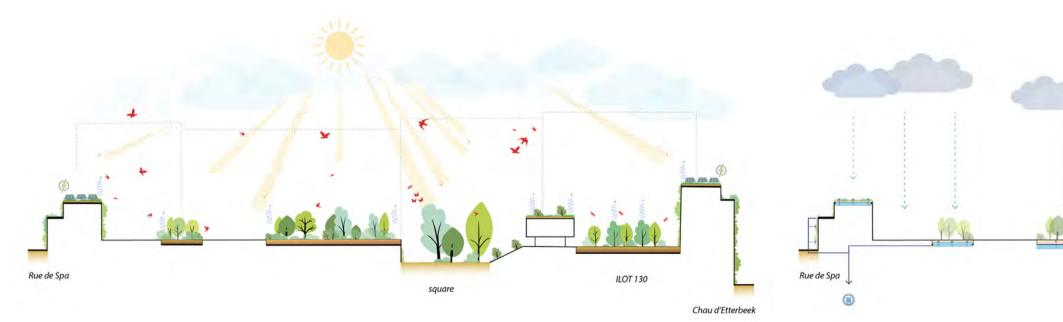
Landscape masterplan: the urban block landing in the city

The landscape design aims to promote a healthier, more social way of living and working through the creation of a public square and semi-public mews, which act as social hubs.

Drawing inspiration from the Maelbeek River, which once flowed near the site, the landscape features soft, organic shapes that echo the natural contours of the river. As in the overall design approach, each green space on the plot has a unique character, adding richness and diversity to the outside environment. These spaces are thoughtfully designed to reflect their specific uses, creating moments that evoke the lost river. In the square, the balance between formality and informality further shapes the design, with framed water features offering both calmness and dynamism. Sustainability is a key focus of the design, reflected in the retention tanks feeding the water elements and planting.

The streets surrounding the site each have their own green character, from the formal row of trees on Rue de la Loi to the denser greenery along Rue d'Etterbeek, enhancing the diversity and richness of the plot.



