Gebléishal à Belval I Etude de faisabilité pour le Ministère de la Culture
Université du Luxembourg—DGSP—ArchMA I Présentation
1.03.2023
14.11.2024

Georges Mischo, Mayor of Esch-sur-Alzette
Anne Heintz, Public Relation, City of Esch-sur-Alzette

Robert Garcia, IK-CNCI
Maria Spada, IK-CNCI
Laurie Kremer, IK-CNCI
Jennifer Muller, IK-CNCI

Students Associations of the University of Luxembourg

Vishojit B. Thapa, Ministère de l'Environnement, du Climat et du Développement durable

Jean Goedert, Former Director City Development Esch-sur-Alzette

Eline Bleser, Administrative Director LUCA

Serge Ecker, President DKollektiv asbl

Daniela di Santo, Director Fonds Belval
Véronique Astranskas, Vice-Director Fonds Belval
Lucio Wercollier, Project Leader Fonds Belval

Norry Schneider, Coordinator CELL
Eric Lavillunière, CELL, Transition Minett asbl

Andreas Fickers, Director C2DH

Philippe Delfosse, Strategic Adviser to the Rector of University of Luxembourg
Thomas Barra, Head of Infrastructure Services, University of Luxembourg

Aline Muller, Director LISER
Patrick Bousch, National Policy Coordinator LISER

Thomas Kalstenius, Director LIST

Klaas de Rycke, Bollinger + Grohmann

Rüdiger Philipps, ENECO Ingénieurs-Conseils S.A.

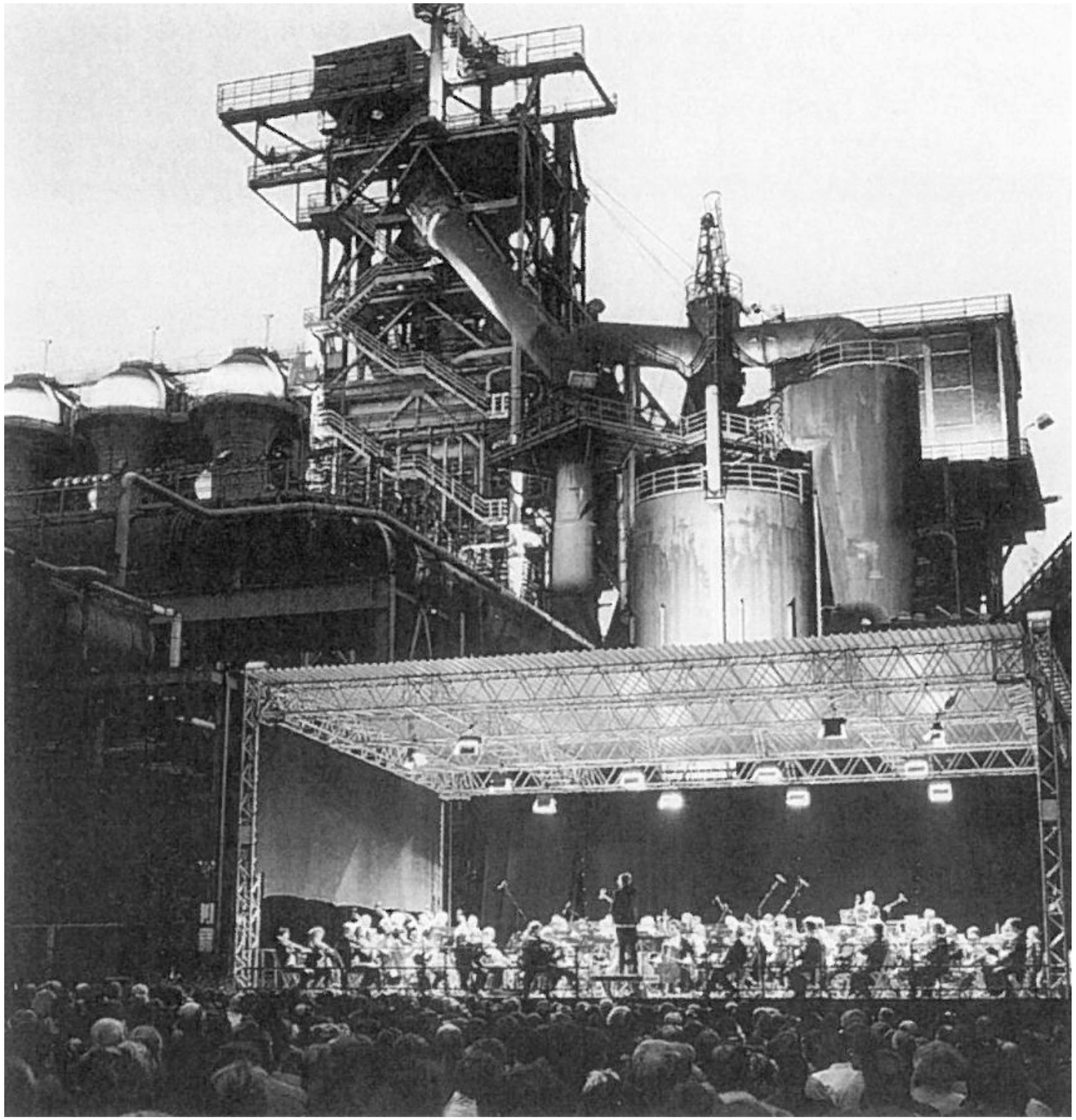
Overview of documents received for this feasibility study

RECEIVED FROM	MADE BY	MADE FOR	TITLE	DATE	CONTENT
INPA	TR-ENGINEERING	MINISTERE DE LA CULTURE	“HALLE DE SOUFFLANTES ARBED-BELVAL - ETUDES TECHNIQUES”	03.2011	Einleitung, Bestandskonstruktion, Beurteilung des Zustands der Halle, Ertüchtigungsmassnahmen, Kostenschätzung, Plandarstellungen
INPA	TR-ENGINEERING, RETEC S.A., IBS GMBH	MINISTERE DE LA CULTURE	“UNTERSUCHUNGSBERICHT B”	12.2015	Überprüfung des Zustands und der Schäden am Betontragwerk und Mauerwerk
INPA	RW-CONSULT	FONDS BELVAL	“RAPPORT 18-7098_01d du”	27.09.2018	Situation et descriptif de l’ouvrage, structure de la toiture, complexe d’étanchéité, stabilité des structures en béton, structures verticales des lanterneaux sur toiture, facades, discussion des variantes de rénovation des toitures
INPA	RW-CONSULT	SERVICE DES SITES ET MONUMENTS NATIONAUX - GRAND-DUCHÉ DE LUXEMBOURG	“HALL DES SOUFFLANTES ESCH-BELVAL”	07.2021	Travaux préparatoires et installation de chantier, dossier appel d’offres
INPA	RW-CONSULT	SERVICE DES SITES ET MONUMENTS NATIONAUX - GRAND-DUCHÉ DE LUXEMBOURG	“HALL DES SOUFFLANTES ESCH-BELVAL”	07.2021	Mise en sécurité des facades par installation de bâches et filets de protection, dossier appel d’offres
INPA	-	-	“INVESTISSEMENTS 2006-2022: HALL DES SOUFFLANTES BELVAL”	06.2022	ALL WE NEED, honoraries 2010-2022, travaux d’entretien et de sécurisation 2009-2022
INPA	RW-CONSULT	-	“RELEVANT NOTES”	.2018	Additional summarizing notes of previous reports
INPA	PW-GPL	-	“RELEVANT NOTES RAPPORT TECHNIQUE FINAL”	.2019	Summarizing notes of report
INPA	PW-GPL	FONDS BELVAL	“REUTILISATION DE LA HALLE CENTRALE A GAZ A ESCH-BELVAL”	27.09.2018	Contexte historique, la centrale a gaz, démarches en vue d’une sécurisation structurelle du bâtiment, considerations statiques, conclusions, inspections actuellement en cours
ROBERT GARCIA	IK-CNCI	MINISTERE DE LA CULTURE, MINISTERE DE LA MOBILITE ET DES TRAVAUX PUBLICS	“BIG HALLS-GREAT VENUES”	04.2022	Description of travel
ROBERT GARCIA	BÜRO FÜR INDUSTRIEARCHÄOLOGIE	-	“GASZENTRALE ELEKTROZENRTALE”	-	Bauteile, Abmessungen, Funktion, Bauepoche, Entwicklung, Konstruktion, Innenbestandteile, Baubeschreibung, Photos
ROBERT GARCIA	IK-CNCI	-	“LE CONCEPT DU CENTRE NATIONAL DE LA CULTURE INDUSTRIELLE (CNCI)	06.01.2020	Le réseau de cooperation du CNCI et ses missions, Le CNCI comme tete de réseau, Structure, administration et financement, La démarche en vue de l’établissement du CNCI
ROBERT GARCIA	FONDS BELVAL	-	“HALLE DES SOUFFLANTES”	06.2021	Situation et histoire, état des lieux, principes de rehabilitation et d’integration urbaine
ROBERT GARCIA	IK-CNCI	-	“Presentation du concept Nei Gebleishal”	-	A porpos de nous, Nei Gebleishal contexte, activités phare, fonctions connexes, whats next?
ROBERT GARCIA	IK-CNCI	M. STEPHANE PALLAGE	LETTER	07.2021	Presentation of project to UniLu
ROBERT GARCIA	IK-CNCI	-	“AVIS DE IK-CNCI SUR L’ASPECT BATI D’UNE REAFFECTATION DE LA HALLE DE SOUFFLANTES”	28.09.2021	Appreciation du point de vue de la preservation du patrimoine industriel (Jacques Maas, historien), Avis sur les elements architecturaux a conserver (Jean Goedert, architecte), Avis sur les fonctions nouvelles (concept IK-CNCI)
ROBERT GARCIA	-	-	“HALLzWENEED 2, GEBLEISSHAL BELVAL, RAPPORT DES ATELIERS”	01.03.2019	Volet patrimonial et museal, Volet urbanistique, Volet fonctions mixtes, Volet architectural, Volet CNCI Eêt tete de réseau pour la gestion commune du Sud, Volet animation culturelle et artistique, Volet start-up économiques et culturelles, Volet integration dans le milieu universitaire et accueil pour les visiteurs du site, le financement et la gestion du site
ROBERT GARCIA	PRO SUD	-	“HALL DES SOUFFLANTES 2025: SCHEMA”	.2020	Drawing & Axonometries
ROBERT GARCIA	IK-CNCI	-	“CONCEPT NEI GEBLEISHAL SCIENCE IN THE CITY”	16.06.2021	Reflexions préliminaires, Bases philosophiques pour le projet Nei Gebleishal, Publics cible, Activites phare, Fonctions connexes, mais essentielles
ROBERT GARCIA	IK-CNCI	-	“MINI-MEMORANDUM GEBLEISHAL”	25.01.2022	Developpement après le 22 juin 2021, démarches actuelles et a court terme CNCI, Propositions du CNCI a l’adresse des responsables politiques du dossier Gebleishal

RECEIVED FROM	MADE BY	MADE FOR	TITLE	DATE	CONTENT
ROBERT GARCIA	-	-	“CREER UN INSTITUT DU PATRIMOINE INDUSTRIEL”	-	ARTICLE: Pistes a suivre, résultats attendus, beneficiaries, échéance, limites et risques, prerequis, porteur du projet, partnaires, inspiration
ROBERT GARCIA	-	-	“SCIENCE IN THE CITY, PROPOSITION DE QUATRE CRENEAUX POUR UNE PREFIGURATION DE L’UNIVERSITE SOCIETALE”	-	Community based research CBR and service learning, l’architecture et l’urbanisme participatif, Gemeinwohl-Ökonomie, Millennium Goals Academy
ROBERT GARCIA	BENG	-	“ NOUVEAU CENTRE LA SOUFFLANTE”	06.08.2007	Plans
[redacted]					
ROBERT GARCIA	SOPHIE KAIFFER	UNILU	“DIPLOM: IN SIDE OUT”	-	Analisis, photos, plans, visualizations
ROBERT GARCIA	ALL WE NEED	LUXEMBOURG ET GRANDE REGION CAPITALE EUROPEENE DE LA CULTURE 2007	“EXPOSITION ALL WE NEED RAPPORT D’ACTIVITE”	17.03.2008	Resume, desciption de l’evenement, les objectifs et les acquis, le contenu politique et citoyen, performances pédagogiques, l’implication des ONG, l’implication des institutions, l’occupation de lieu industriel, communication, etc
ROBERT GARCIA	FUNDATION BASSIN MINIER	-	“HISTORIQUE DU PROJET CENTRE NATIONAL DE LA CULTURE INDUSTRIELLE (CNCI)”	03.2019	Information on the project by CNCI
ROBERT GARCIA	PATRICK GILLEN	MINISTERE DE LA CULTURE	LETTER	10.2007	Historique des évènement en relation avec la restauration de la halle des soufflantes, visa, mesures, communication avec contrôleur financier
ROBERT GARCIA	2001	MINISTERE DE LA CULTURE, FONDS BELVAL	“SOUFFLANTES 2.0: KUCKDEPOT”	18.02.2019	Speculation project, plans, images
ROBERT GARCIA	SAM TANSON, MINISTRE DE LA CULTURE	NANCY BRAUN	LETTER	18.03.2019	Content: summary of Hall condition
ROBERT GARCIA	installationlx@gmx.net	LUXEMBOURG ET GRANDE REGION CAPITALE EUROPEENE DE LA CULTURE 2007	“ESPACE SOUFFLANTE”	08.07.2004	Esquisse de projet pour un espace de cultures d’échange et d’innovation
SCUTO	AMICALE DES HAUTS FOURNAUX ARBED ESCH/ BELVAL	PUBLIC	“ALS ERENNERUNG UN D’LEIT VUN DE SCHMELZEN”	11.2009	Book on the history of iron extraction factories and its workers
RÜDIGER PHILIPPS	LE GOUVERNEMENT DU GRAND-DUCHE DE LUXEMBOURG	-	“CADASTRES DES SITES POTENTIELLEMENT CONTAMINES ET DES SITES CONTAMINES OU ASSAINIS”	31.10.2018	Plans
RÜDIGER PHILIPPS	SOLETUDE S.A.R.L.	FONDS BELVAL	“PARCELLE NORD DES HAUTS FOURNEAUX PROJET HASO-HALL DES SOUFFLANTES, BELVAL”	02.05.2022	Cadre réglementaire, Contexte du Site, Programme de travail, images, photos

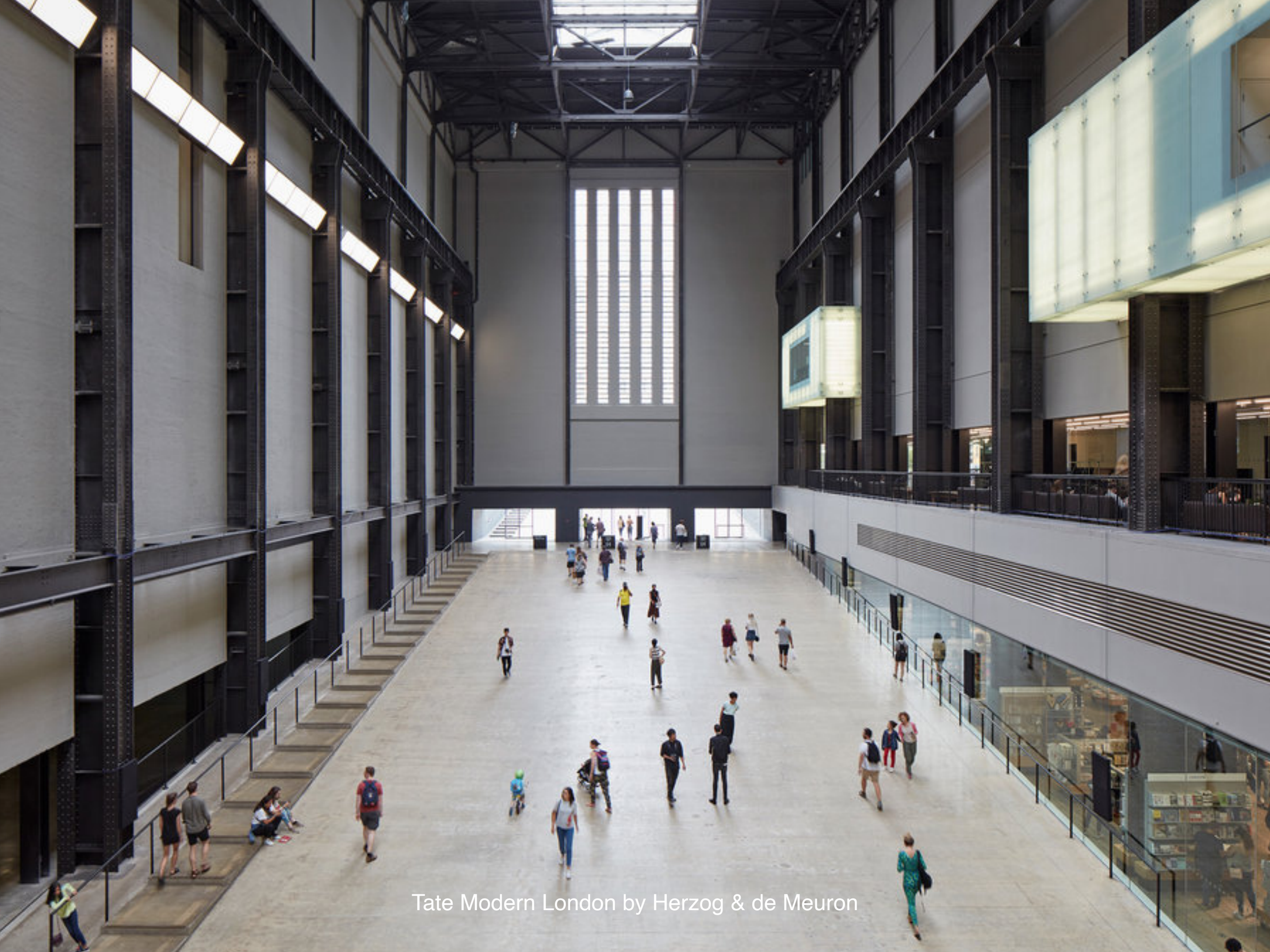
Histoire des idées

Bernd und Hilla Becher,
Fördertürme 1965-95



Concert
IBA Emscher Park Duisburg

FRAC Dunkerque by Lacaton Vassal

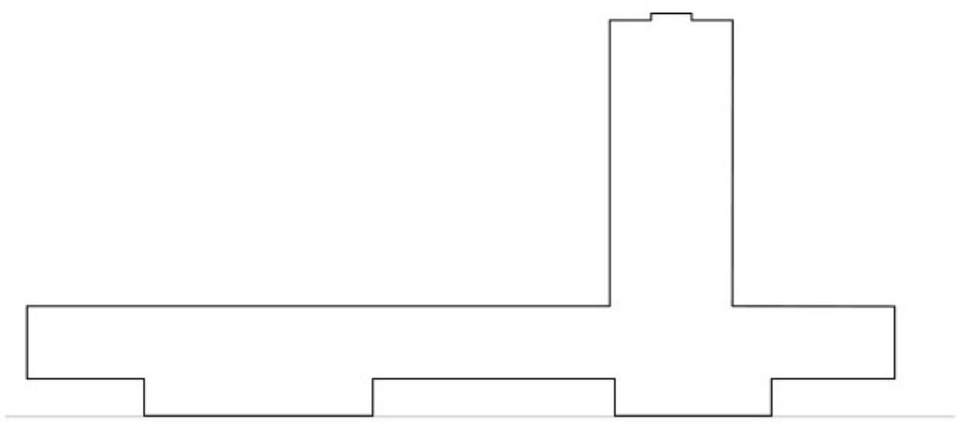


Tate Modern London by Herzog & de Meuron

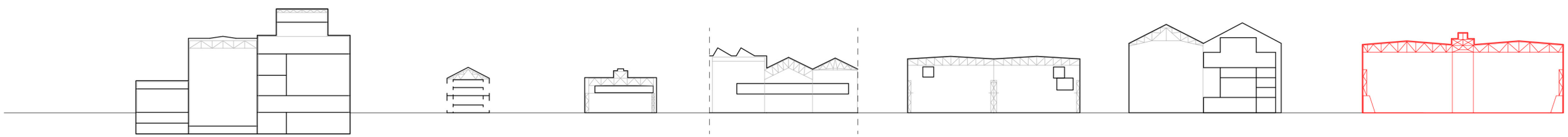
LocHal Tilburg by CIVIC Architects et al.

Fabra i Coats Barcelona by Planurbs et al.

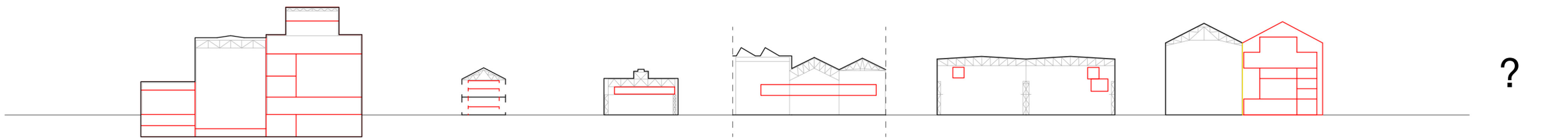
Battersea Power Station London



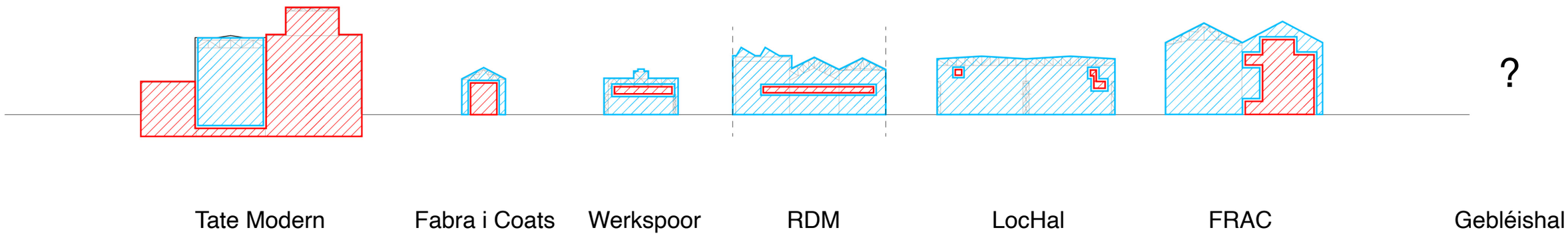
Gebléishal = 1,5 x Maison du Savoir



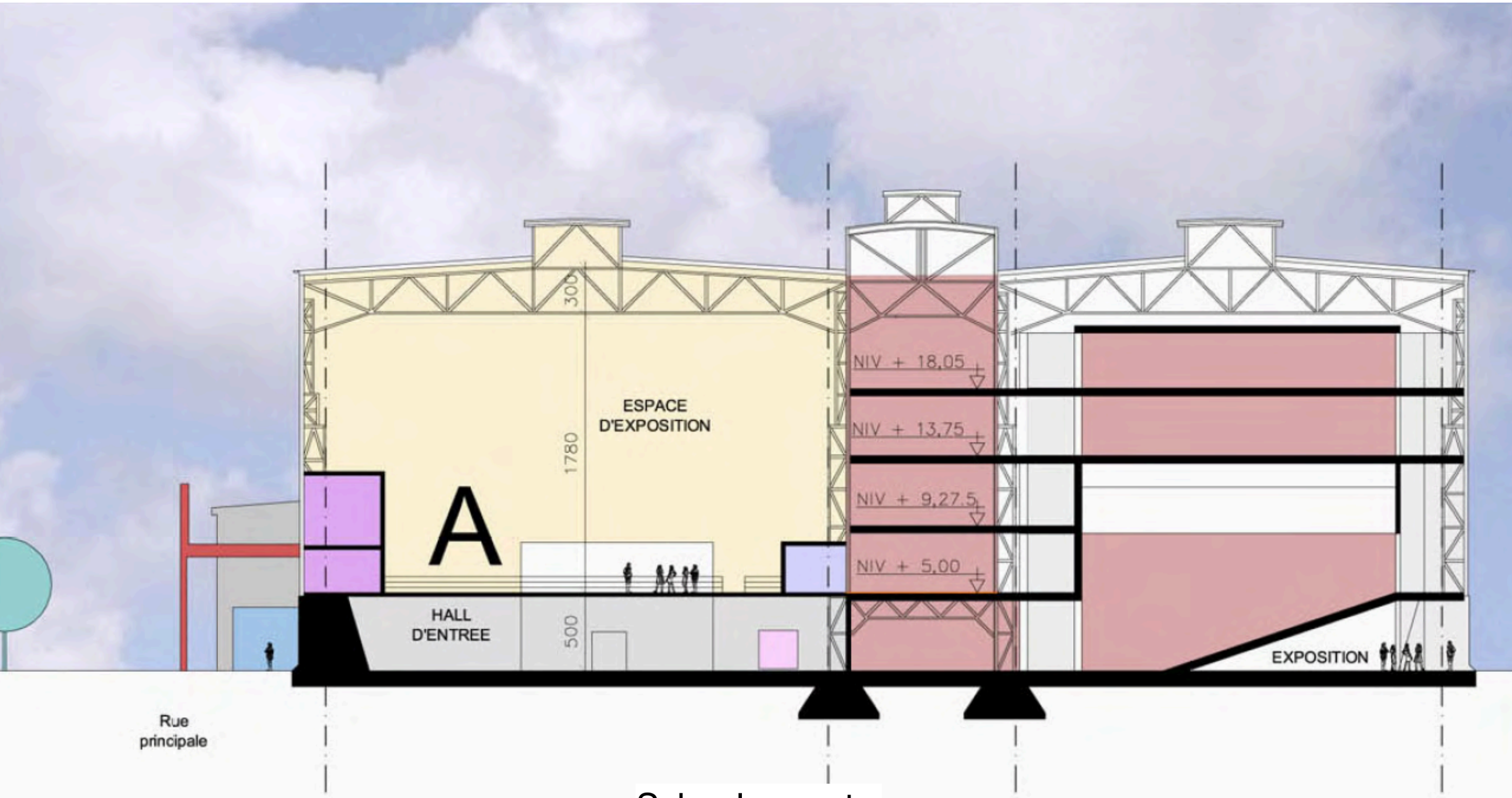
Tate Modern Fabra i Coats Werkspoor RDM LocHal FRAC Gebléishal



Tate Modern Fabra i Coats Werkspoor RDM LocHal FRAC Gebléishal

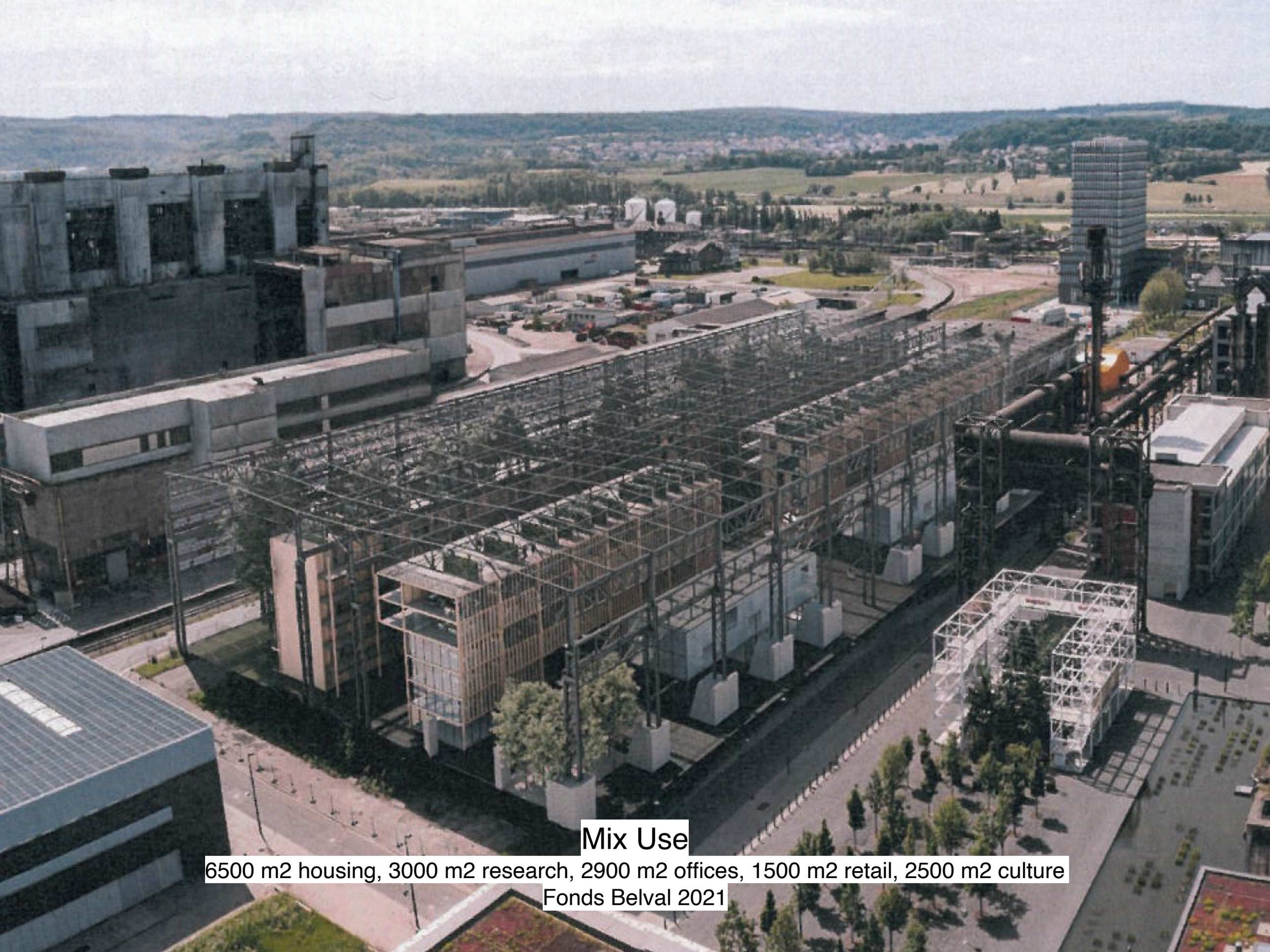

?
Tate Modern
Fabra i Coats
Werkspoor
RDM
LocHal
FRAC
Gebléishal

?
Tate Modern
Fabra i Coats
Werkspoor
RDM
LocHal
FRAC
Gebléishal
Exhibition Hall
Restaurant/Café
Atrium
Apartment
Gallery
Lab
Manufacturing
Common Areas
Shop
Office/Studio
Library



Schaulager etc.

