

Reformation of Social Structure

Concurrent Occupancy
&
Working Hierarchy Reconstruction

Under the issue of suburbanization of young generation and community segregation, how can the National Bank of Belgium play a social role of reforming the current social structure and eliminating the boundaries between communities while benefitting from the renovation itself?

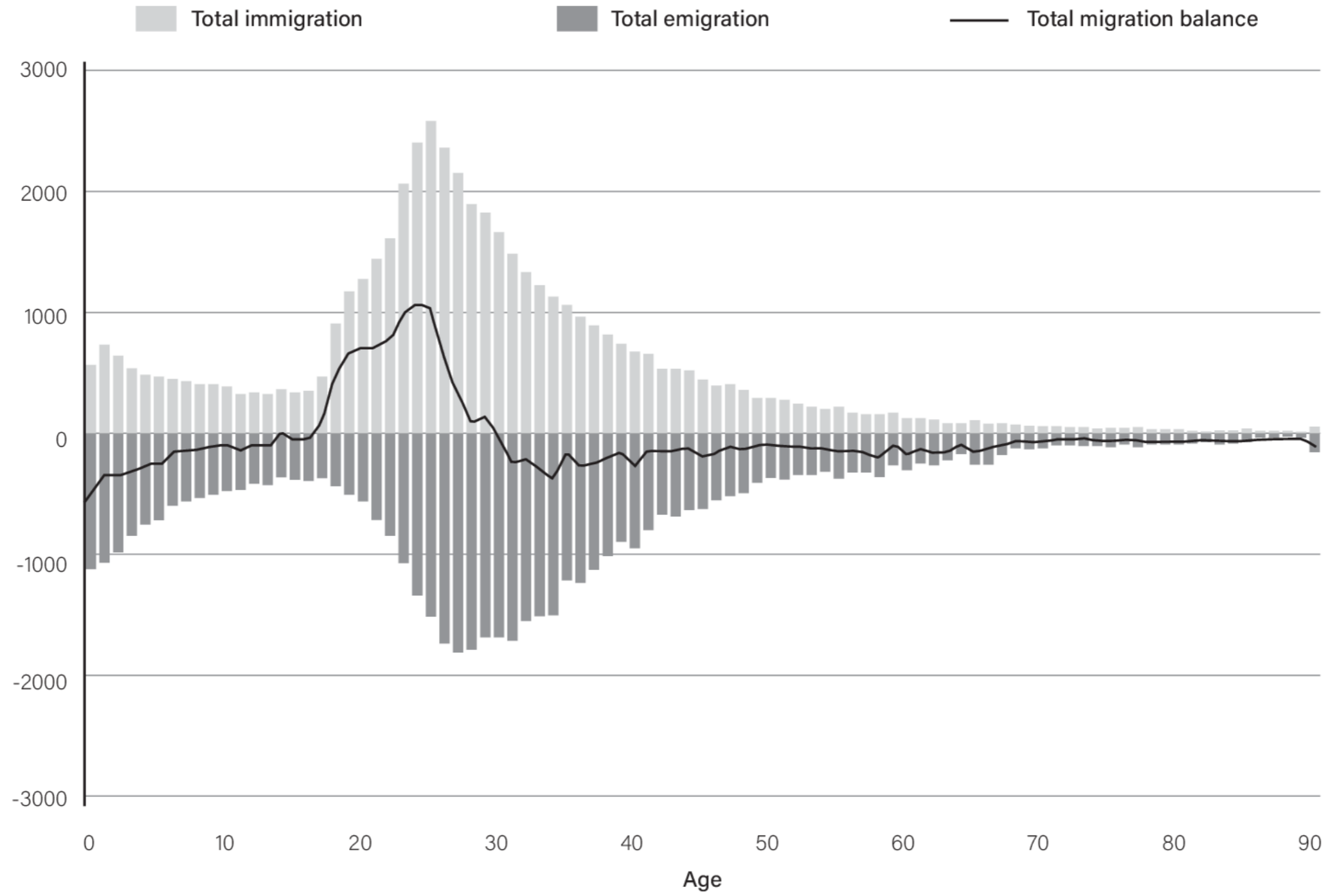
- What are the social relations between the bank and the public, also within the bank?

- What kind of additional programs can be introduced in the renovation so as to turn the bank into a social plinth?

- How can the spatial relations of the bank be redesigned in order to reform the spatial behaviour and the boundaries between individuals?

Research

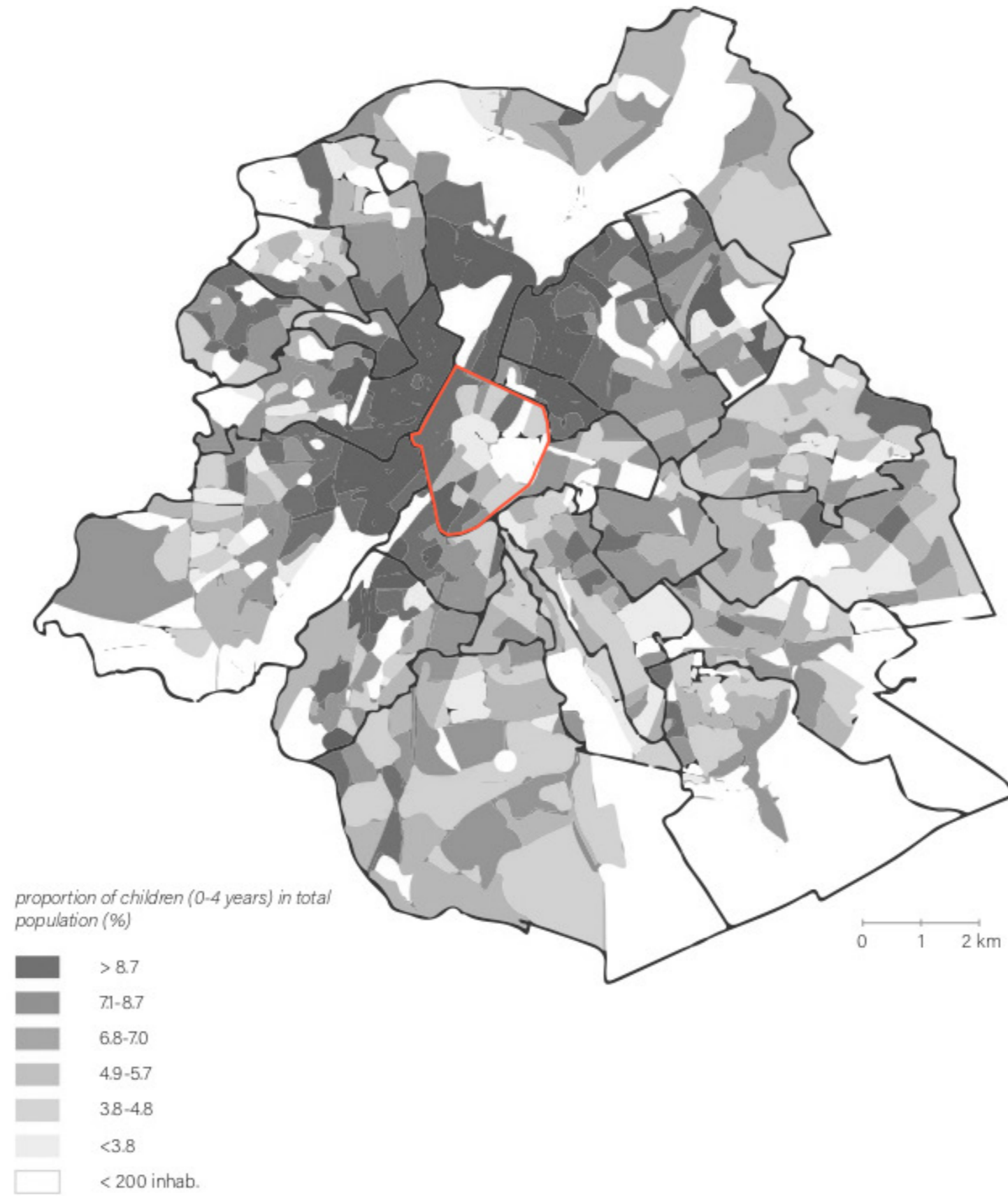
Demographics | International Youth Migration



Migration-Age Graph

Not-to-scale
2005
Brussels, Belgium

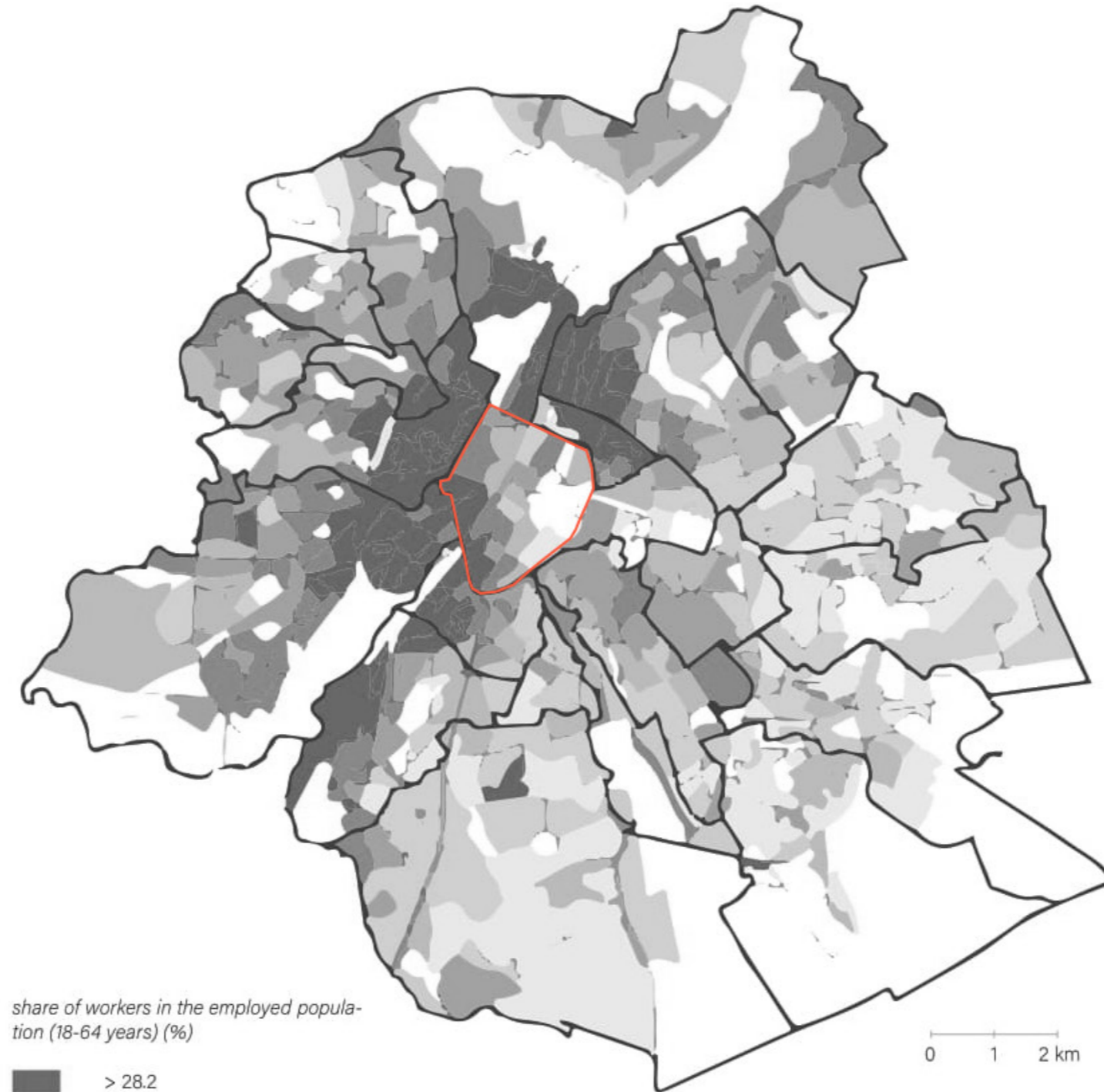
Demographics | Suburbanization of Youth



Share of Children (0-4 years)

Not-to-scale
2001
Brussels, Belgium

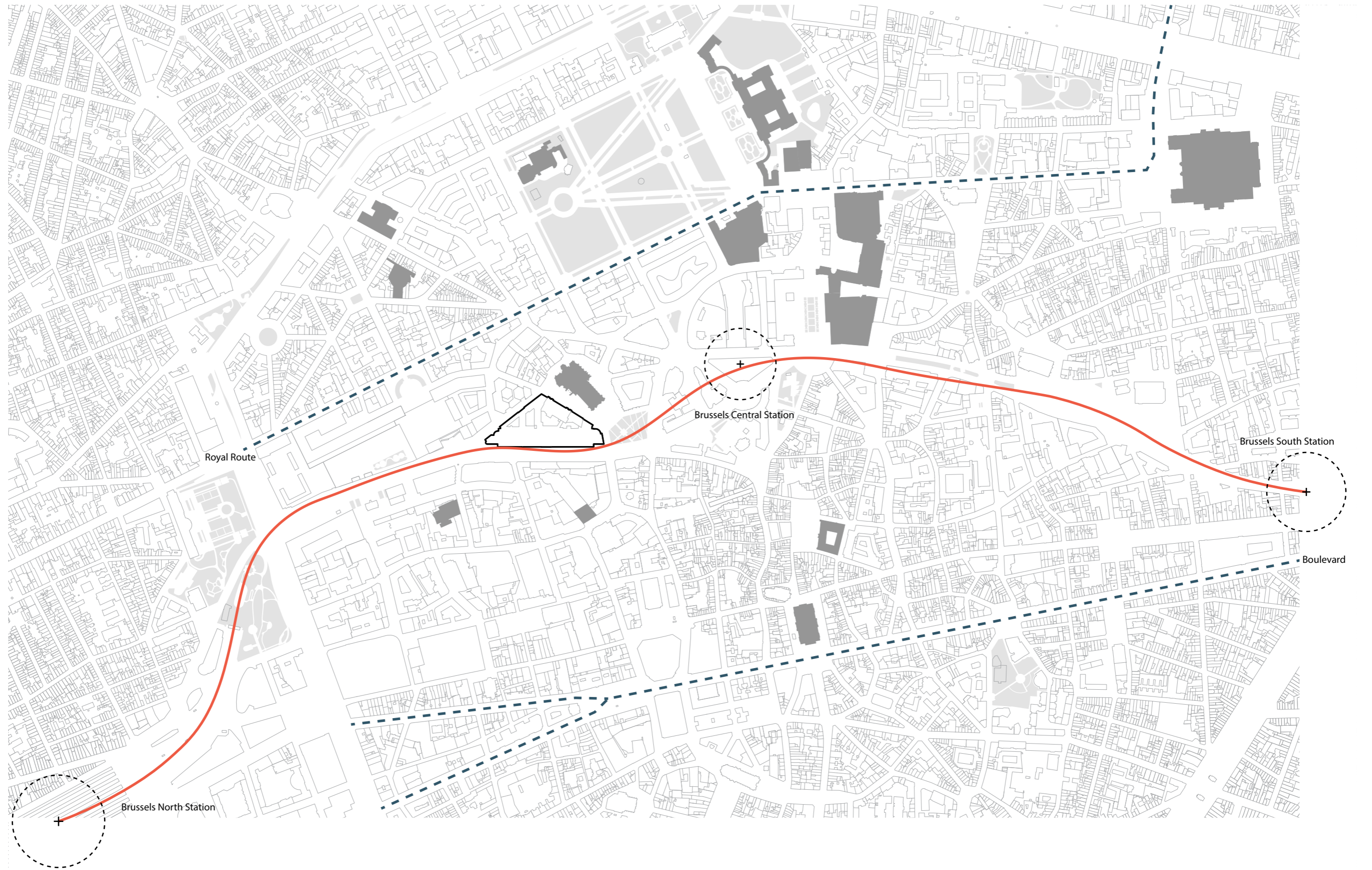
Demographics | Community Segregation



Proportion of Workmen

Not-to-scale
2001
Brussels, Belgium

Urban Context | Social Division

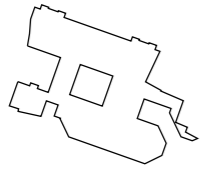


Site Analysis

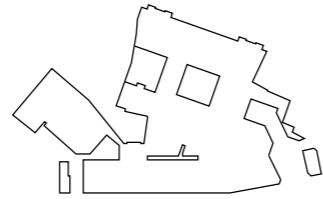
1:5000
National Bank of Belgium
Brussels, Belgium



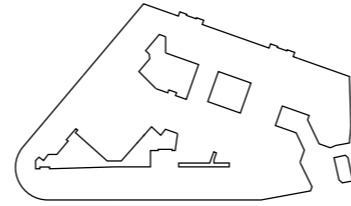
History | Bank Enclosure



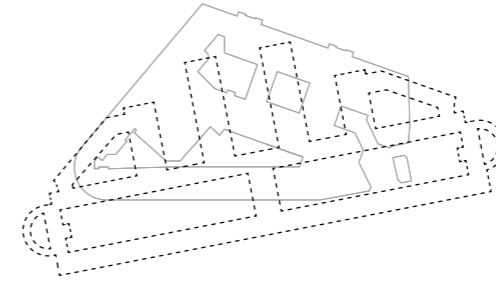
1860-1874



1871-1878

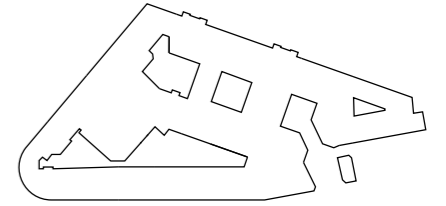


1900-1908

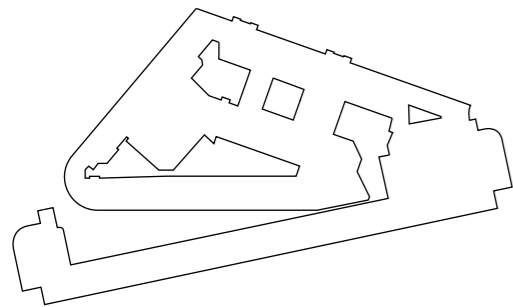


Projection 'Project C'
(initial plan Van Goethem)