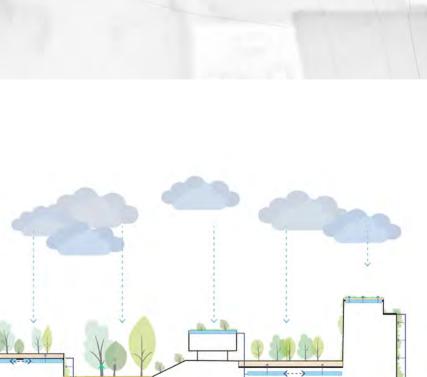


Green system

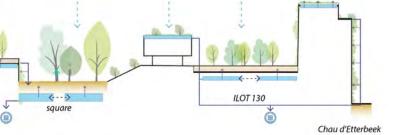
Water management

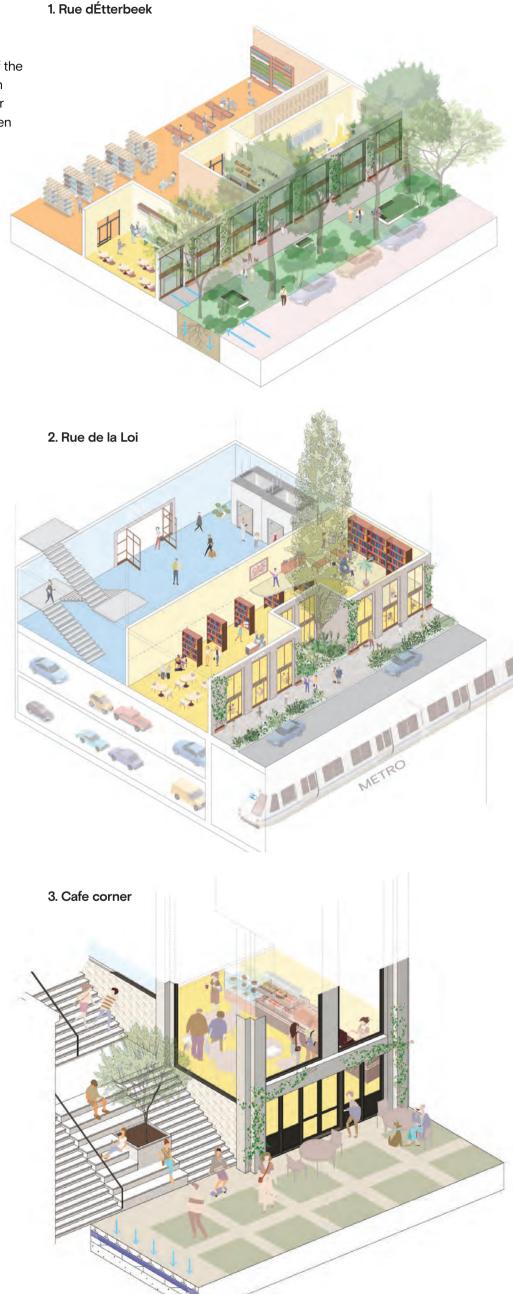
Plinth

The new plinth approach prioritises commercial activity and emphasises transparency in the facades. Larger functions such as supermarkets are placed towards the back, creating a more dynamic and open frontage that encourage social interaction. This strategy not only enhances the vibrancy of the streetscape but also promotes a more human scale. Open corners and green notches along the facade further break down the barrier between the interior and exterior, integrating greenery and more spontaneous interactions between the inside and outside of the building.









The square

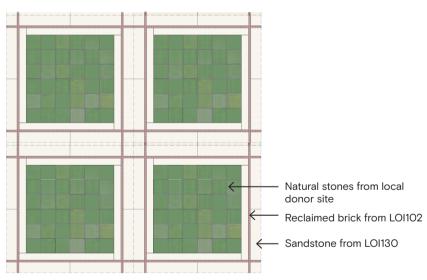


Rue Joseph



Landscape design

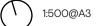
The design of the square balances formality with informality, drawing inspiration from the Maelbeek river. At its center is a green core featuring flowing planters filled with native trees, framed by a water feature that embodies both playfullness and decorum. This blend of formal and informal elements extends to the pavement, where elegant, structured paths meet organic, informal patterns that flow outward from the green core.



Variant of pavement pattern in public areas

Reused materials as a place maker

Our concept for the overall project is to demolish as little as possible, and what we demolish we should reuse on site. There are also symbolic reasons for reuse; used materials come with a history. Reintroducing them near a site helps to load the meaning of a location. It helps to define a place. From the LOI 130 building we dismantle its sandstone elevation panel. With a small treatment (cleaning, waxing and cutting on site) these materials can be reapplied as pavement of the square, interior cladding of the metro station and finish of the public staircases.



Loi 102 Gate Building



Gate building as approached from Rue de Treves



Entrance from the sqaure to the escalators of the new metro hall via escalator.

The 102 building at the Rue de la Loi has a crucial position whithin the site. It is positioned at the end of the Trierstaat. Coming from the European parliament it is the building seen at the end of the street marking the llot 130 site. Expanding on our urban concept (combined with the functional program of the office buildings), it became clear during the design process that the 102 building could act as a gate building. A building that has the capacity to (re)distribute the flows of visitors, workers, dwellers and urbanites along, in and through the llot 130 site. The building can help to make the entry to the Maalbeek metro station spatially clearly defined, fully accessible, inclusive and more socially secure. At the same time it provides for a pedestrian through route (cut out form the existing 102 building). Through this the Rue de Treves is directly connected to the Rue Joseph via the llot 130 site. Our plan introduces a square halfway this pedestrian connection. This square (Maalbeek plein) is positioned about 7m lower than the Rue de la Loi, the 102 building accommodates this height difference in an urban manner:

- A wide and modestly sloping urban staircase with greening and places for people to sit.

- Our vertical transport strategy (escalalators and elevator) via the metro entrance, provides an inclusive connection to the square.

Moving from this the square to Rue de la Loi, this building provides a covered and fully activated through route.

To ensure more sunlight hours for the square, the top two floors of the 102 building are removed.

Square <u>+ 49,40 m</u> SQAURE _____



Crossing the Rue de la Loi, metro station to the right



Entry from de Rue de la Loi into the main hall, that leads to the escalotors of the Metro station on the Left, and the entrance to Loi 130 on the right. The double height metro hall allows for views down towards the new square.



Section from Rue de la Loi to the square - LOI102 (1:150)

Loi 130





Existing buildings

The existing building consists of sections of between eight hundred and a thousand square metres per floorplate, each section with its own vertical circulation. The principal typology has 3 zones in plan, the two outer zones adjacent to the facades which can accommodate functions requiring daylight: cellular offices, larger working areas or meeting spaces, and a central zone for cores, wc's and supporting functions.

The primary structure is a reinforced concrete frame with floor-to-floor heights of ca. 3.3m. Facades are a stone veneer on concrete with metal windows. These are not engineered to meet contemporary standards for overheating, insulation or airtightness. The capacity of the lift cores and structural frame limit the feasibility of additional storeys.

Access to natural daylight from central circulation corridors is limited, as is access to open space and shared amenities.