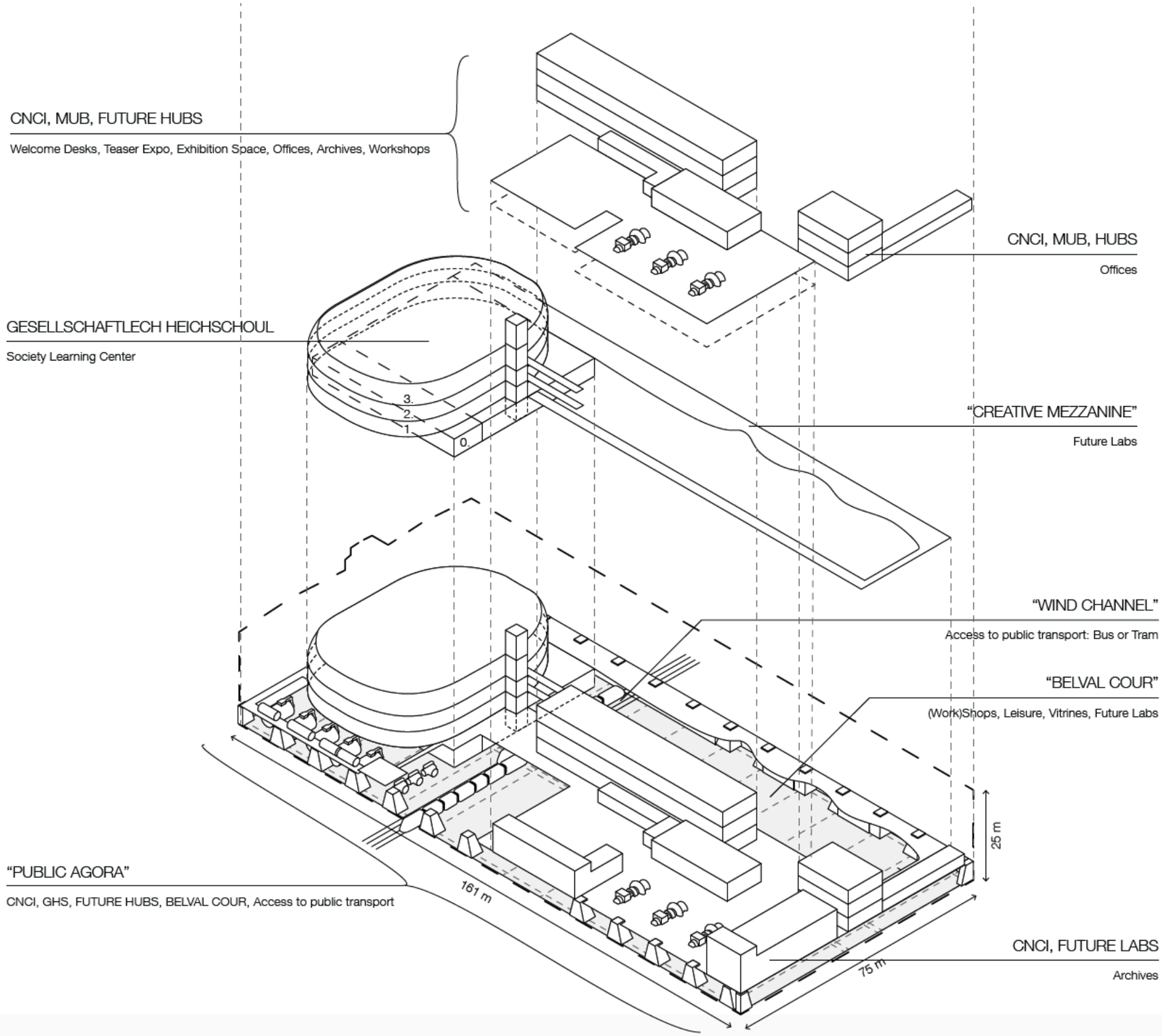
Beng Architectes 2007



Mix Use

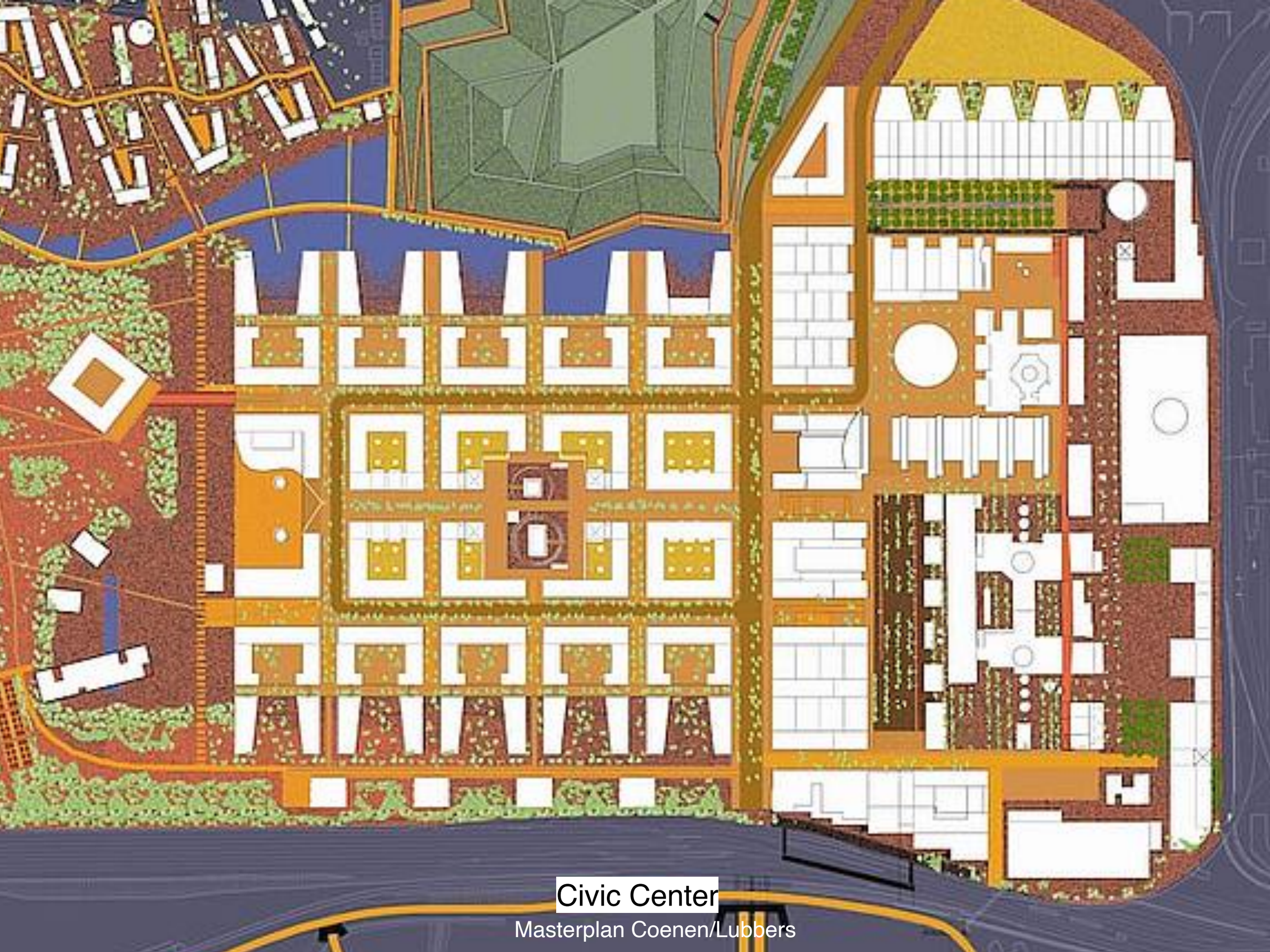
6500 m2 housing, 3000 m2 research, 2900 m2 offices, 1500 m2 retail, 2500 m2 culture

Fonds Belval 2021



Science in the City

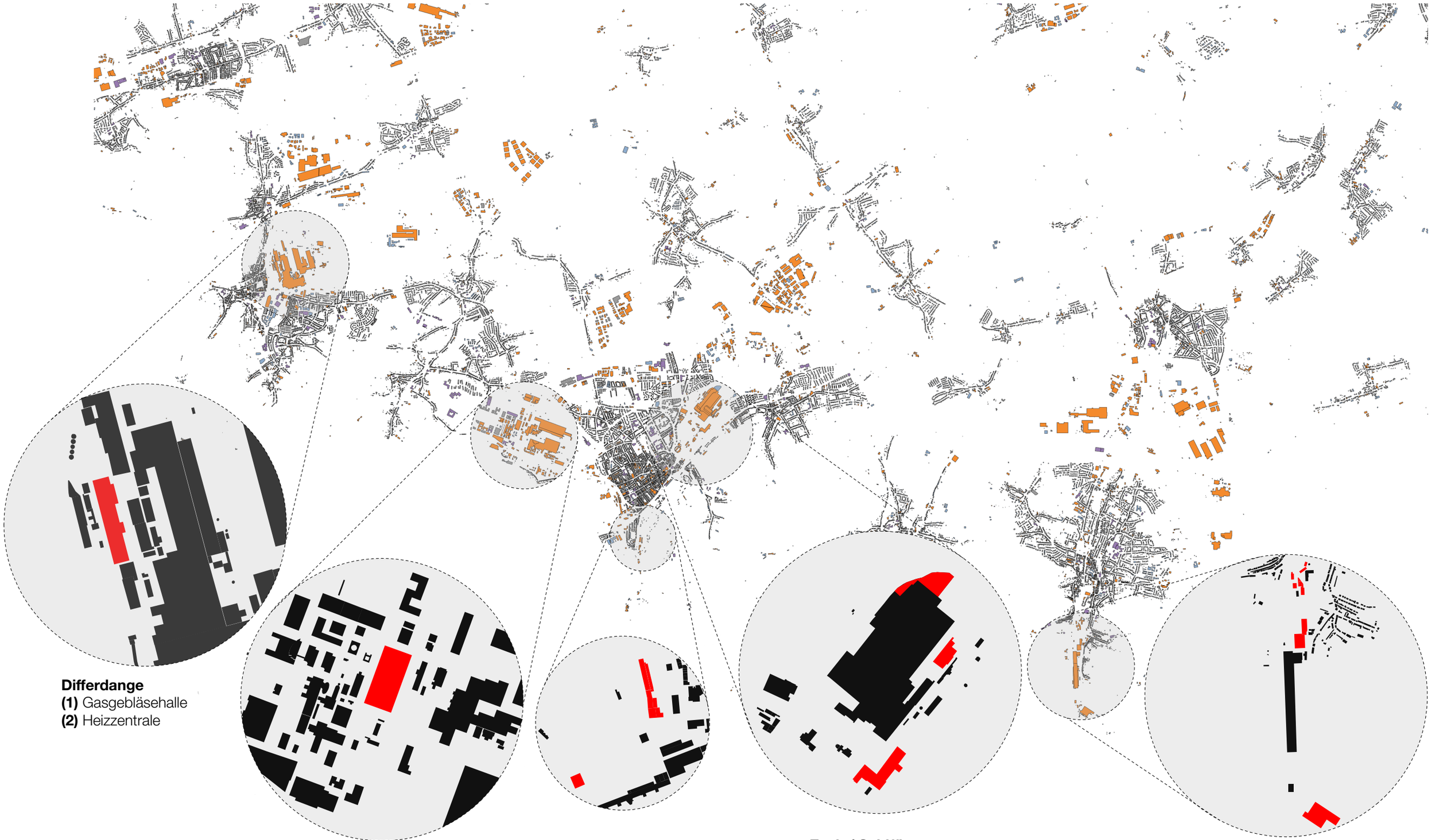
IK CNCI / Serge Ecker 2021



Civic Center

Masterplan Coenen/Lubbers

Le contexte



Differdange
(1) Gasgebläsehalle
(2) Heizzentrale

Belval
Gebléishal

Esch-sur-Alzette
(3) Turbinenhalle
(4) Gebläsehalle

Esch / Schifflange
(5) Walzwerkhallen
(6) Zentralwerkstatt
(7) Gebläsehalle

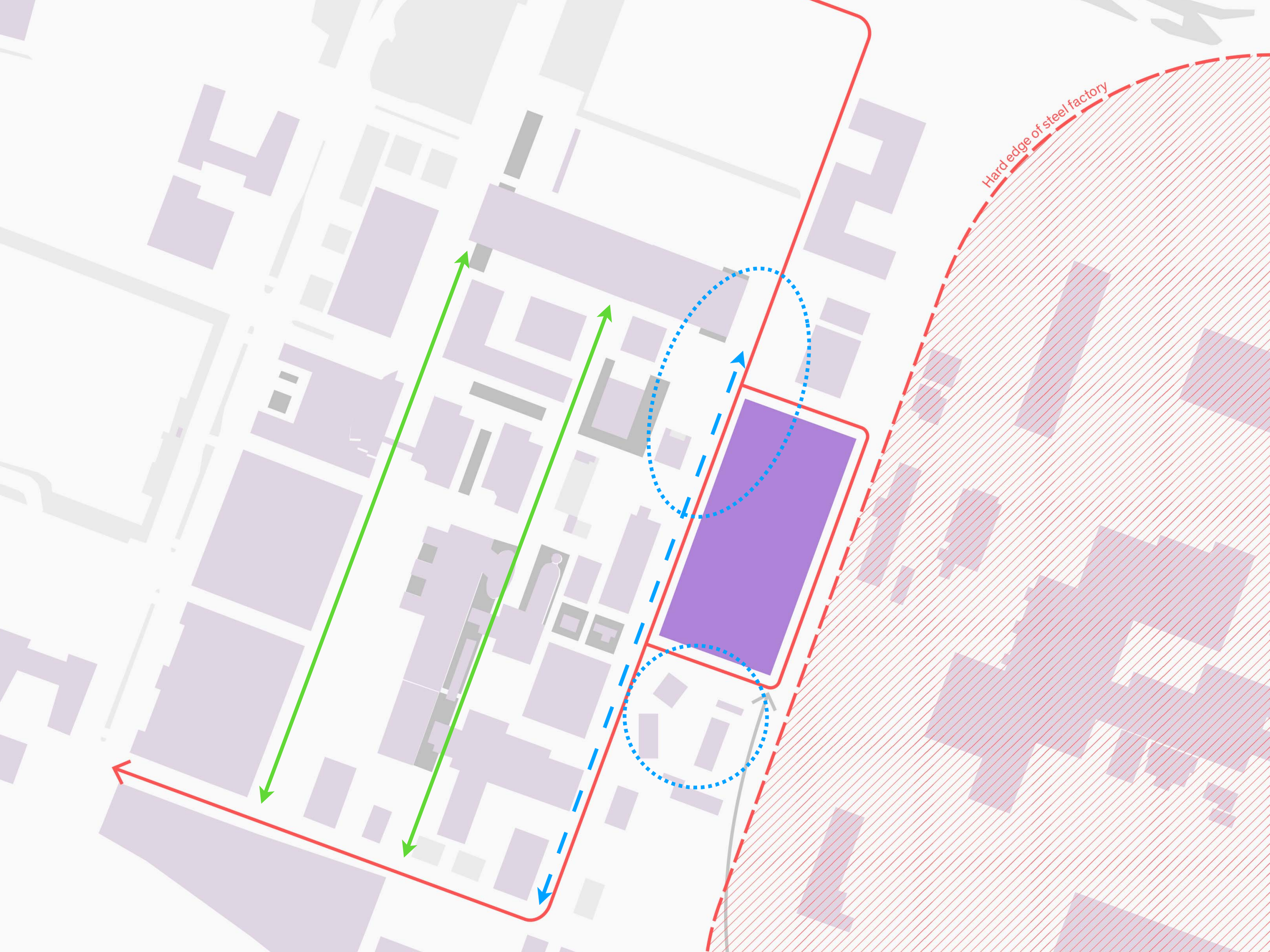
Dudelange
(8) Lokomotivwerkstatt
(9) Wagenwerkstatt
(10) Maschinenhalle
(10) Schalthaus
(10) Werkstatthalle
(10) Sozialgebäude
(11) Stahlwerk
(12) Blechwalzwerkhalle
(13) Walzwerkhalle