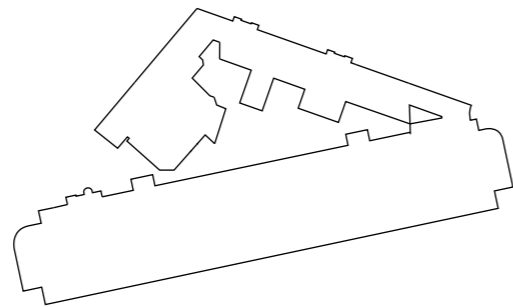
1948



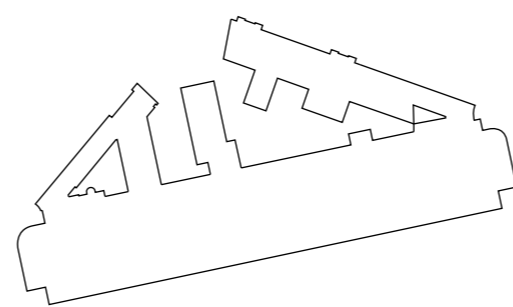
1948-1949



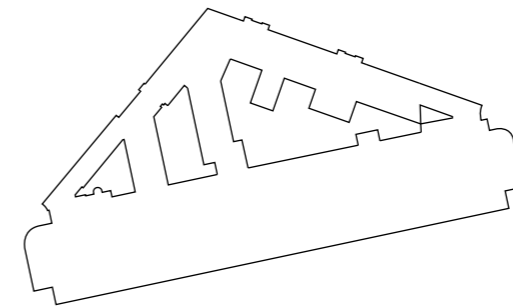
1949-1951



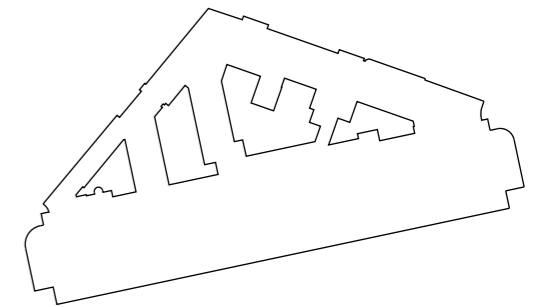
1952-1953



1954



1965

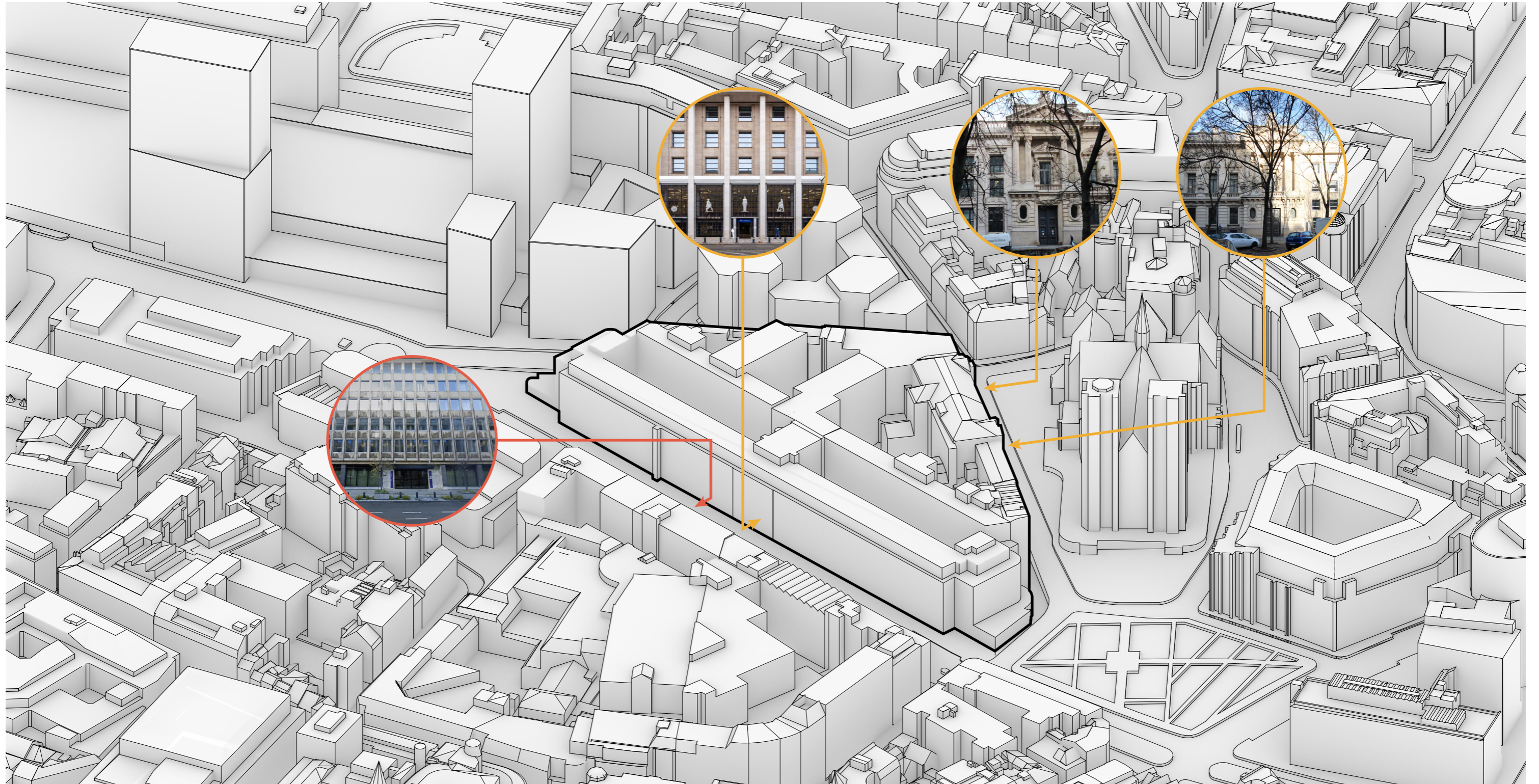


2021

Formation History

Not-to-scale
National Bank of Belgium
Brussels, Belgium

Site Analysis | Lack of Access

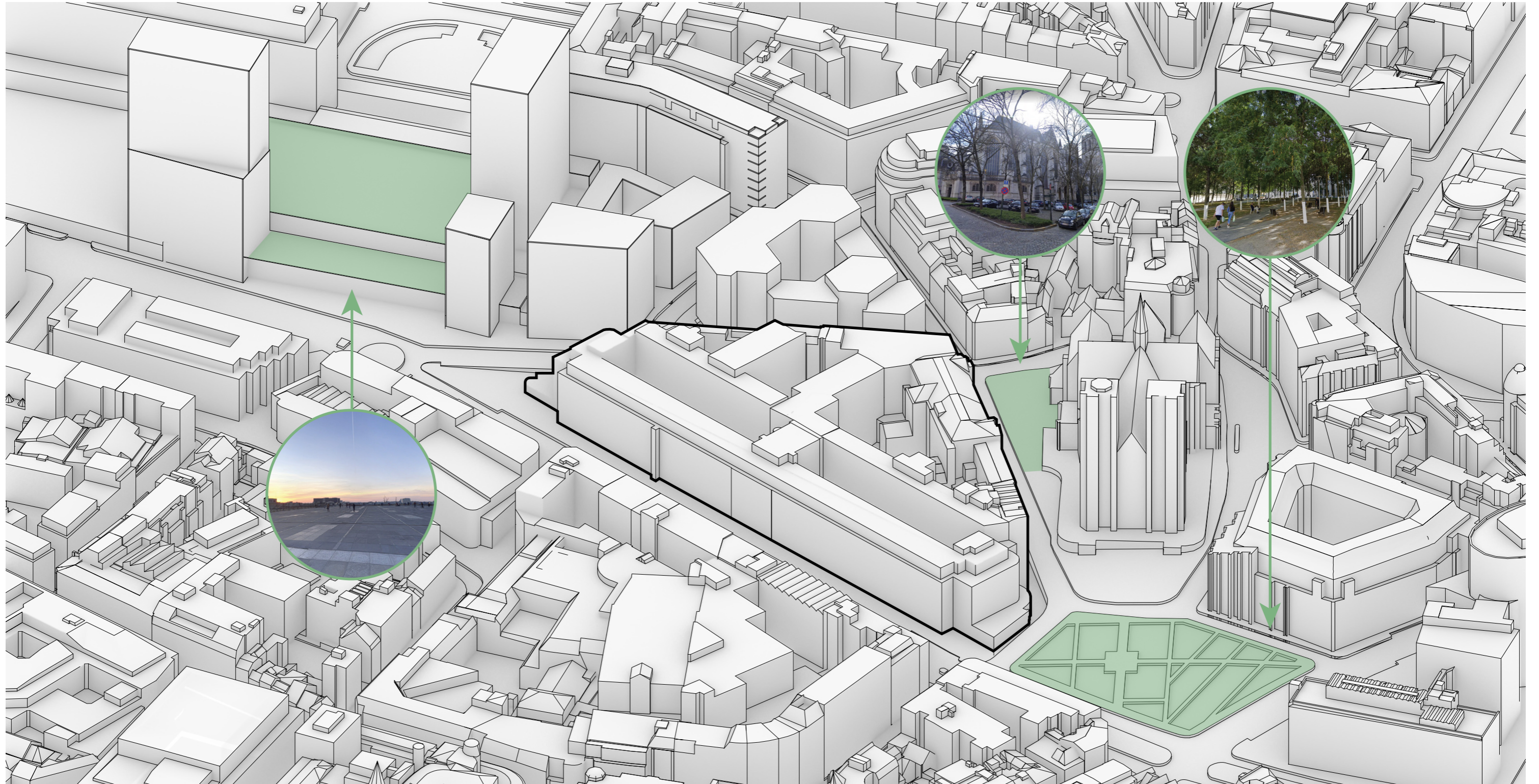


- Visitor Entrance
- Officer Entrance

Accessibility Map

1:1500
National Bank of Belgium
Brussels, Belgium

Site Analysis | Neighbourhood Connection

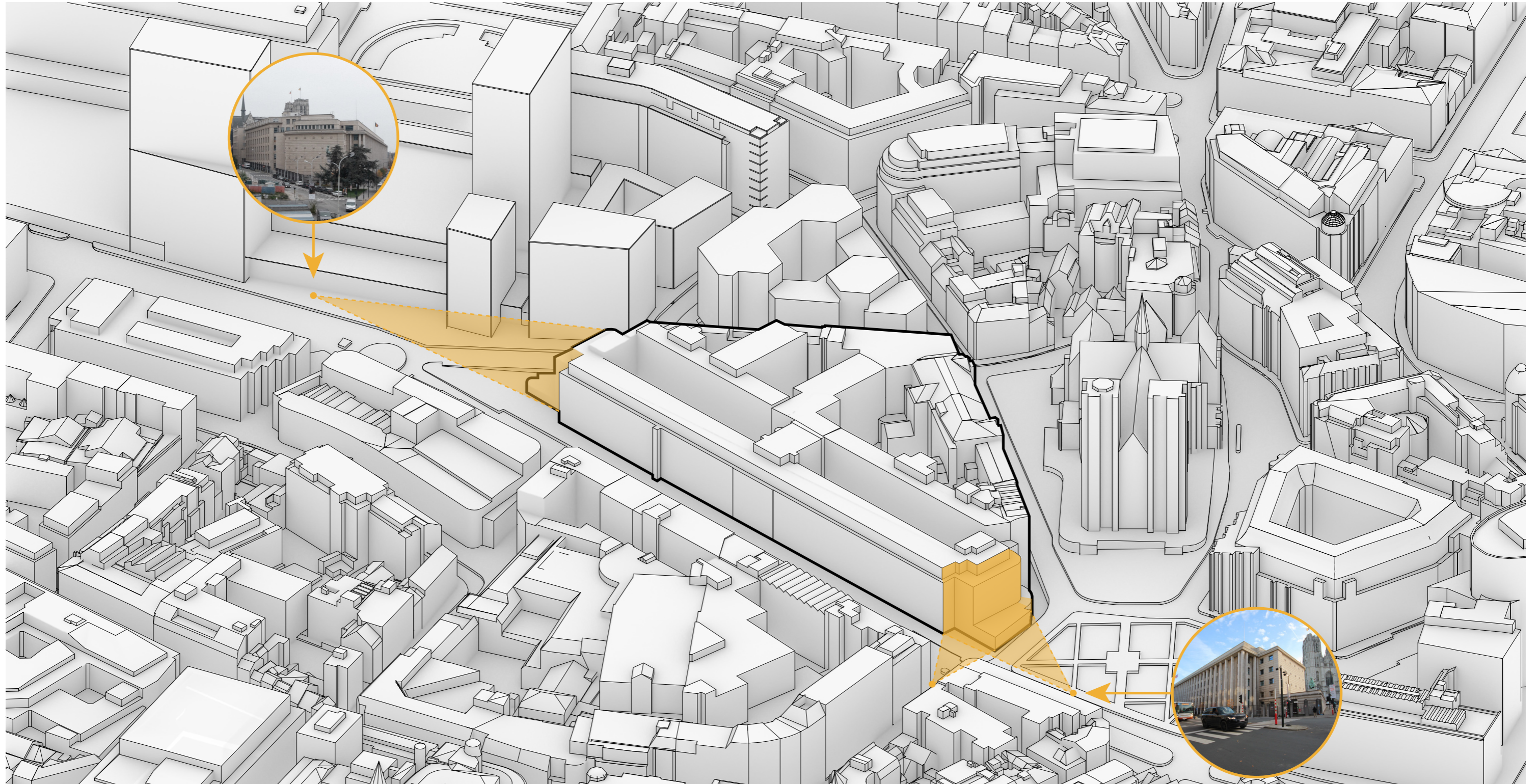


Public Space

Public Space Map

1:1500
National Bank of Belgium
Brussels, Belgium

Site Analysis | Perception of Access



Viewpoint

Visibility Map

1:1500
National Bank of Belgium
Brussels, Belgium

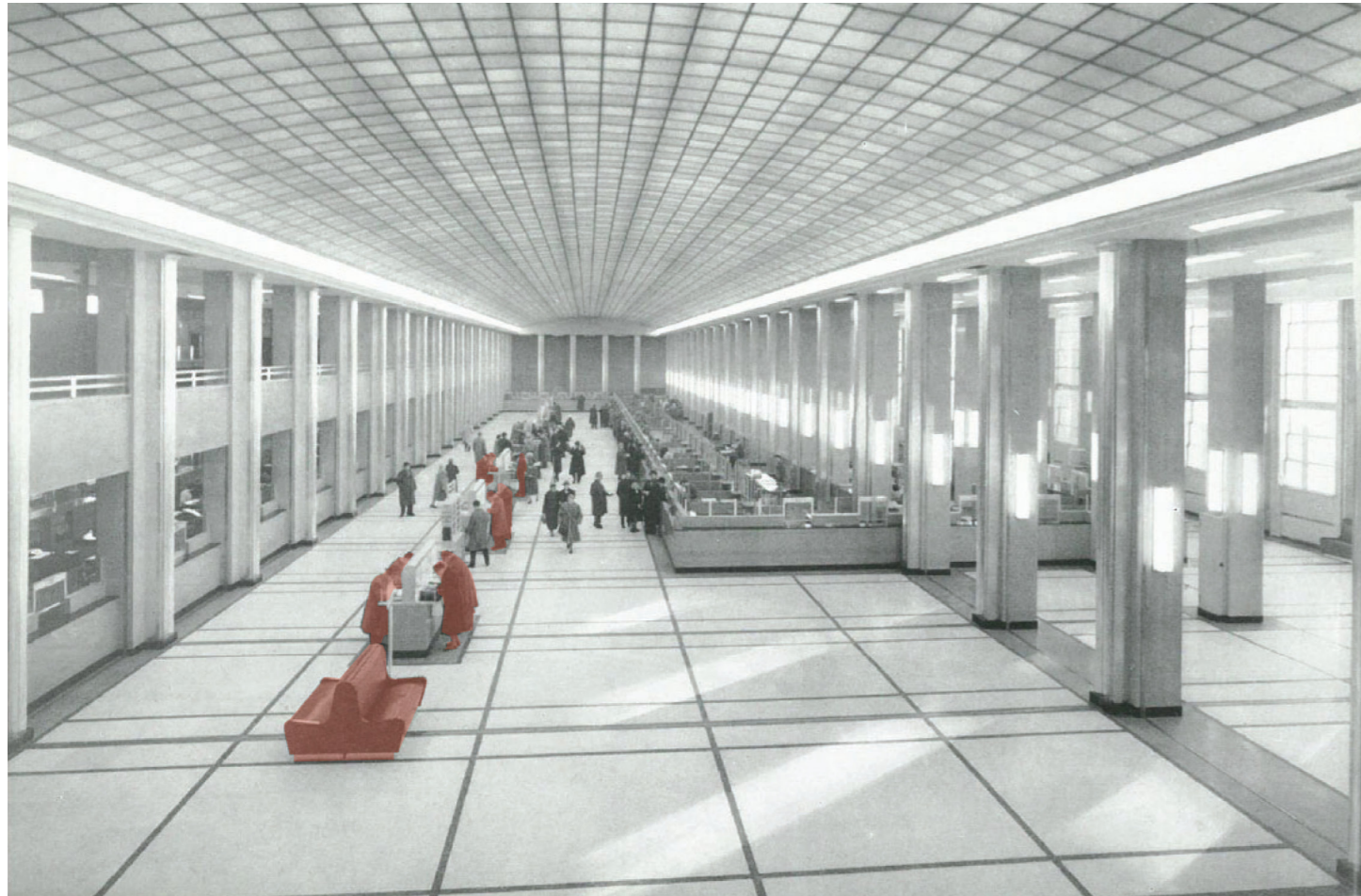
Site Analysis | Perception of Access



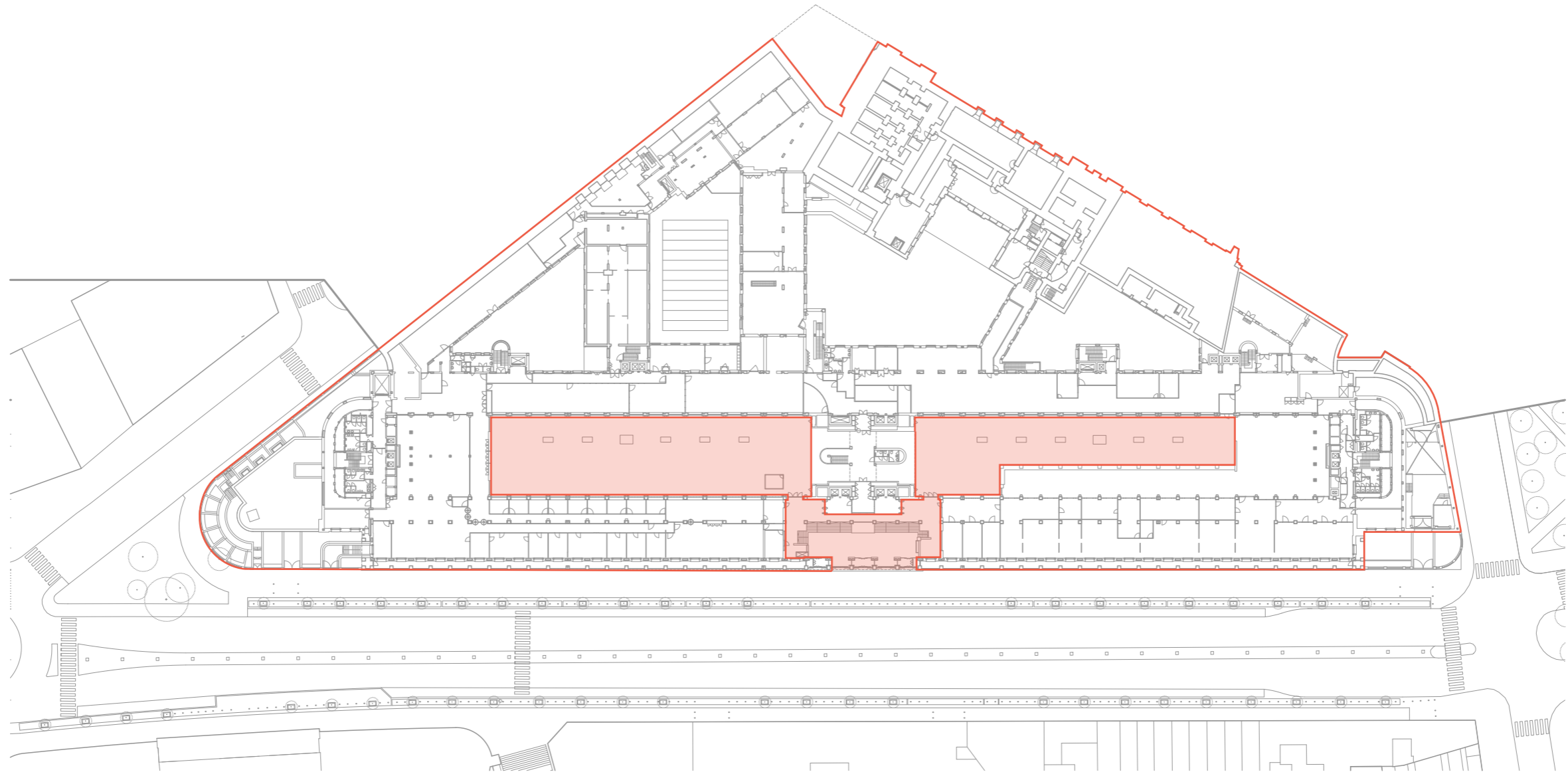
Site Analysis | Perception of Access



Distribution In & Through Space | Explicit Boundary



Interior Analysis | Explicit Boundary

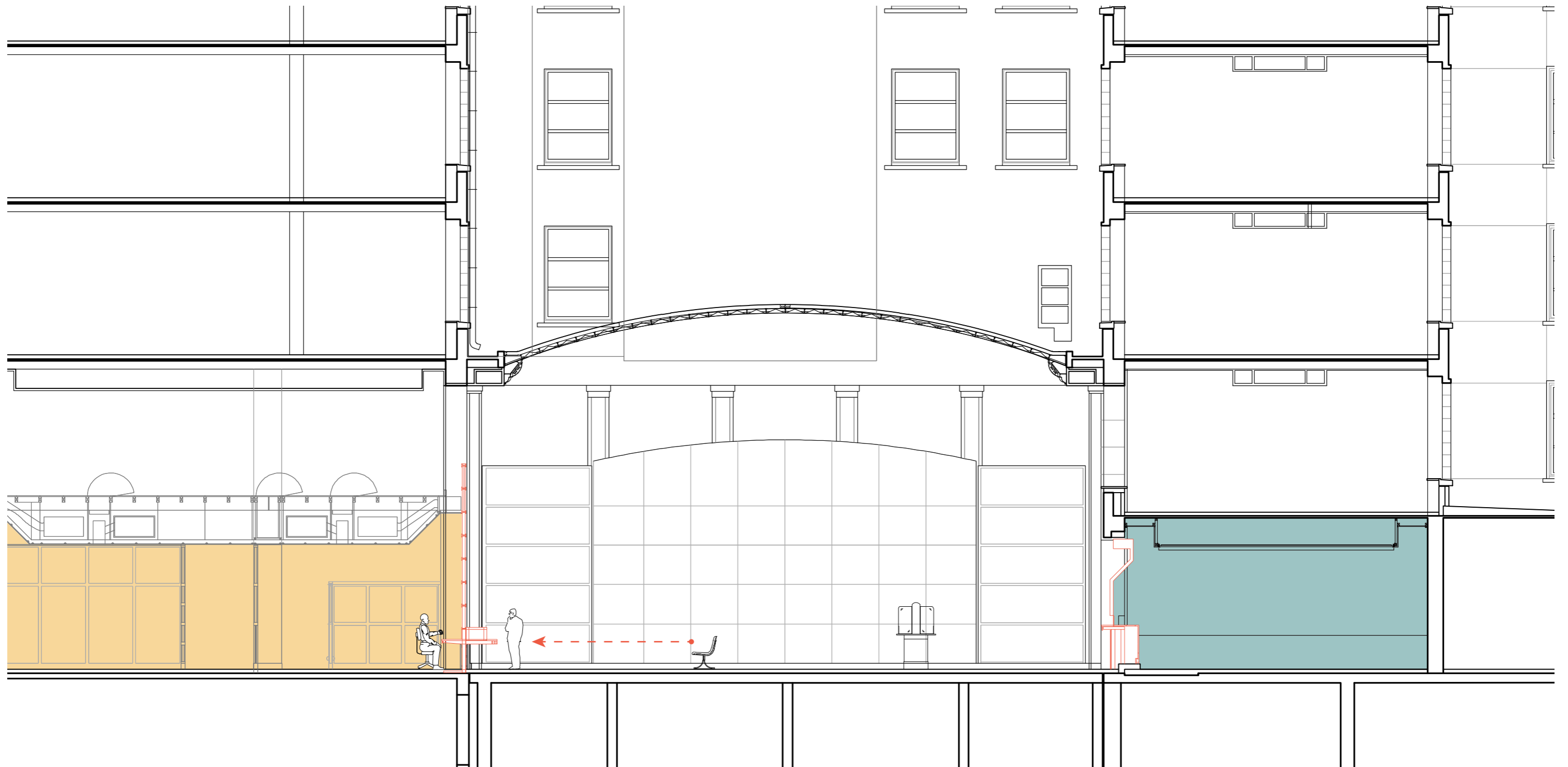


Visitor Accessible Area
Boundary Line

Boundary Map

1:1000
National Bank of Belgium
Brussels, Belgium

Distribution In & Through Space | Explicit Boundary

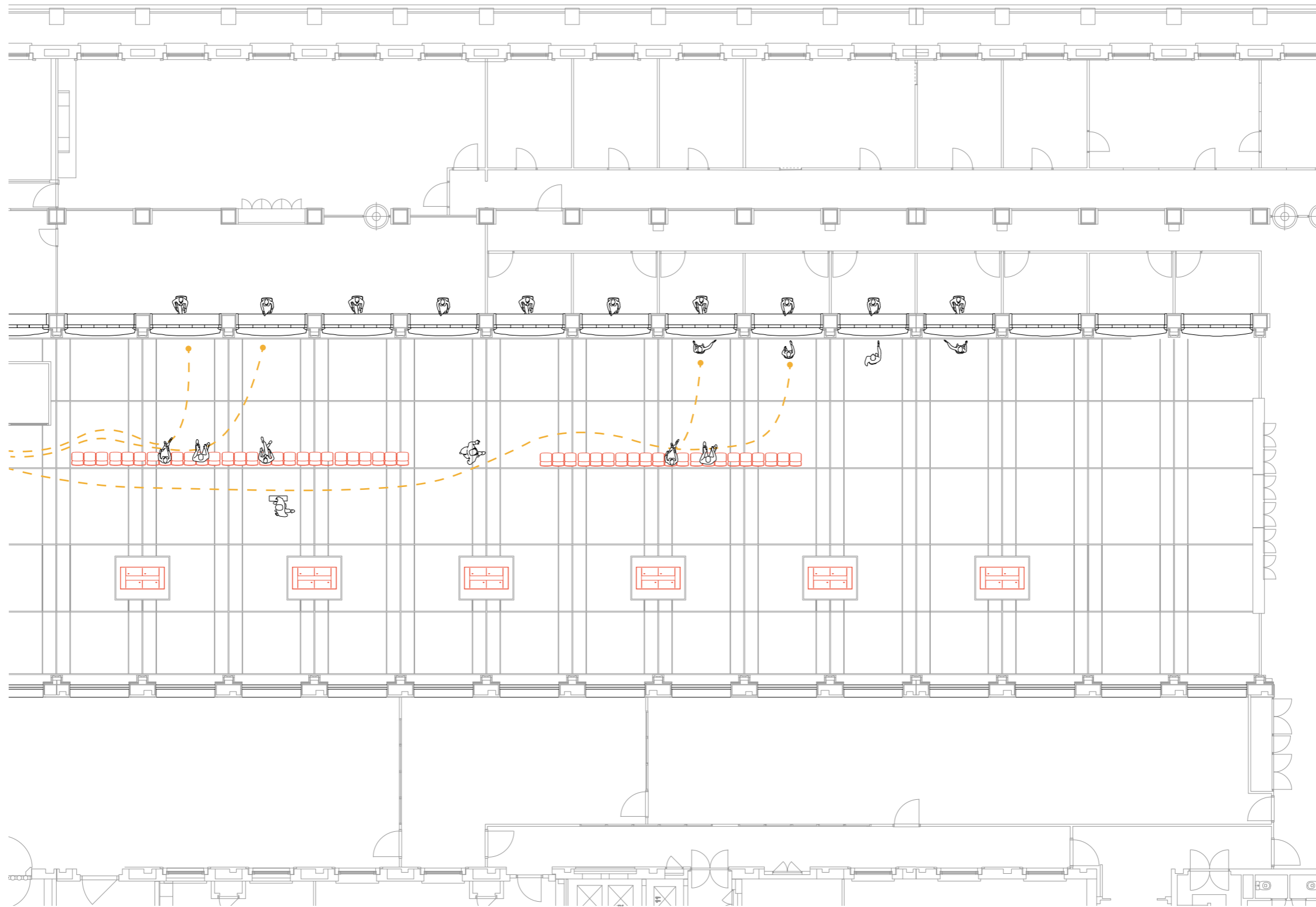


- Front Office
- Back Office
- Visitor Movement

Section

Ground Floor / 1:100
National Bank of Belgium
Brussels, Belgium

Distribution In & Through Space | Explicit Boundary



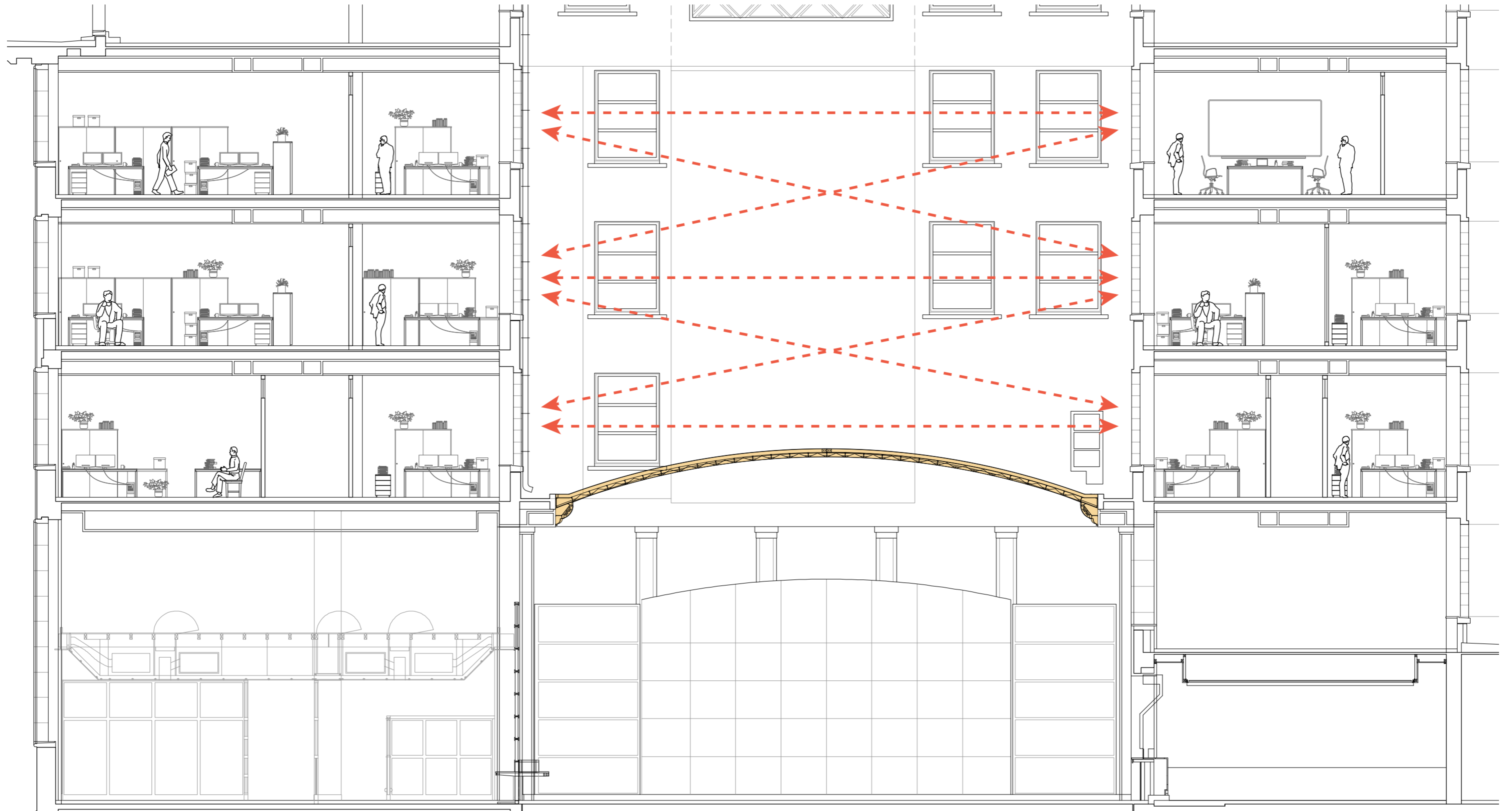
— — — — — Visitor Movement
— — — — — Artefacts

Plan

Ground Floor / 1:200
National Bank of Belgium