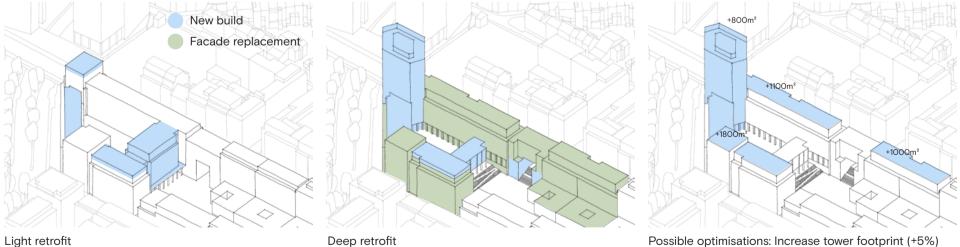
Our approach focusses on preserving as much of the existing structure as possible. Designed by the Polak brothers, the building consists of modest 11-storey tower blocks located at both ends—one at the start of Joseph II-straat and the other at Wetstraat. These towers are connected by pragmatic horizontal volumes, forming a coherent architectural ensemble.

The connections between these blocks and the linear volumes have been thoughtfully addressed, particularly in relation to the scale of the urban environment, as detailed in the Erfgoednota llot 130.

In our view, two primary flaws characterise the Loi 130 ensemble: 1. Non-functional Corner Plan: The building's corner at Wetstraat and Steenweg has an inefficient layout. The current design hampers functionality, particularly in this pivotal area.

2. Technical Demands: Modern high-end tenants have stringent requirements, particularly in relation to the technical performance of the building's envelop, with regard to the glazing %, thermal performance and overall longevity, which the current structure does not meet.

To address these issues, the plan includes dismantling the corner section of the building to introduce a new tower volume. This intervention will enhance the usability of the entire building, improving both its functionality and efficiency, particularly at the corner where space is limited.



+ additional roof levels = 4700m² additional floor area

Light vs Deep Retrofit

The team has explored different approaches to the adaptive re-use of the existing office buildings, ranging from a light touch approach to more significant intervention. A light touch approach offers benefits like lower embodied carbon, reduced upfront costs, and simpler logistics. However, it comes with drawbacks such as higher operational carbon due to lower façade performance, limited capacity for additional storeys, poorly positioned additional mass in urban design, and restrictions from existing floor-to-floor heights.

A more significant intervention involving greater demolition and a deeper retrofit

lowers operational carbon by upgrading the building fabric, allows for a new efficient footprint, and enhanced urban design and building appearance. It will also improve access to outdoor spaces and natural daylight for the building occupants. Although this approach results in higher embodied carbon, greater upfront costs, and more complex logistics, the benefits of the deep retrofit approach outweigh the disadvantages. It offers significant sustainability benefits over a business-as-usual demolition and newbuild approach because of the retention of the structural frame and basement.

Loi 130



The Loi 130 entrance pavilion

Loi 130 proposal

The proposal will transform and modernise the llot 130 offices. Creating a sustainable working environment that is future proofed for at least the next 50 years.

The proposals will:

 Consolidate the llot 130 offices to the eastern end of the block, freeing up space to create a truly mixed-use urban block with residential and amenity uses.

Integrate the buildings better into the urban context, contributing to an inclusive, safe and diverse urban environment, and a more attractive streetscape. Create new greened public spaces for the city

 Provide a significantly upgraded working environment, with views of sky and green, access to open air amenity and places to meet.

Circulation and access strategy

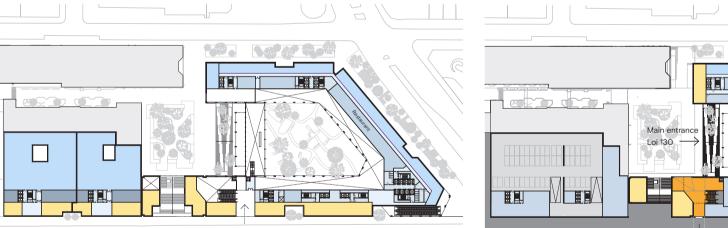
A new entrance foyer to the metro is created at square level (1), and new escalators overcoming the three-level difference at the eastern end are integrated into the new building (2).

The building gets a new heart and address onto the new square (3), with connections into the new entrance pavilion from Rue de la Loi (4) for deliveries and private access (VIP), and from Rue de Joseph (5) via a drop-off at street level. From this entrance lobby (6) a secured connection leads into the building.

In a single-tenant strategy, the entrance pavilion acts as the main entrance from square, metro and street level.