Protected Halls

Industrial Halls

A network of industrial halls

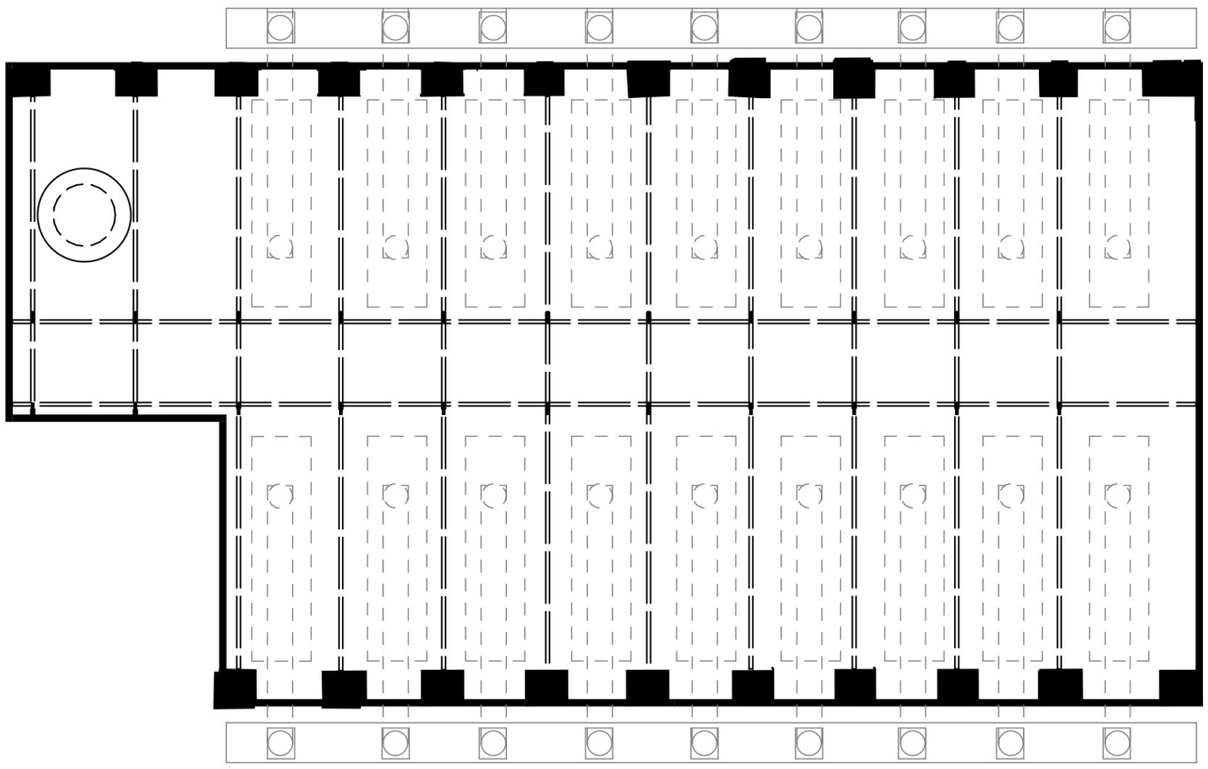
Gebléishal

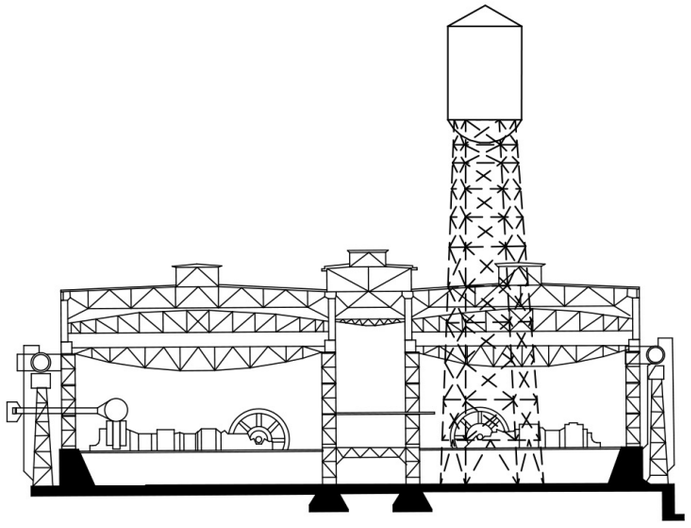

Hard edge of steel factory

The hall — view from the new bridge

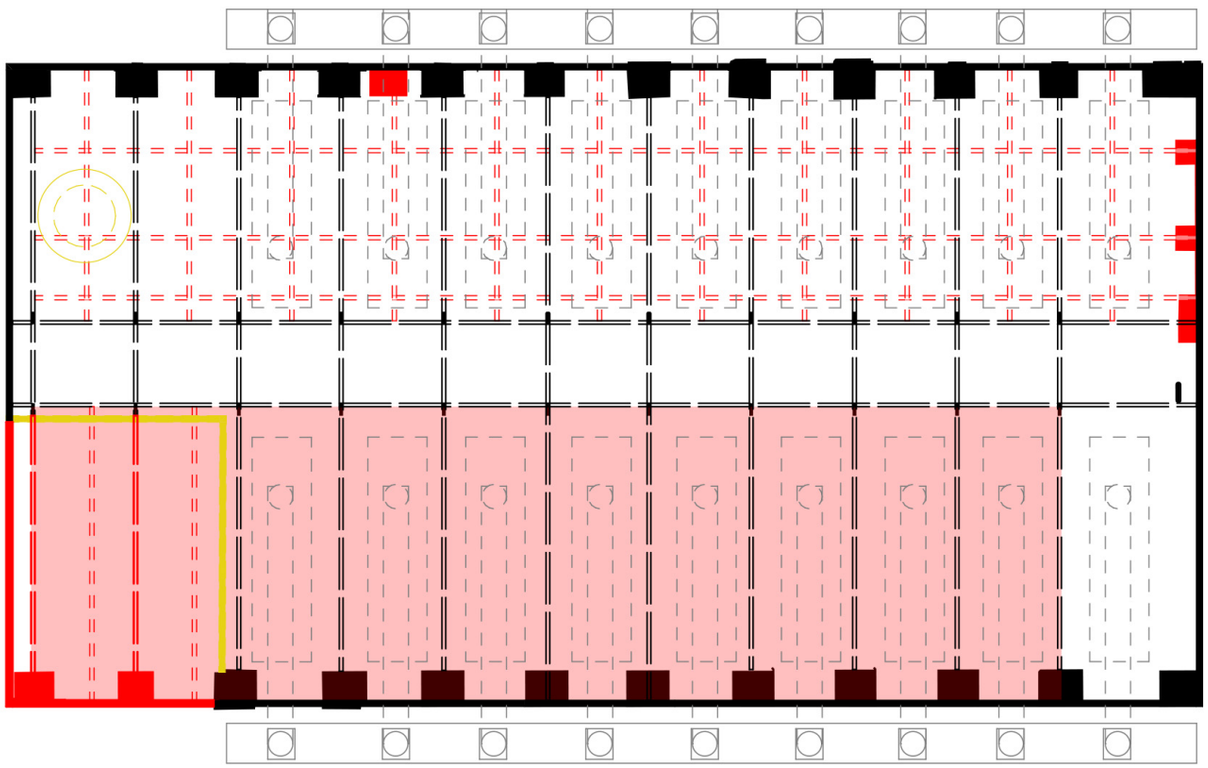
AVENUE DES
SIDERURGISTES
ENTRÉE
30

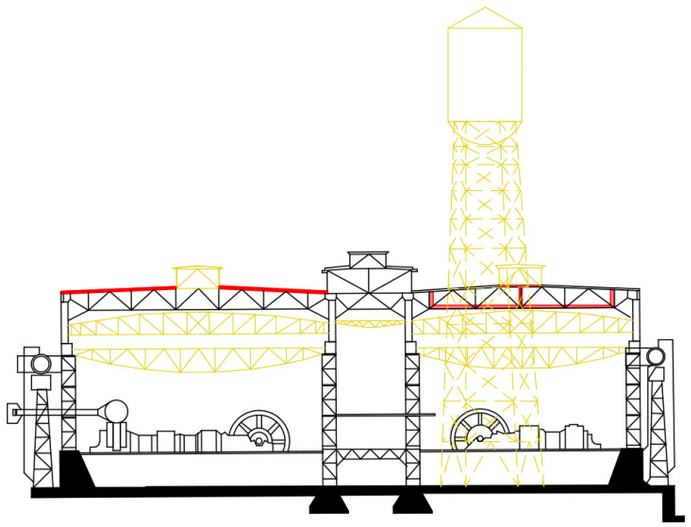
Le bâtiment



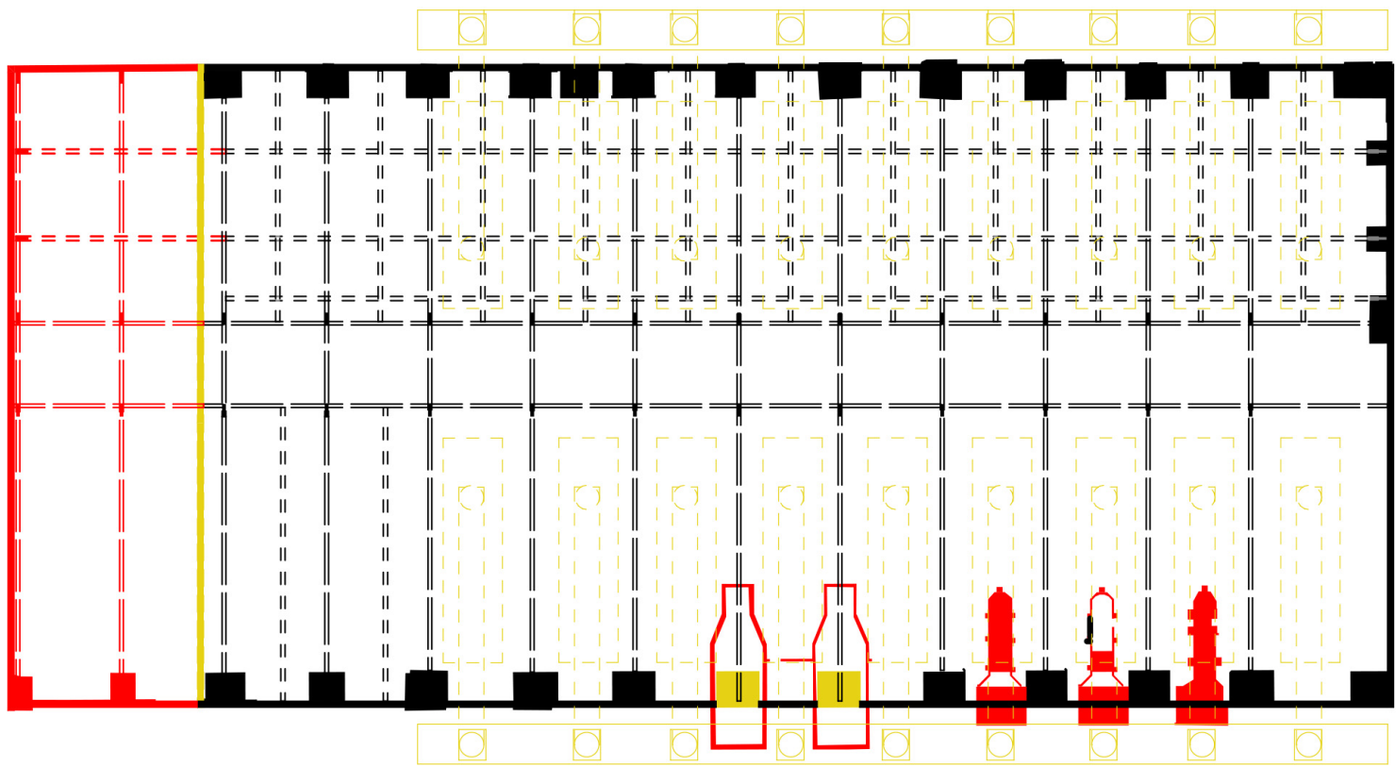


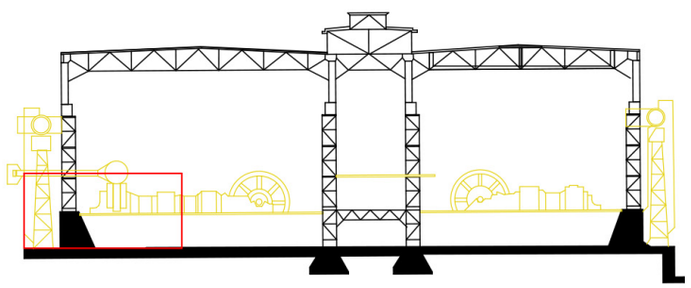
1910: Origin



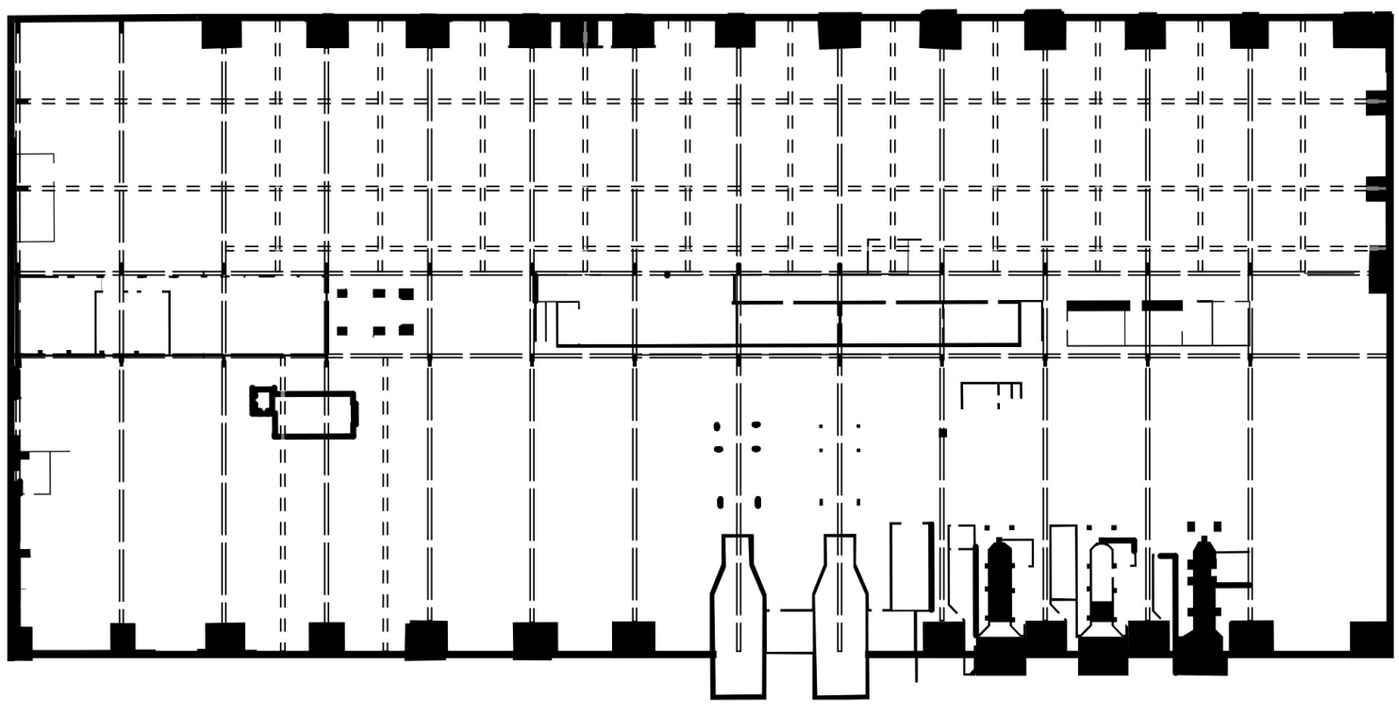


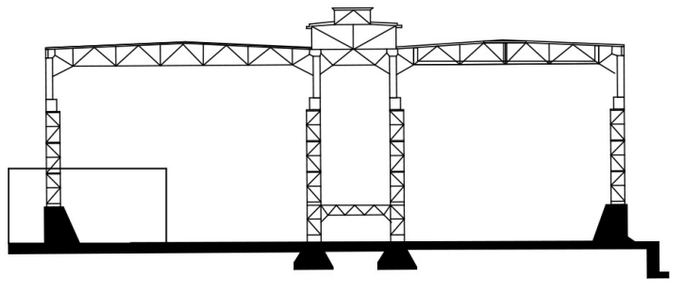
1917: Extension Halle des soufflantes
Structural change and new roof



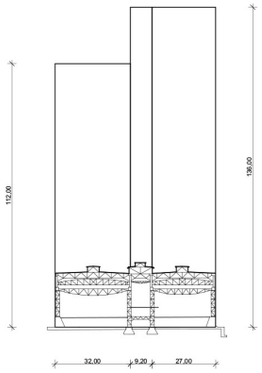


1929-39: Extension Hall /
demolition floor / new machines

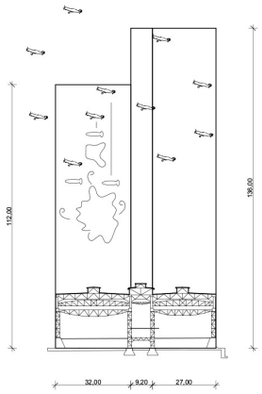




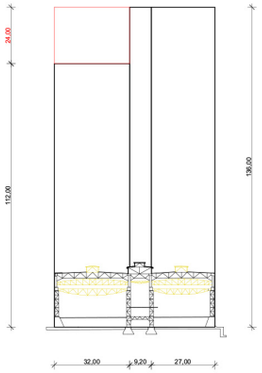
1996-2023: Cease of use



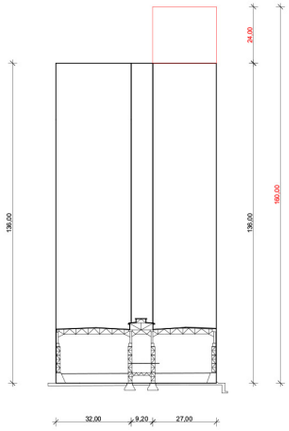
1910
origin



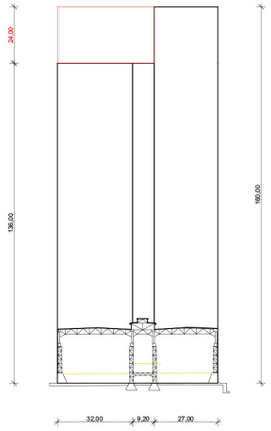
1916
bombardment



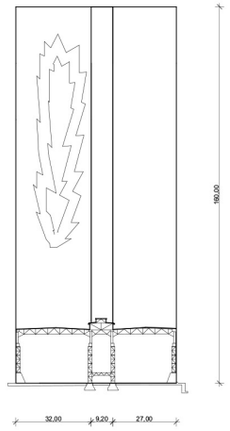
1917
extension "halle
soufflantes"
structure change



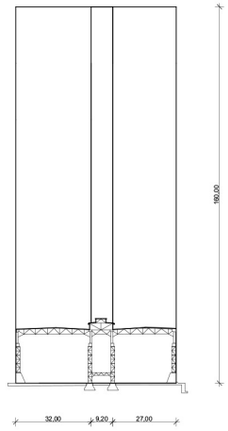
1929
extension "halle
génératrices"



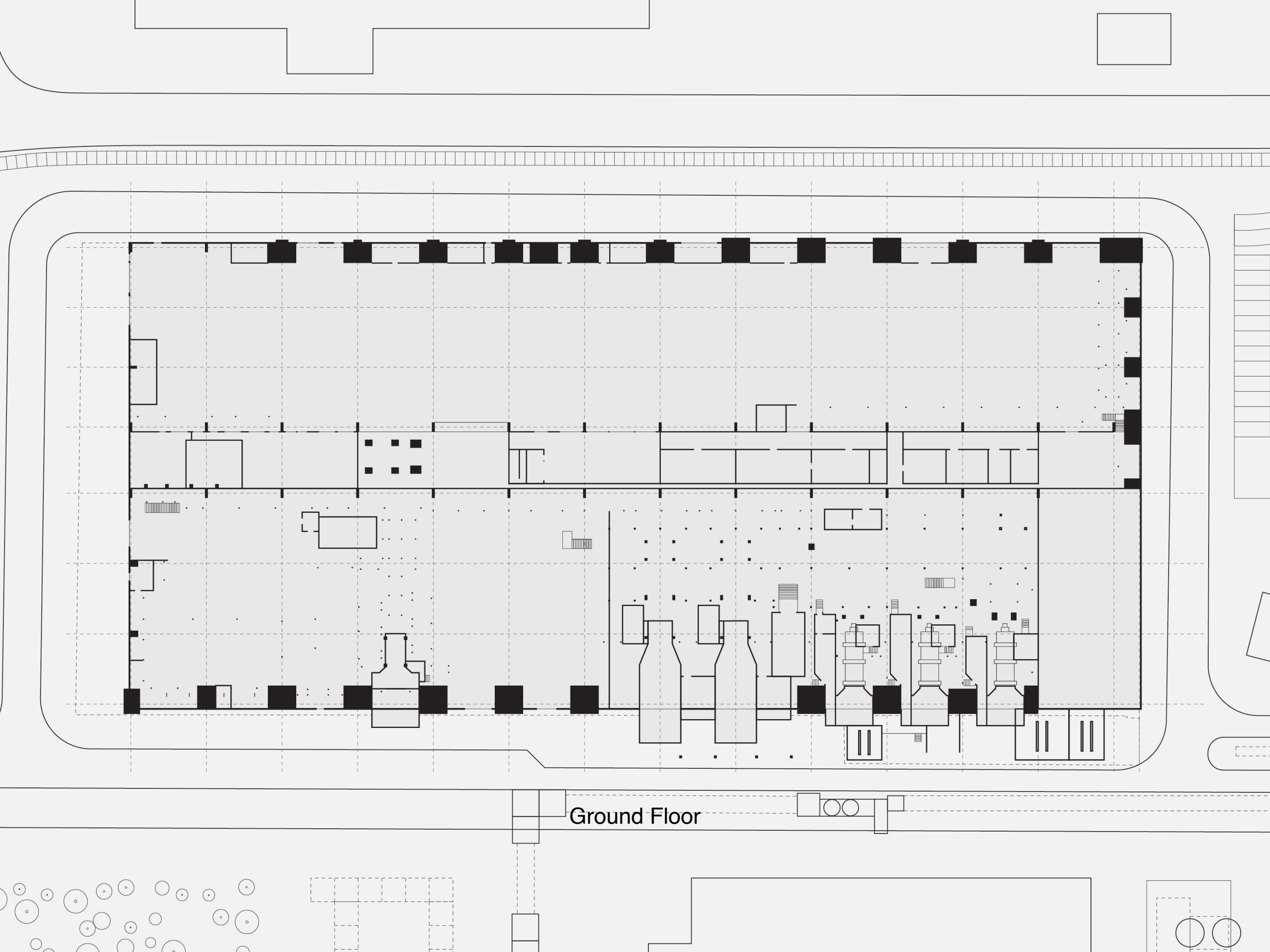
1939
extension "halle soufflantes"
removement floor