Brussels, Belgium



Distribution In & Through Space | No Visual Linkage



— Visual Barrier
- - Visual Link

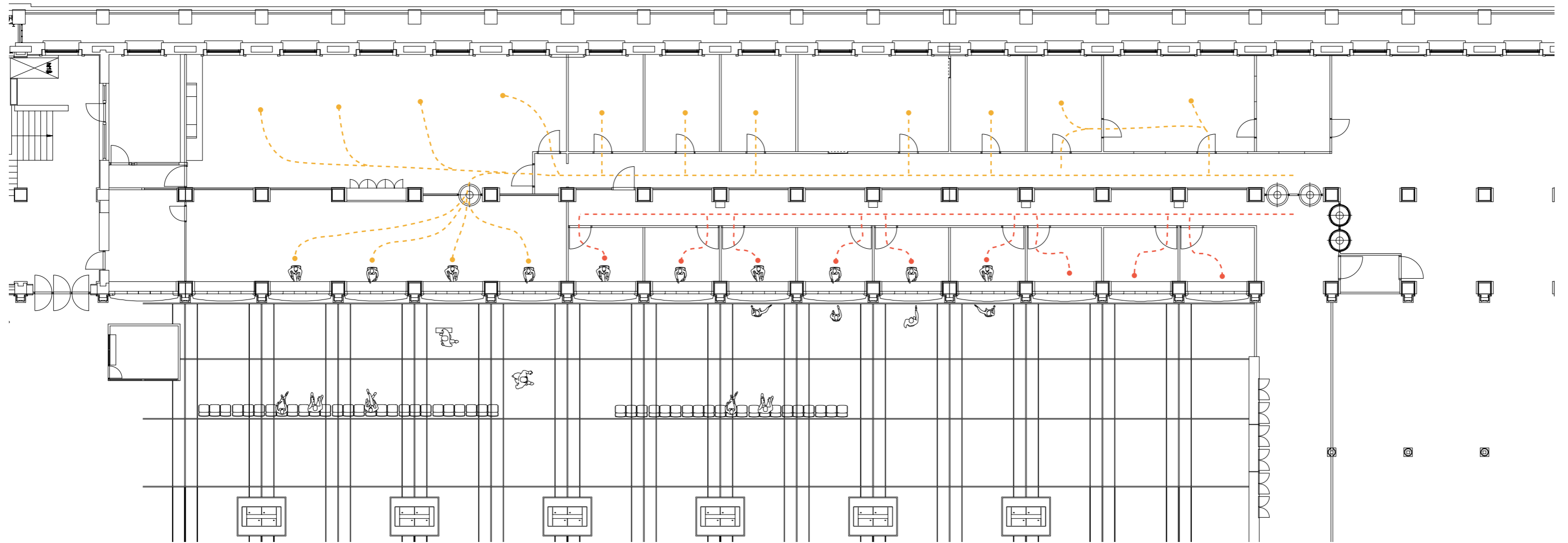
Section

1:100
National Bank of Belgium
Brussels, Belgium

Distribution In & Through Space | Subdivided Workplaces



Distribution In & Through Space | Subdivided Workplaces



— Officer Movement
— Teller Movement

Plan

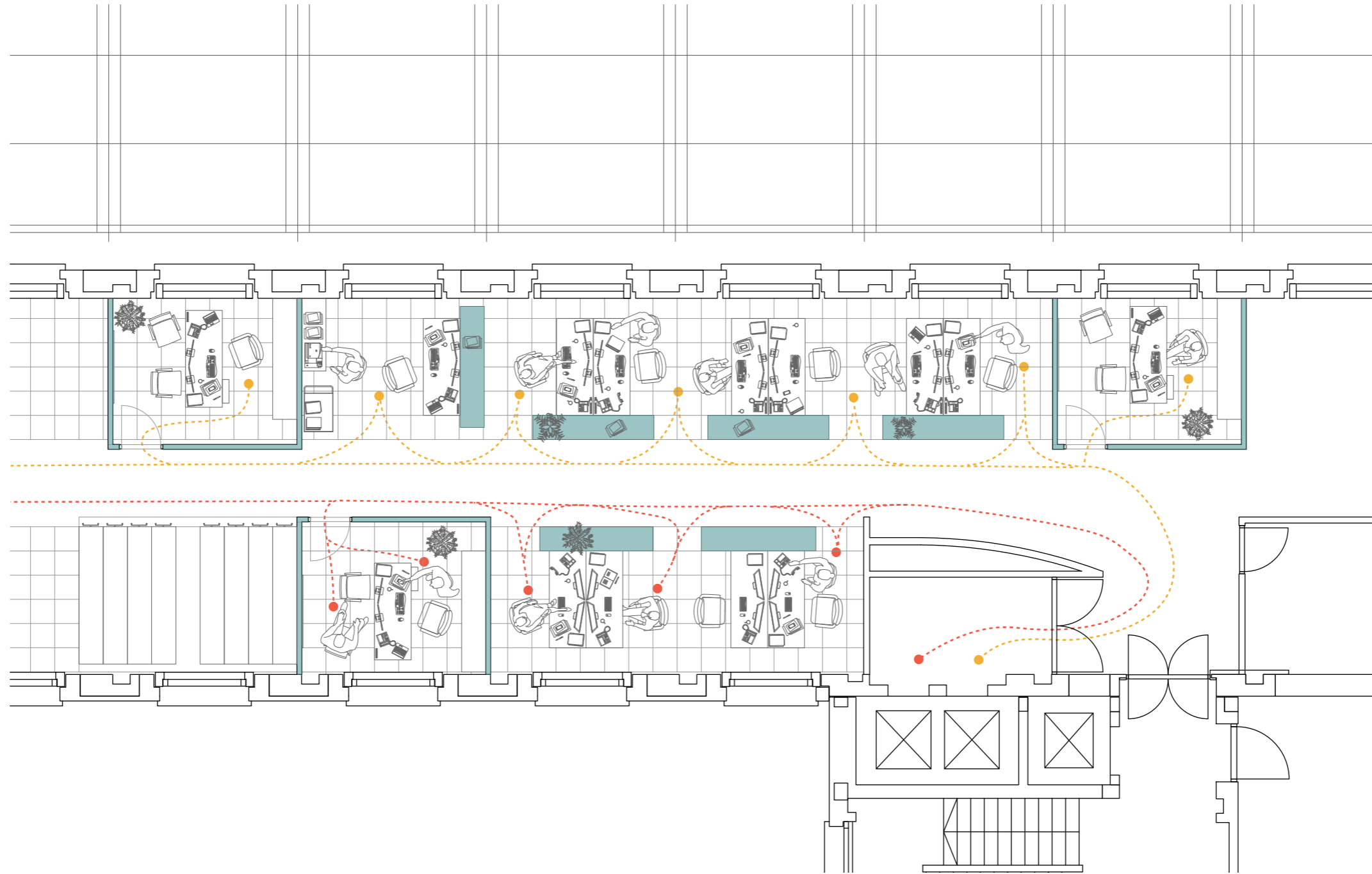
Ground Floor / 1:200
National Bank of Belgium
Brussels, Belgium



Distribution In & Through Space | Subdivided Workplaces



Distribution In & Through Space | Subdivided Workplaces



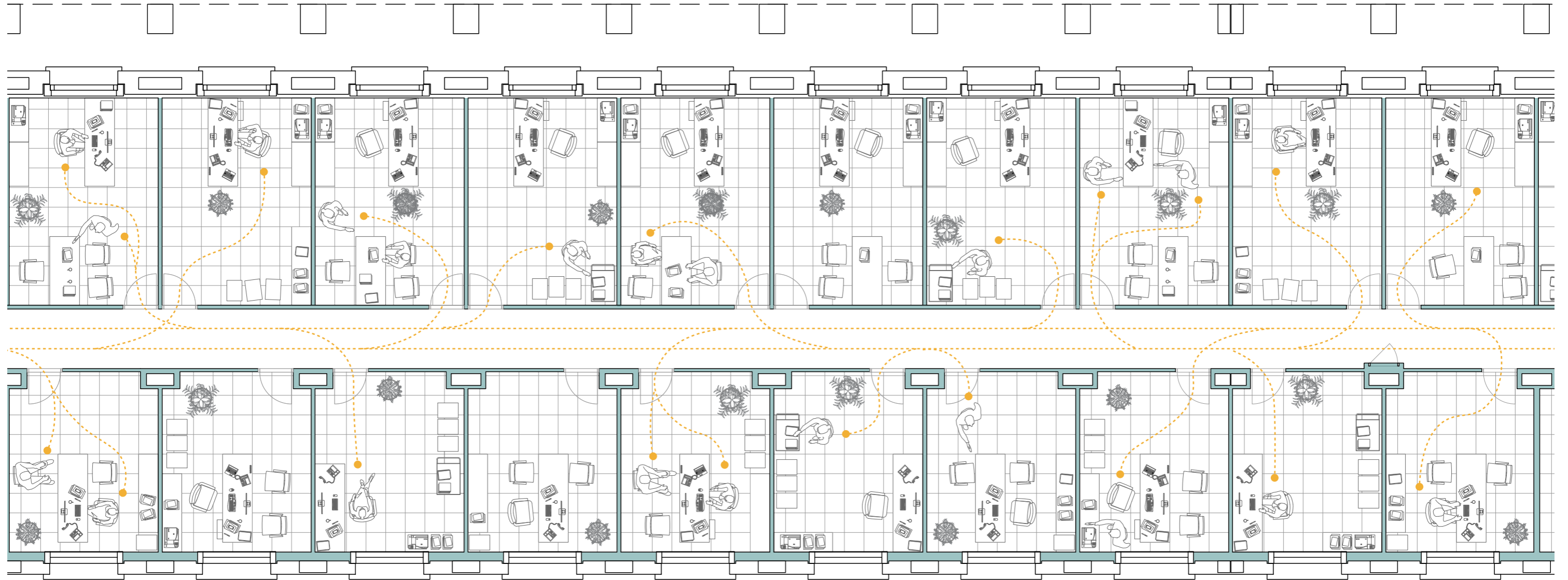
- Group 1 Officer Movement
- Group 2 Officer Movement

Plan

Second Floor / 1:100
National Bank of Belgium
Brussels, Belgium



Distribution In & Through Space | Subdivided Workplaces



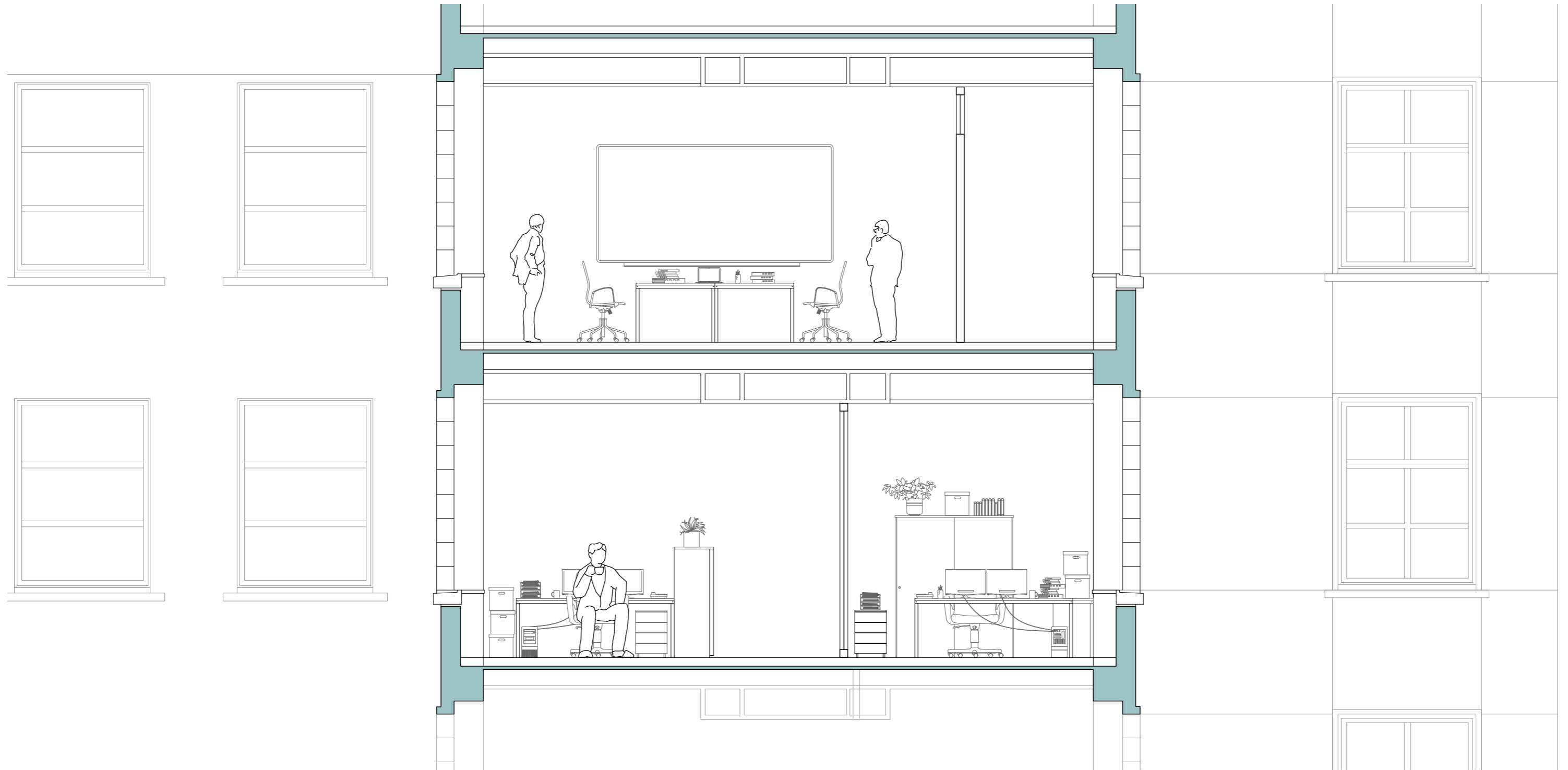
— Officer Movement

Plan

Second Floor / 1:100
National Bank of Belgium
Brussels, Belgium



Distribution In & Through Space | Missing Vertical Connection



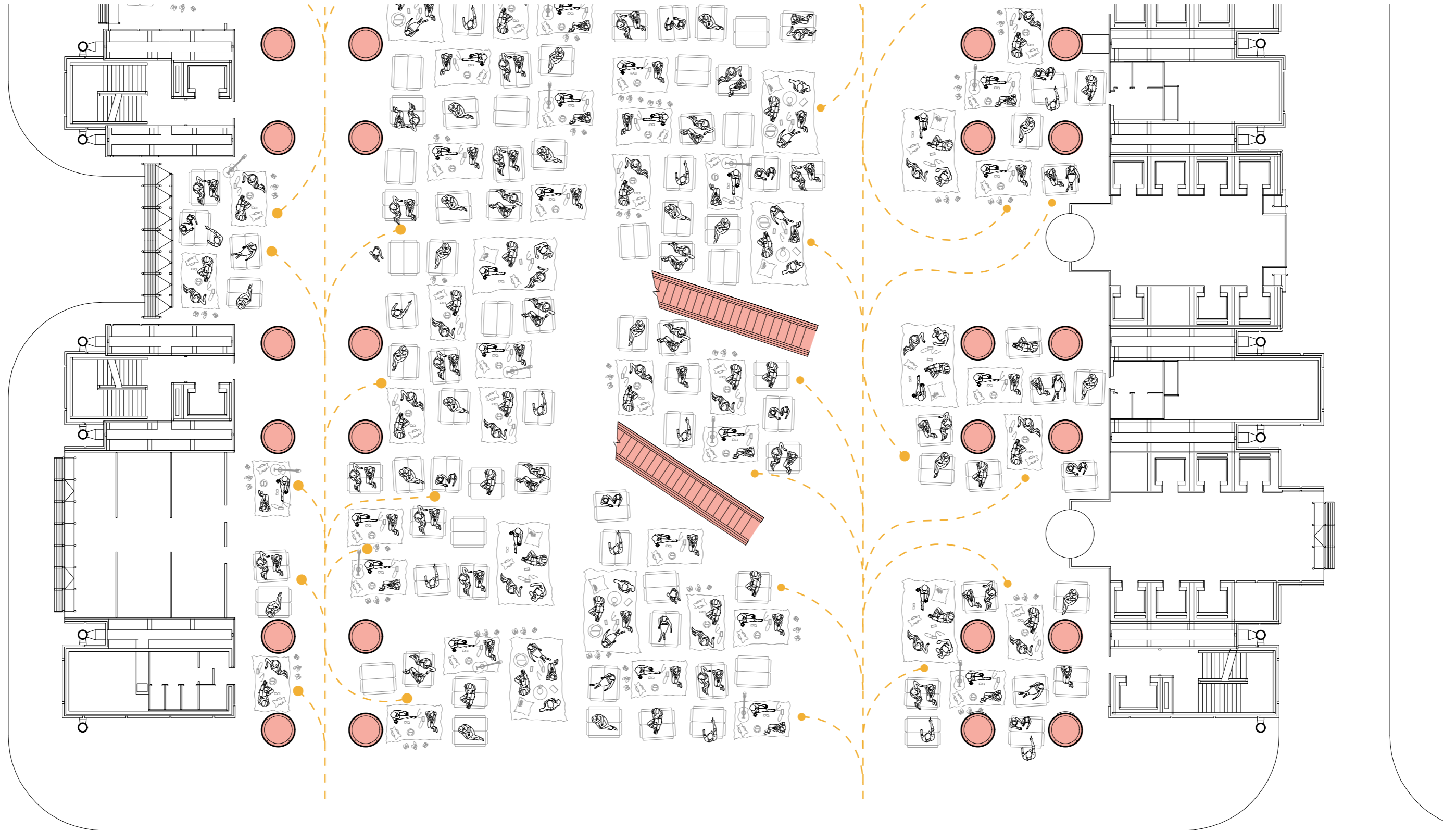
Section

Ground Floor / 1:50
National Bank of Belgium
Brussels, Belgium

Precedent Studies | HSBC Headquarter, HK



Precedent Studies | HSBC Headquarter, HK



— Public Movement

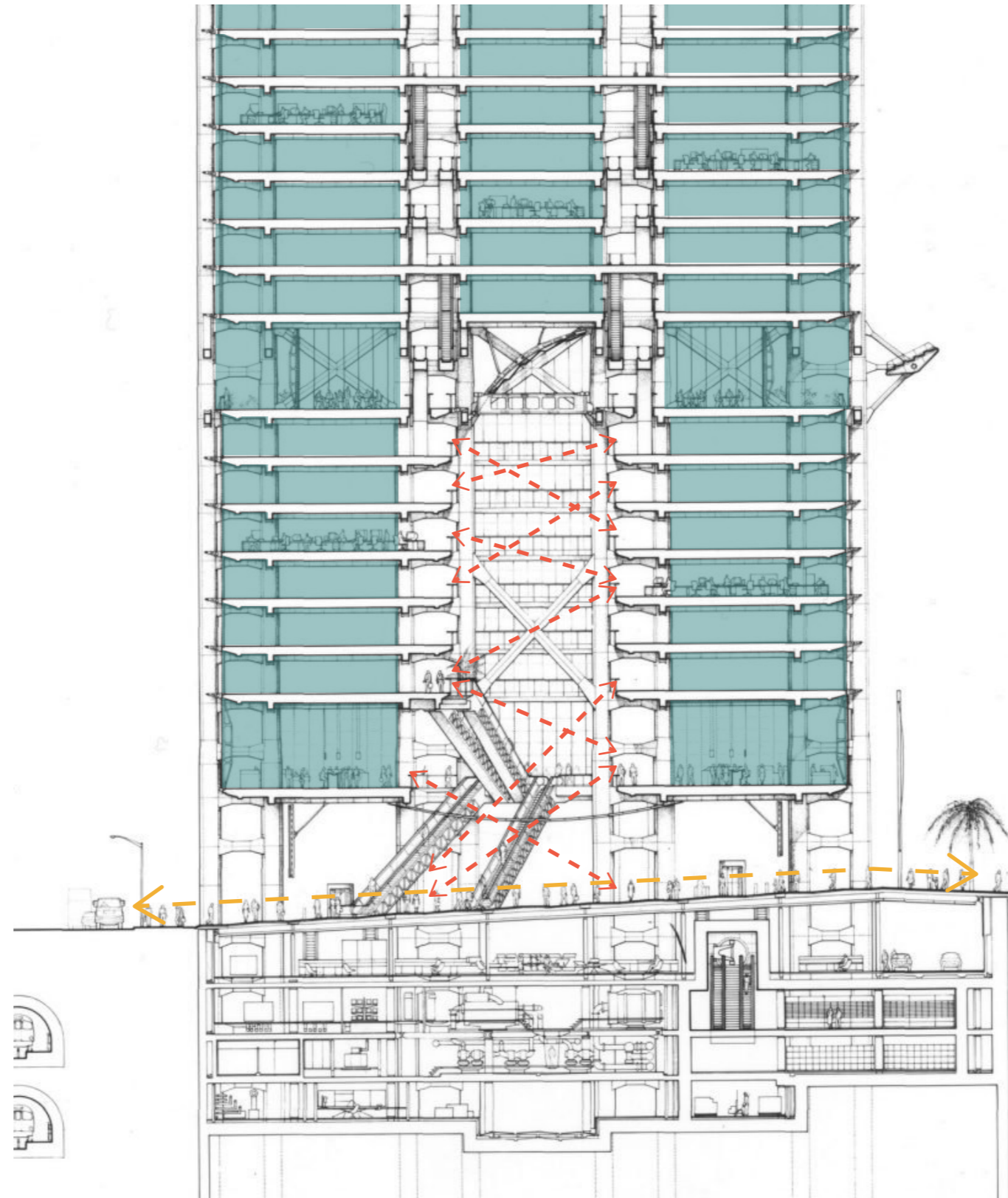
Plan

Ground Floor / 1:200
HSBC Headquarter
Central, Hong Kong

Precedent Studies | HSBC Headquarter, HK



Precedent Studies | HSBC Headquarter, HK



- Office
- Public Movement
- Visual Link

Cross Section

1:50
HSBC Headquarter
Central, Hong Kong

Research Summary

City

- *Social role and potentials of the National Bank of Belgium to revitalize Brussels*