In multi-tenant strategy, distinctive new street entrances provide an address to each individual building.

The existing and new cores for vertical circulation are arranged around a newly landscaped courtyard within a cloister. Primary social functions like a restaurant, screening room and meeting spaces, are organised on this courtyard level which means that in both a single-tenant and multi-tenant situation, this level has a communal function for either one, or a range of different organisations.

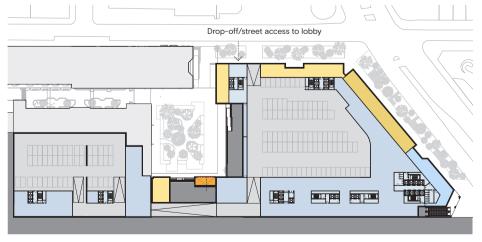


Street access to lobby



Metro

Level O: rue de la Loi



Level -2: parking/technical



Technical space Car park (213 spaces)

Service yard



Level -3: Rue d'Etterbeek: supermarket/bikestore/parking entrance

Bicycle parking (774 spaces) Entrance lobby Loi 130

(semi-public)

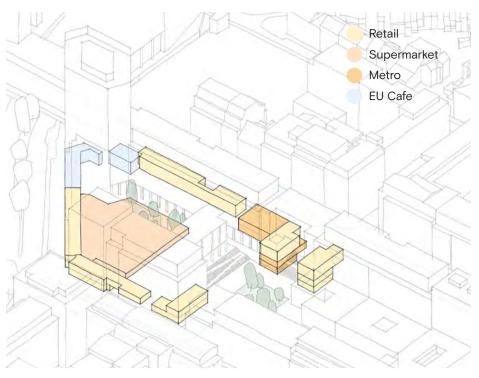
Level -1: pavilion entrance level

 \rightarrow Main entrance llot 130 Additional street access

Loi 130





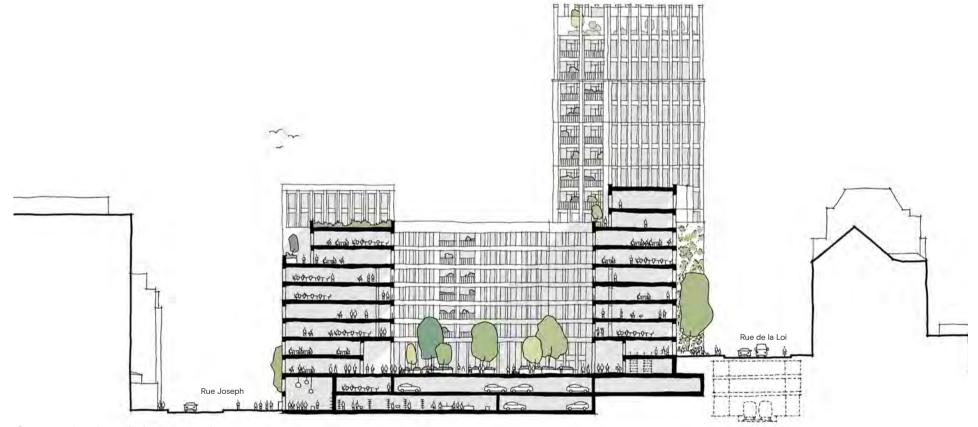


Quality

The retrofit introduces new qualities into the building, improving the working environment. Notches in the external building line separate the bigger volume into smaller individual buildings. They bring light into the central corridors, providing daylight and glimpses of sky and green. Open spaces can be accessed appropriate to a significant urban block in the city centre. from every level of the building in the form of terraces and loggias. The installation strategy will make optimal use of space to maximise floor to ceiling heights within the re-used parts of the frame. Newbuild parts have generous floor to floor heights.

Ground floor uses and active frontages

New active frontages are proposed around the building with commercial uses and amenities both for the building and the neighbourhood. The quality of plinth facades will be significantly upgraded with a level of detail and richness



Cross section through the courtyard



Loi 130





Facade strategy

The existing facades of Loi 84 and 86 exhibit a pronounced horizontal character. The same horizontality - although less radical - applies to the Loi 130 facades. This horizontal emphasis contributes to a sense of movement rather than place, further intensified by the smooth and flat materiality, such as the metal panelling on 84/86 and the stone panelling on Loi 130, which aligns flush with the window frames. Although vertical grooves creating shallow bays introduce some vertical articulation, the predominance of the banded windows still emphasizes the horizontal orientation, especially from oblique angles.

Our redesign aims to introduce a dominant vertical character to the facades. This shift will anchor the buildings more firmly in their location, fostering a sense of place rather than movement.