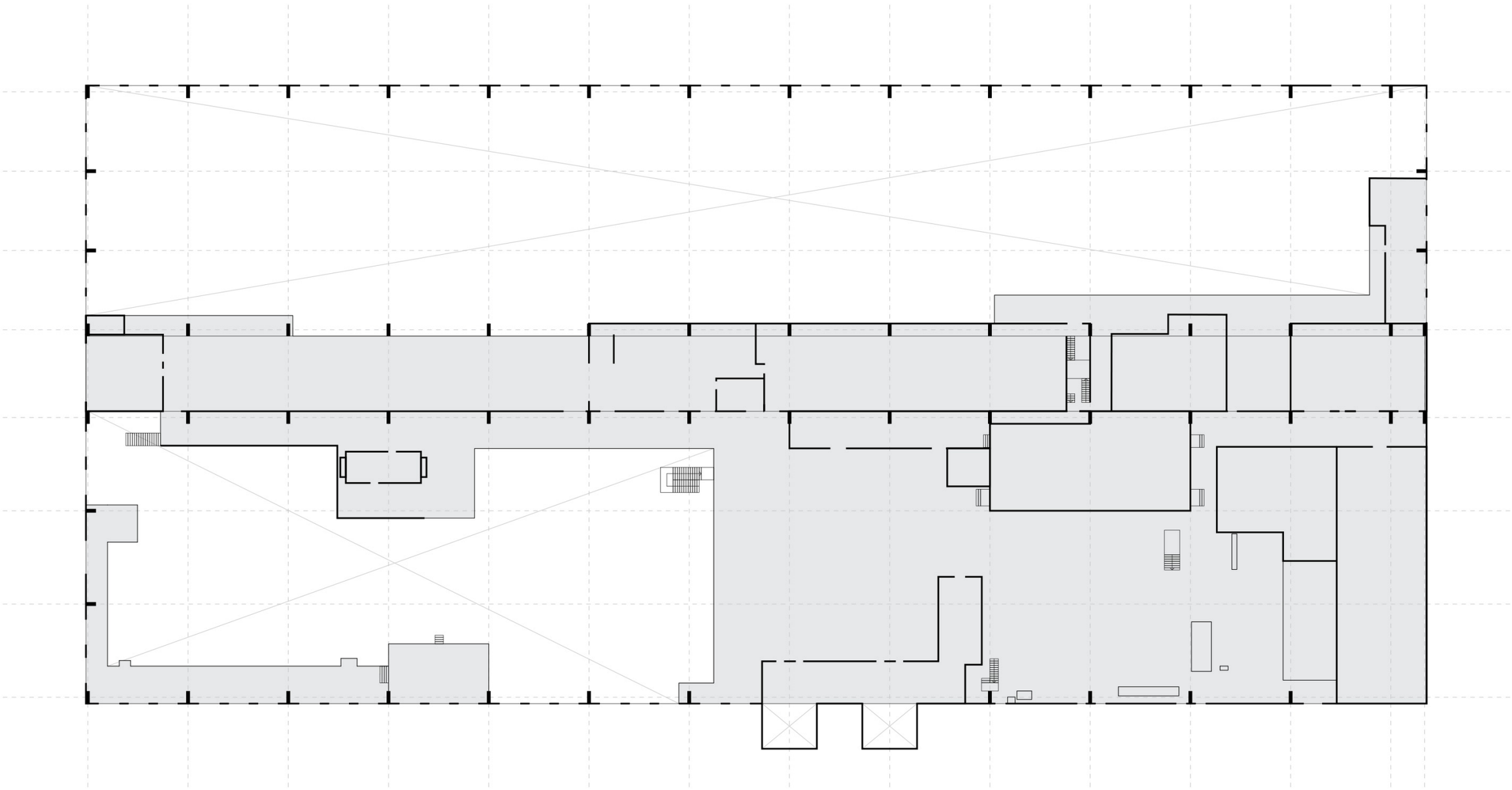


1990
internal fire

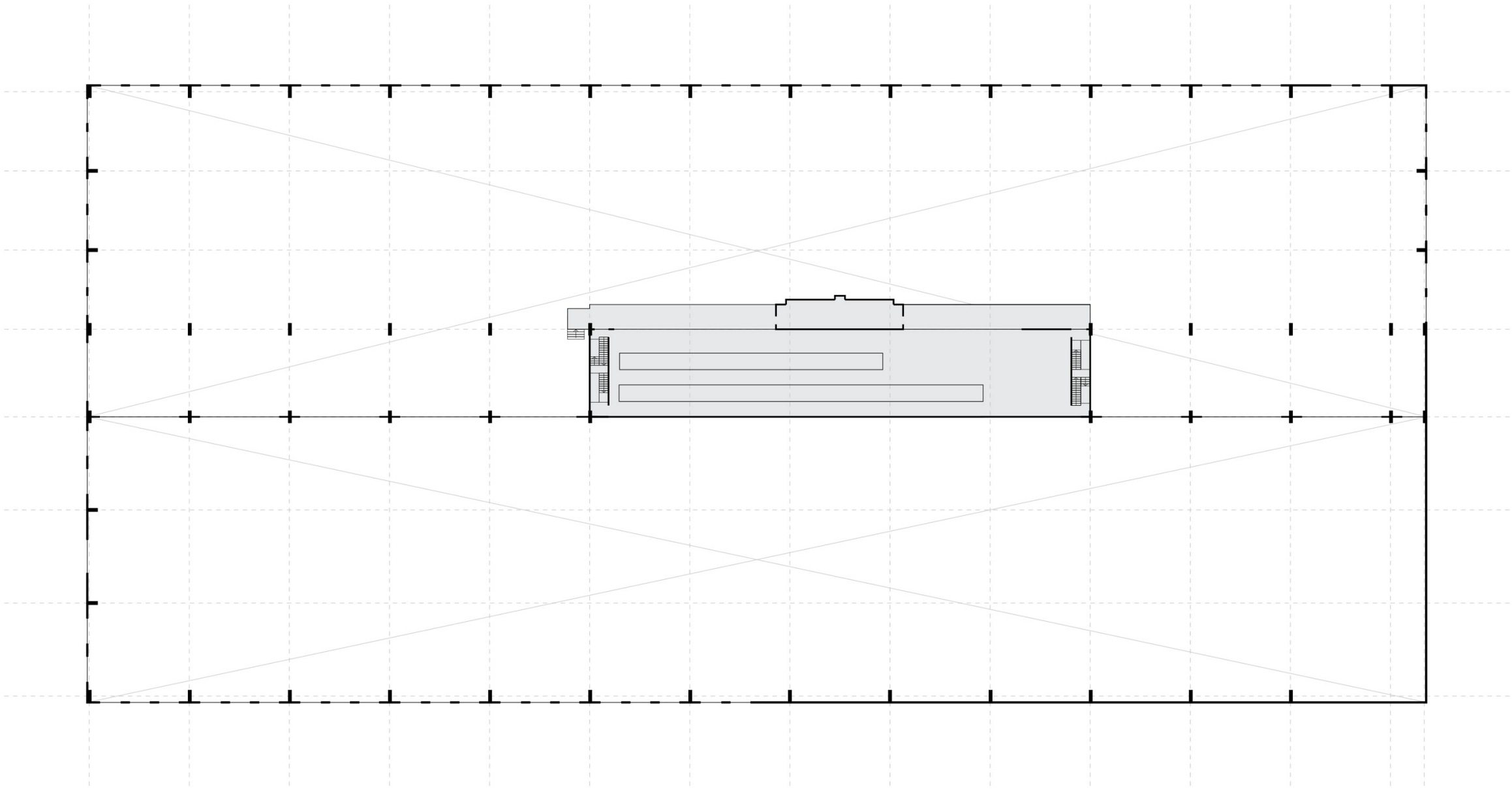


1996-2022
cease of use

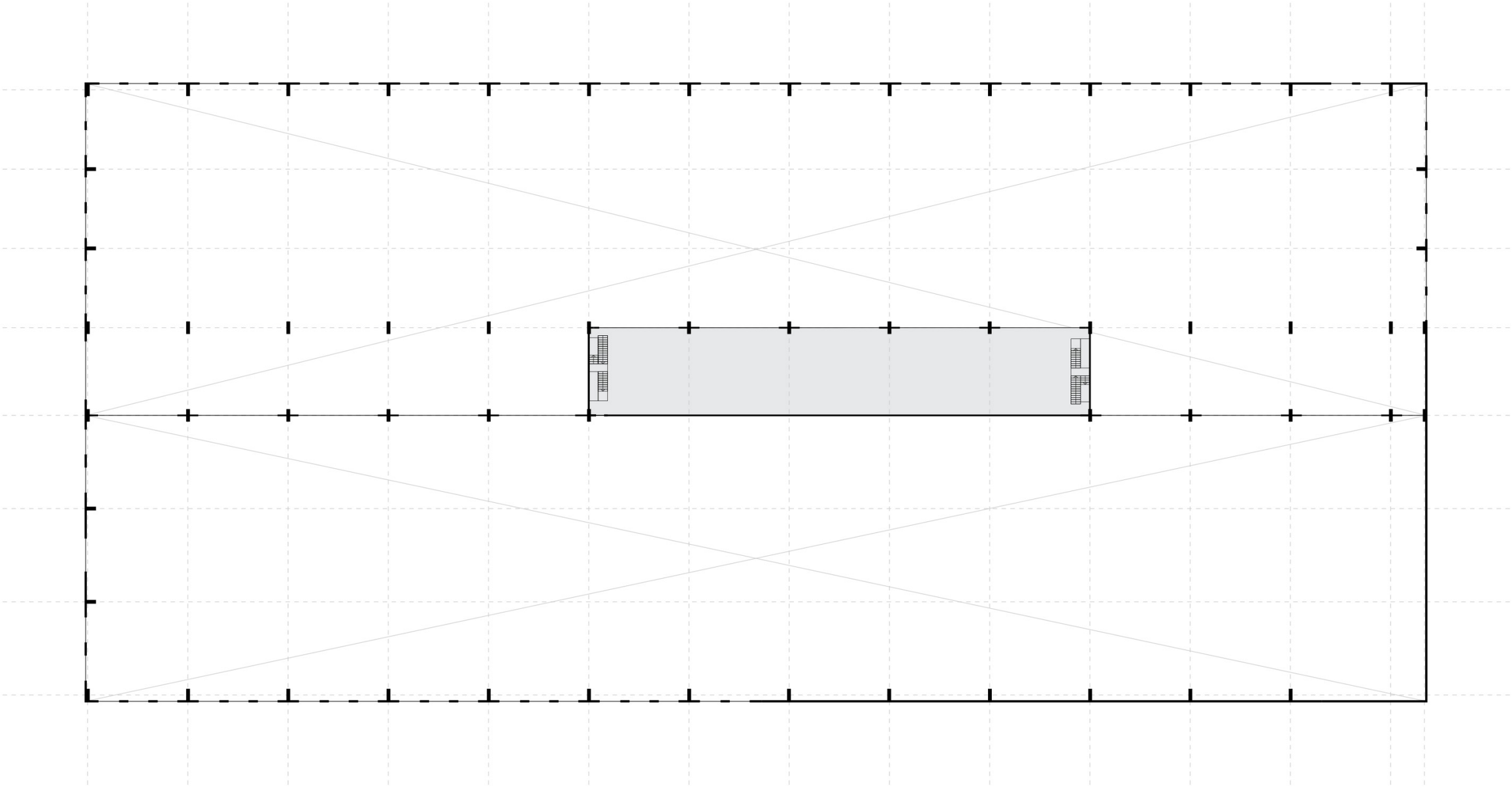

Ground Floor



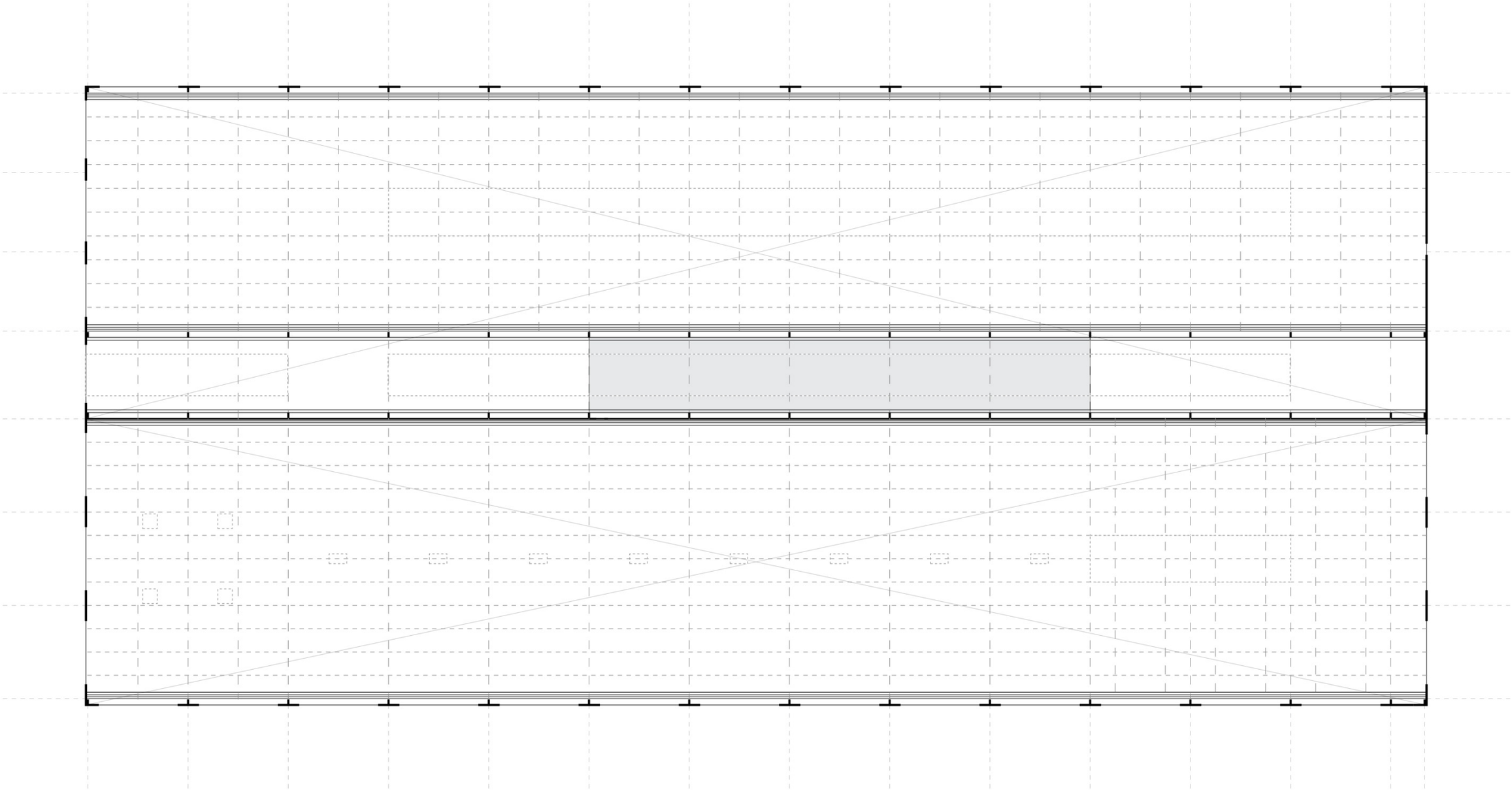
First Floor



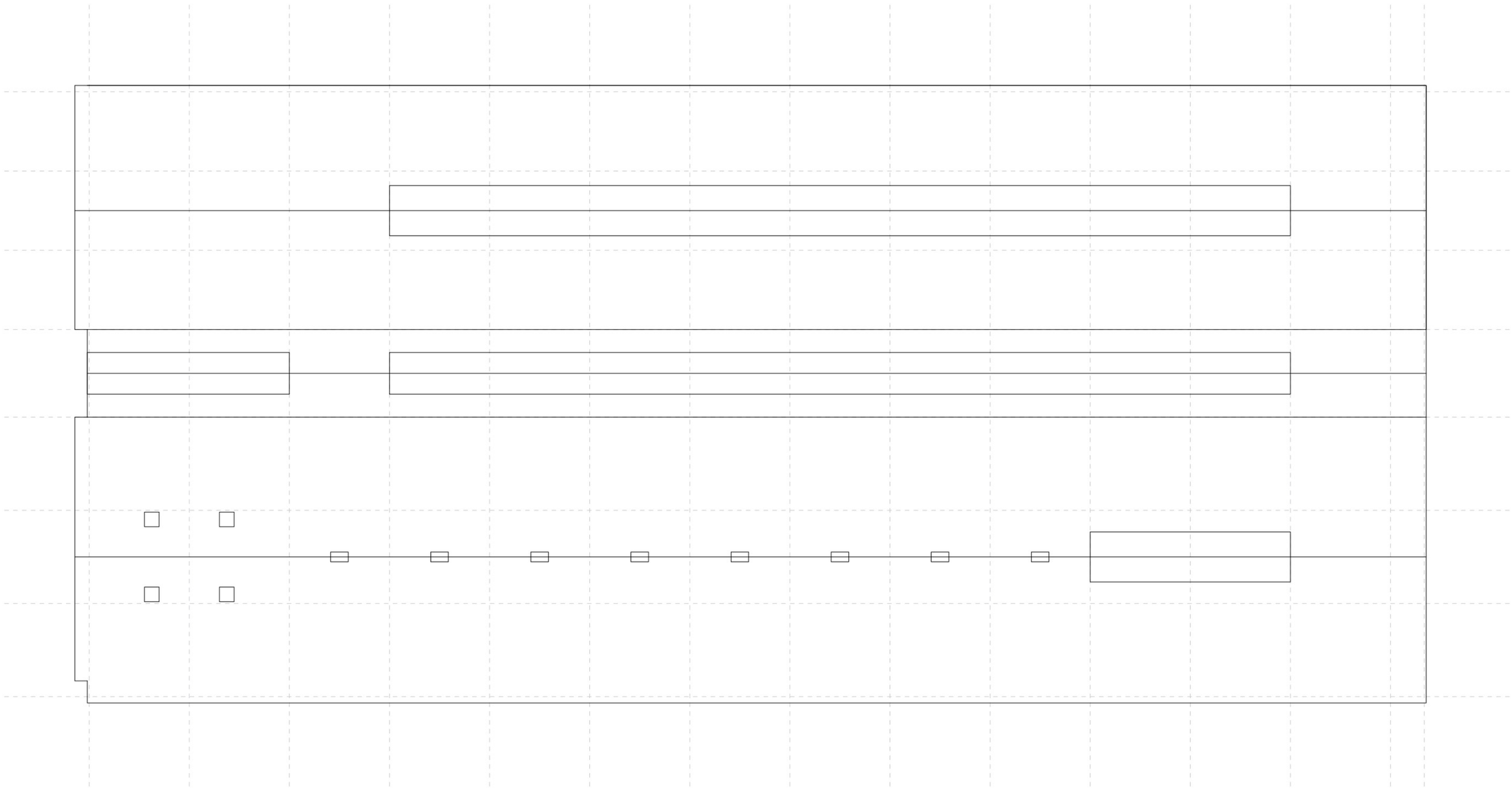
Second Floor



Third Floor



Fourth Floor



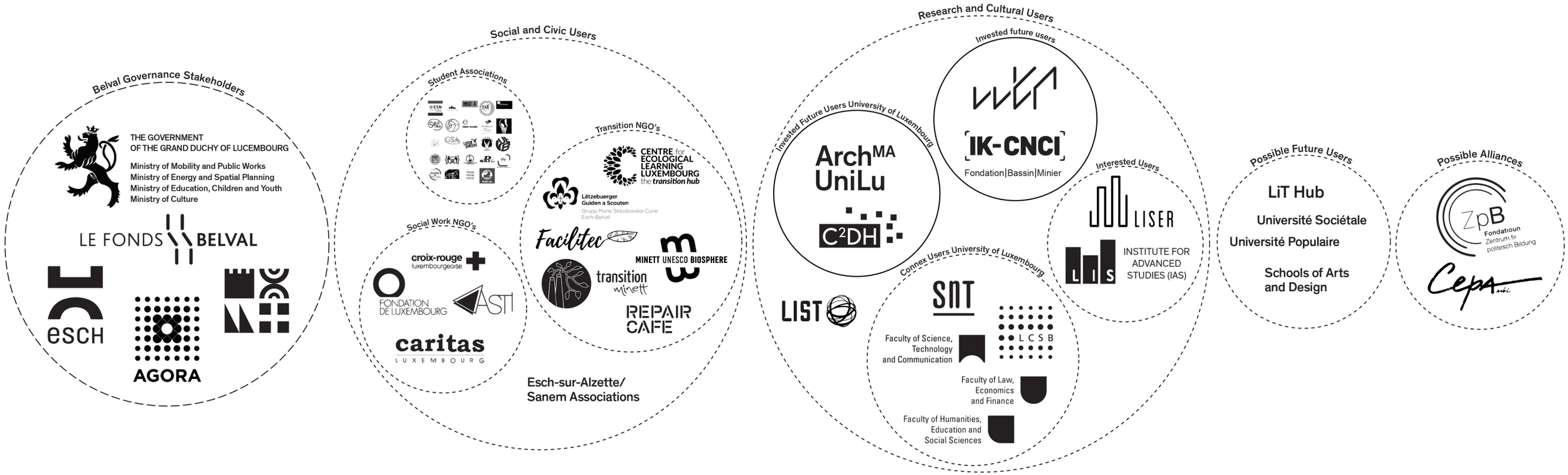
Roof

The Gebléishal today

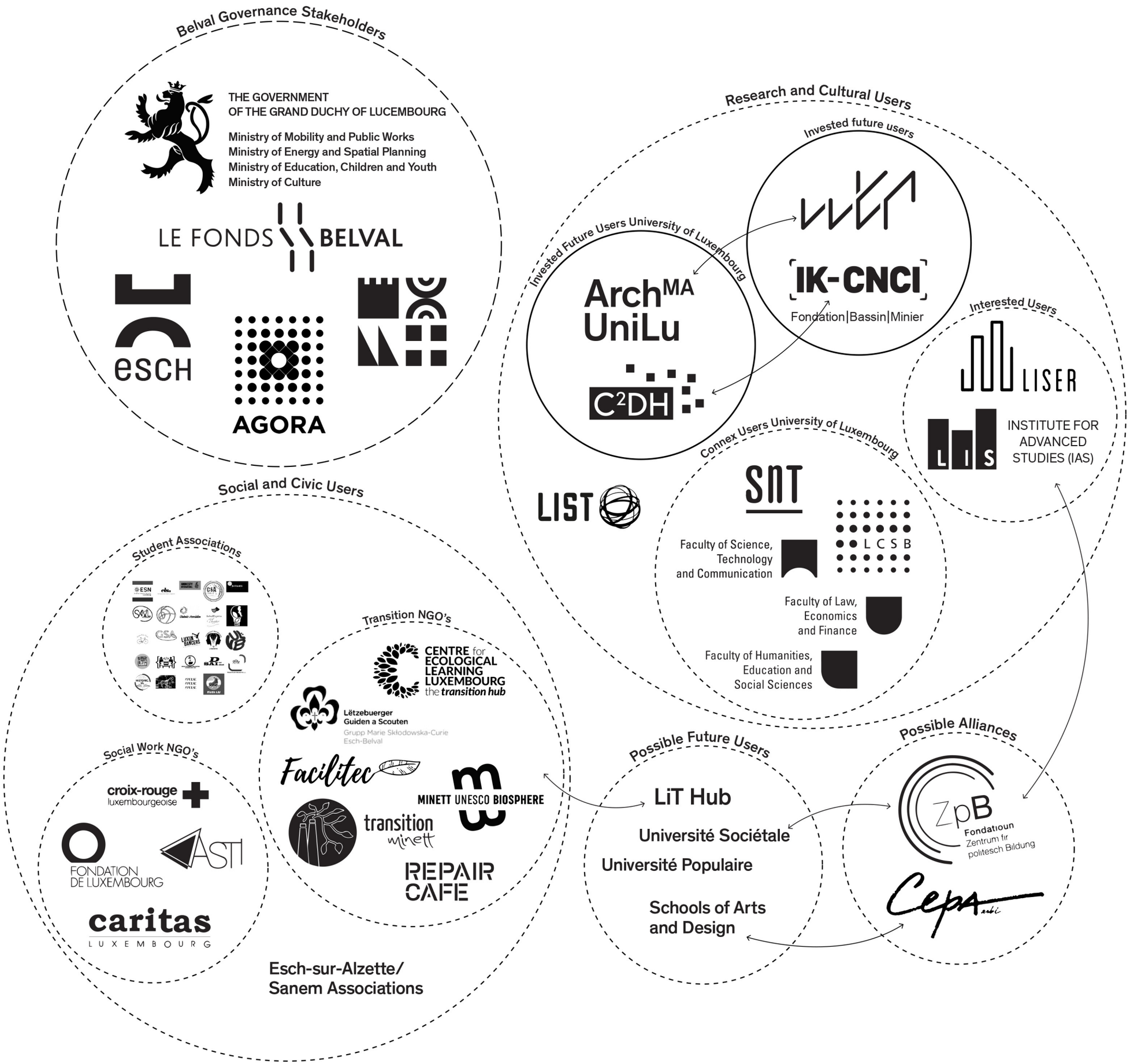
NDSM before repair

NDSM after repair

Programme et architecture


Belval Governance Stakeholders
THE GOVERNMENT
OF THE GRAND DUCHY OF LUCEMBOURG
Ministry of Mobility and Public Works
Ministry of Energy and Spatial Planning
Ministry of Education, Children and Youth
Ministry of Culture
LE FONDS BELVAL
esch
AGORA
Social and Civic Users
Student Associations
Transition NGO's
CENTRE for ECOLOGICAL LEARNING LUXEMBOURG the transition hub
Lëtzebuerger Guiden a Scouten
Grupp Marie Skłodowska-Curie Esch-Belval
Facilitec
MINETT UNESCO BIOSPHERE
transition minett
REPAIR CAFE
Social Work NGO's
croix-rouge luxembourgeoise
FONDATION DE LUXEMBOURG
ASTI
caritas LUXEMBOURG
Esch-sur-Alzette/
Sanem Associations
Research and Cultural Users
Invested future users
IK-CNCI
Fondation|Bassin|Minier
Invested Future Users University of Luxembourg
ArchMA
UniLu
C²DH
Interested Users
LISER
INSTITUTE FOR ADVANCED STUDIES (IAS)
LIST
Connex Users University of Luxembourg
SnT
Faculty of Science, Technology and Communication
LCSB
Faculty of Law, Economics and Finance
Faculty of Humanities, Education and Social Sciences
Possible Future Users
LiT Hub
Université Sociétale
Université Populaire
Schools of Arts and Design
Possible Alliances
ZpB
Fondatioun Zentrum fir politesch Bildung
Cepa

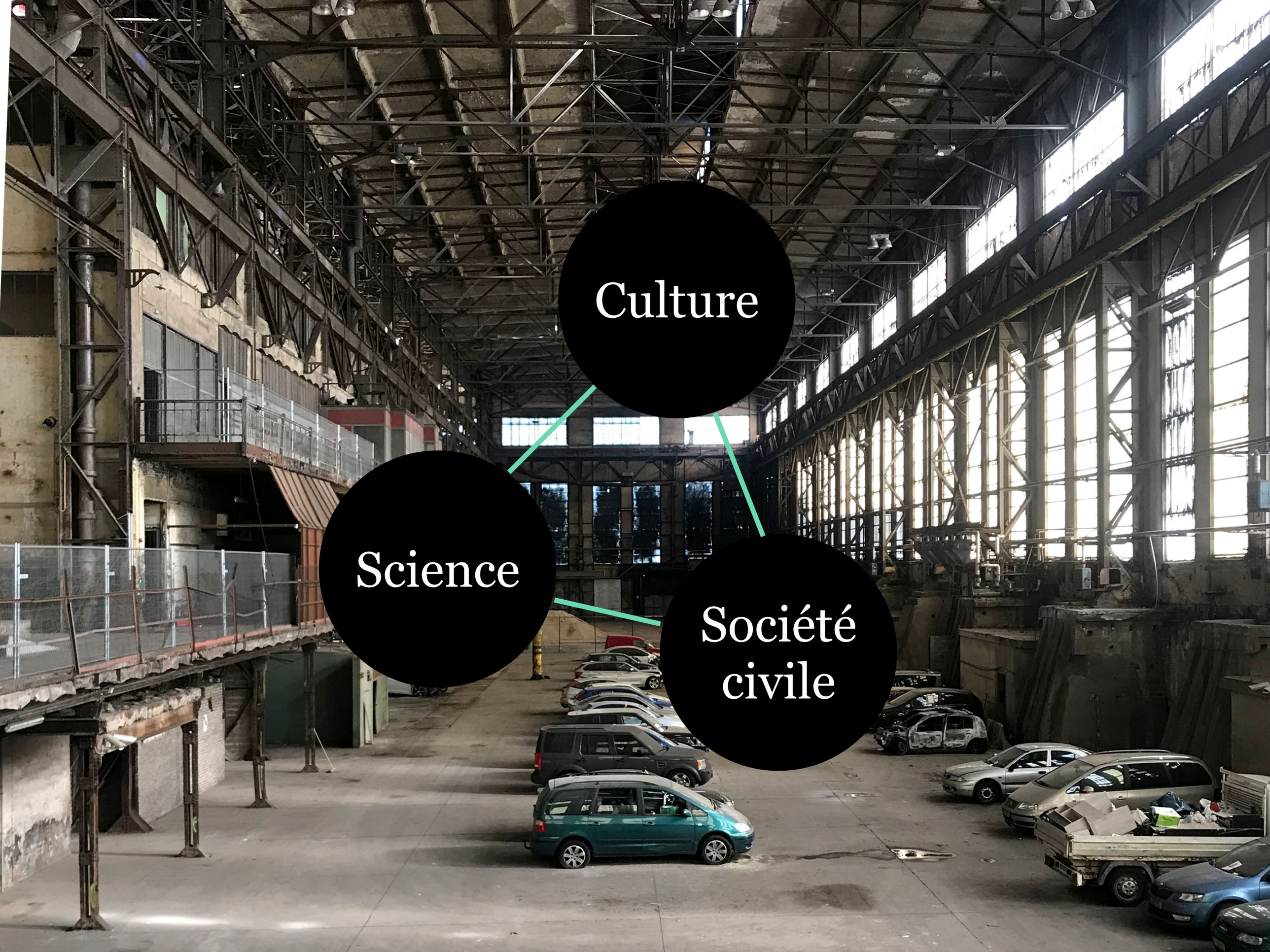
Actors


Belval Governance Stakeholders
THE GOVERNMENT
OF THE GRAND DUCHY OF LUCEMBOURG
Ministry of Mobility and Public Works
Ministry of Energy and Spatial Planning
Ministry of Education, Children and Youth
Ministry of Culture
LE FONDS BELVAL
esch
AGORA
Research and Cultural Users
Invested future users
IK-CNCI
Fondation|Bassin|Minier
Invested Future Users University of Luxembourg
ArchMA
UniLu
C2DH
Interested Users
LISER
LIS
INSTITUTE FOR
ADVANCED
STUDIES (IAS)
Connex Users University of Luxembourg
LIST
SnT
LCSB
Faculty of Science,
Technology
and Communication
Faculty of Law,
Economics
and Finance
Faculty of Humanities,
Education and
Social Sciences
Social and Civic Users
Student Associations
Transition NGO's
CENTRE for
ECOLOGICAL
LEARNING
LUXEMBOURG
the transition hub
Lëtzebuerger
Guiden a Scouten
Grupp Marie Skłodowska-Curie
Esch-Belval
Facilitec
MINETT UNESCO BIOSPHERE
transition
minett
REPAIR
CAFE
Social Work NGO's
croix-rouge
luxembourgeoise
FONDATION
DE LUXEMBOURG
ASTI
caritas
LUXEMBOURG
Esch-sur-Alzette/
Sanem Associations
Possible Future Users
LiT Hub
Université Sociétale
Université Populaire
Schools of Arts
and Design
Possible Alliances
ZpB
Fondatioun
Zentrum fir
politesch Bildung
Cepa

Manque de logements abordables

Manque d’espace pour s’approprier (surtout pour les étudiants)