Research Summary

City

- *Social role and potentials of the National Bank of Belgium to revitalize Brussels*

Buildings

- *Segregation of the community due to low accessibility*

Research Summary

City

- *Social role and potentials of the National Bank of Belgium to revitalize Brussels*

Buildings

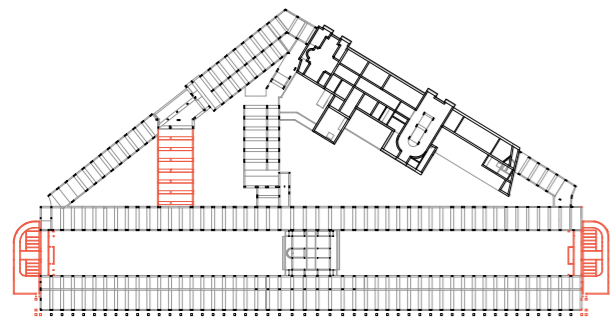
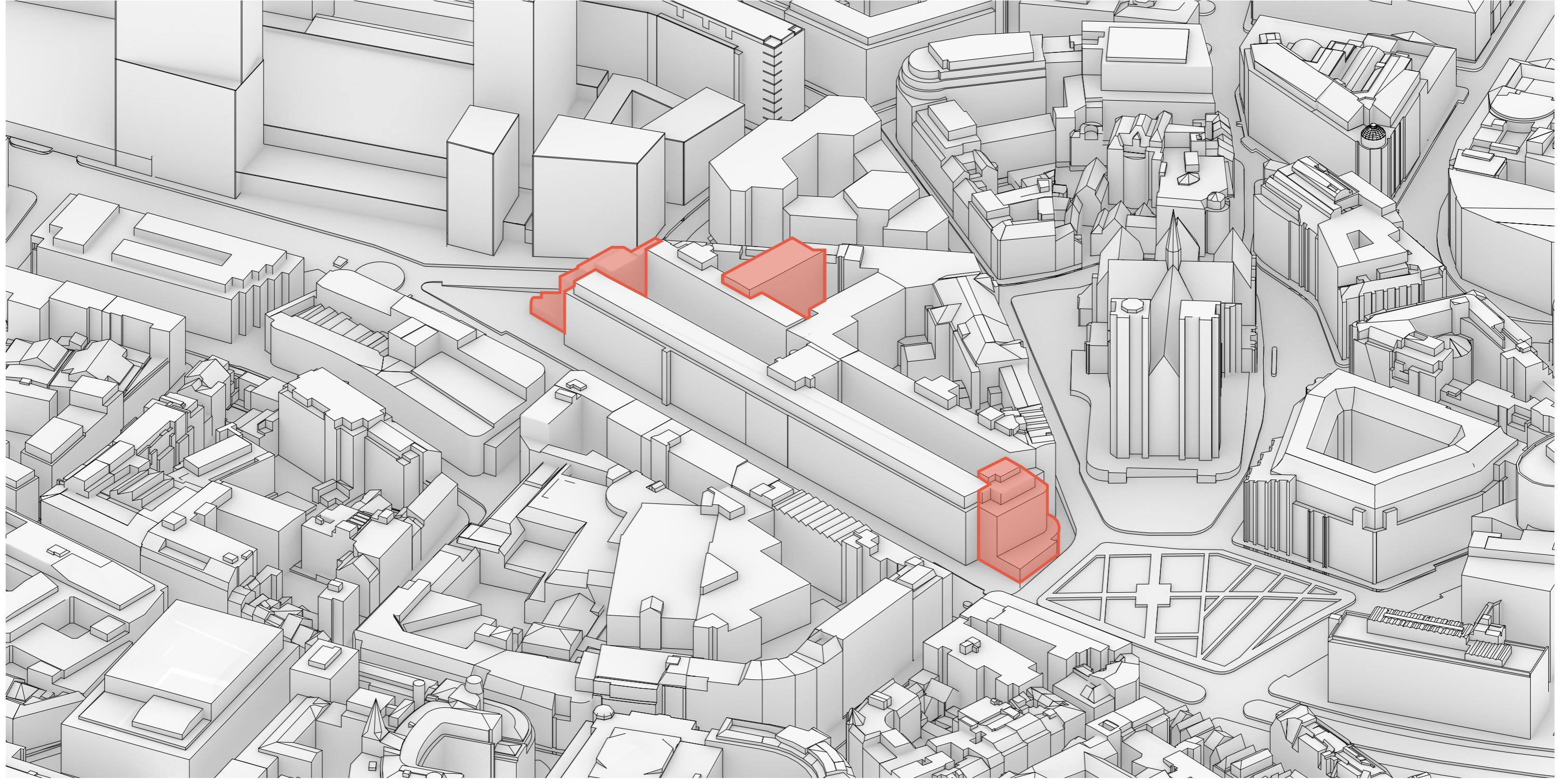
- *Segregation of the community due to low accessibility*

Interior

- *Social separation between the National Bank of Belgium and the public*
- *Loss of working hierarchy due to inappropriate working environment*

Design Proposal

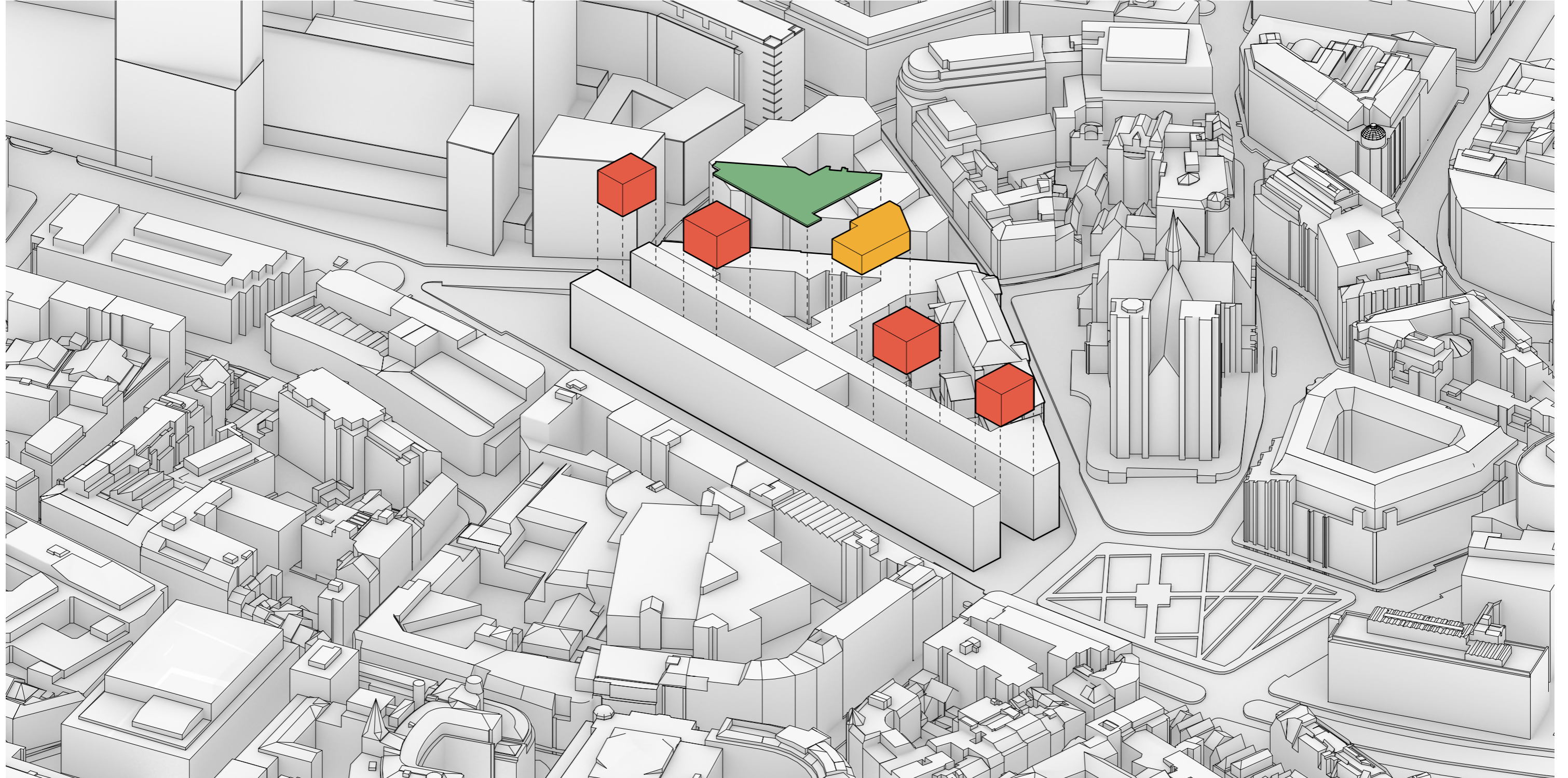
Design Proposal | Demolishment



Structural Plan

Ground Floor / 1:750
National Bank of Belgium
Brussels, Belgium

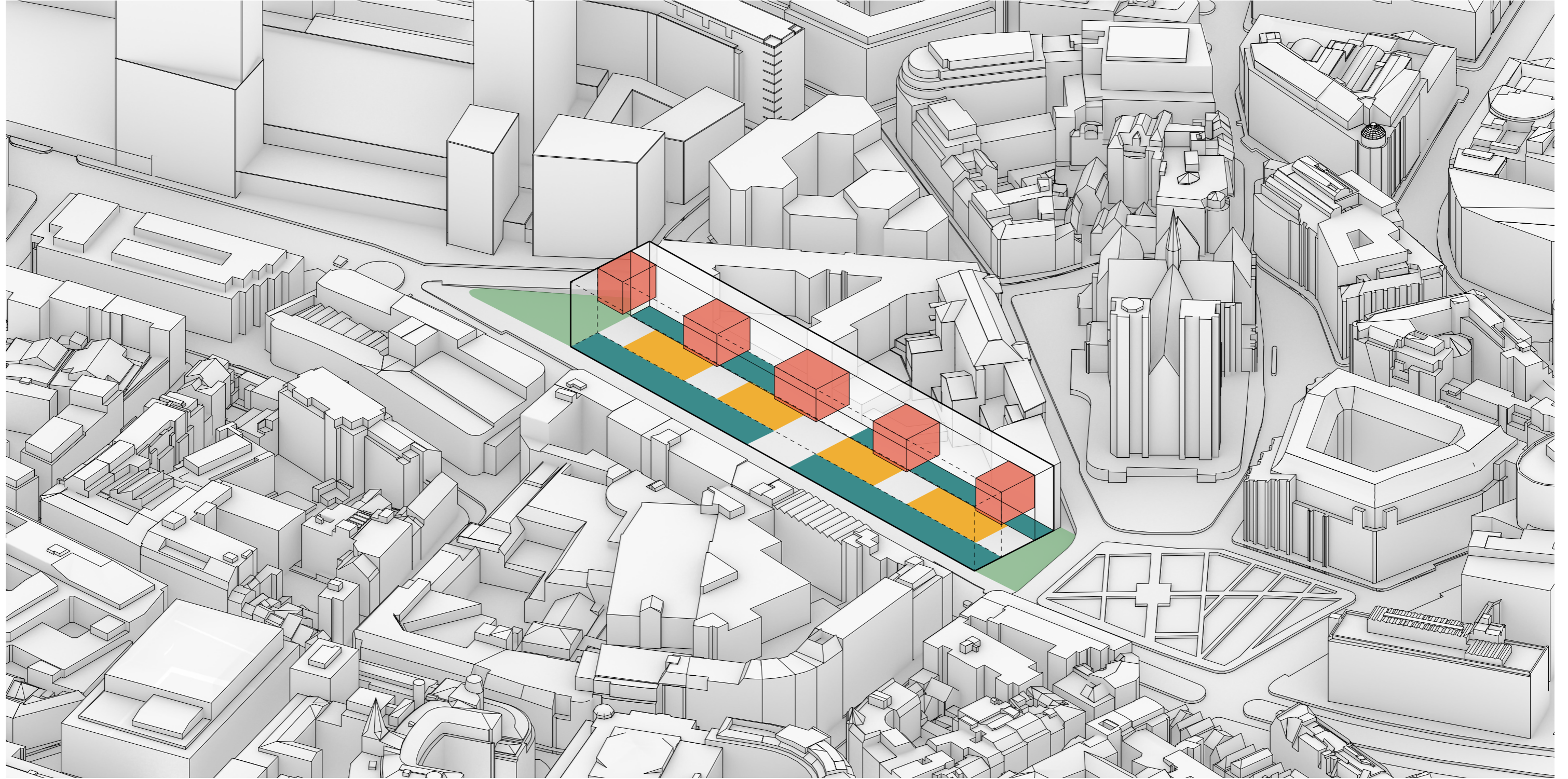
Design Proposal | Social Plinth



Plan Diagram

Ground Floor / Not-to-scale
National Bank of Belgium
Brussels, Belgium

Design Proposal | Social Plinth



- Meeting Area
- Interaction Area
- Greening Area
- Working Area

Plan Diagram

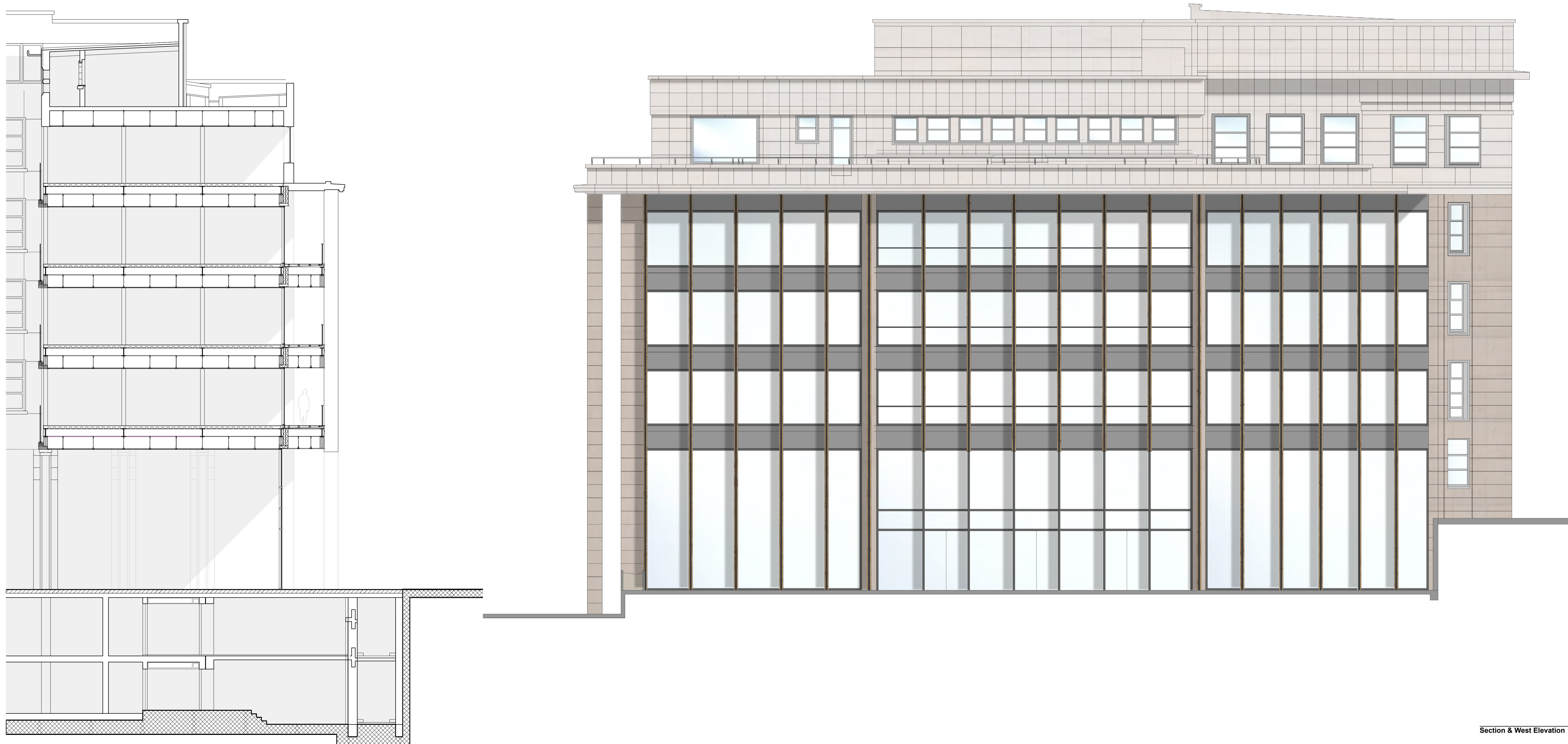
Ground Floor / Not-to-scale
National Bank of Belgium
Brussels, Belgium