We propose a family of facades to address the monotony of the current Loi 84-86 and Loi 130 appearance. By incorporating 'notches,' we segment the blocks into distinct, medium-sized sections, each with its own unique character. This approach introduces an urban grain that one relates to more easily, and that creates clear addresses in case of a multi-tenant strategy.

The new design features a clear and active plinth, an elegant middle section, and a pronounced top, emphasizing facade modelling and shadow play. We will use warm, tactile materials and a carefully chosen colour palette to enhance the visual appeal and physical presence of the buildings.





Existing facades Rue de la Loi



Active frontage: Elephant & Castle, London, Maccreanor Lavington



ENTRANCE METRO / LOI 130

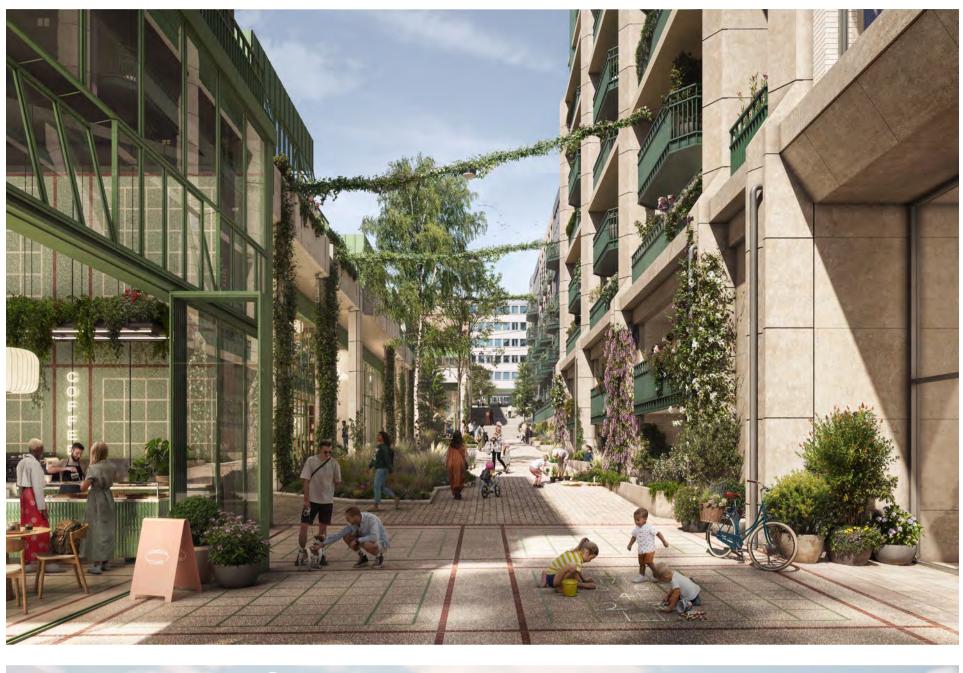
OFFICE ENTRANCE (MULTI-TENANT)

FACADE NOTCH: OUTSIDE SPACE

CAFE/RESTO

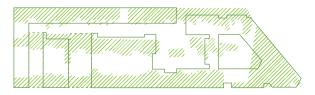
Active frontage - Rue de la Loi

The Mews, reclaiming an internal street





When presented with the opportunity to transform 25% of the llot 130 block into housing, our primary goal was to foster a true sense of home, to create a shared space where residents can come together, children can play safely, and the community can enjoy evenings in a welcoming environment. Through careful and selective demolition of the inner volumes, we unveil the site's hidden historical asset: a mews, an inner street that stretches from the eastern side of the block to Spa Street. This rediscovered feature enhances the site's character, providing both connectivity and a unique sense of place for the new residents.



Overlap of the proposed urban design and historical grain of the block

While connecting to the surroundings









3. Bakery on the square corner

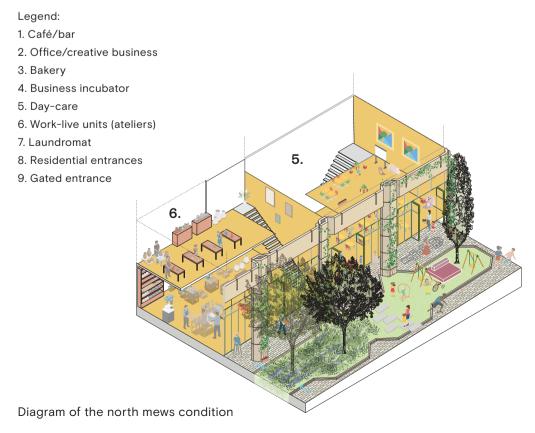
1. Café, corner of Spa street and Josef II street