Manque de nature


Culture
Science
Société civile

Architecture

luca
ArchMa

Arts

School Arts/Design
CEPA

Learning

Uni Sociétale
Uni Populaire

Living Lab

Students Association
Esch Association

Société Civile

Transition

CELL
Facilitec
Transition Lab

Living Lab

Living Lab

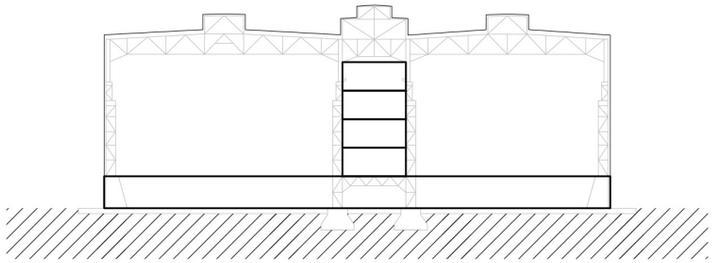
Society

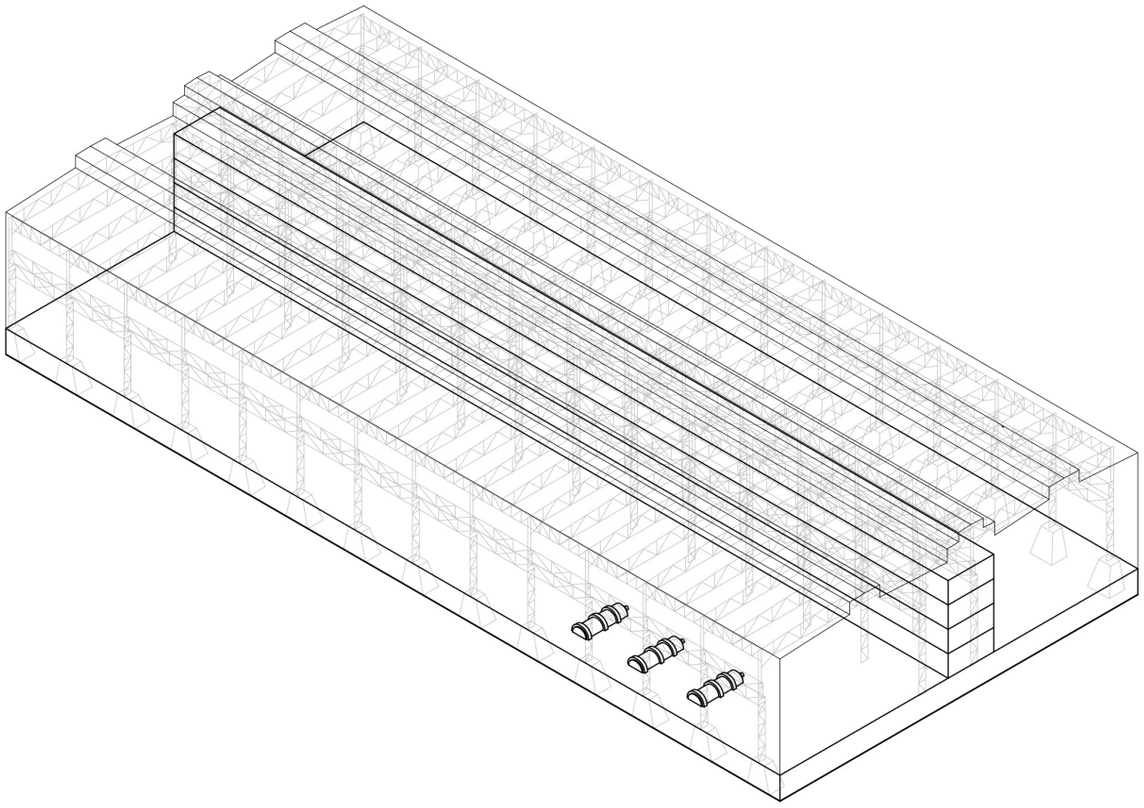
LISER
LIS
ZpB

History

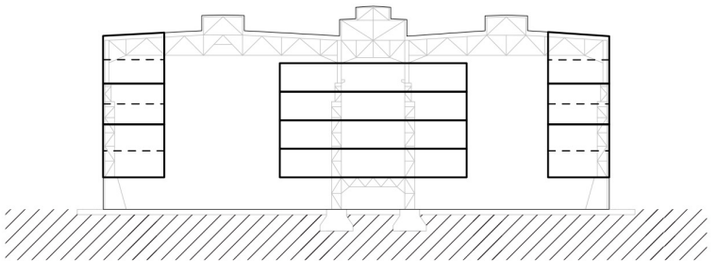
IK-CNCI
C2DH

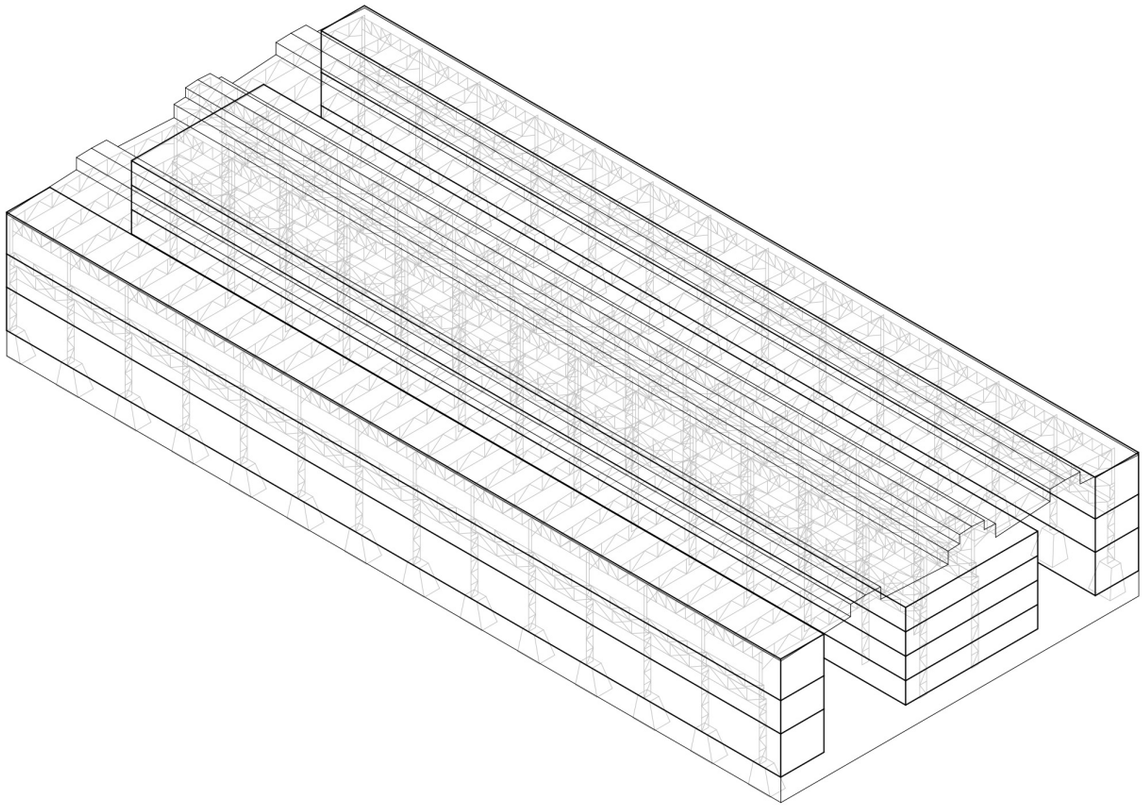
LOCHAL



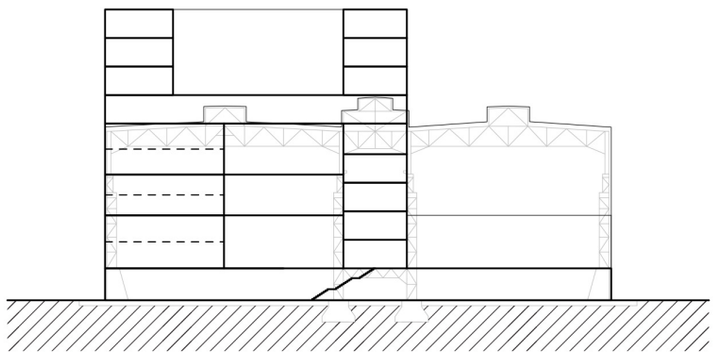


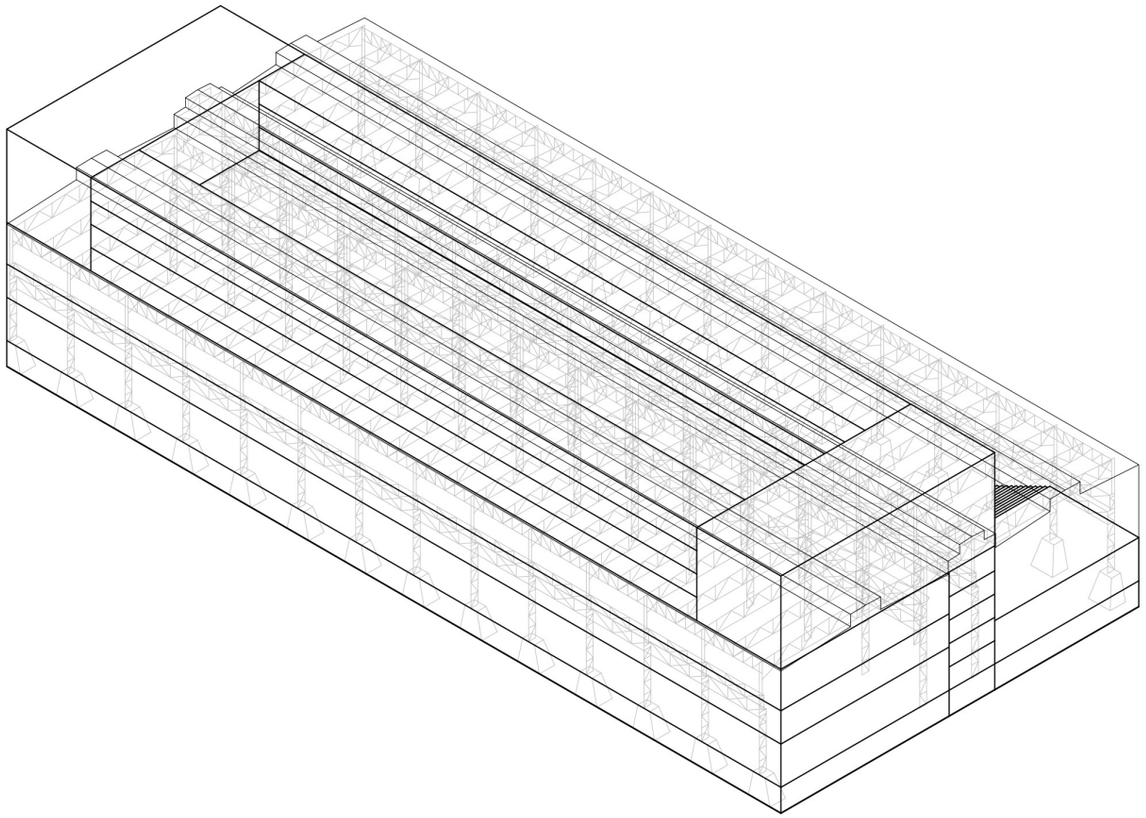
Scenario “Restoration”



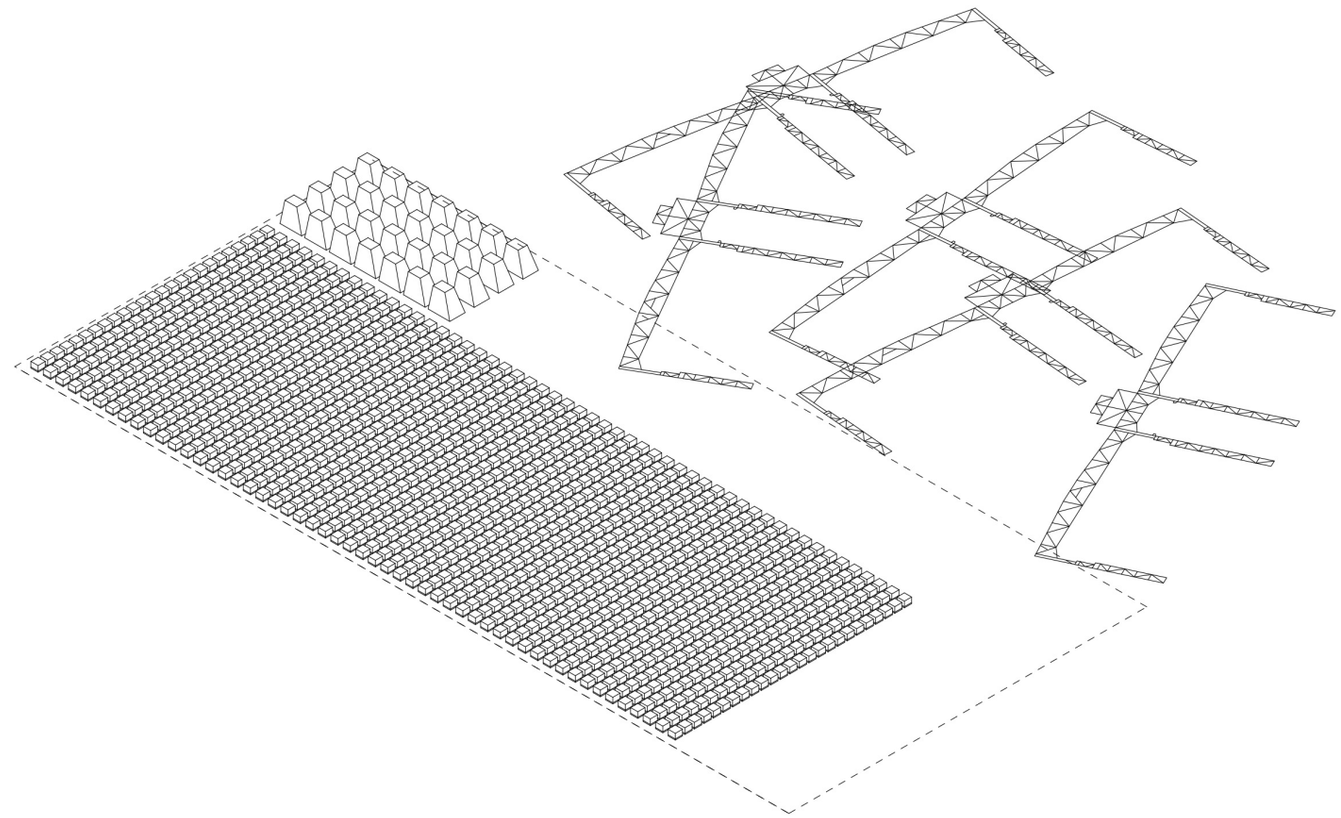


Scenario “Nesting”



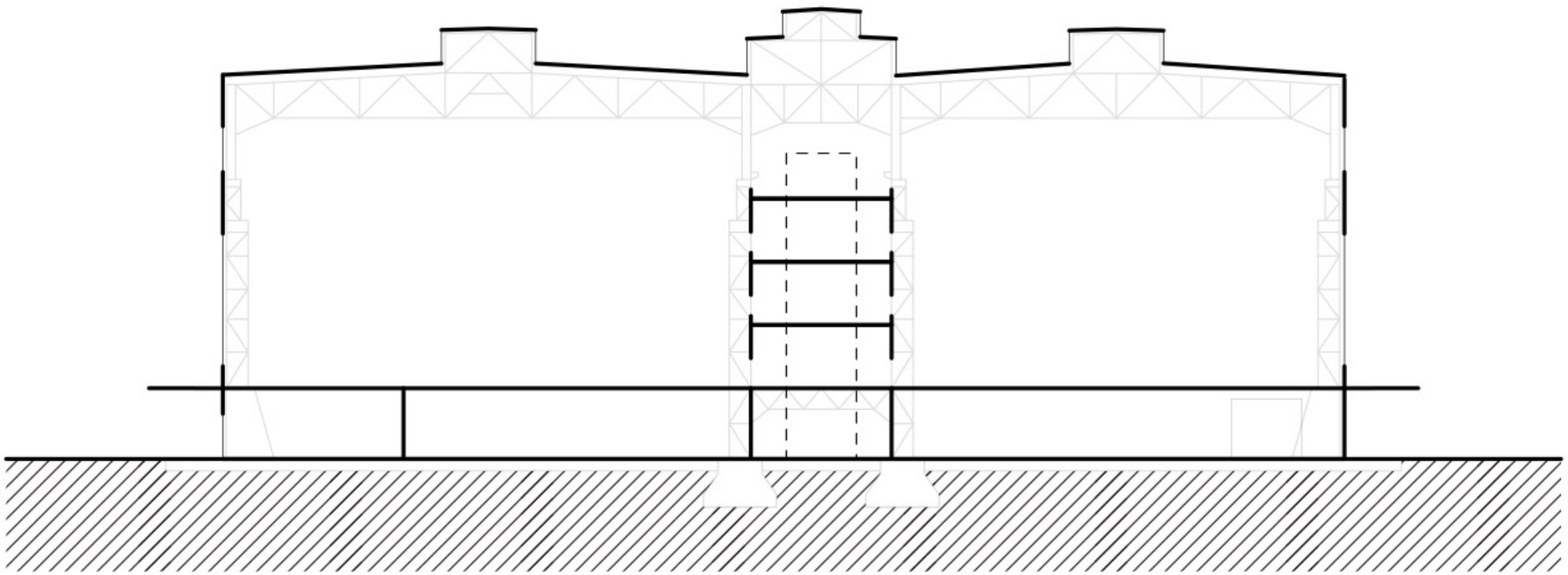


Scenario “Congestion”

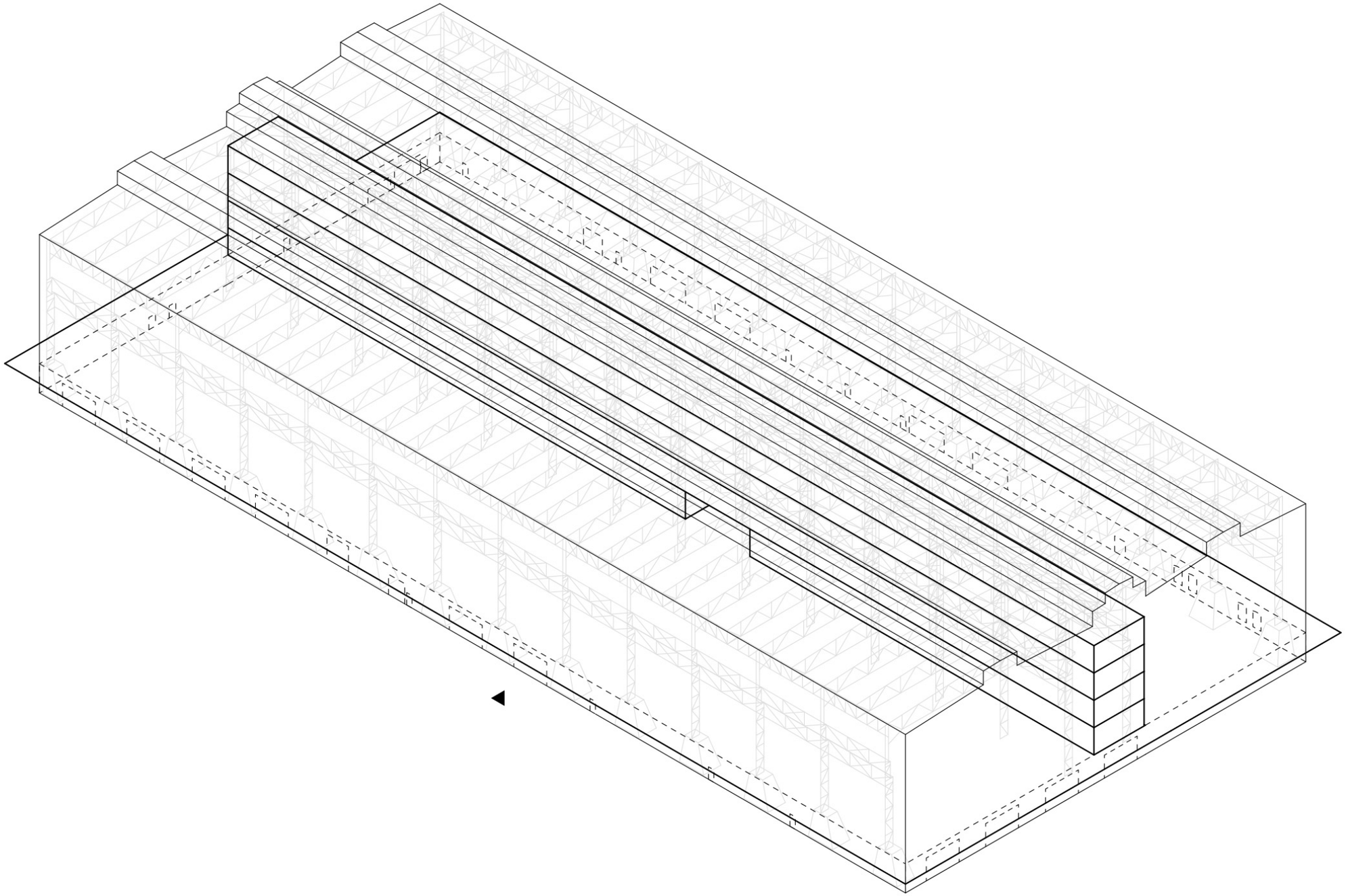


Scenario “Unbuilding”

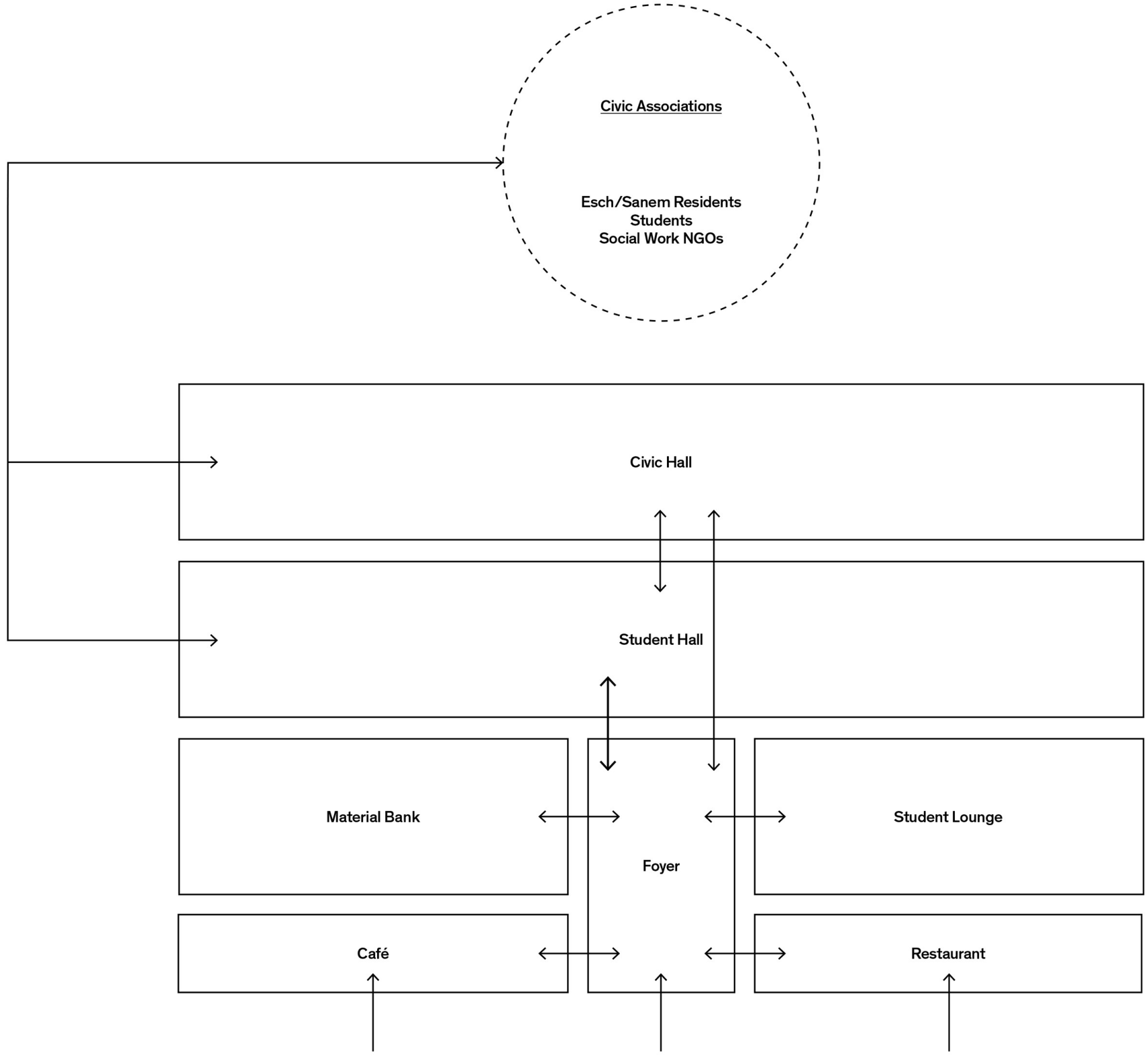
22 000 m3 concrete
3 000 m3 bricks
1 000 m3 steel