Design Proposal | New Entrance

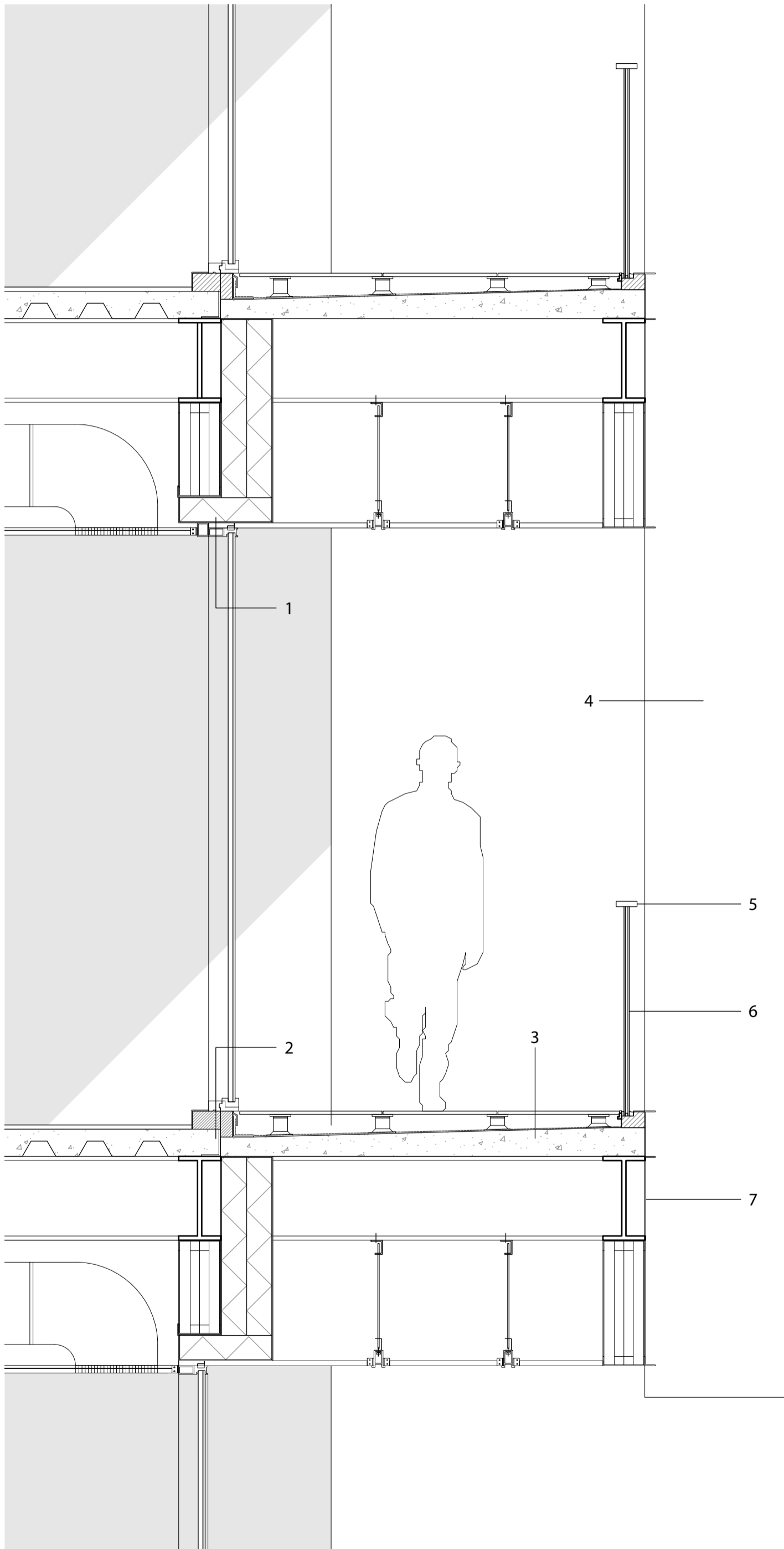


Render

National Bank of Belgium
Brussels, Belgium



Design Proposal | Facade Details

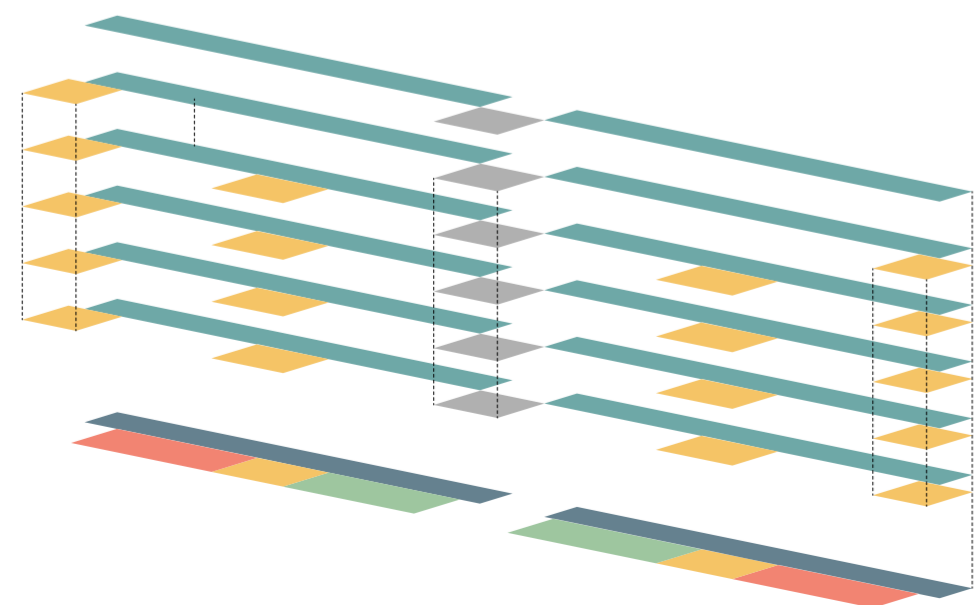
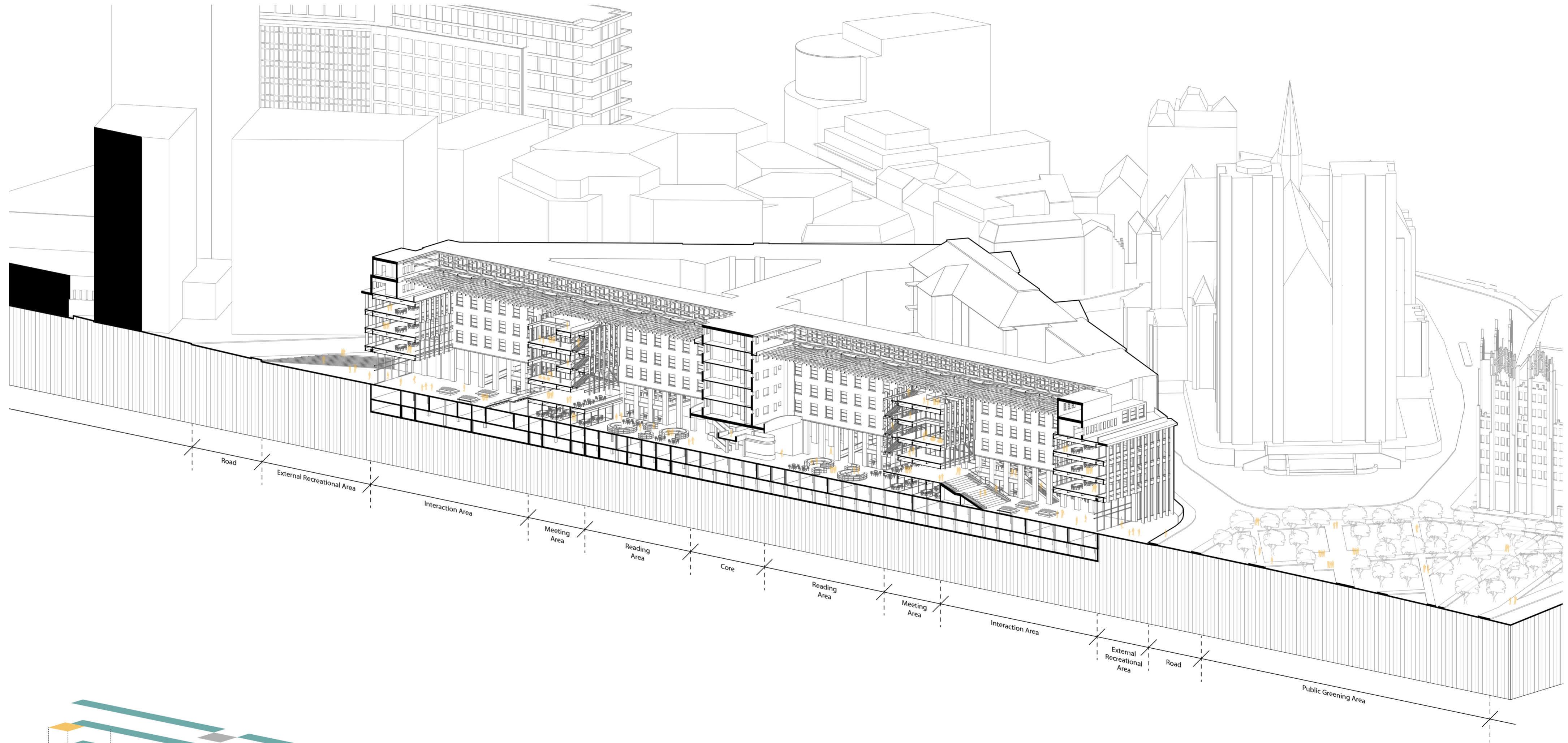


- 1 Vertical Aluminium Profile
Installation Foam
Waterproof Membrane
XPS - 7cm
Extruded polystyrene (XPS) board
CLT Beam
Steel Beam
- 2 Installation Foam
Thermal Installation Element
Interior Flooring - carpet
Concrete Slab
- 3 Outdoor Flooring - granite
PVC Raised Floor Pedestal
Waterproof Membrane - 4mm
- 4 Aluminium Vertical Fins
- 5 Railing Handle
- 6 Triplex Tempered Glass
- 7 Aluminium Fascia Panel

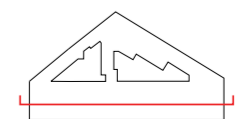
Facade Details

1:20
National Bank of Belgium
Brussels, Belgium

Design Proposal | Boundless Office & Residence



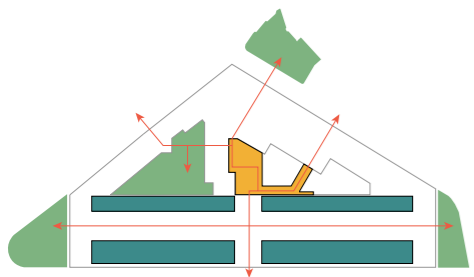
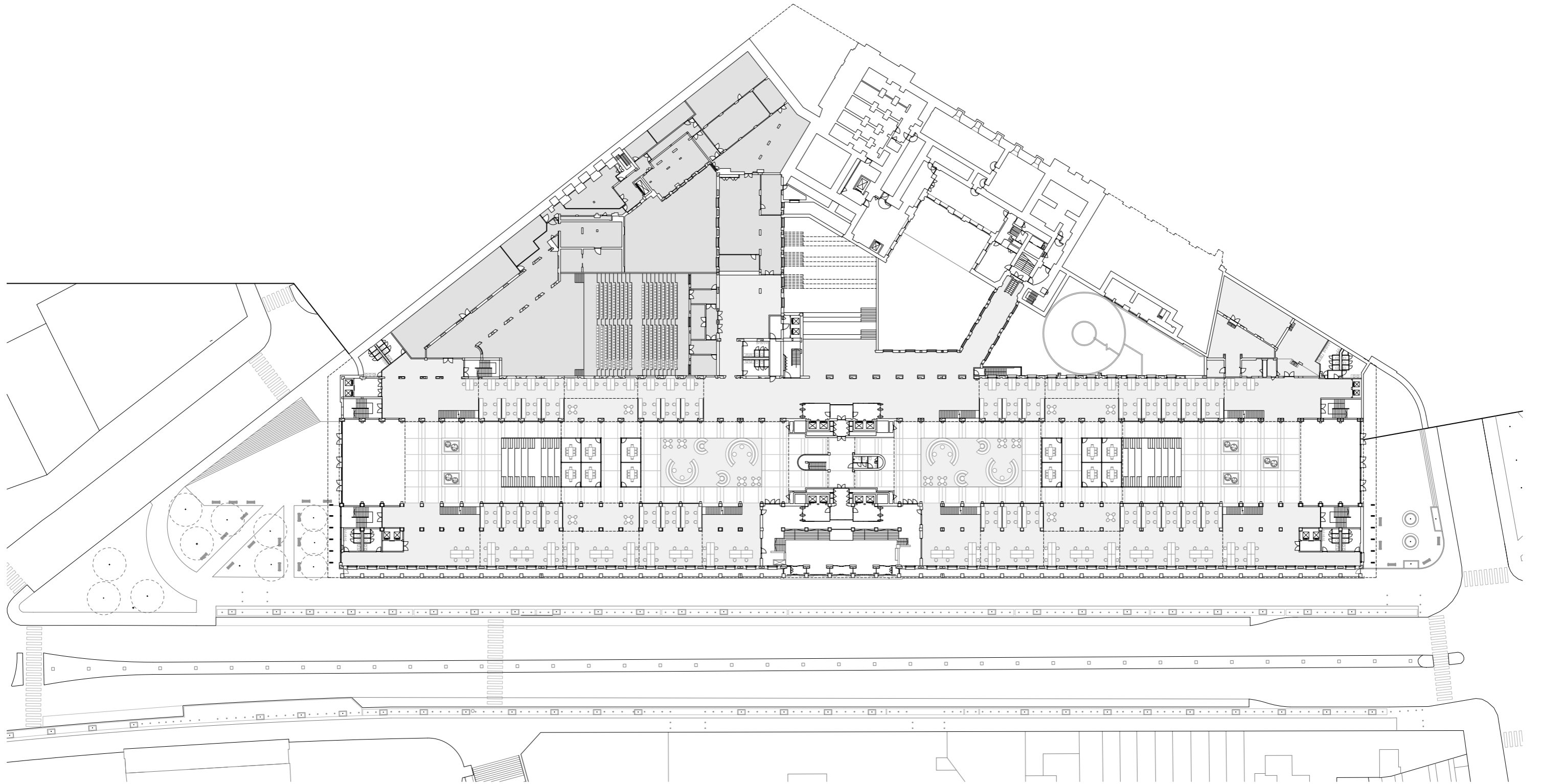
- Interaction Area
- Meeting Area
- Reading Area
- Office
- Core
- Working Area






Section

1:600
National Bank of Belgium
Brussels, Belgium

Design Proposal | Social Plinth



-  Waiting Area
-  Greening Area
-  Working Area

Plan

Ground Floor / 1:750
National Bank of Belgium
Brussels, Belgium

Design Proposal | Visual Connection



Render

Ground Floor
National Bank of Belgium
Brussels, Belgium

Design Proposal | Visual Connection



Render

Ground Floor
National Bank of Belgium
Brussels, Belgium

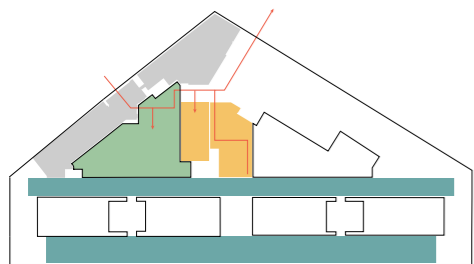
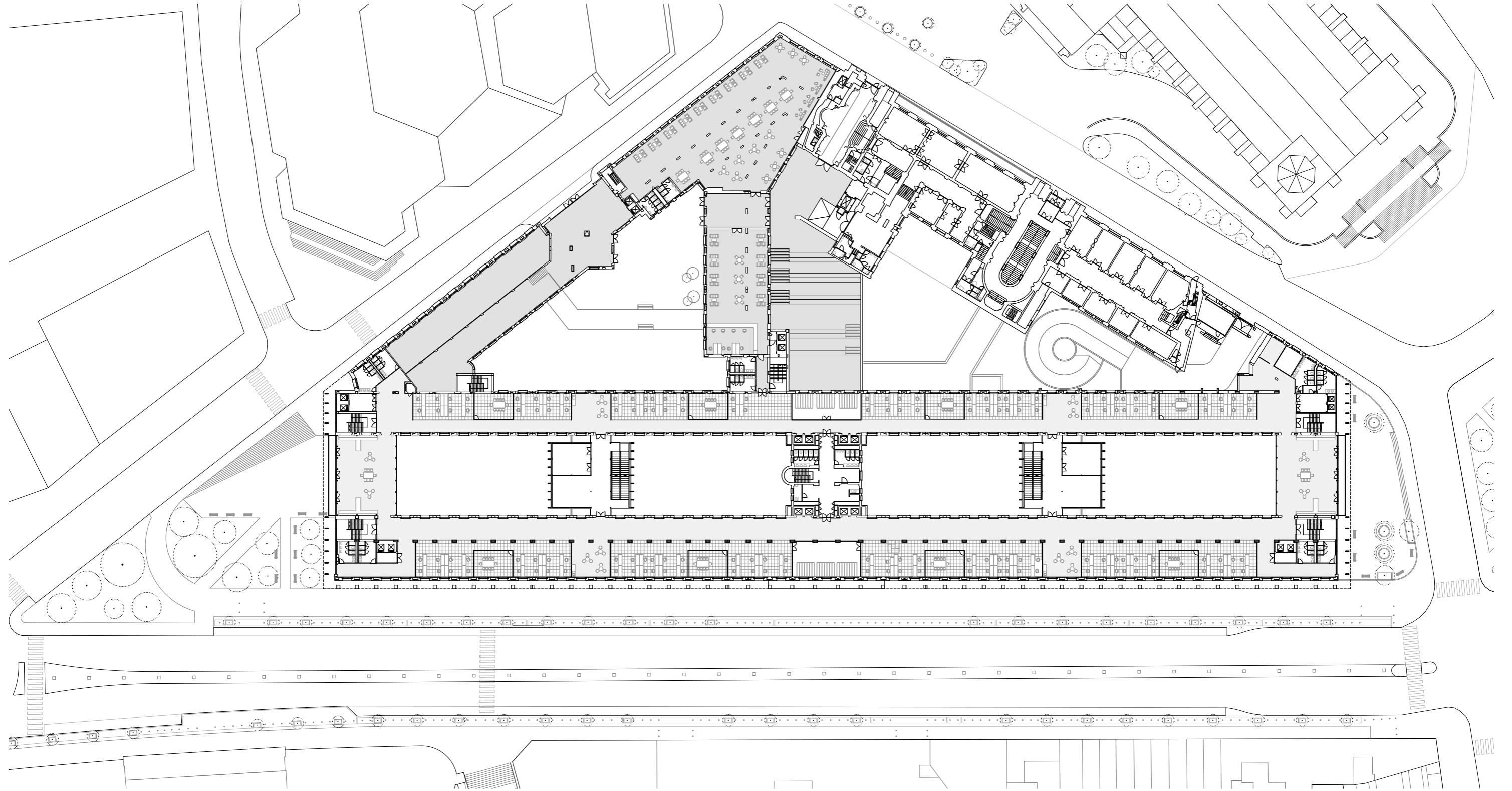
Design Proposal | Visual Connection