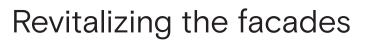
9. Gateway to the mews on Spa street

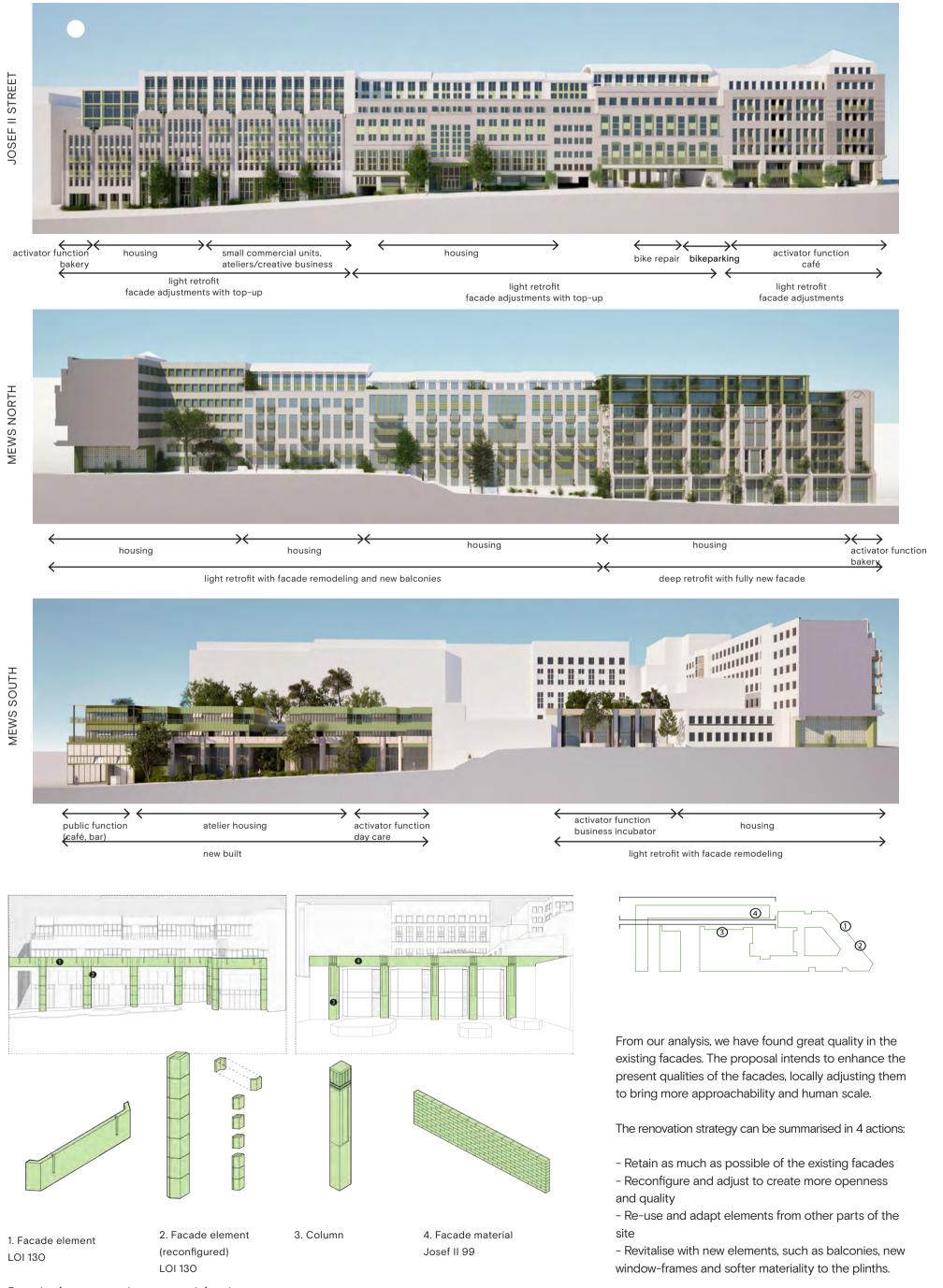
While the mews functions primarily as a residential street, it is enriched by additional uses; day-care center (5) and live-work atelier units (6). It also connects to a new business incubator space on the ground floor of the Loi 80 building (4). These diverse functions ensure the mews remains lively and active throughout the day.