1st Scenario Restoration

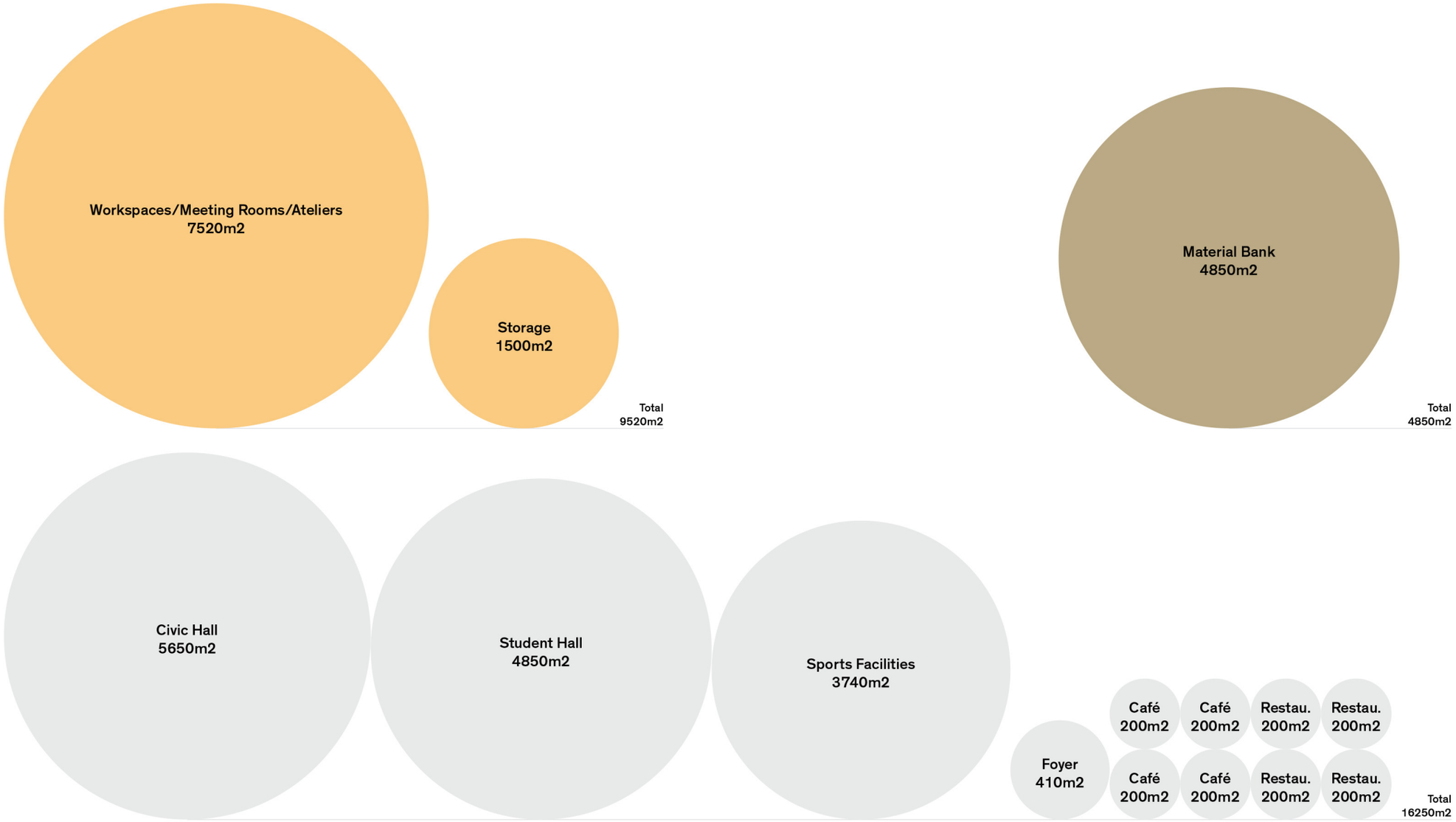


1st Scenario Restoration
32 470 m2 / FAR 2.6



Programme Restoration

Outdoor Public Space

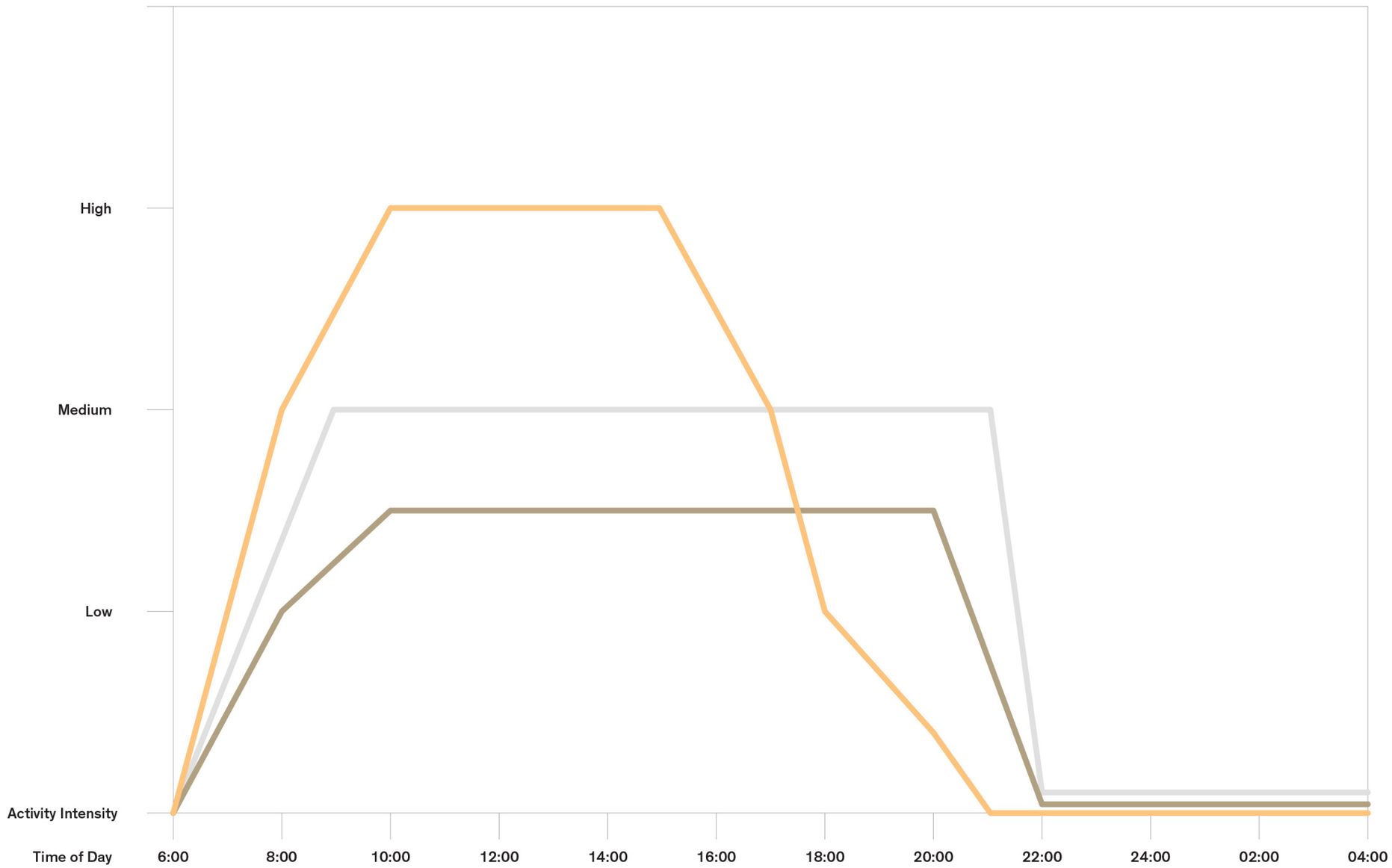


Programme Restoration

All visitors | Civic & Student Associations | Material Bank

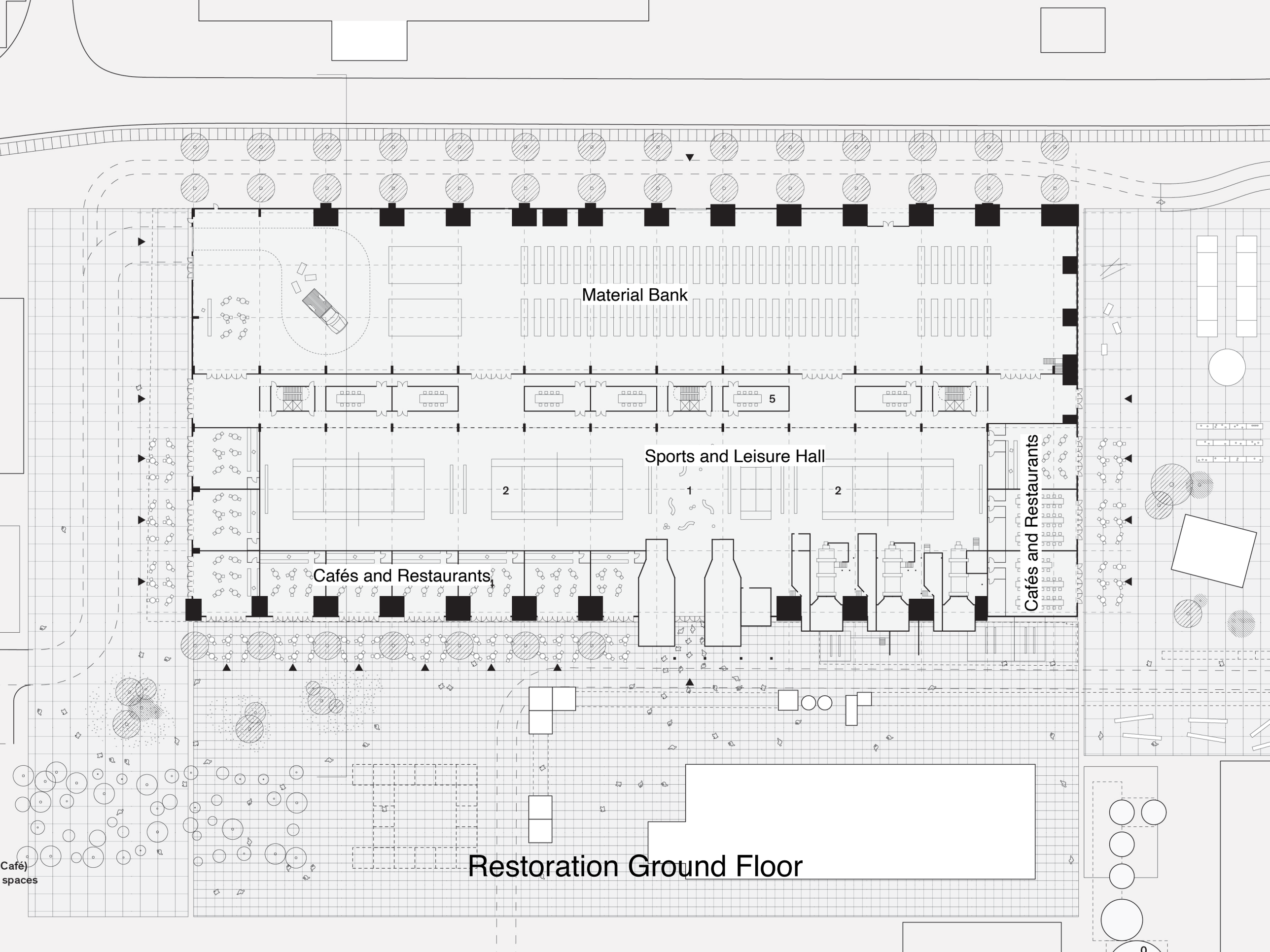
Programme Restoration

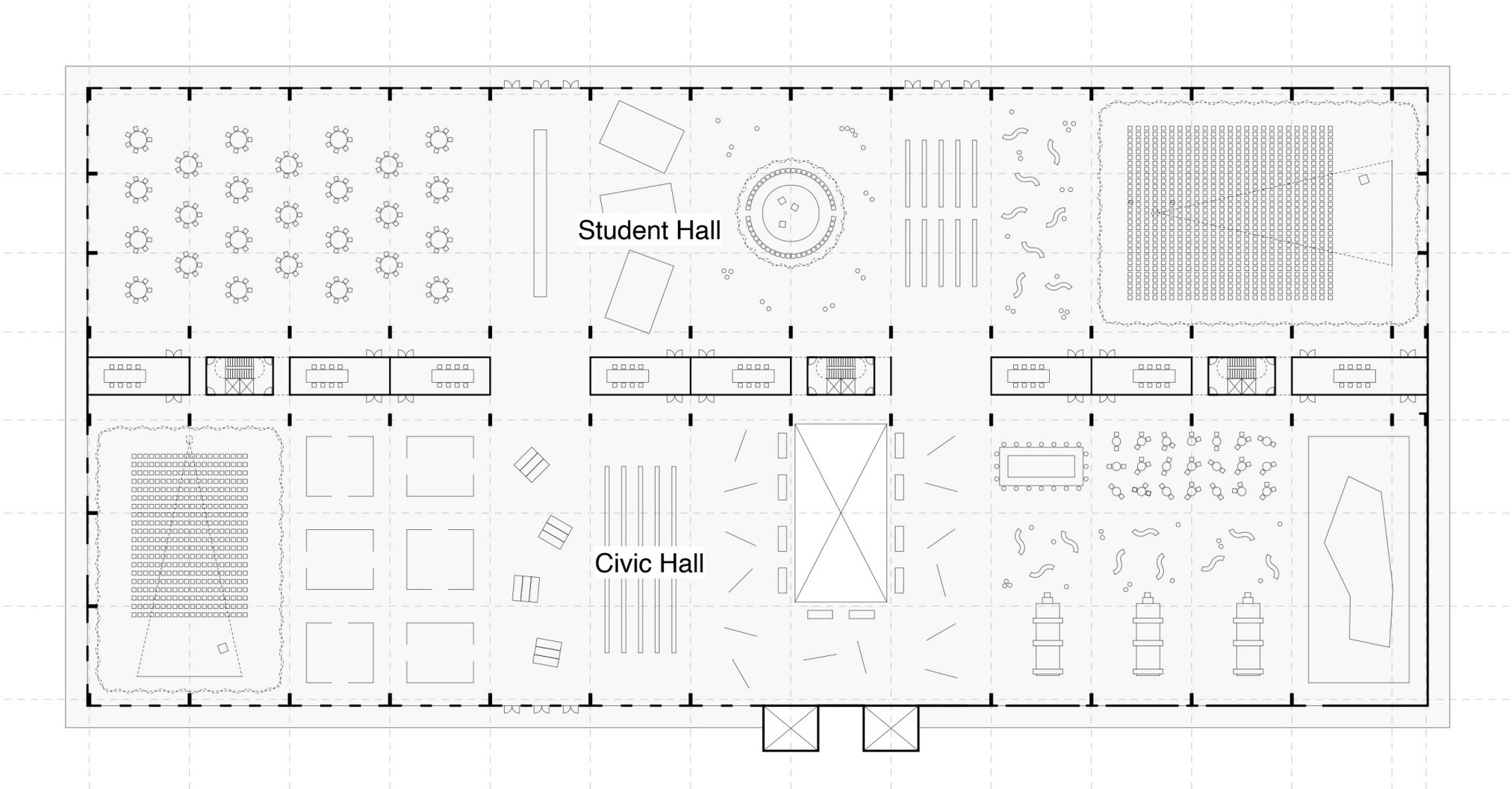
All visitors | Civic & Student Associations | Material Bank



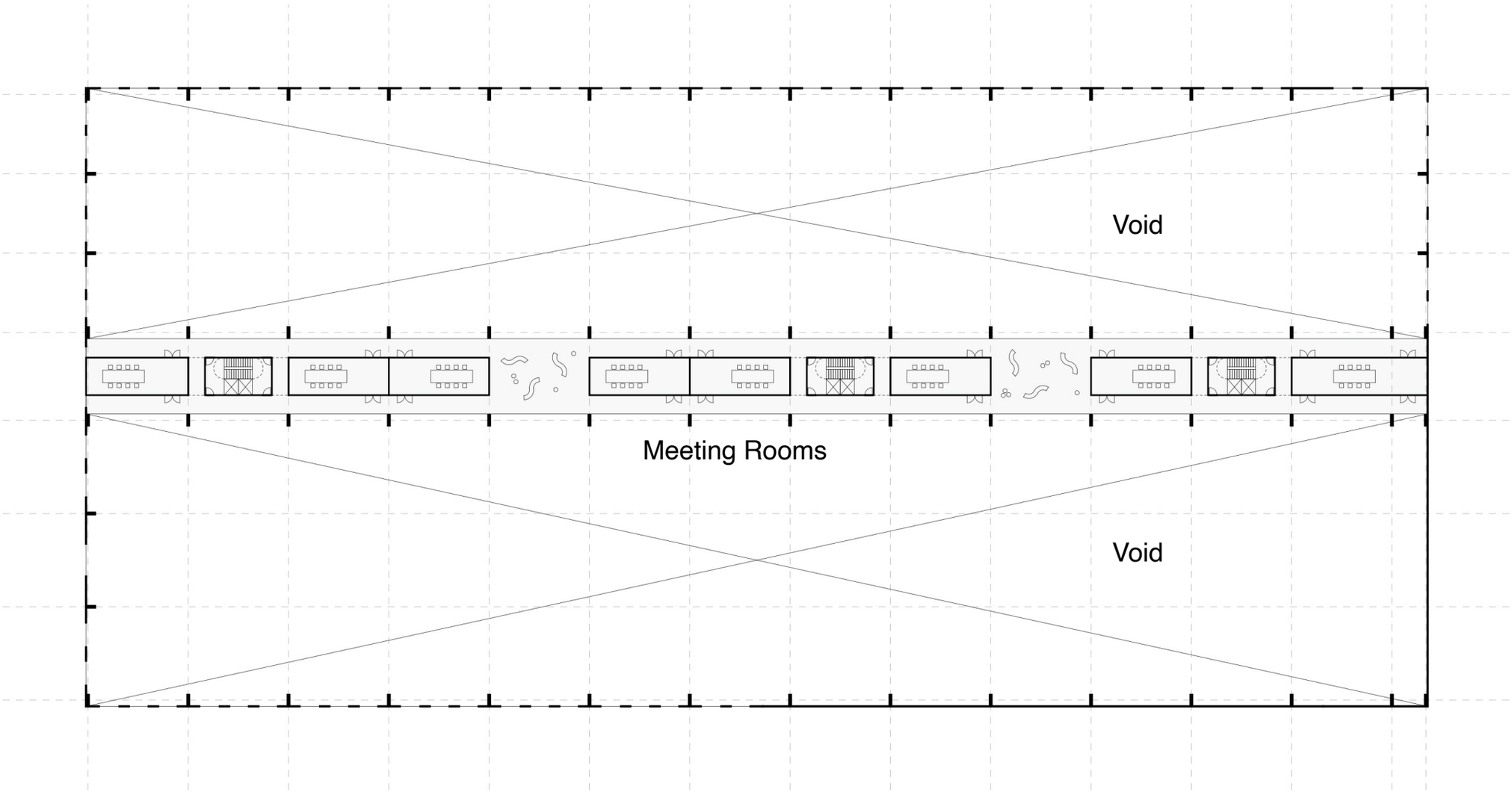
Frequency of Use Restoration

All visitors | Civic & Student Associations | Material Bank

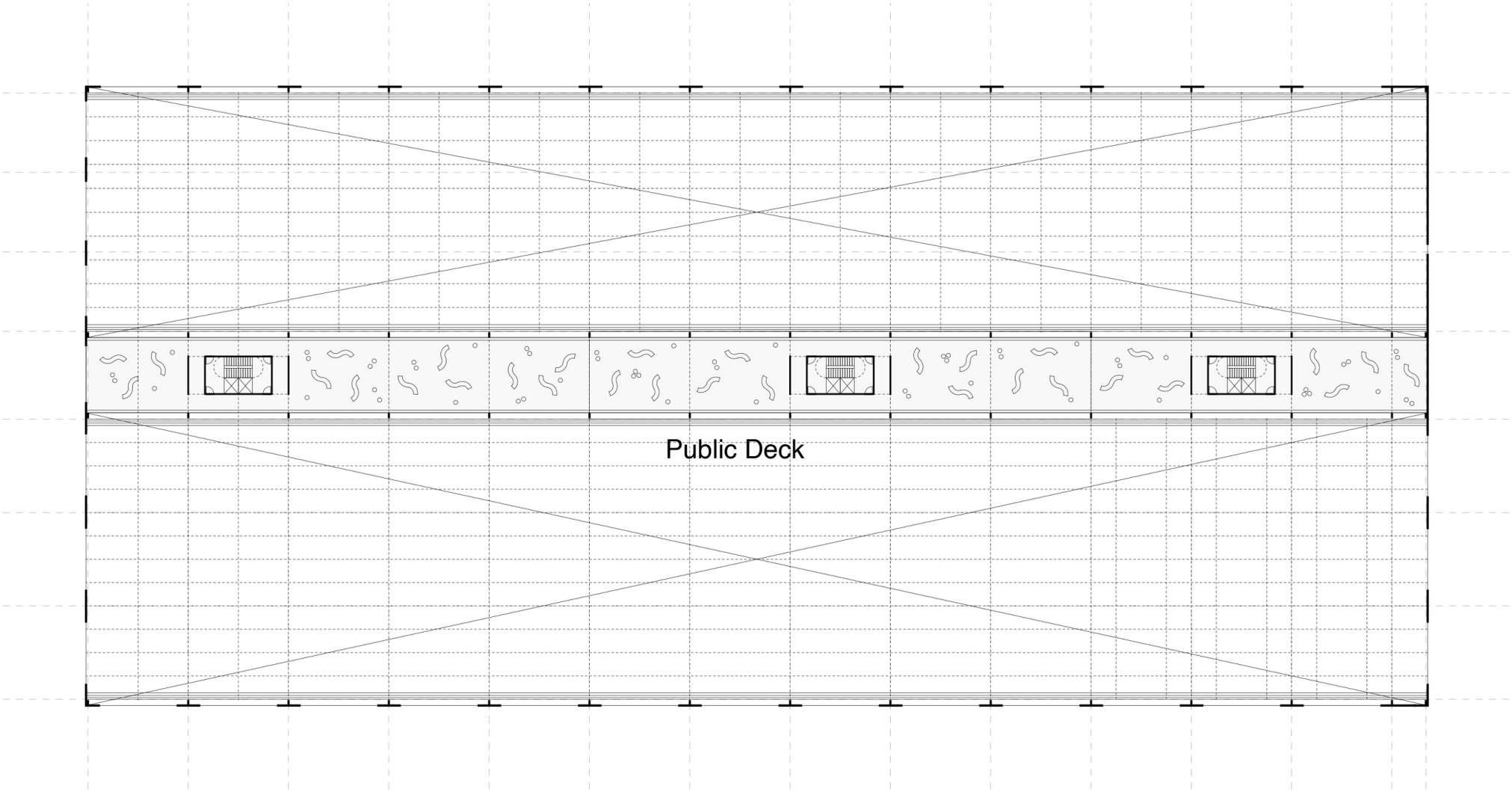

Material Bank
5
Sports and Leisure Hall
2
1
2
Cafés and Restaurants
Cafés and Restaurants
Restoration Ground Floor
Café)
spaces