Render

Ground Floor
National Bank of Belgium
Brussels, Belgium

Design Proposal | Centralized Reception

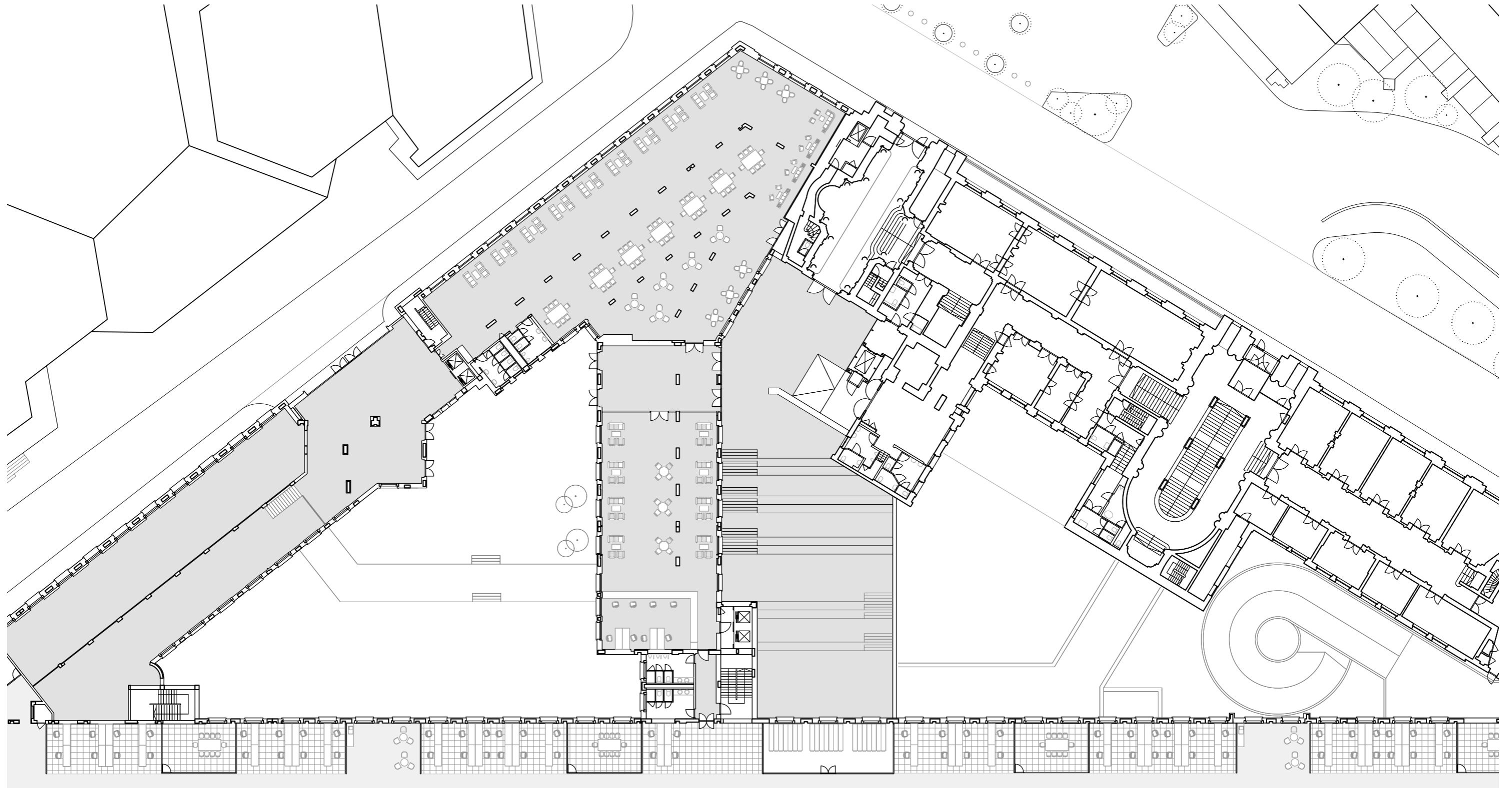


-  Rental Office
-  Waiting Area
-  Greening Area
-  Working Area

Program Plan

First Floor / 1:750
National Bank of Belgium
Brussels, Belgium

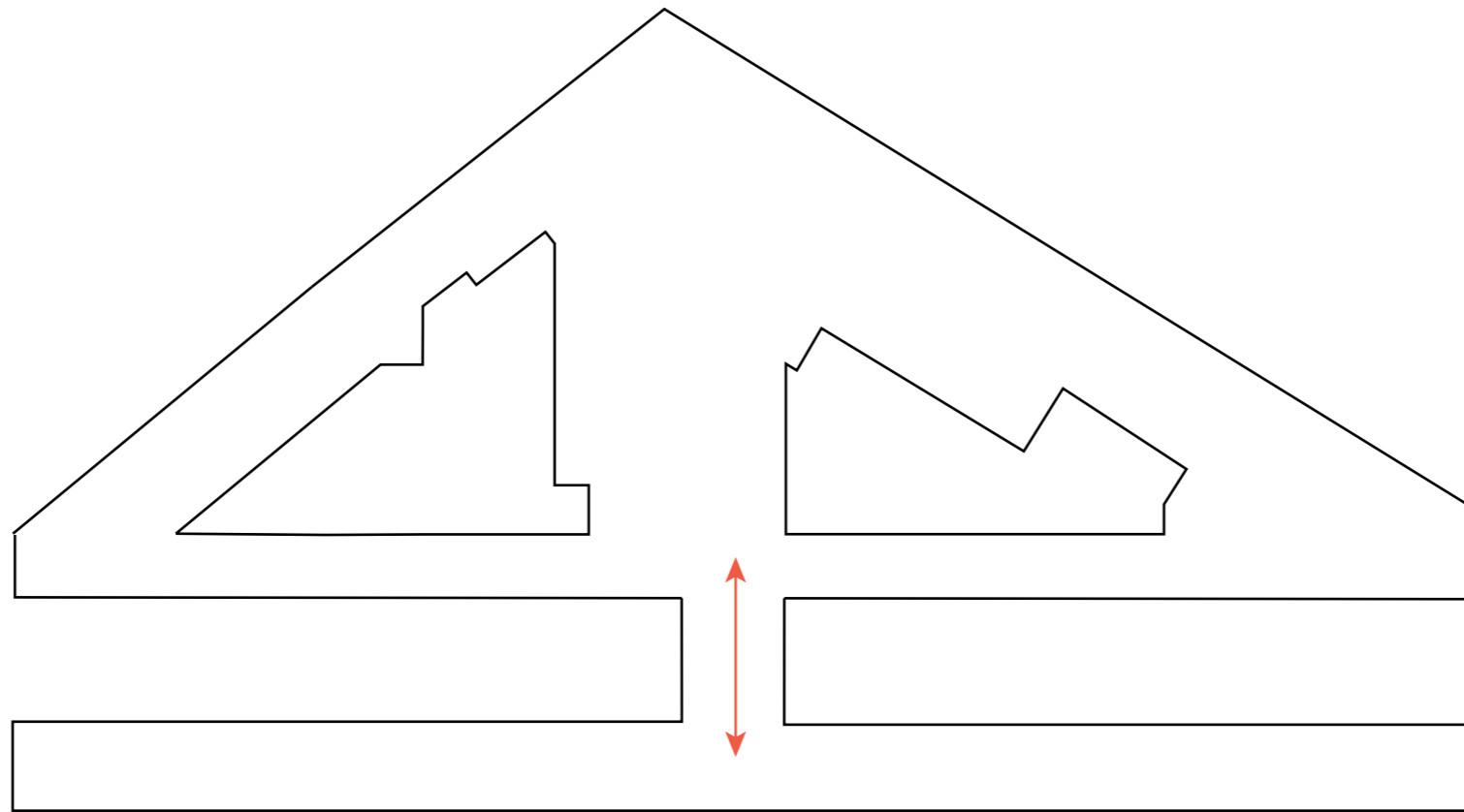
Design Proposal | Centralized Reception



Program Plan

First Floor / 1:400
National Bank of Belgium
Brussels, Belgium

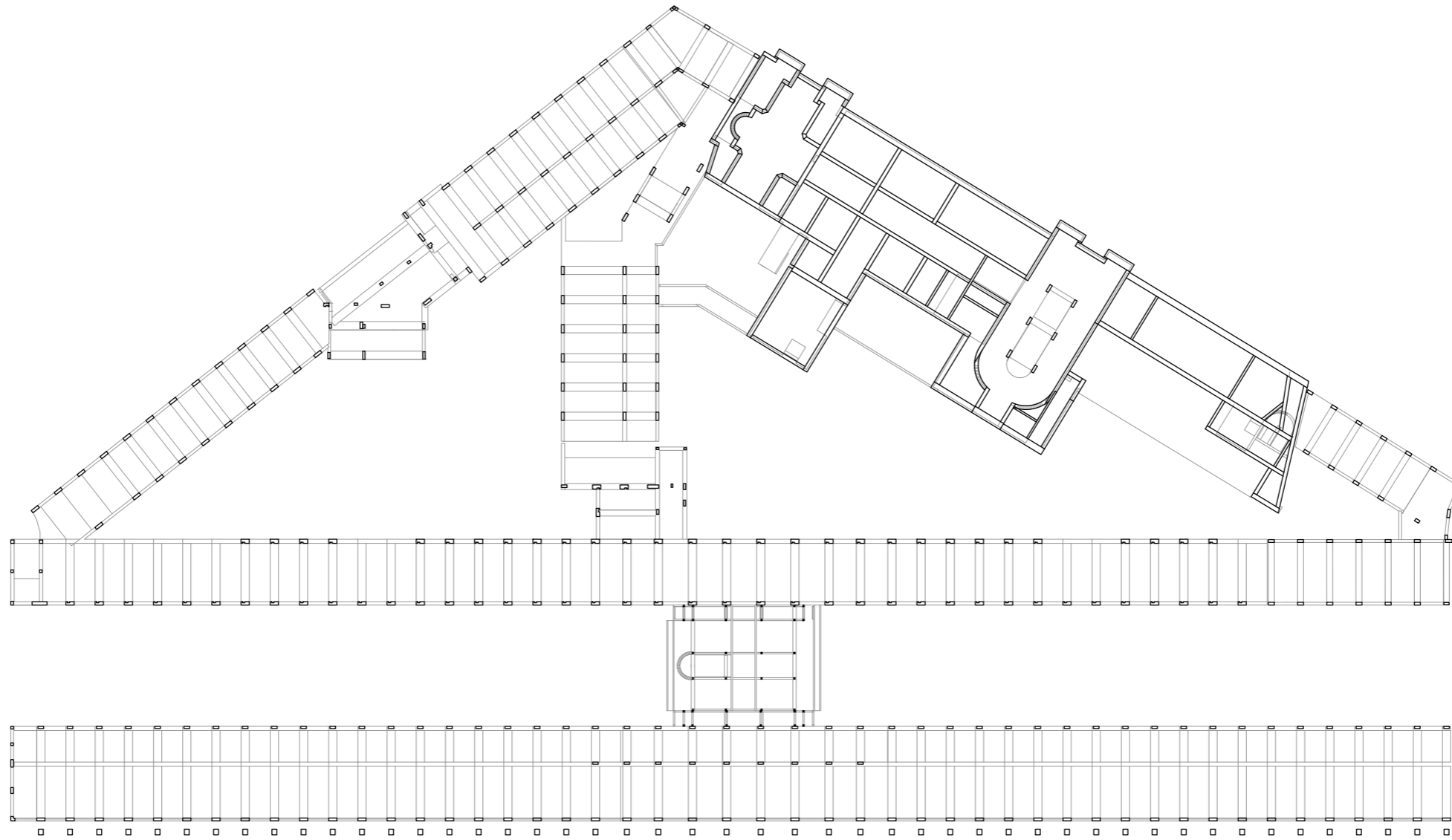
Design Proposal | Detached Office



Plan Diagram

First Floor / Not-to-scale
National Bank of Belgium
Brussels, Belgium

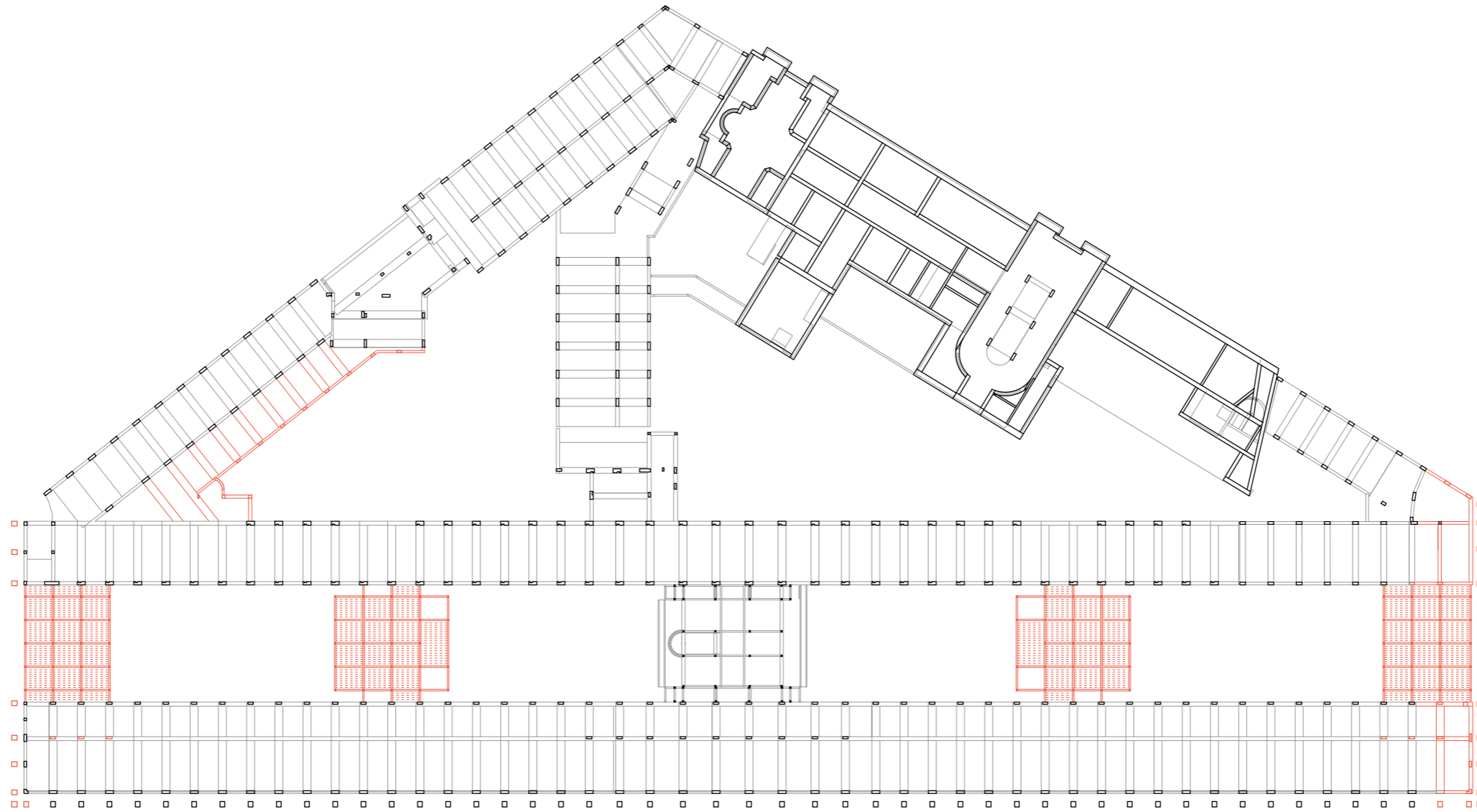
Design Proposal | Retained Structure



Structural Plan

Ground Floor / 1:750
National Bank of Belgium
Brussels, Belgium

Design Proposal | Intervention



Structural Plan

Ground Floor / 1:750
National Bank of Belgium
Brussels, Belgium

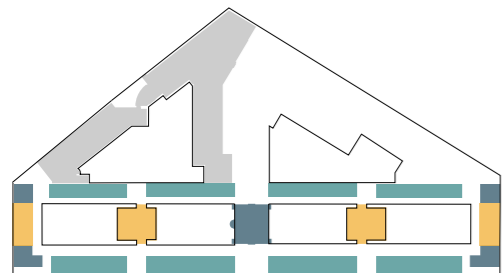
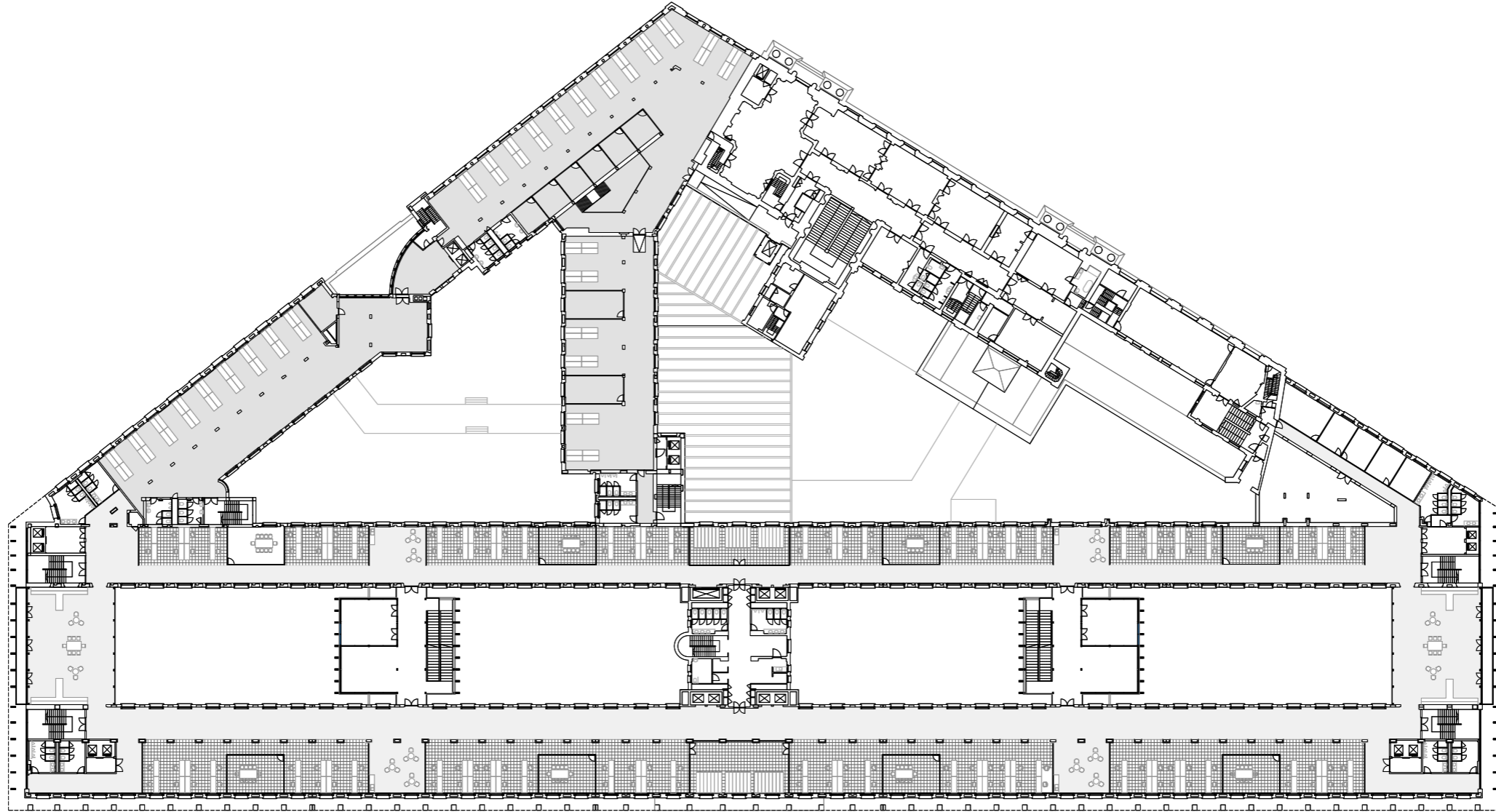
Design Proposal | Demolishment







Structural Plan

Ground Floor / 1:750
National Bank of Belgium
Brussels, Belgium

Design Proposal | Office Layout

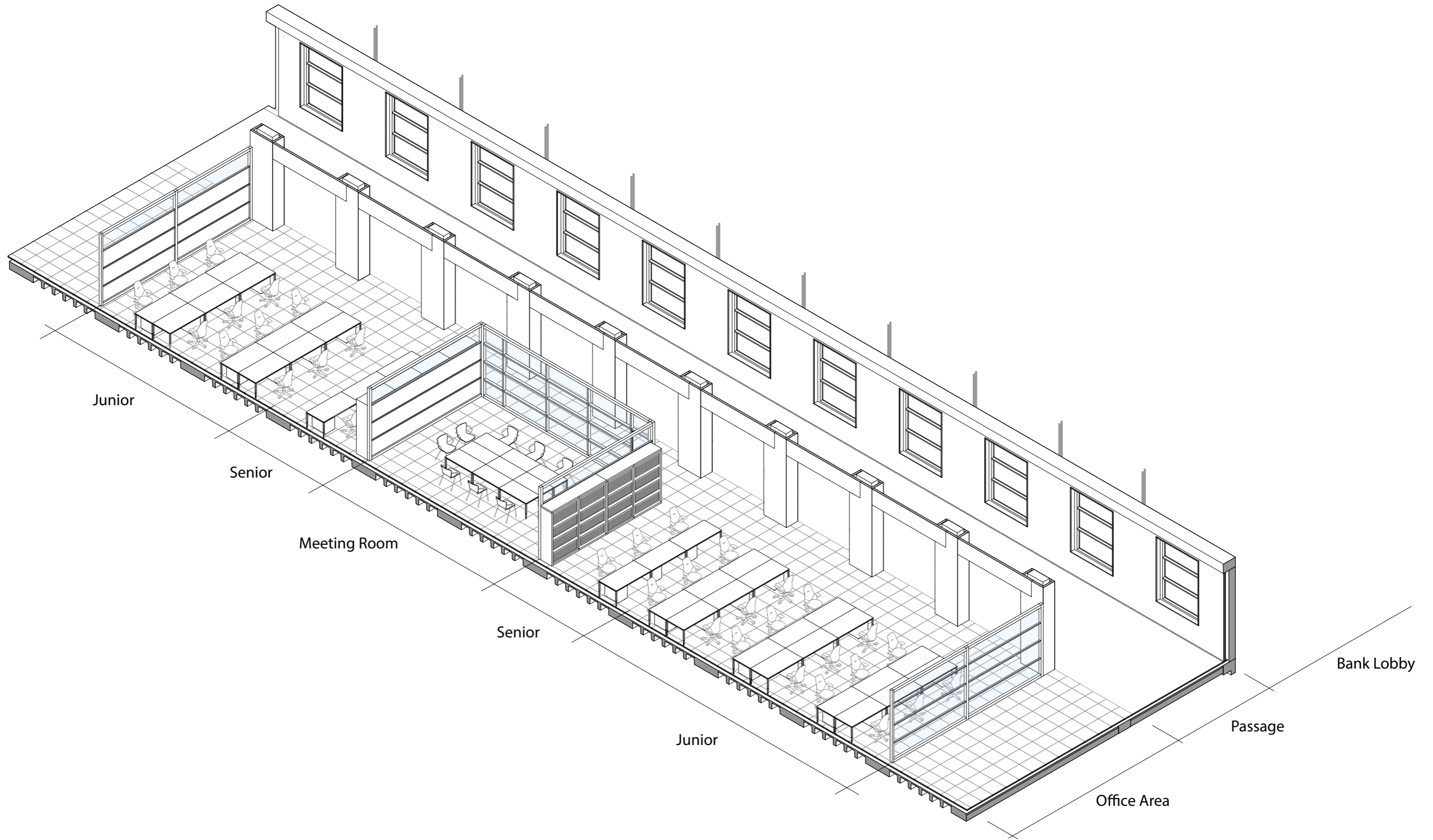


-  Meeting Area
-  Bank Office
-  Rental Office
-  Core

Plan

Third Floor / 1:750
National Bank of Belgium
Brussels, Belgium

Design Proposal | Reformed Social Structure



Axonometrics

1:150
National Bank of Belgium
Brussels, Belgium

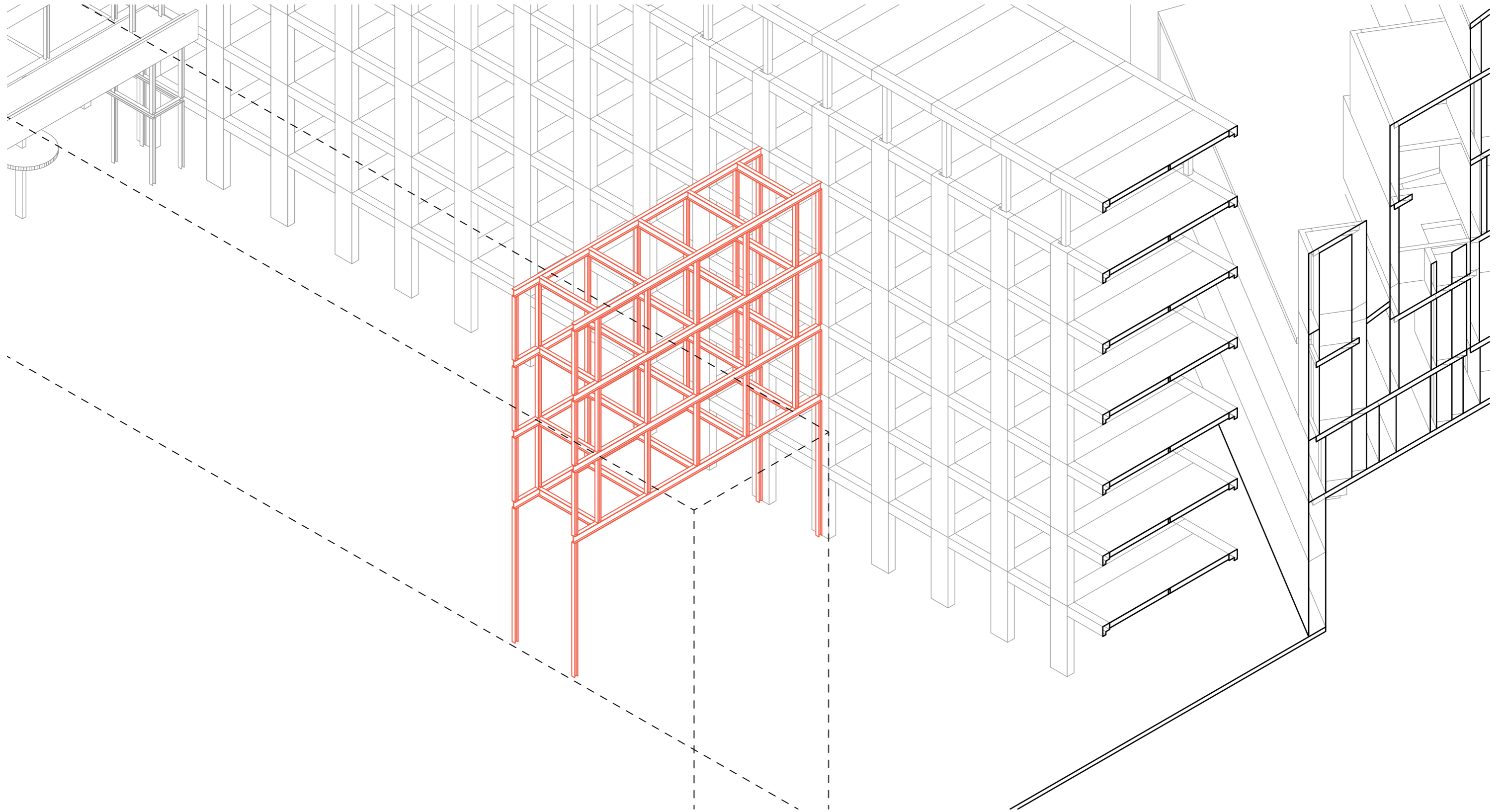
Design Proposal | Reformed Social Structure