The new residential block, however, is not solely inward-looking. Adjustments in the facades, and internal layouts of the blocks provide multiple access routes to the mews—some more public, others more private. The entrance from Spa Street serves as a grand gateway (9), marking the end point of the mews. Additionally, all housing blocks feature internal but direct connections between the street and the mews (8).

Around the perimeter of the mews, commercial and shared spaces such as a bakery (3), laundromat (7), cafés (1), and small office units (2) provide vital amenities. These attractors activate the plot and bring life to Josef II Street, ensuring a vibrant, mixed-use environment.







Example of a re-use on the mews south facade

A new residential neighbourhood





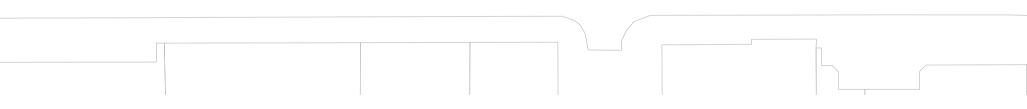
Faced with the challenge of designing within an 18-meter deep existing floor plate, the typical approach might yield single-aspect apartments. However, we propose a different solution: intersecting duplexes and apartments. This layout not only allows most living spaces to be oriented to the south, it also minimizes long, inefficient corridor spaces, increasing the usable internal areas of the apartments. This layout allows us to create 250 units, with no less than 73% enjoying direct views of the mews.

To ensure quality outdoor spaces for every apartment, the design adds to the existing facades of a mix of narrow and deep balconies. They are incorporated on the mews facade but also on Josef-II Street. Taking inspiration from the chamfered facade of Loi 130, those new balconies also become a tying motif to the block, creating a unity within the variation of the existing and new facades.