Restoration First Floor

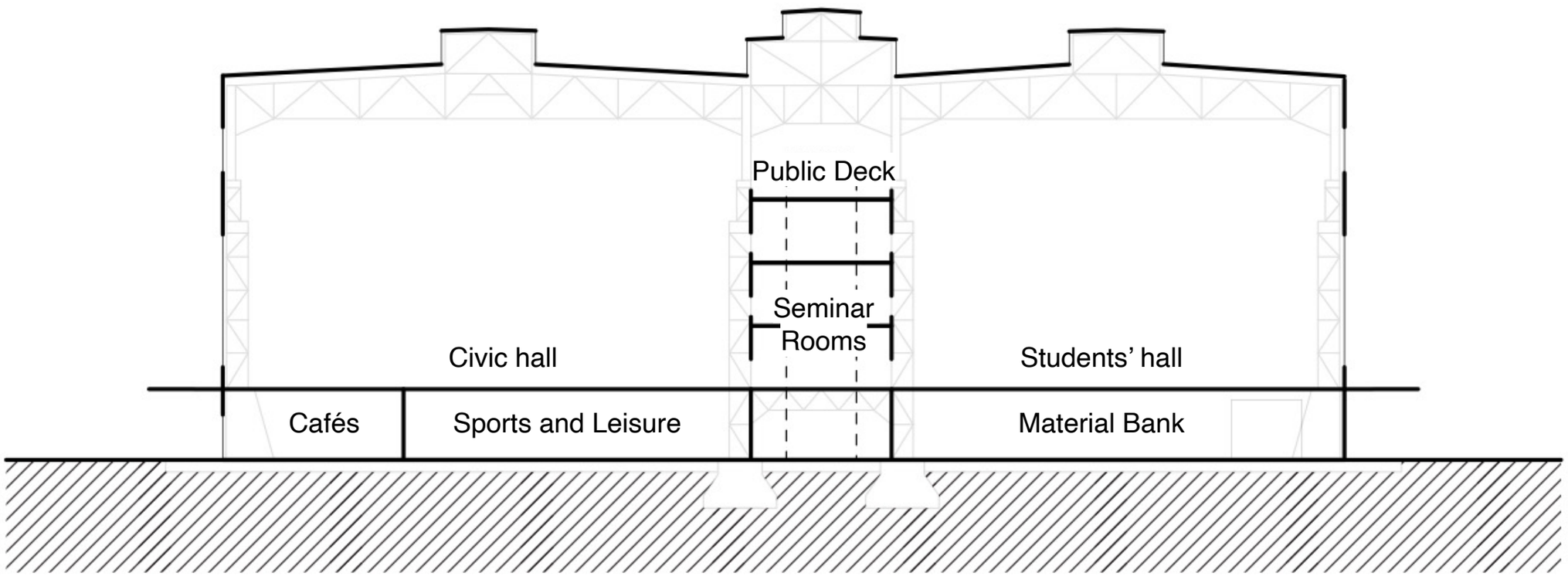


Restoration Second Floor

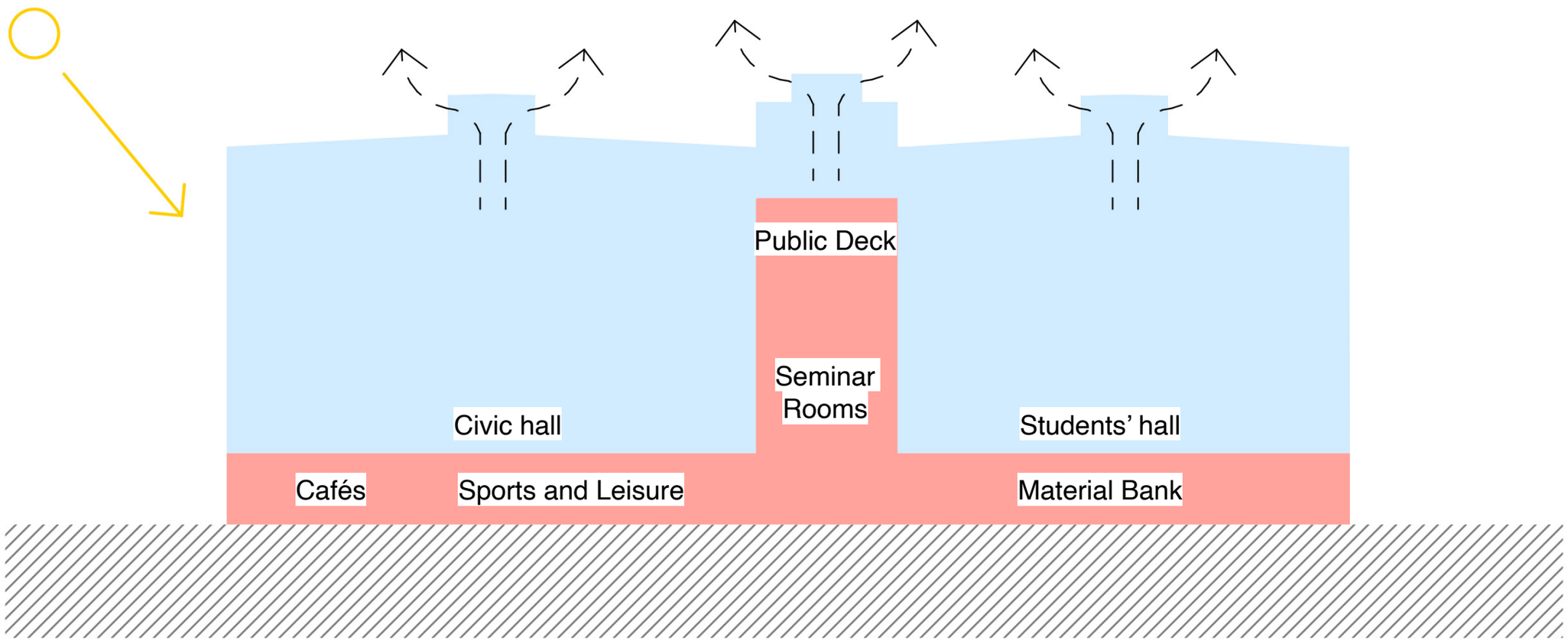


Restoration Third Floor

Floor Structure according to historic building

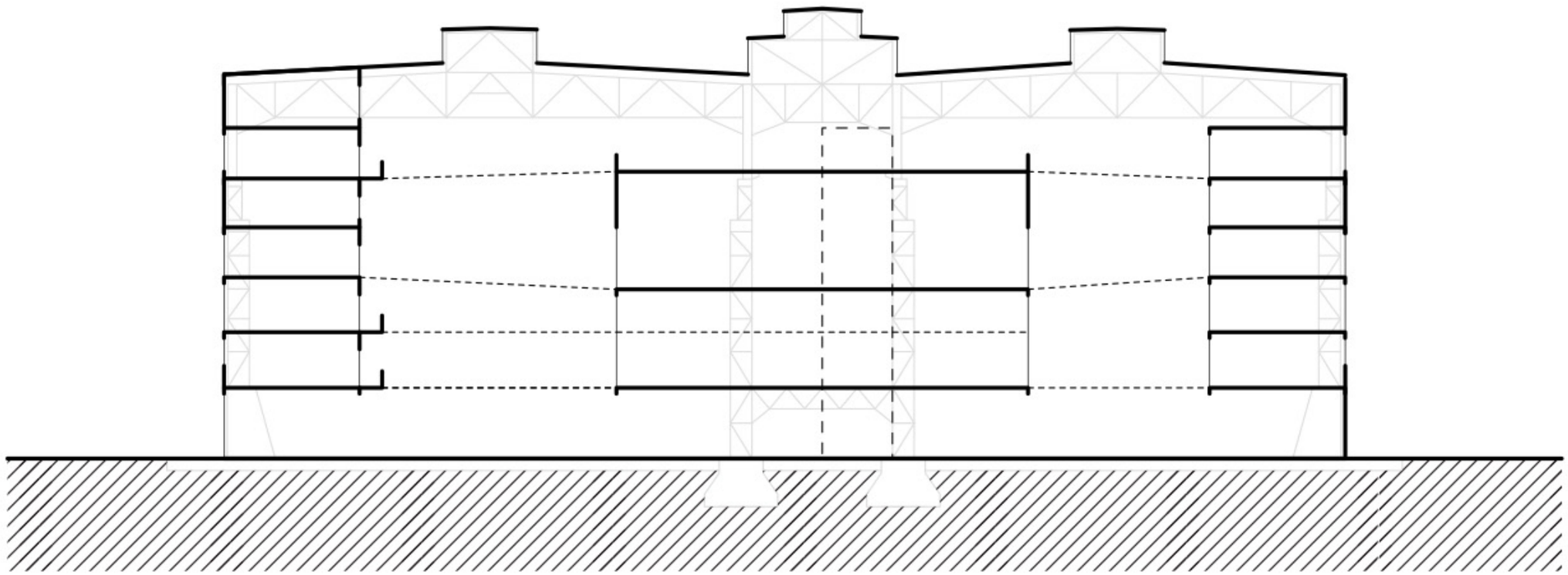


1st Scenario Restoration

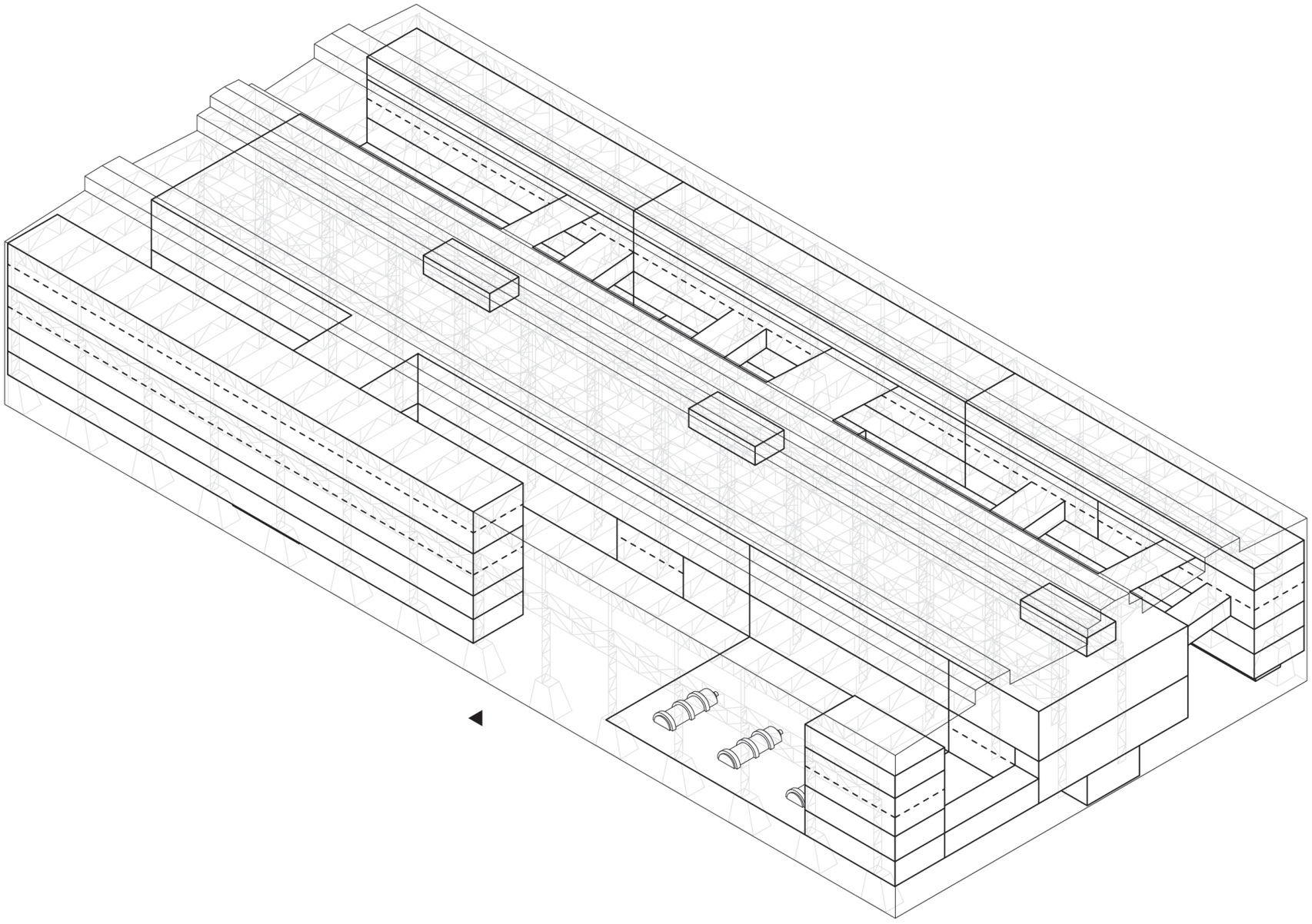


Climate Control Diagramme

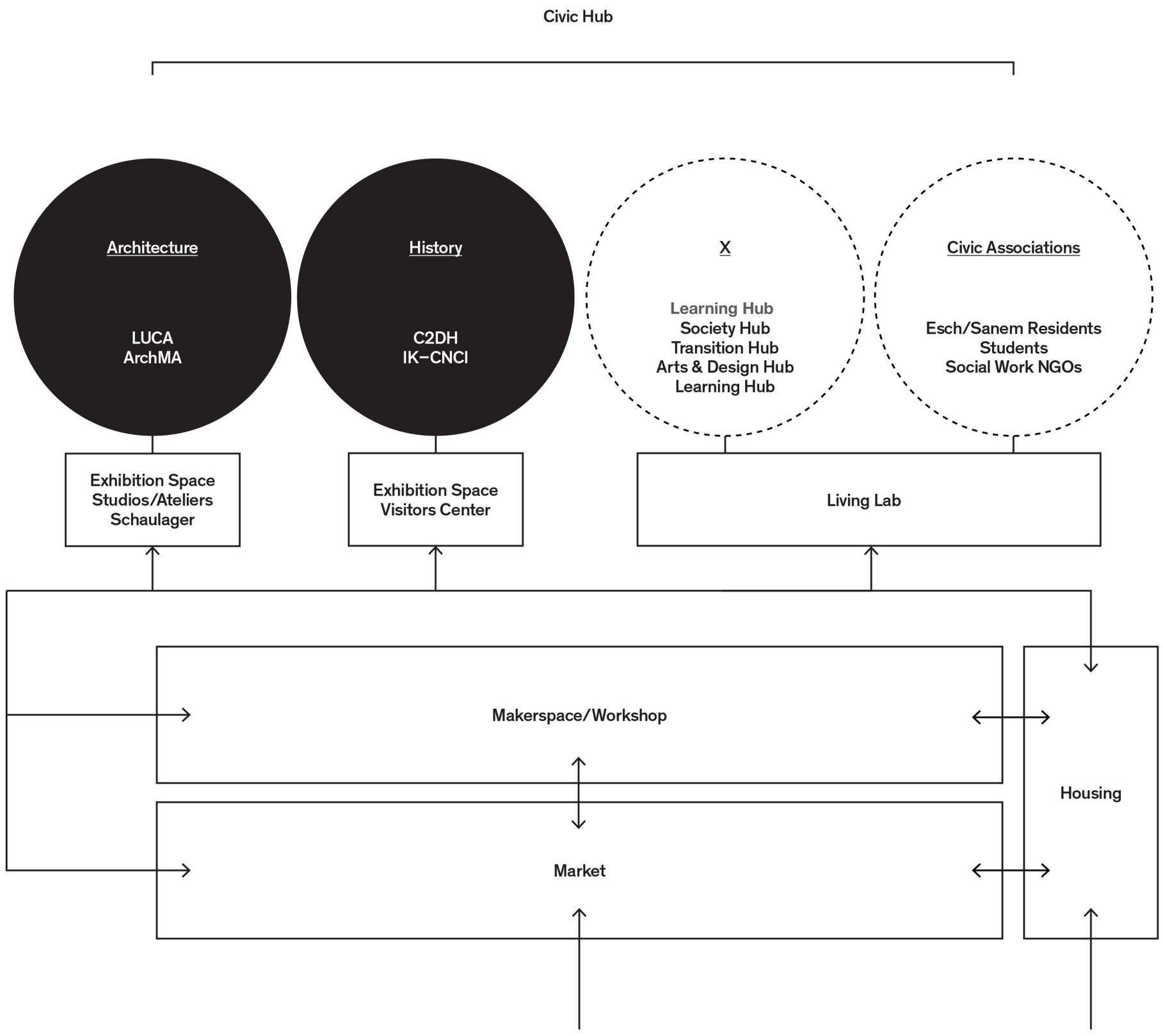
Reference LocHal



2nd Scenario Nesting



2nd Scenario Nesting
47500 m2 / FAR 4



Programme Nesting

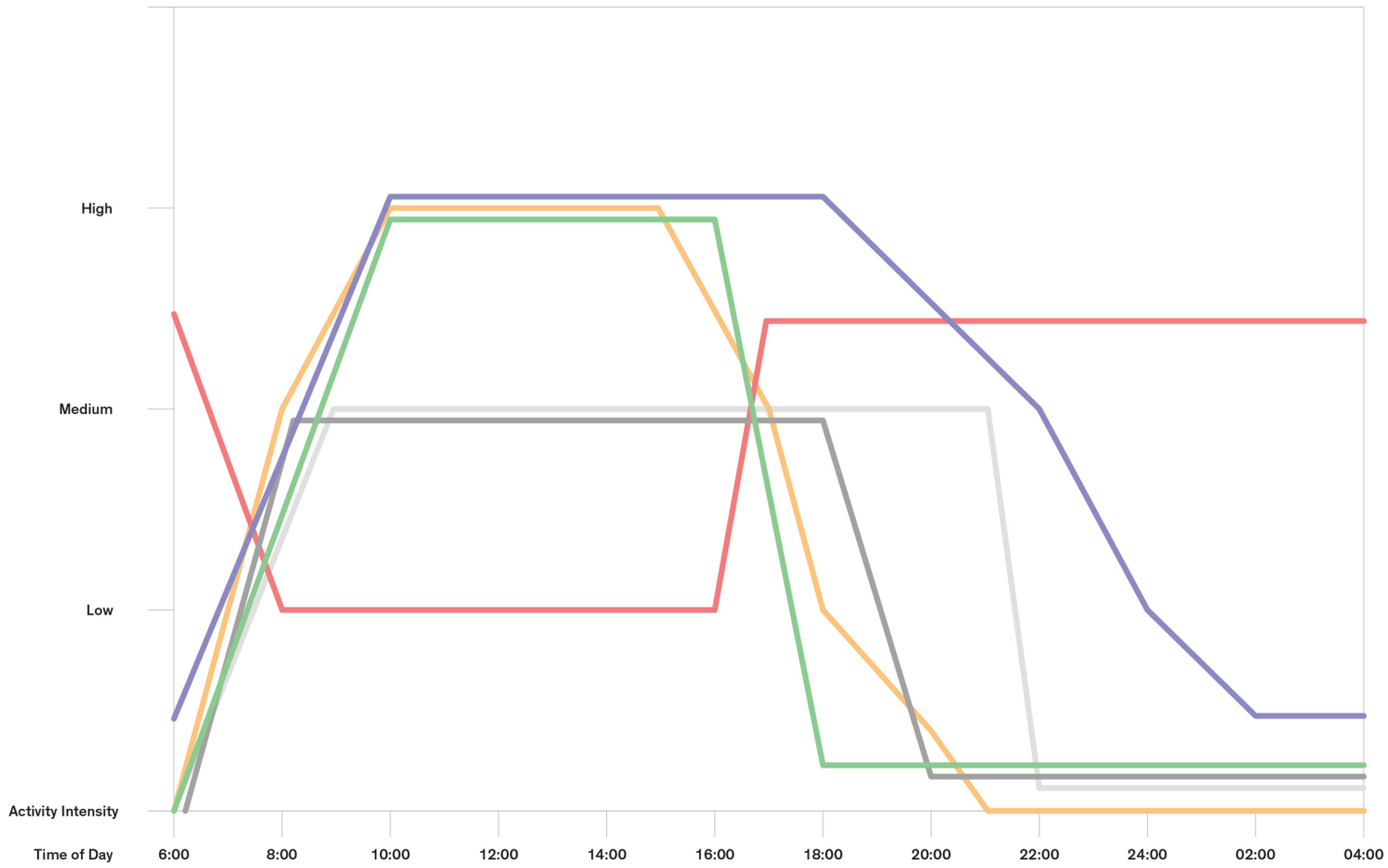
Outdoor Public Space

Programme Nesting

All visitors | Civic Associations | Residents | Potential Hub "X" | History Hub | Architecture Hub

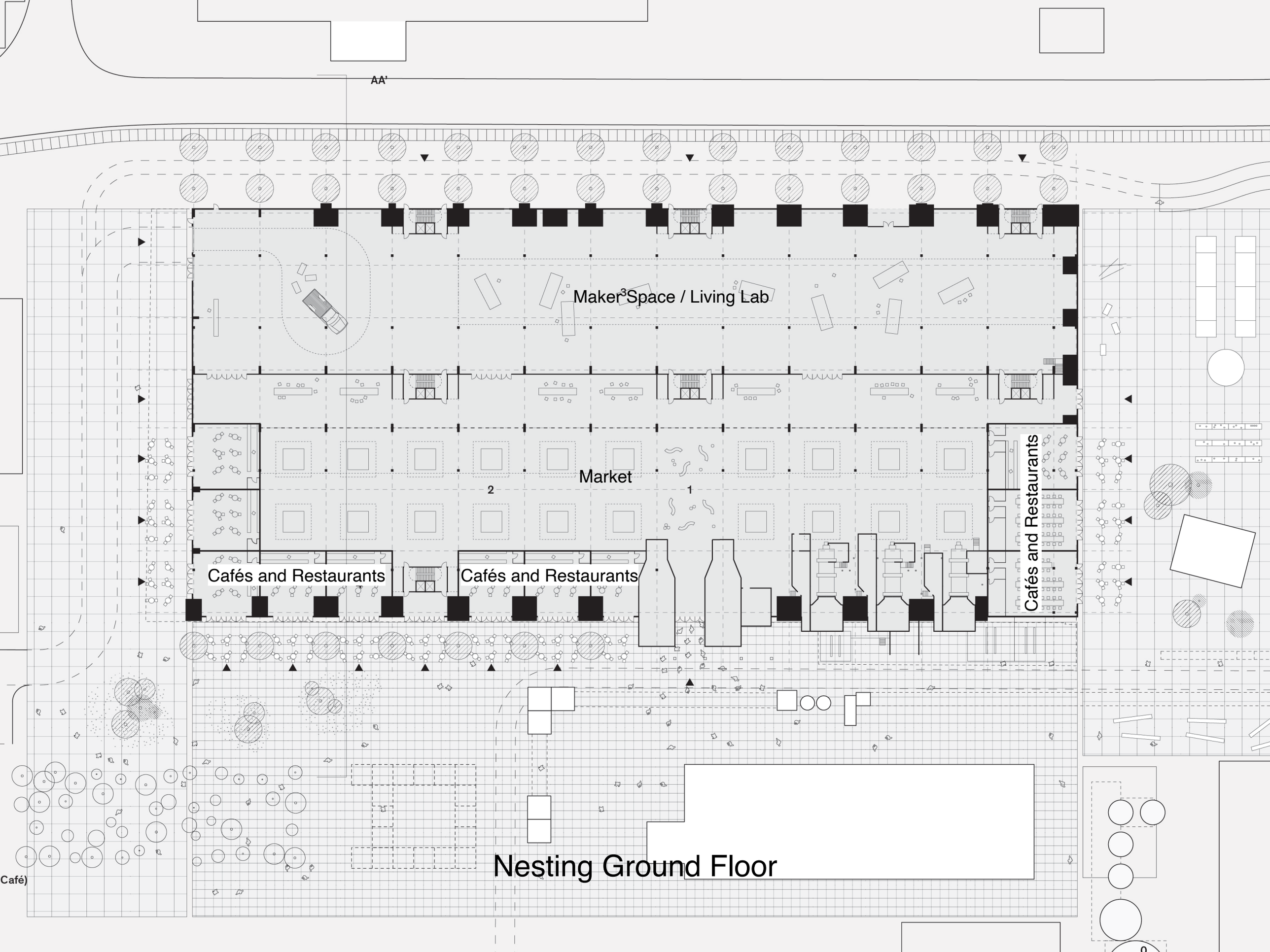
Programme Nesting

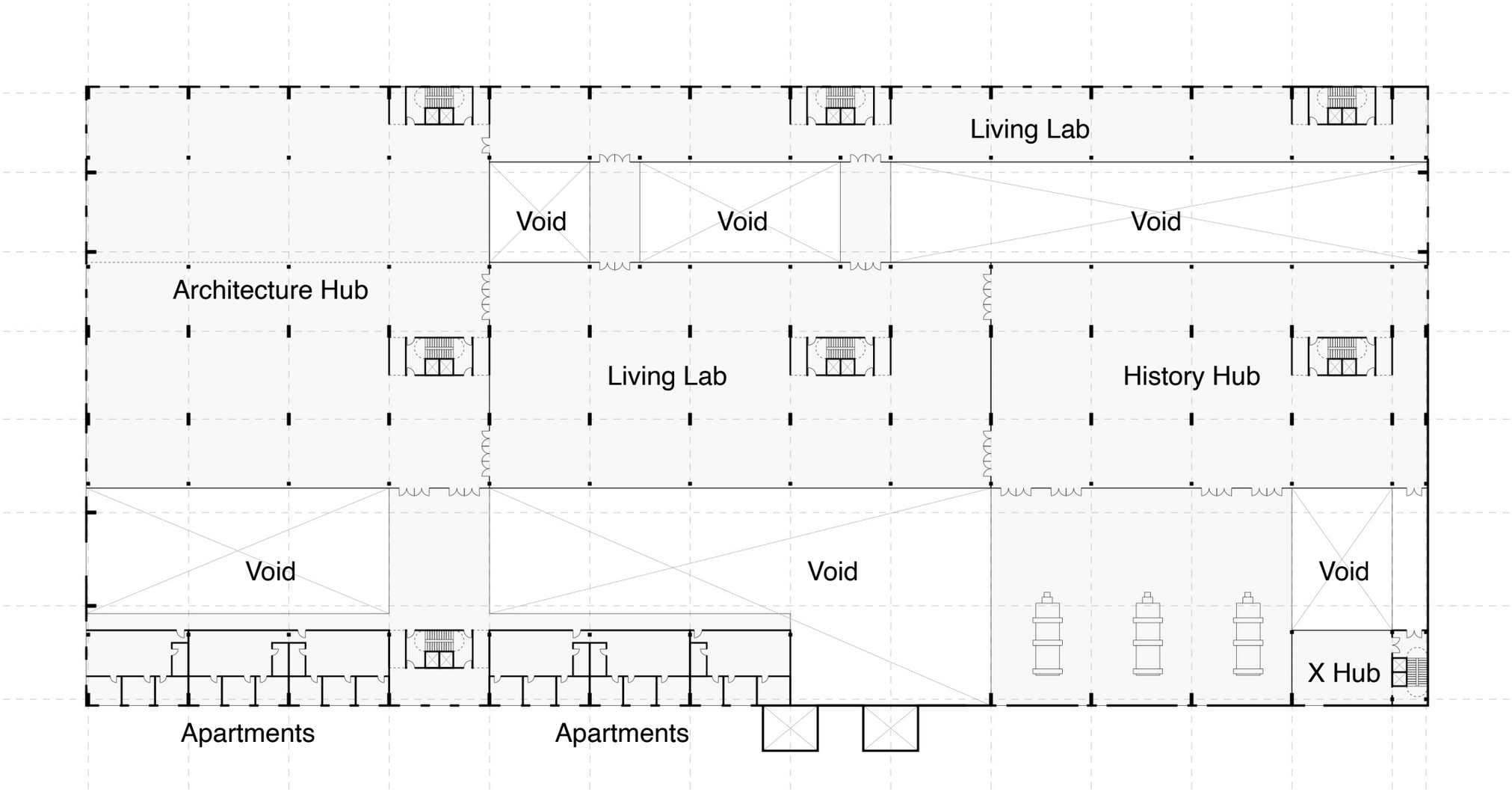
All visitors | Civic Associations | Residents | Potential Hub “X” | History Hub | Architecture Hub



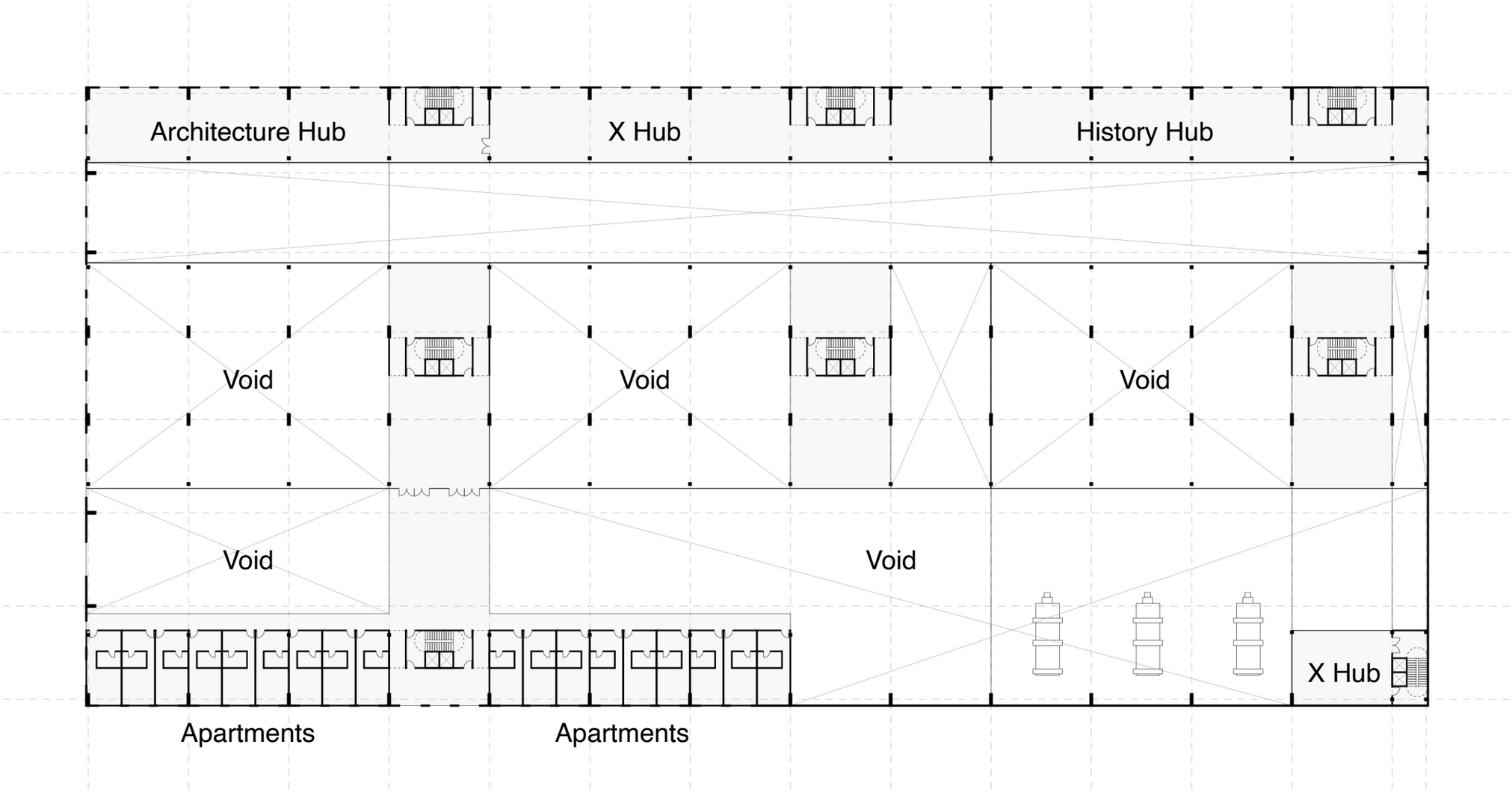
Frequency of Use Nesting

All visitors · Civic Associations · Residents · Potential Hub “X” · History Hub · Architecture Hub

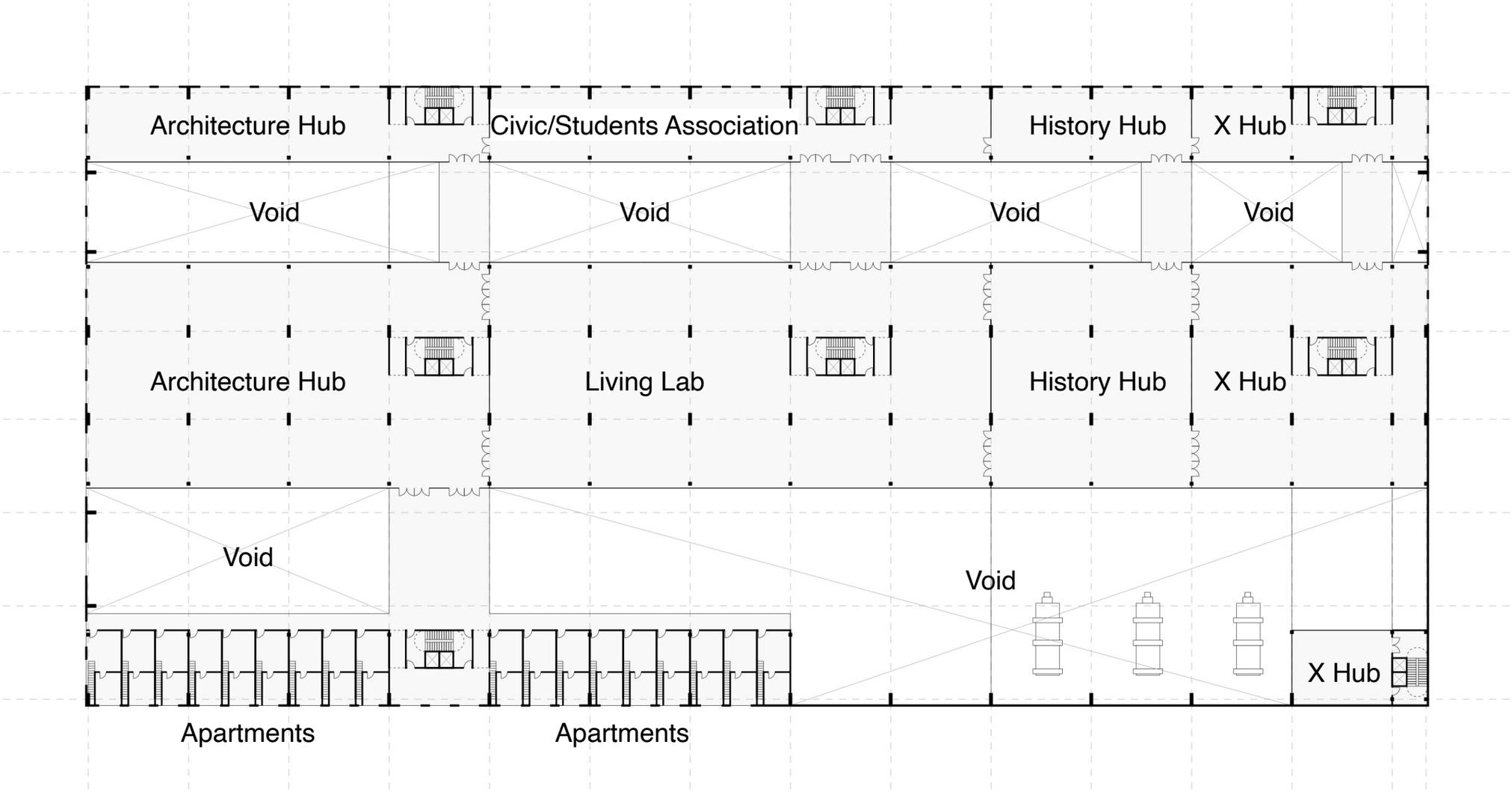

AA'
Maker³Space / Living Lab
Market
2
1
Cafés and Restaurants
Cafés and Restaurants
Cafés and Restaurants
Nesting Ground Floor
Café)