Render

National Bank of Belgium
Brussels, Belgium

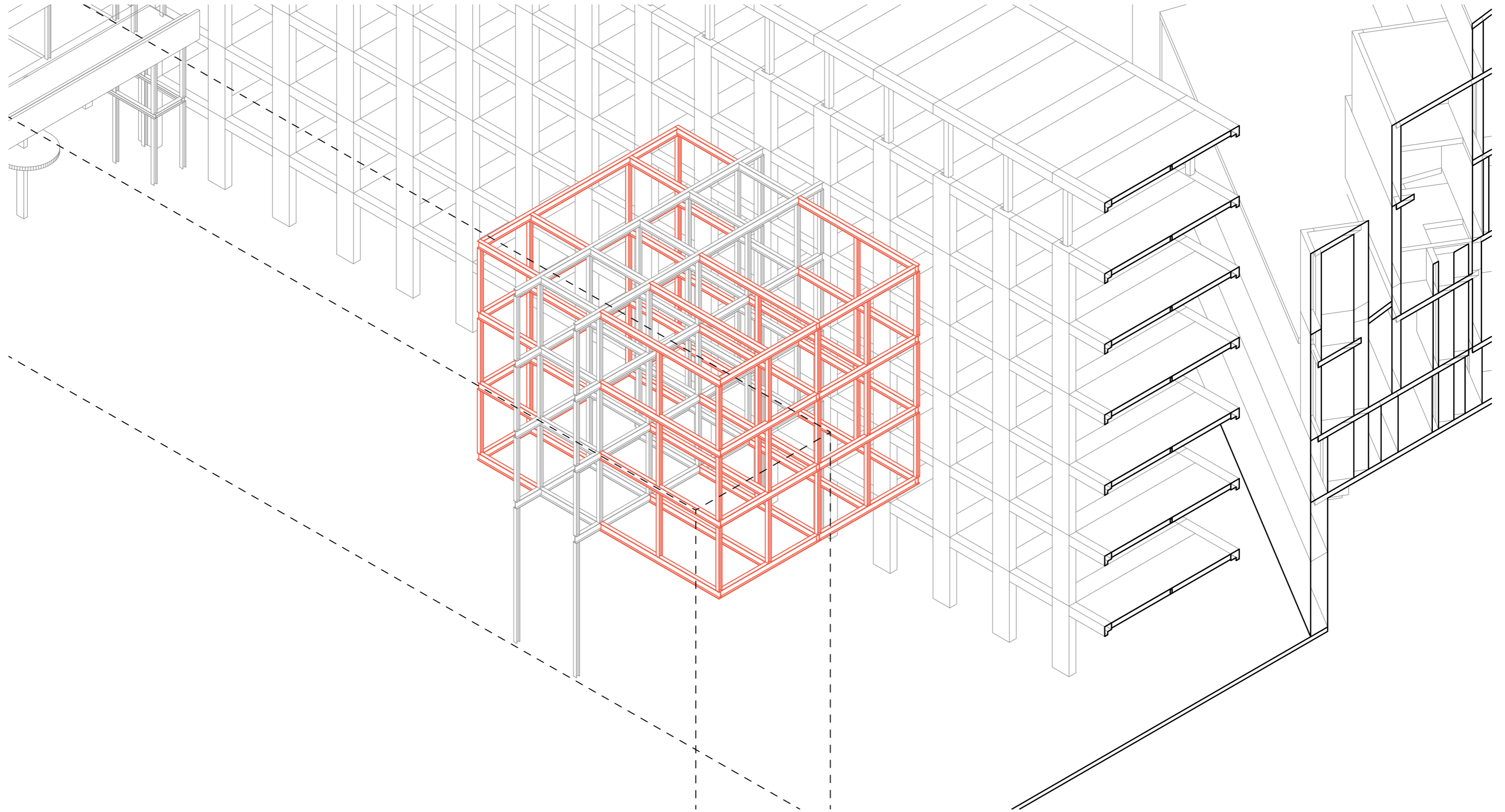
Design Proposal | Bridge Structure



Section

1:200
National Bank of Belgium
Brussels, Belgium

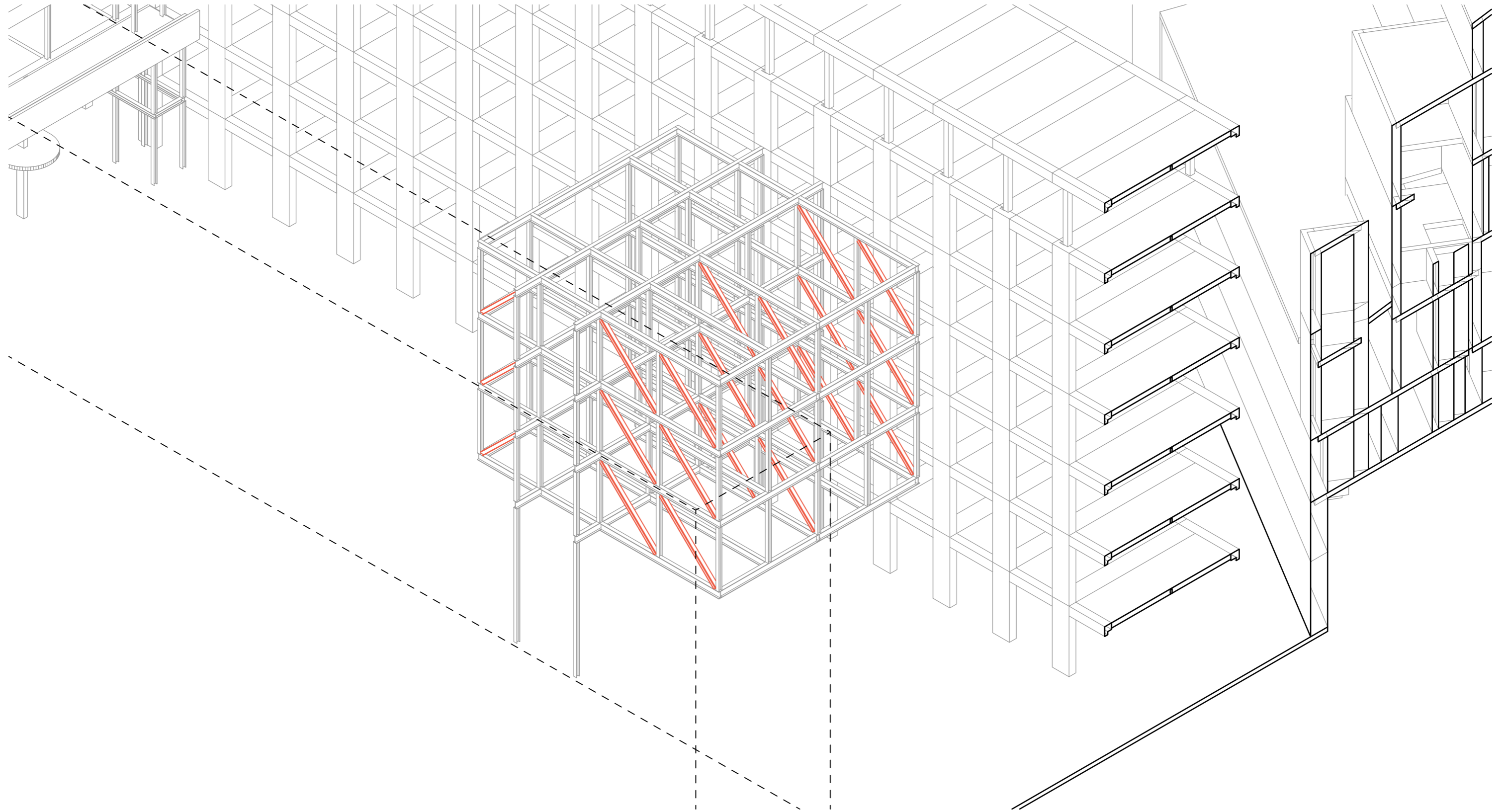
Design Proposal | Bridge Structure



Section

1:200
National Bank of Belgium
Brussels, Belgium

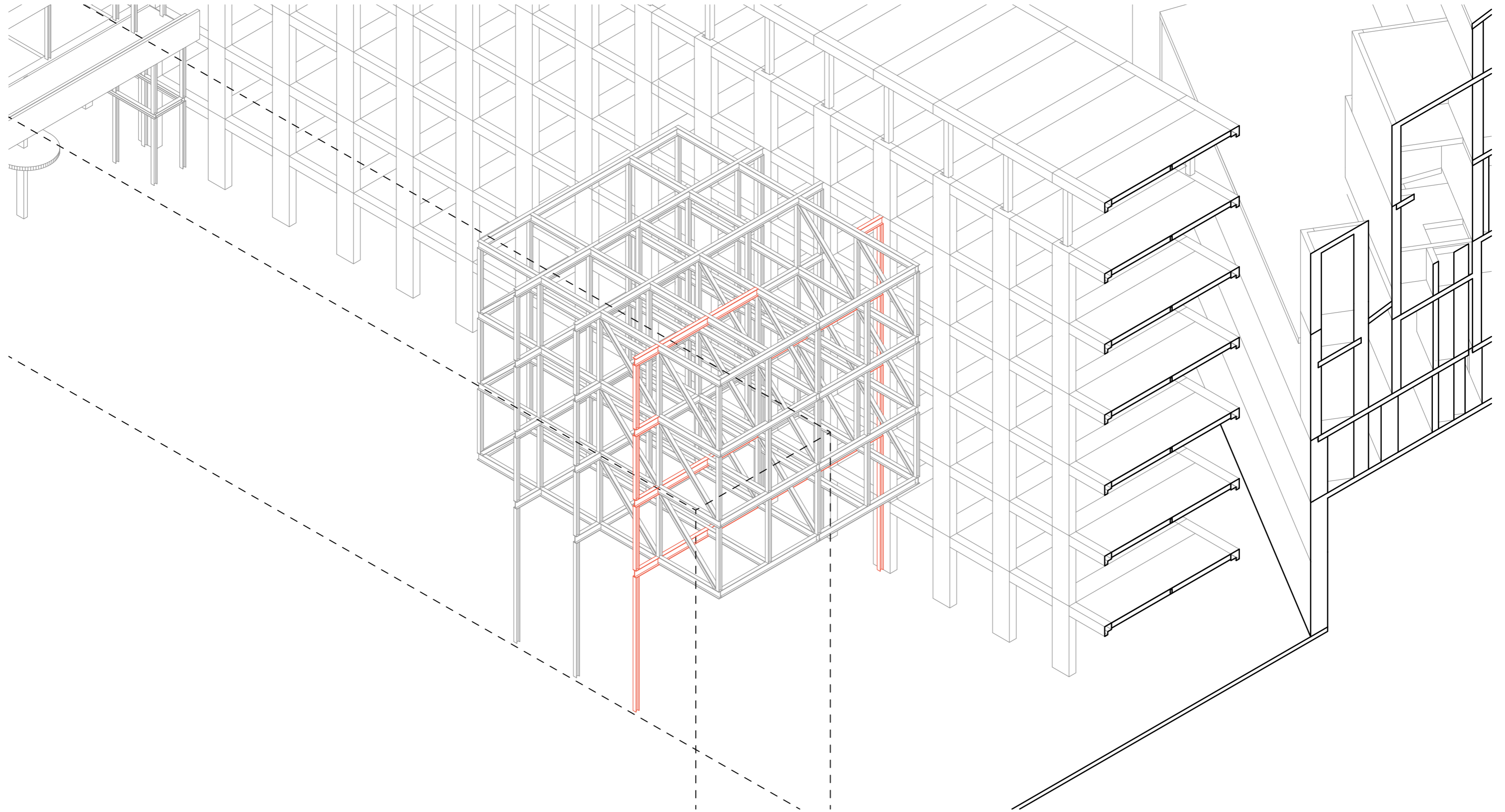
Design Proposal | Bridge Structure



Section

1:200
National Bank of Belgium
Brussels, Belgium

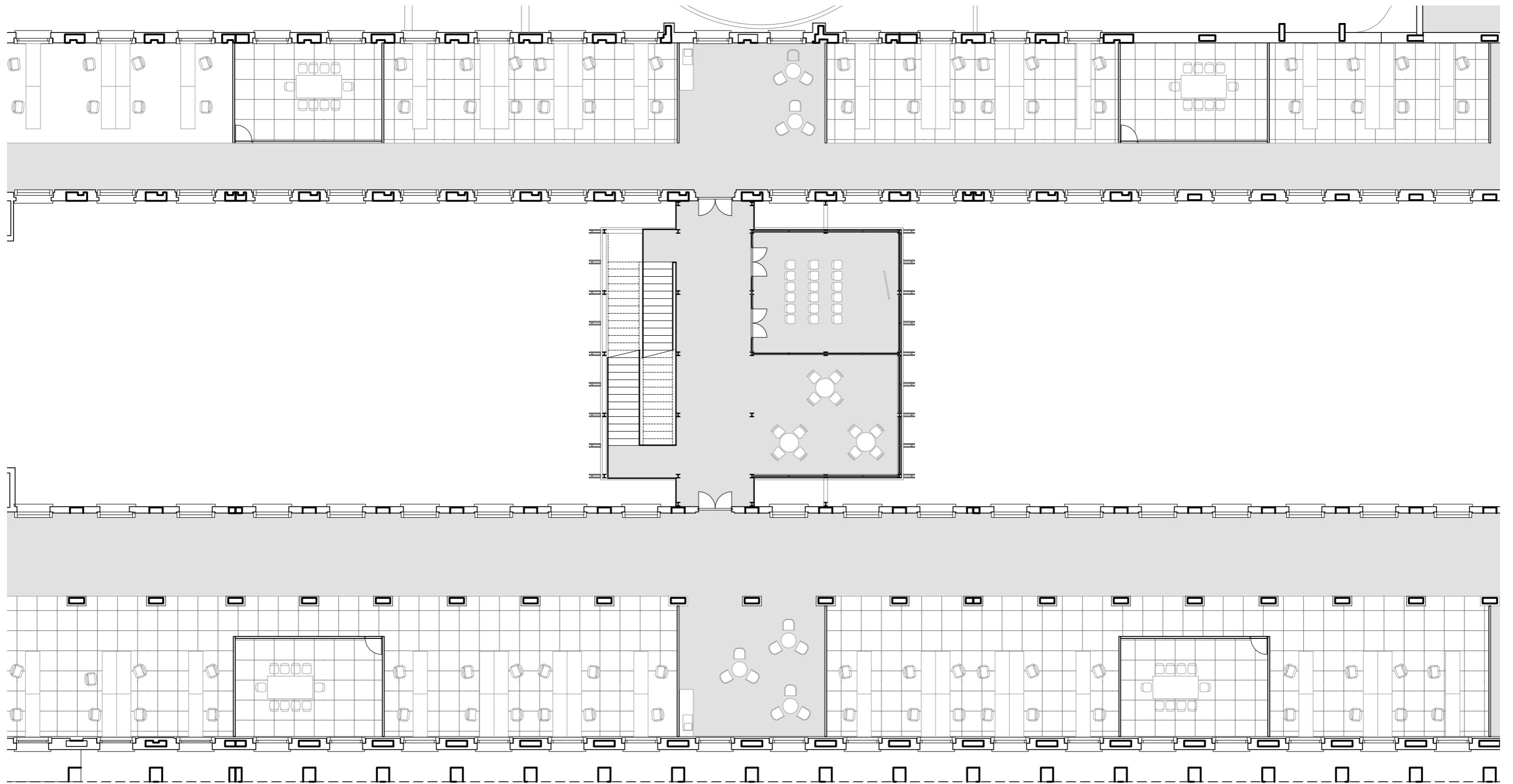
Design Proposal | Bridge Structure



Section

1:200
National Bank of Belgium
Brussels, Belgium

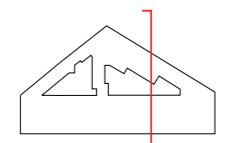
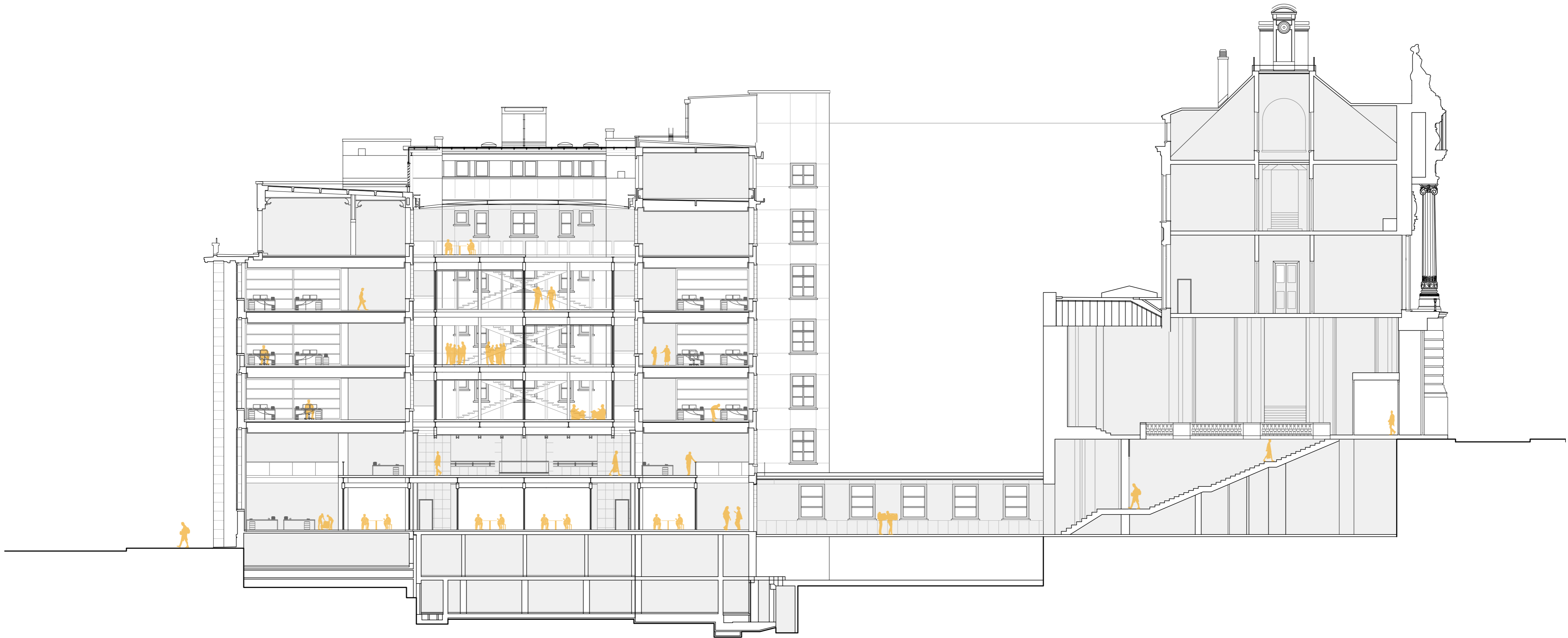
Design Proposal | Dynamic Gathering Space



Program Plan

First Floor / 1:200
National Bank of Belgium
Brussels, Belgium

Design Proposal | Dynamic Gathering Space



Section

1:200
National Bank of Belgium
Brussels, Belgium

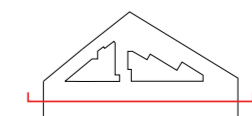
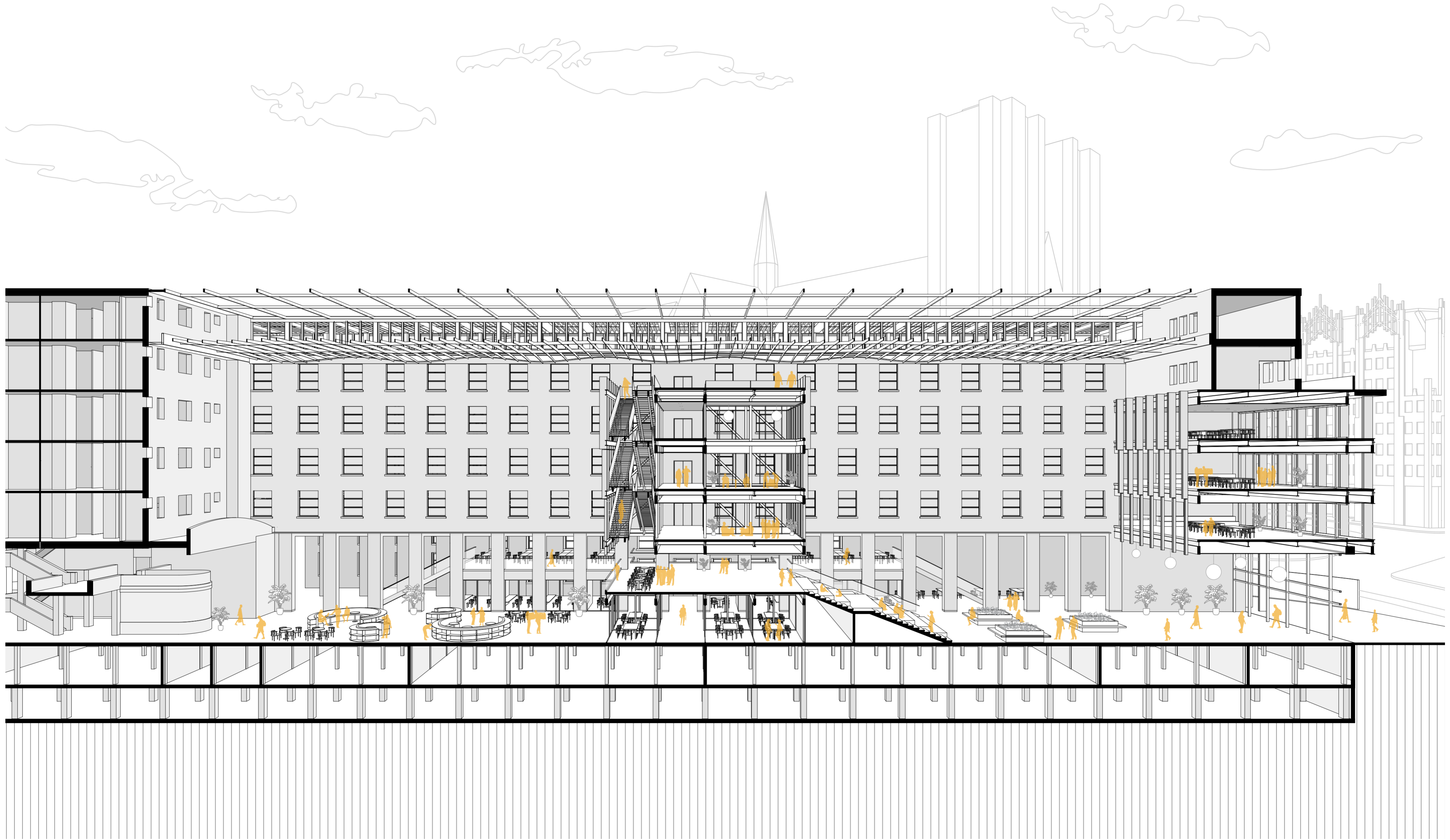
Design Proposal | Gathering Space



Render

Second Floor
National Bank of Belgium
Brussels, Belgium

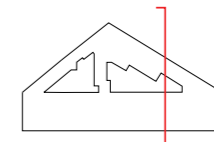
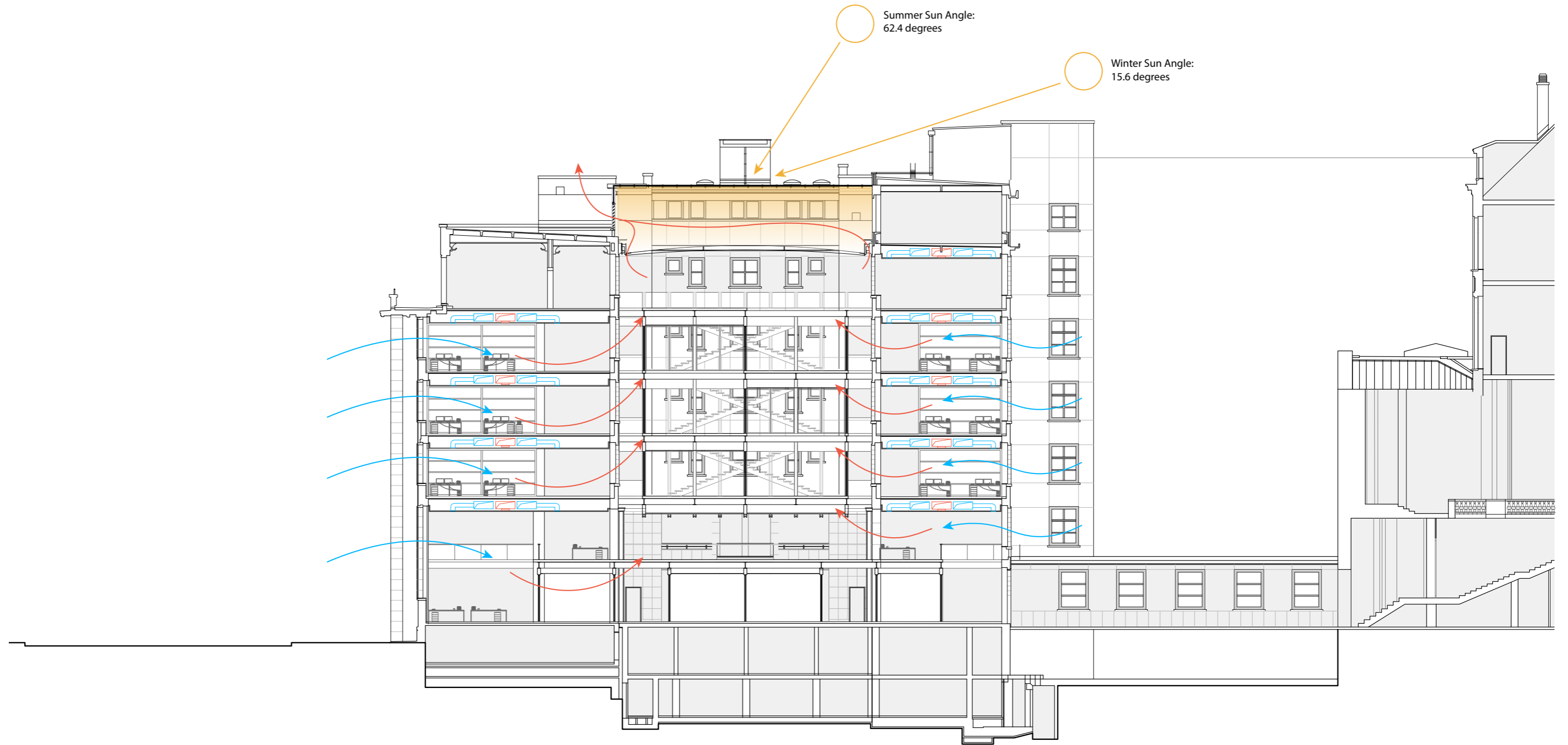
Design Proposal | Bridge Structure