Partial 1:200 floor plans with intersecting apartments

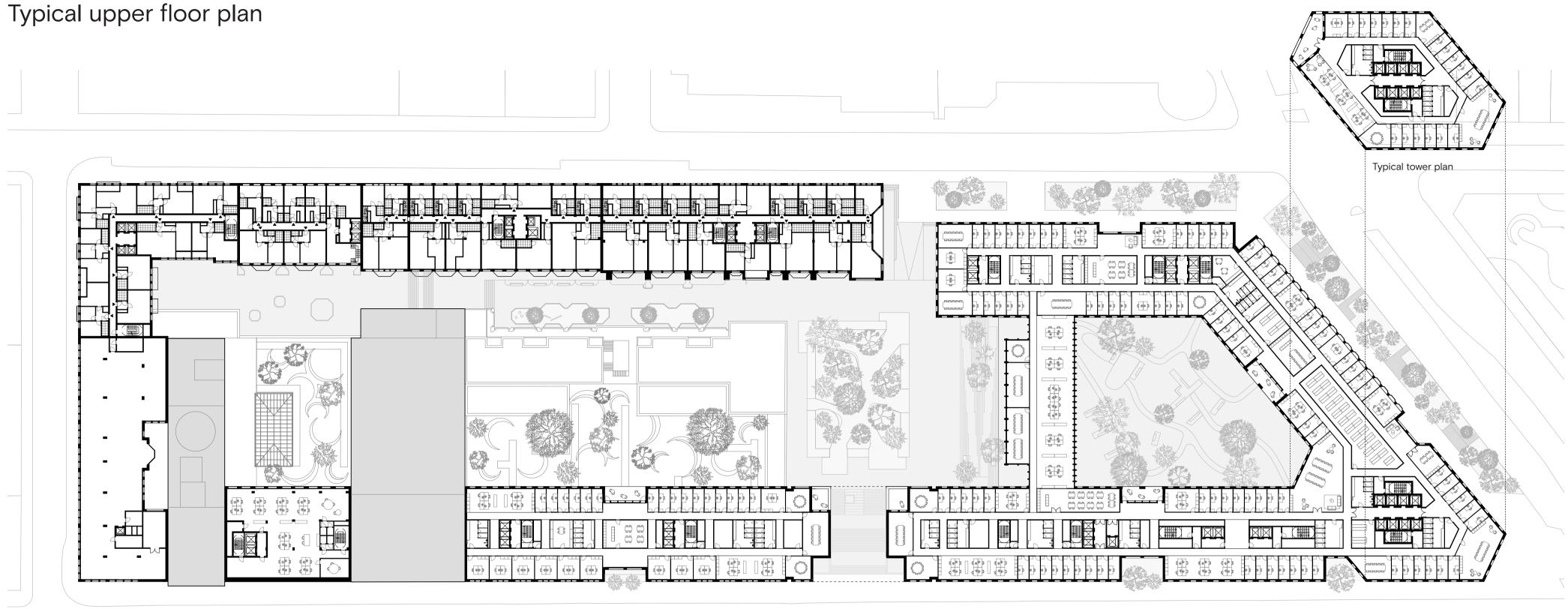


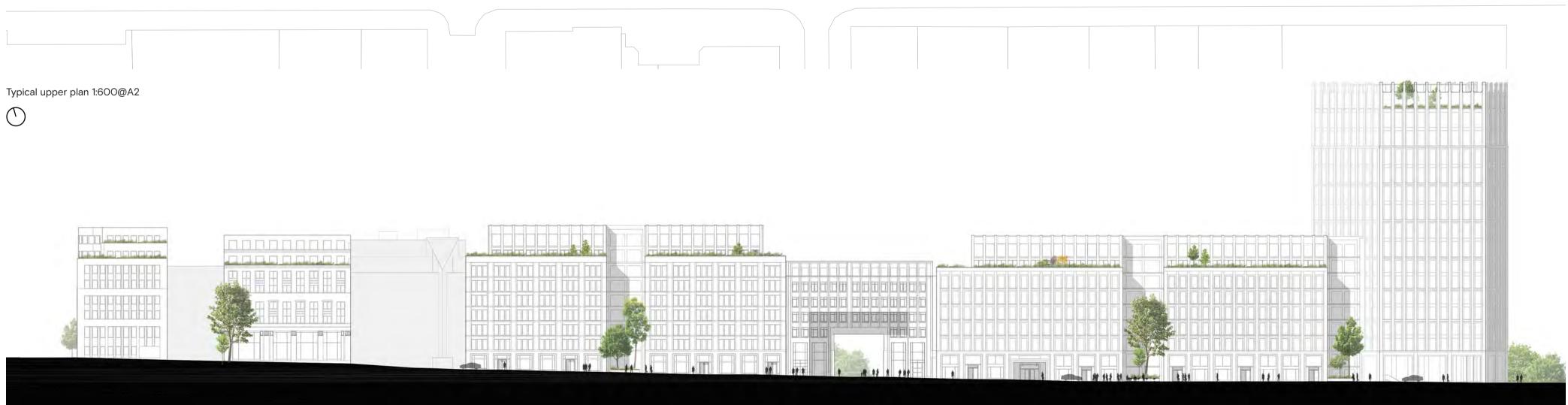




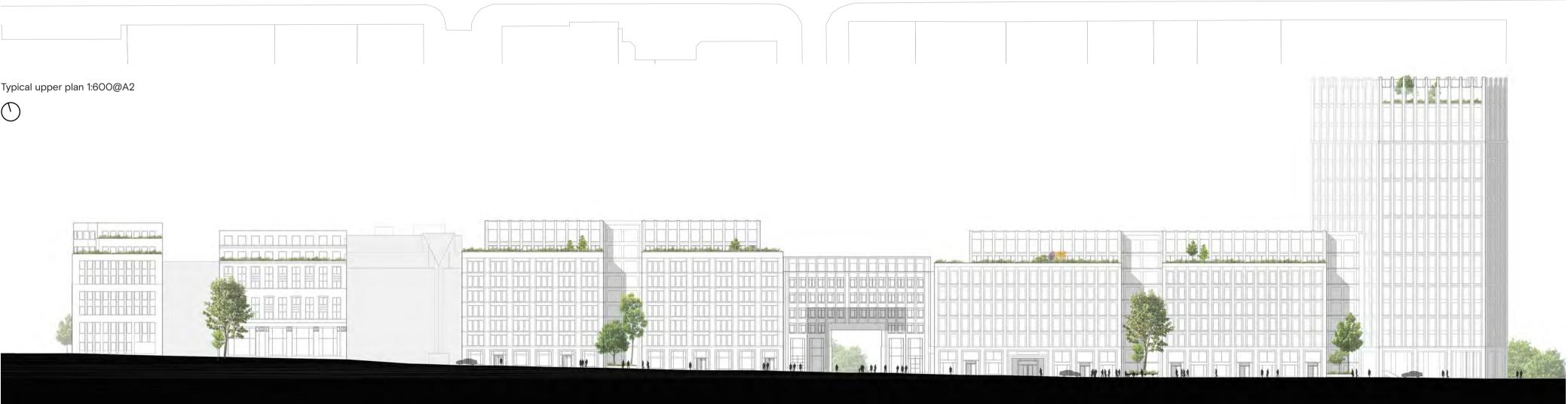
Long section through mews/square/courtyard 1:600@A2

Lower floor plan and long section









Elevation Rue de la Loi: 1:600@A2

20 Passengers In Time

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