Sectional Perspective

1:300
National Bank of Belgium
Brussels, Belgium

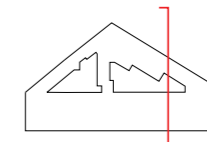
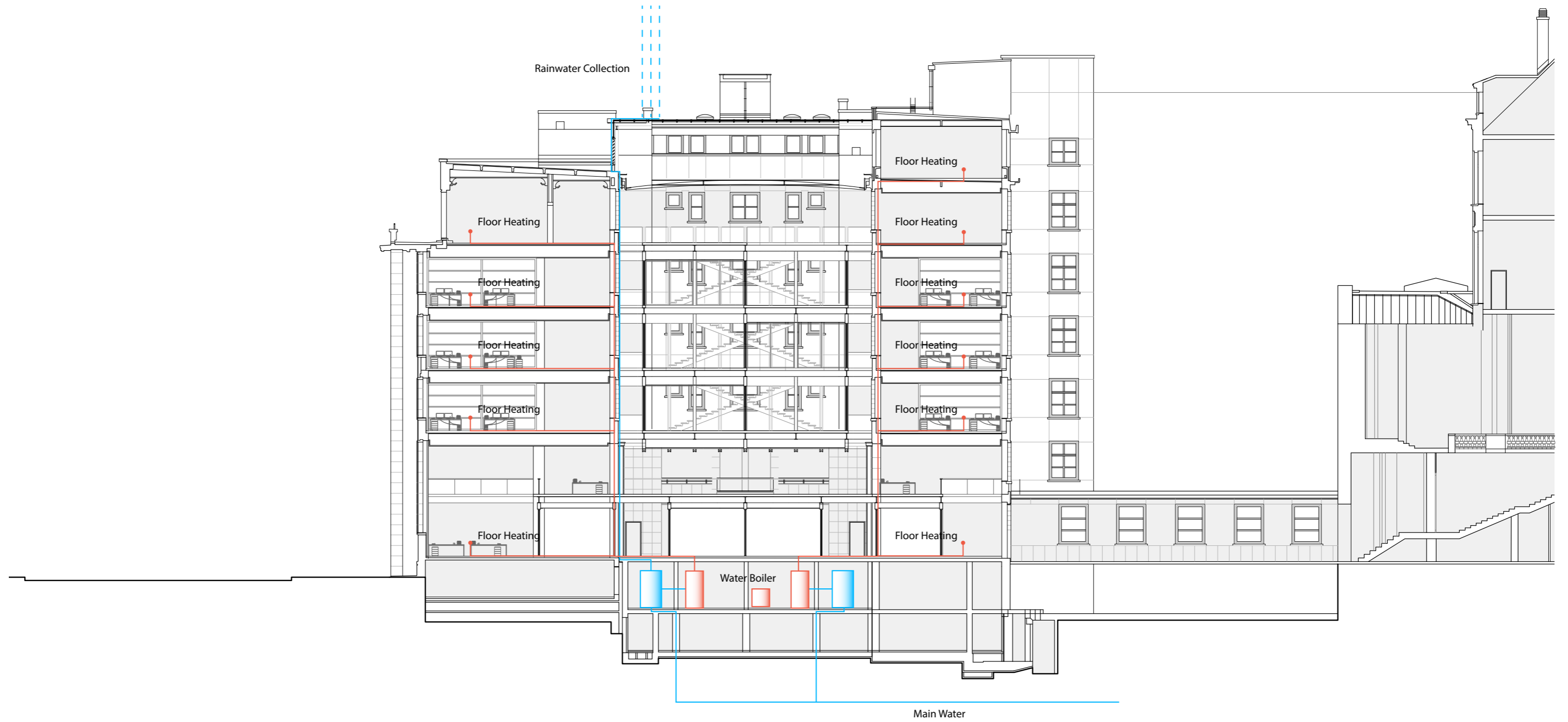
Design Proposal | Climatic Design



Sectional Perspective

1:200
National Bank of Belgium
Brussels, Belgium

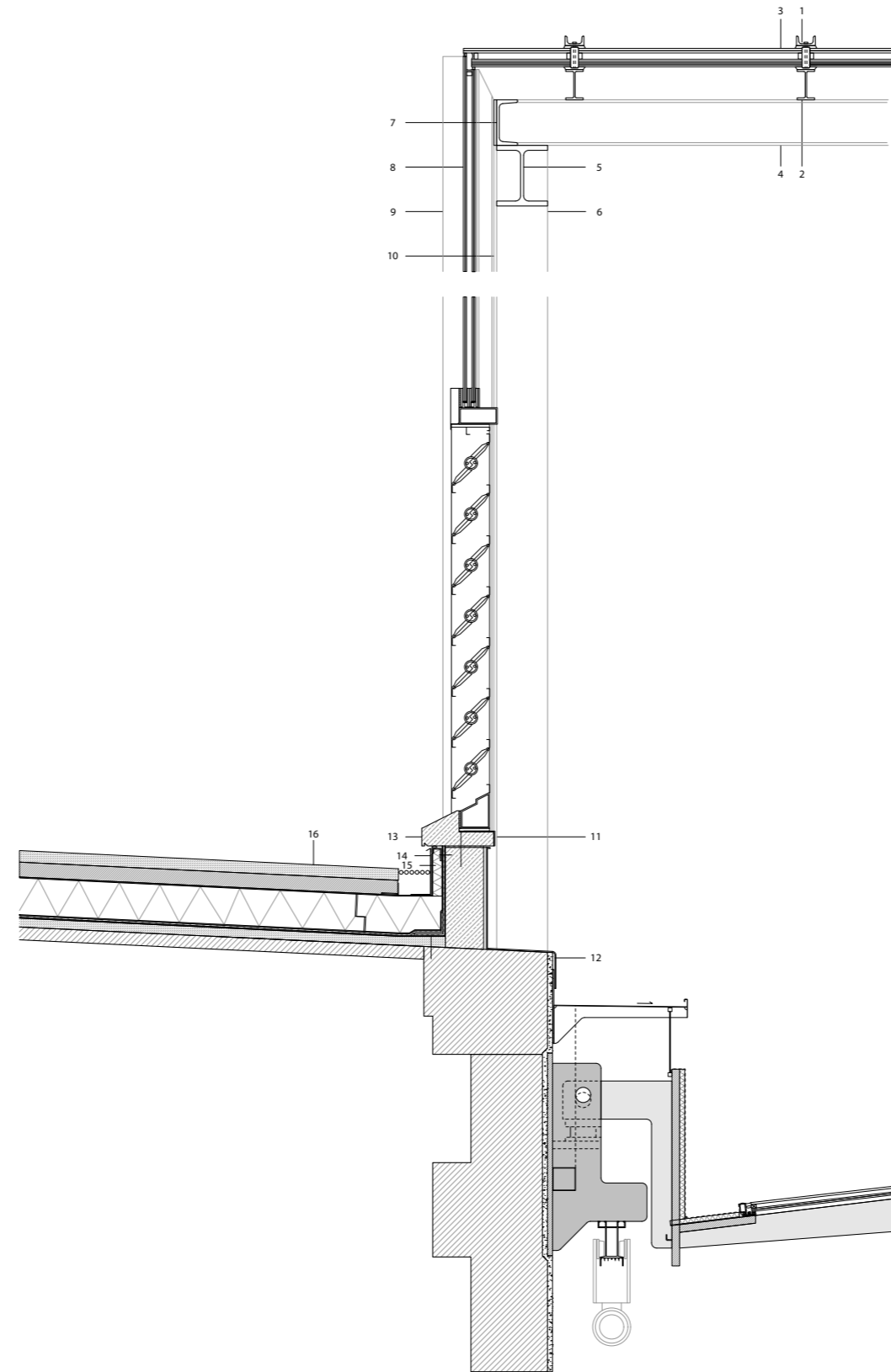
Design Proposal | Climatic Design



Sectional Perspective

1:200
National Bank of Belgium
Brussels, Belgium

Design Proposal | Roof Details



- | | |
|---|-------------------------------------|
| 1 Patent glazing cap | 13 Precast concrete coping |
| 2 Glazing bar | 14 Sheet metal skirting |
| 3 Insulating glass: tough + lam. safety | 15 Extruded polystyrene (XPS) board |
| 4 Beam | 16 Concrete flags |
| 5 Beam | Chippings |
| 6 Column | Filter fleece |
| 7 Steel channel edge rail | Extruded polystyrene (XPS) board |
| 8 Insulating glass: tough + lam. safety | Separating membrane |
| 9 Patent glazing cap | Synthetic waterproofing |
| 10 Glazing Bar | Protective membrane |
| 11 Sheet metal sill | Screed laid to falls |
| 12 Flat metal cladding | |

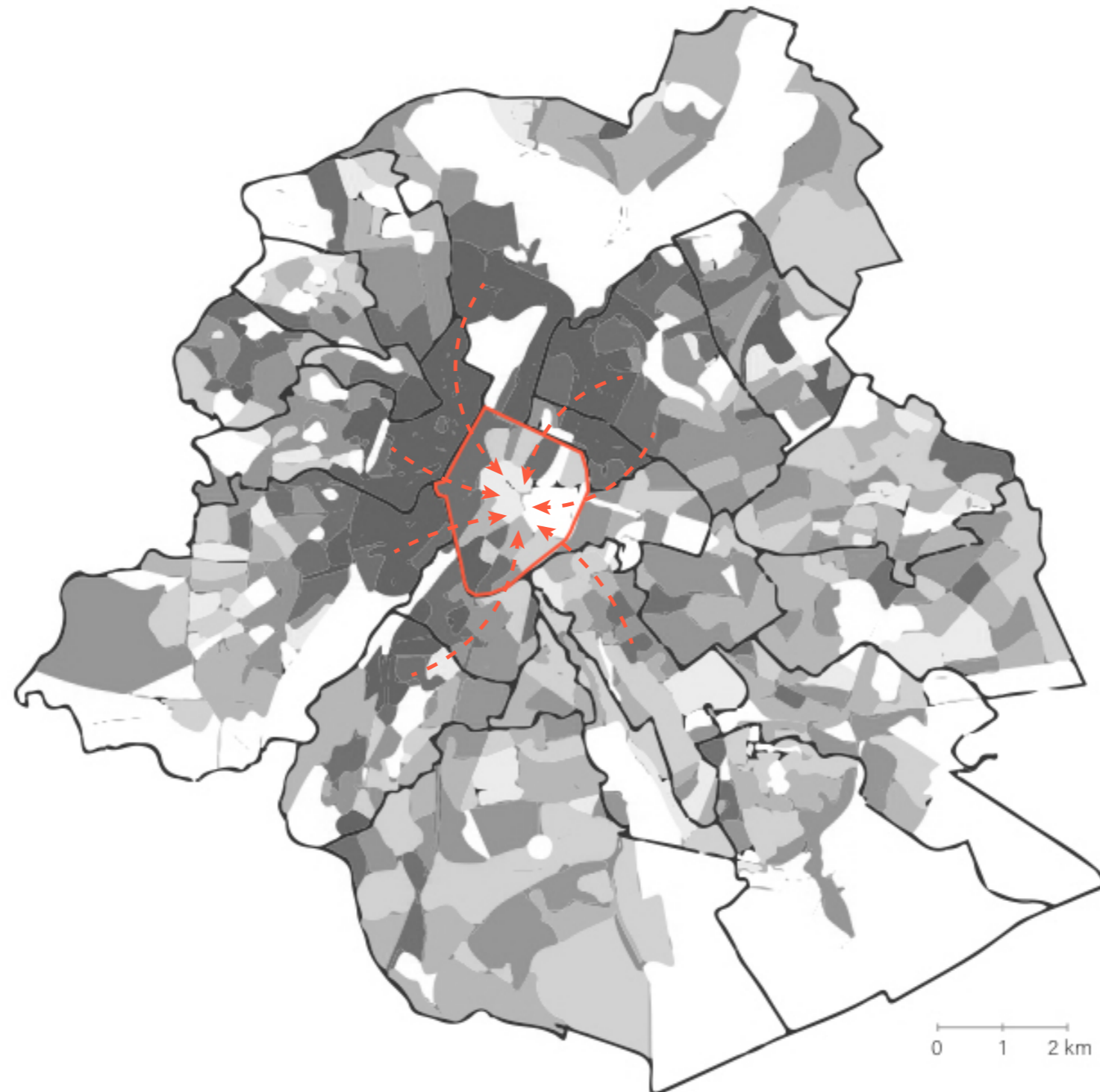
Details

1:25
National Bank of Belgium
Brussels, Belgium

Conclusion

City

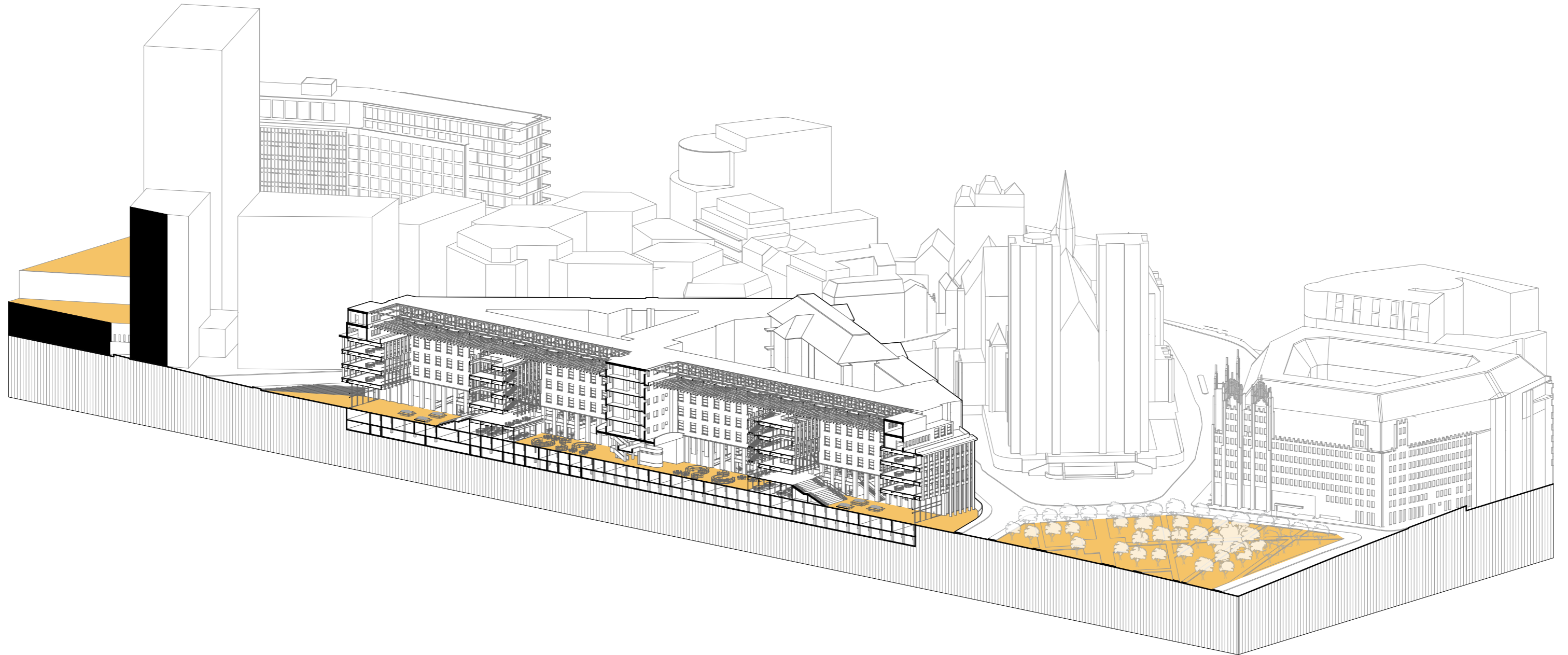
- *Establish a role model to revitalize the Brussels*



Conclusion

Building

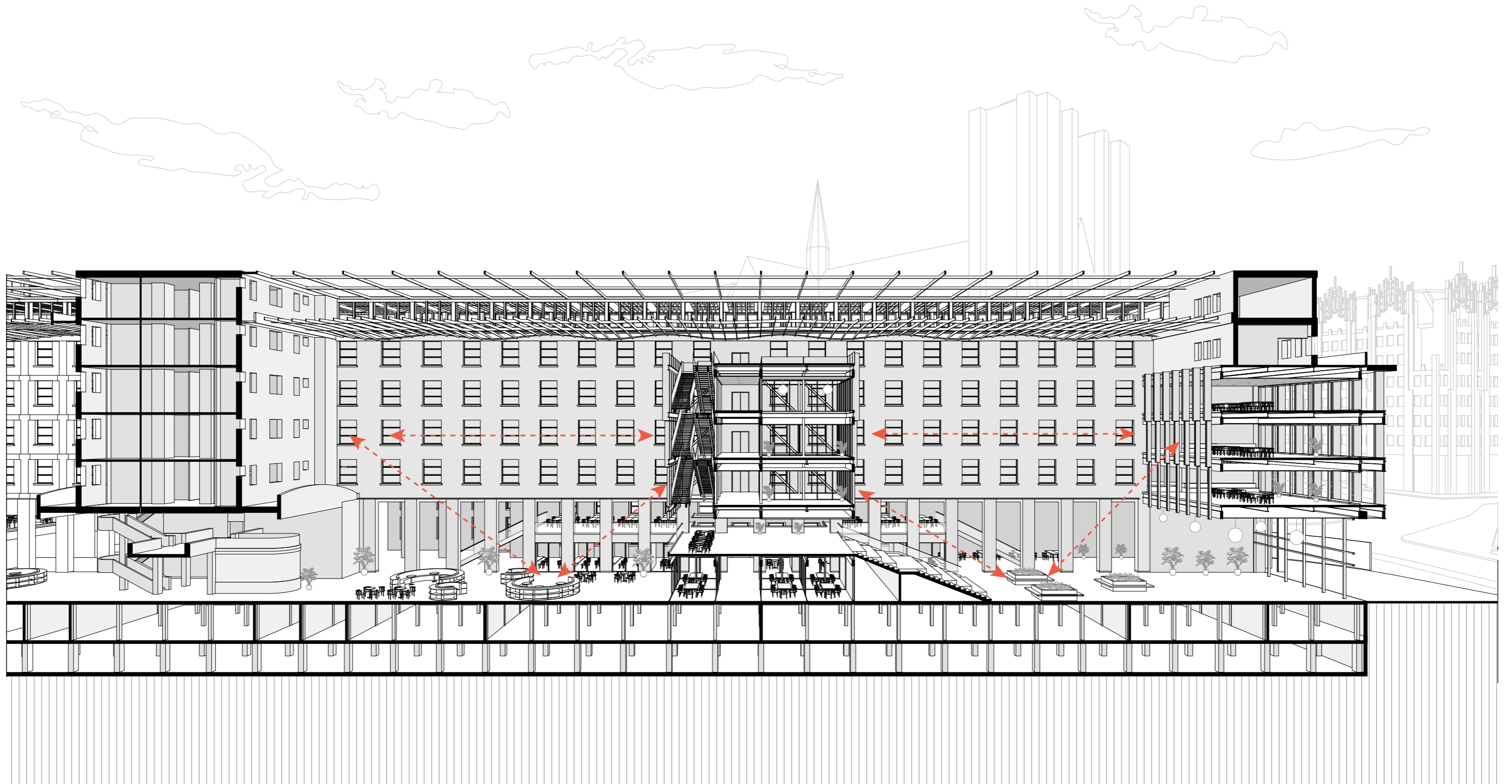
- Social plinth to link up the neighbourhood



Conclusion

Interior

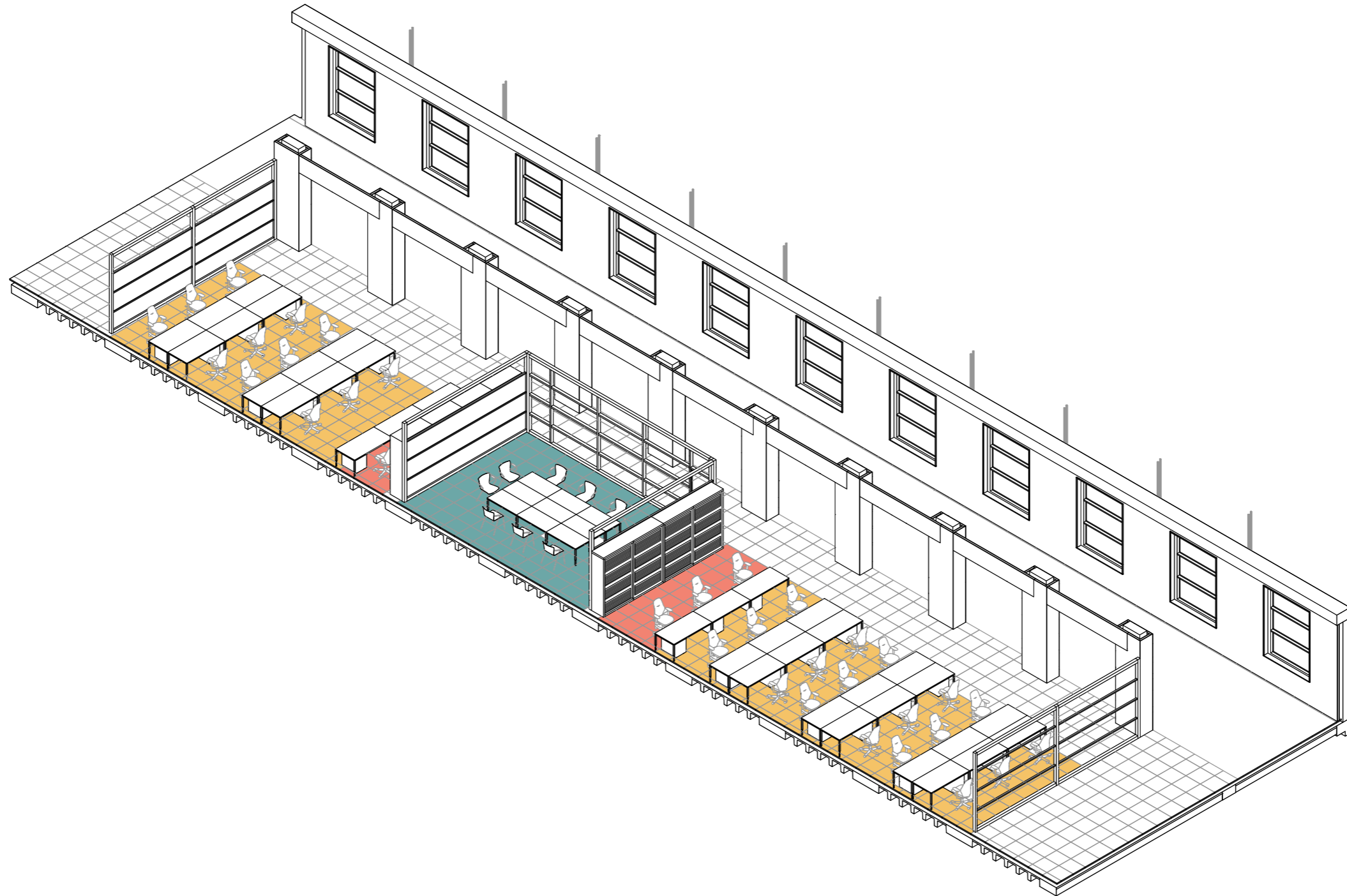
- Reform the social relation between the bank and the public



Conclusion

Interior

- Reconstruct the social structure within the bank



Thank you!