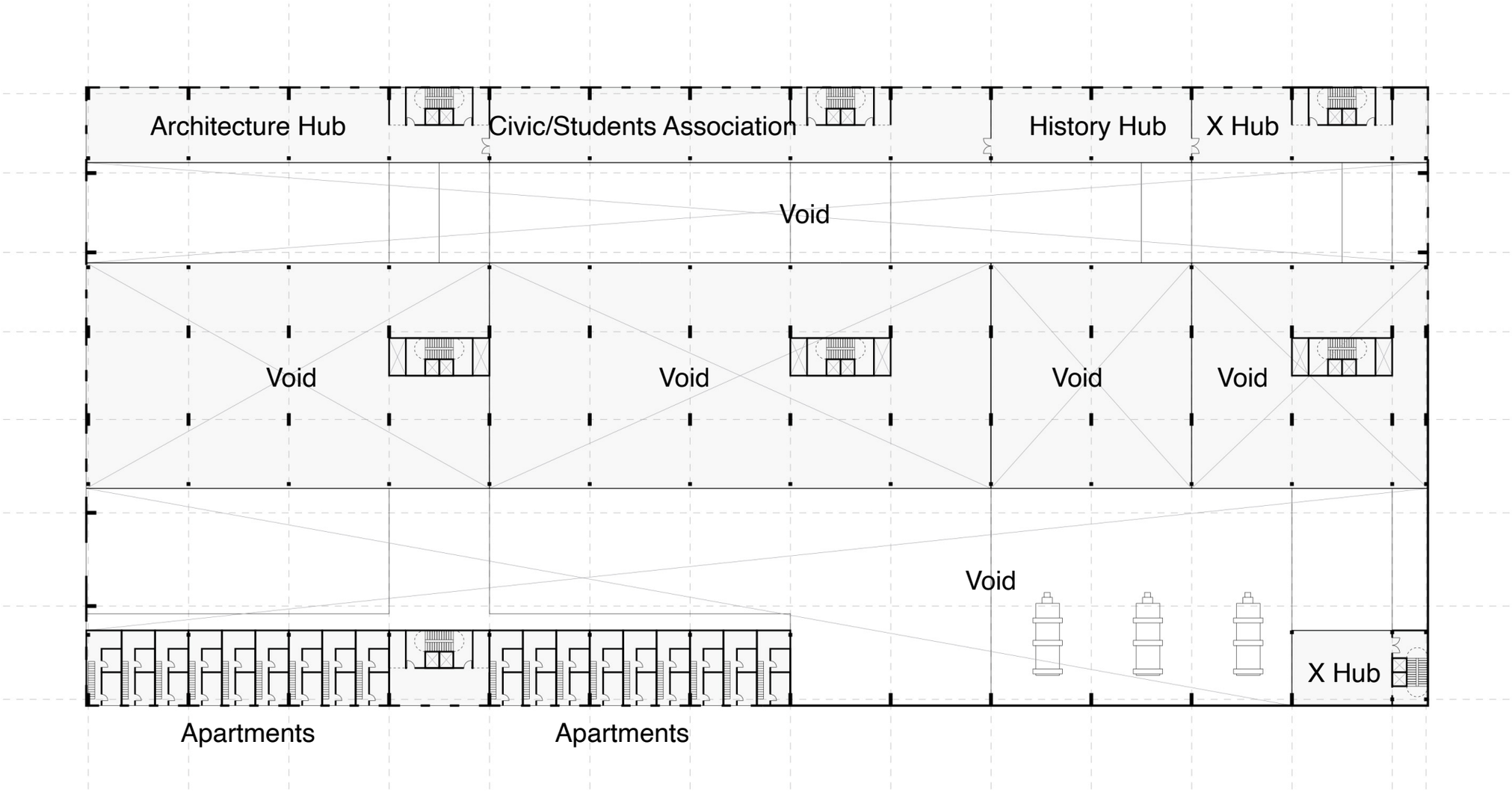
Nesting First Floor



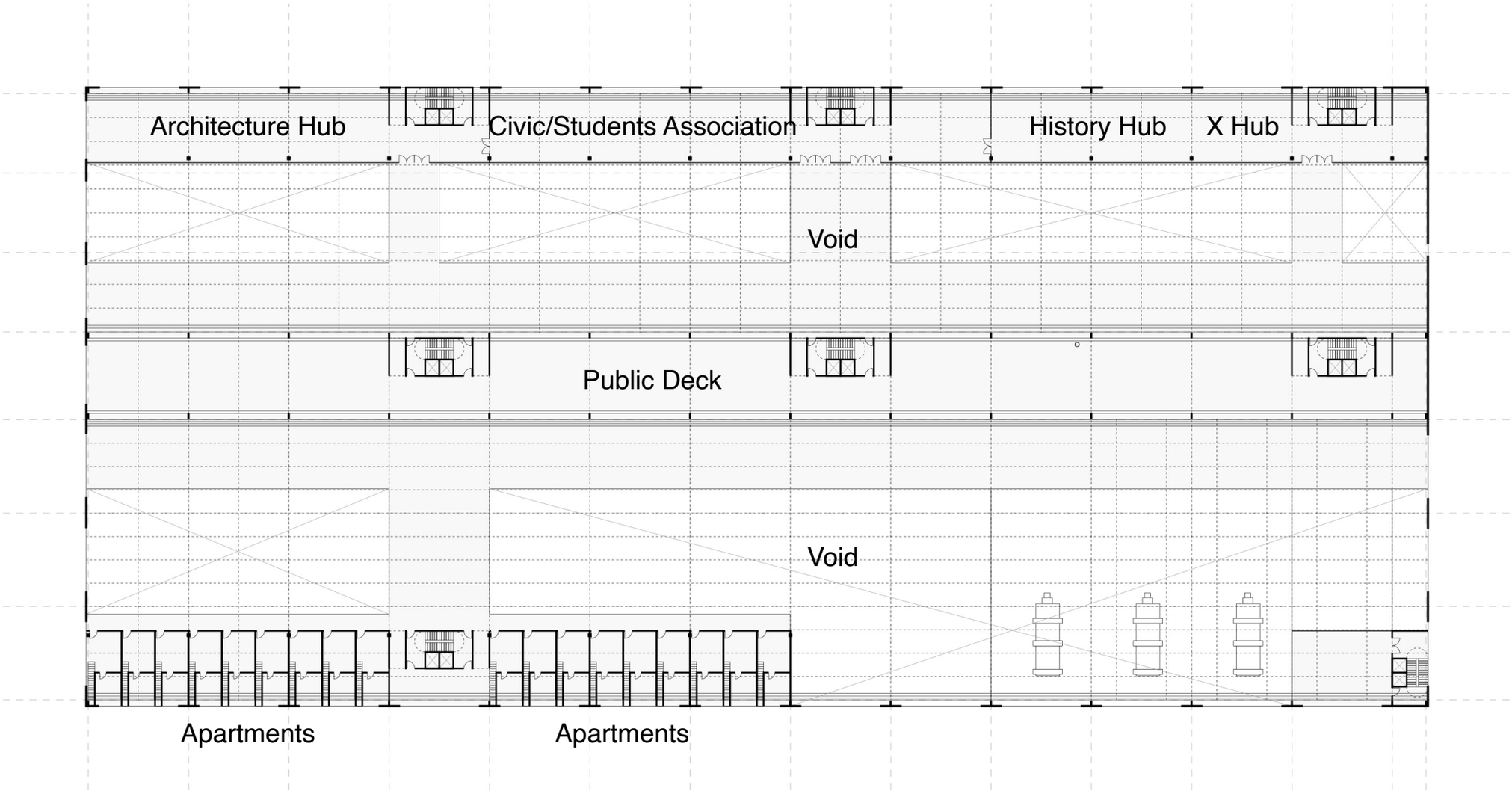
Nesting Second Floor



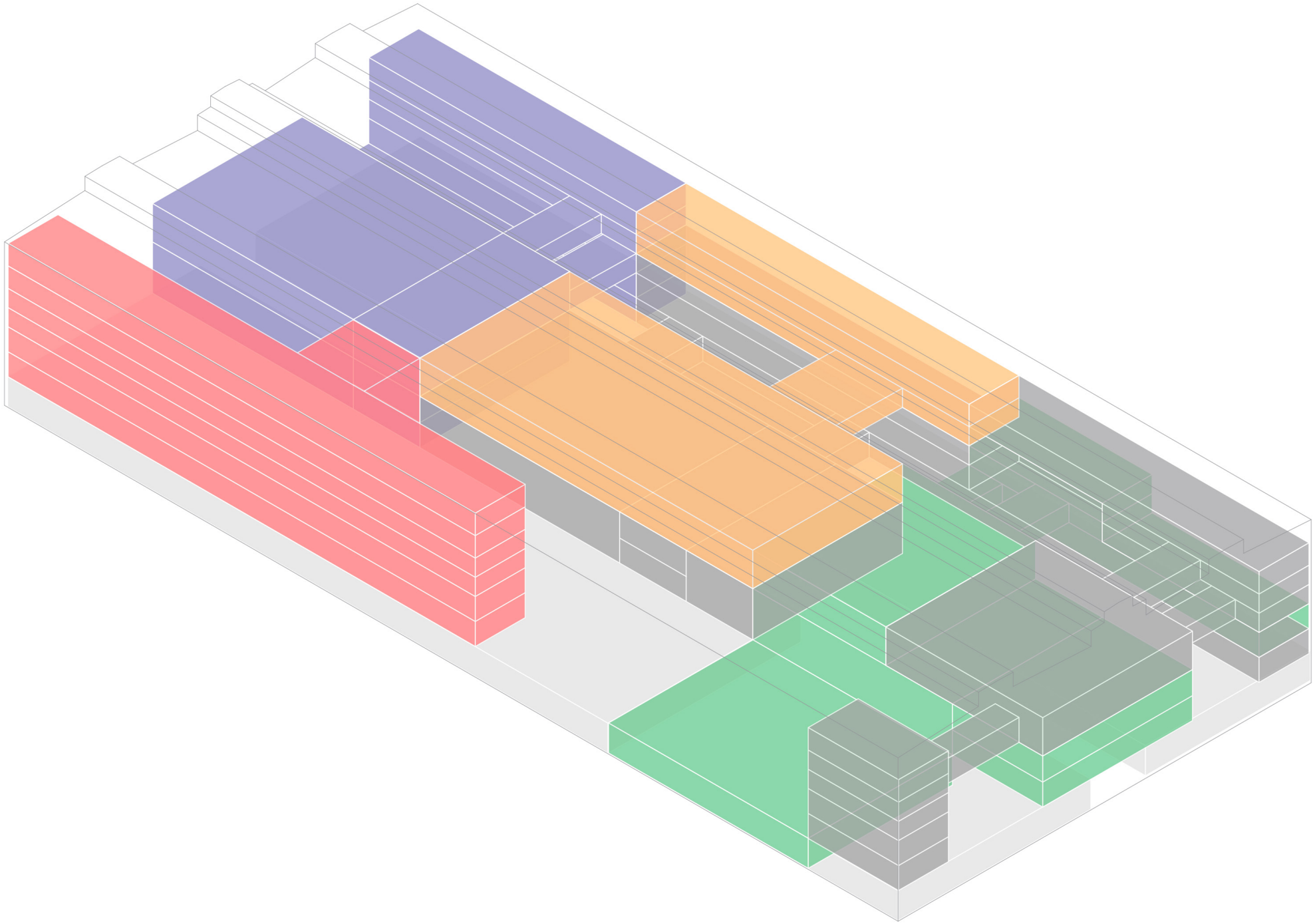
Nesting Third Floor



Nesting Fourth Floor

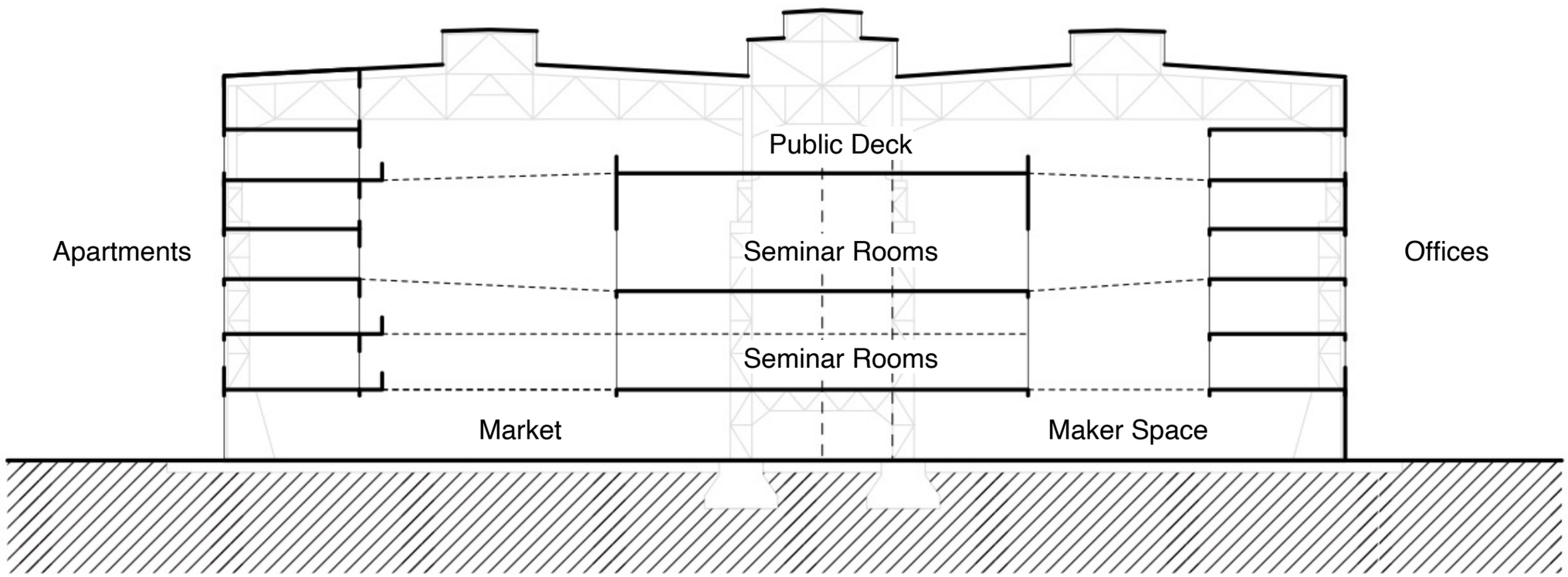


Nesting Fifth Floor

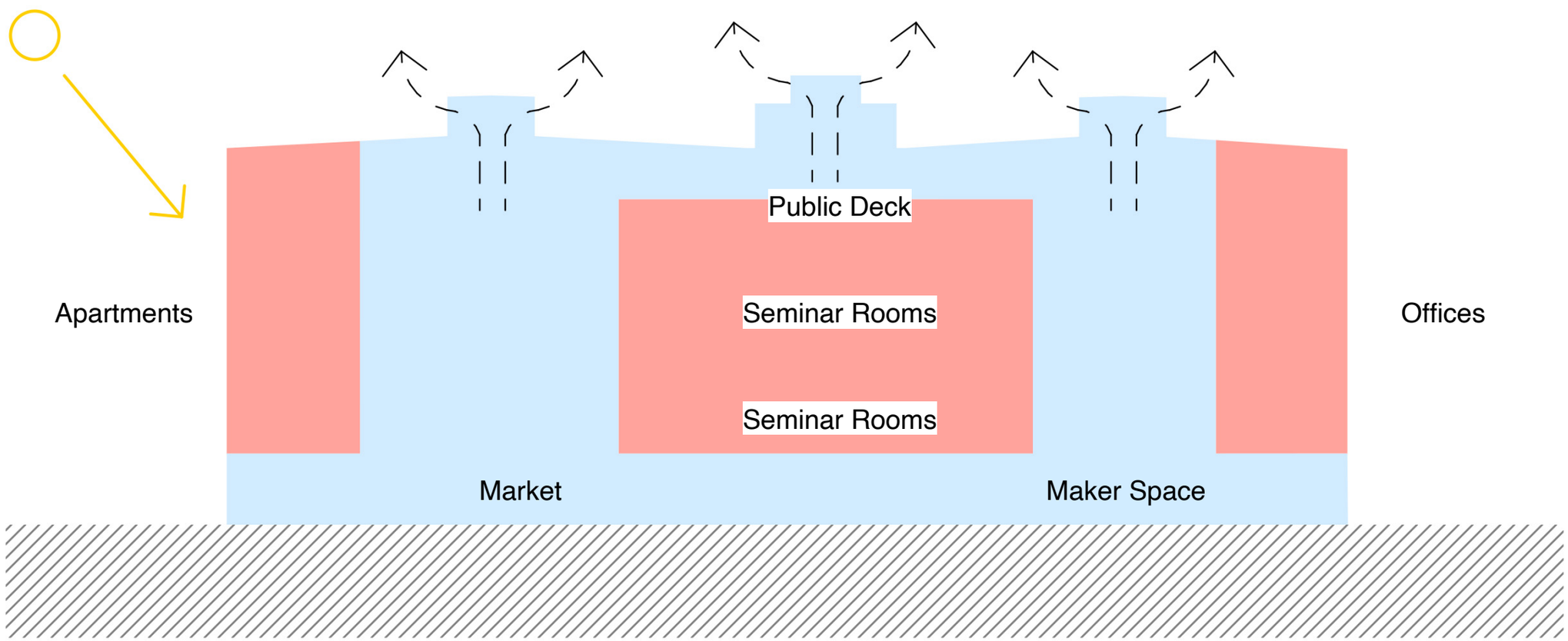


Nesting Programmatic Imbrication
+ 120 residents

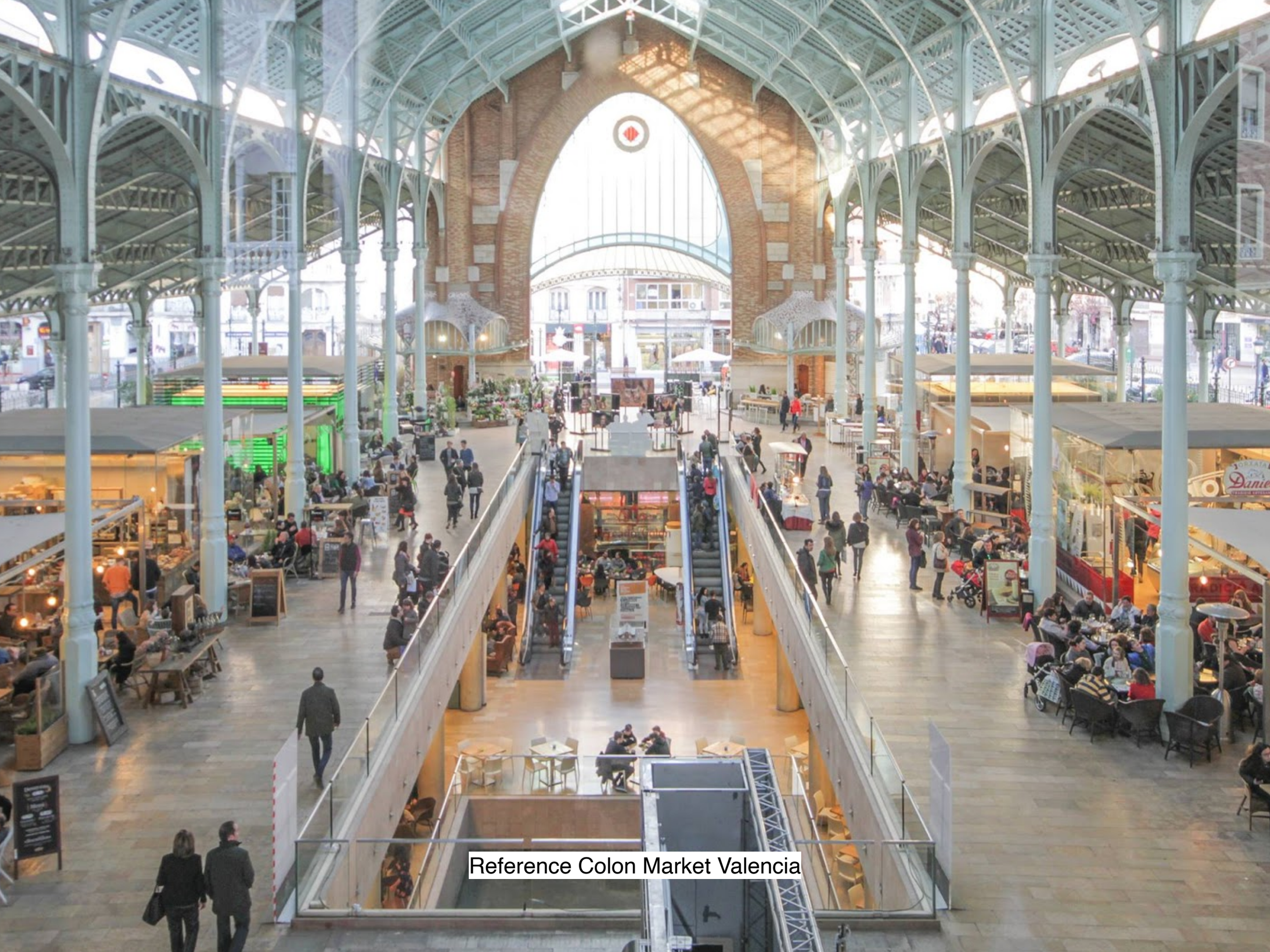
Floor structure according to the facade



2nd Scenario Nesting



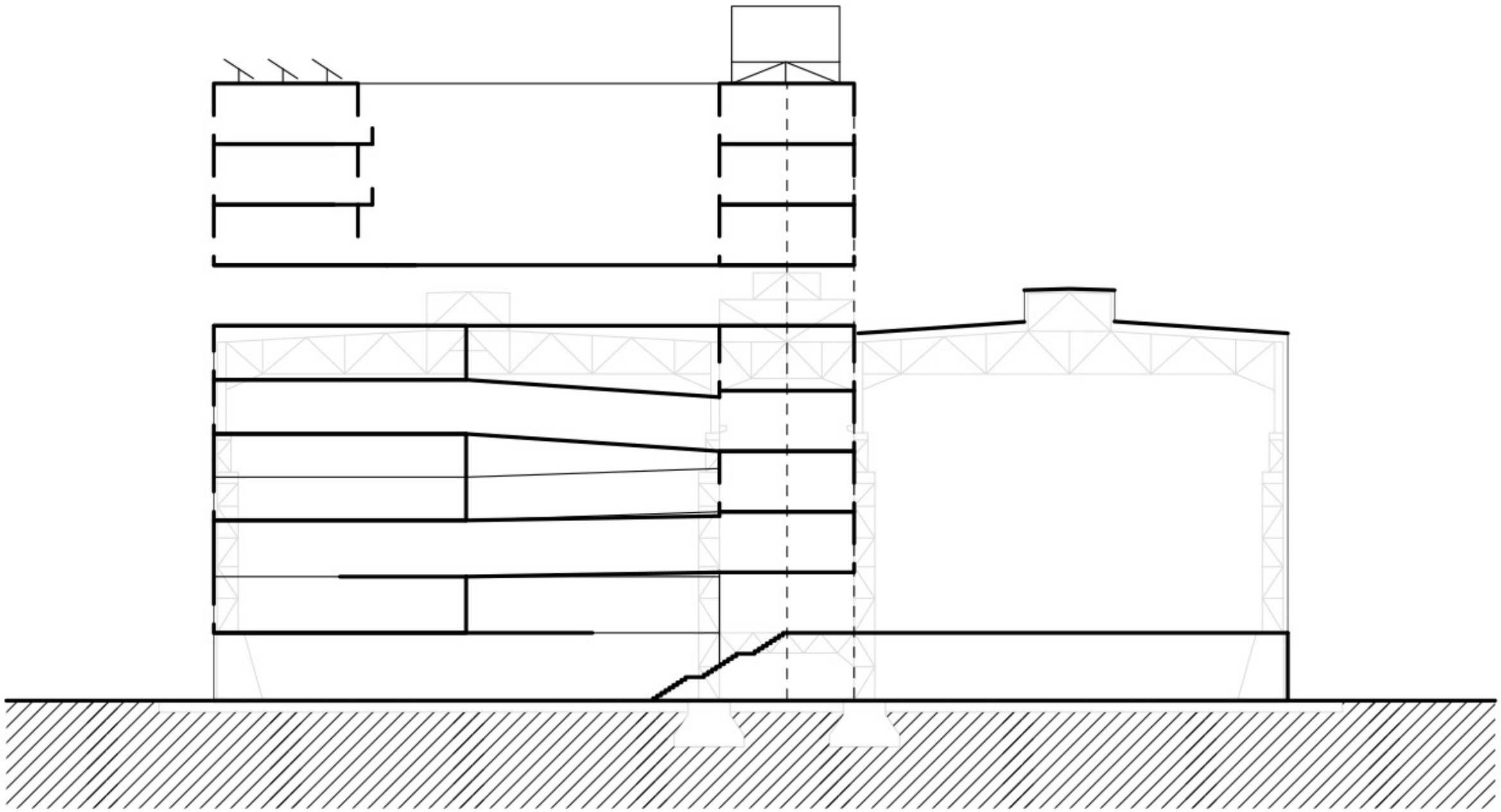
Climate Control Diagramme



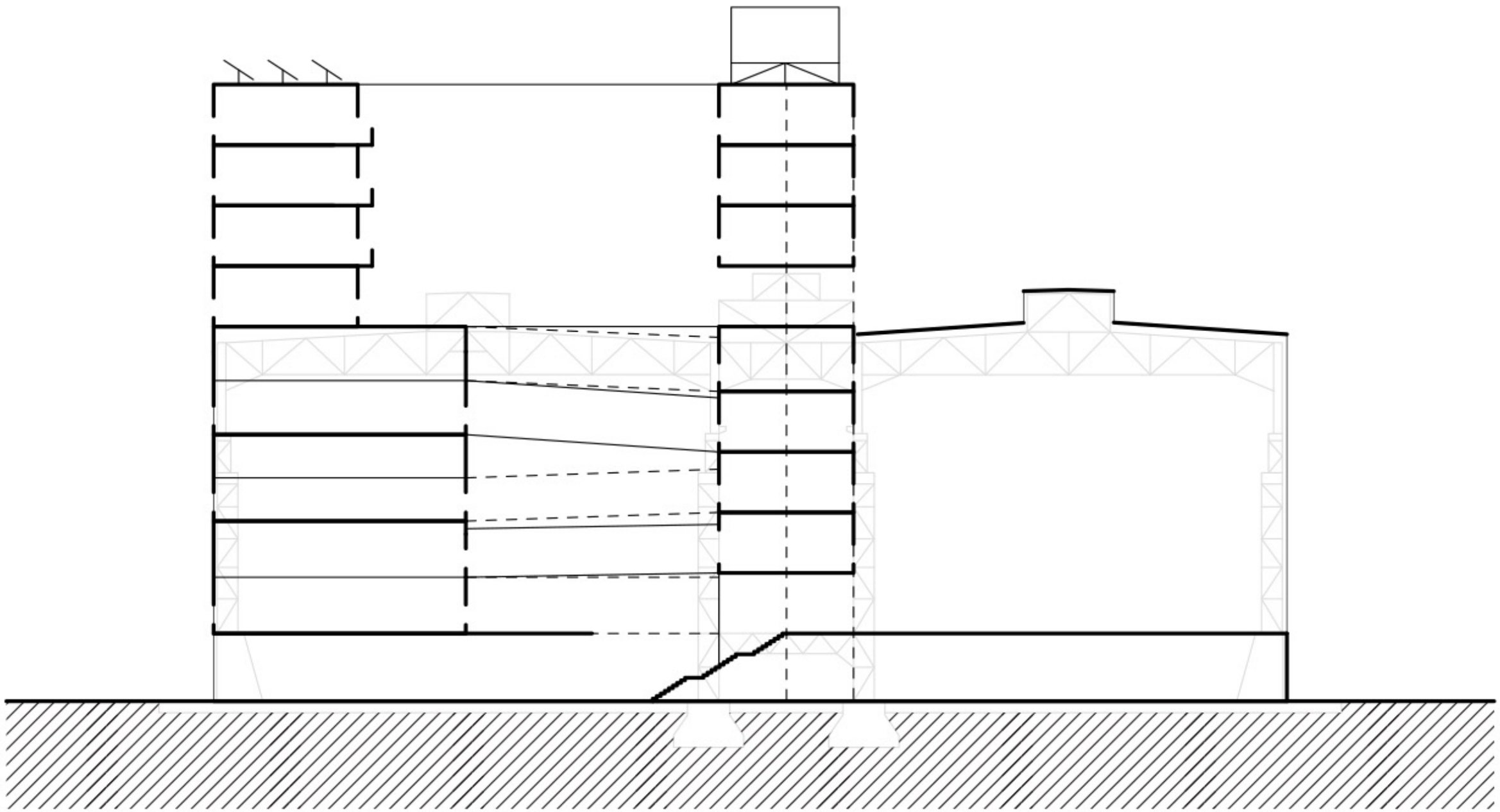
Reference Colon Market Valencia

Reference RDM

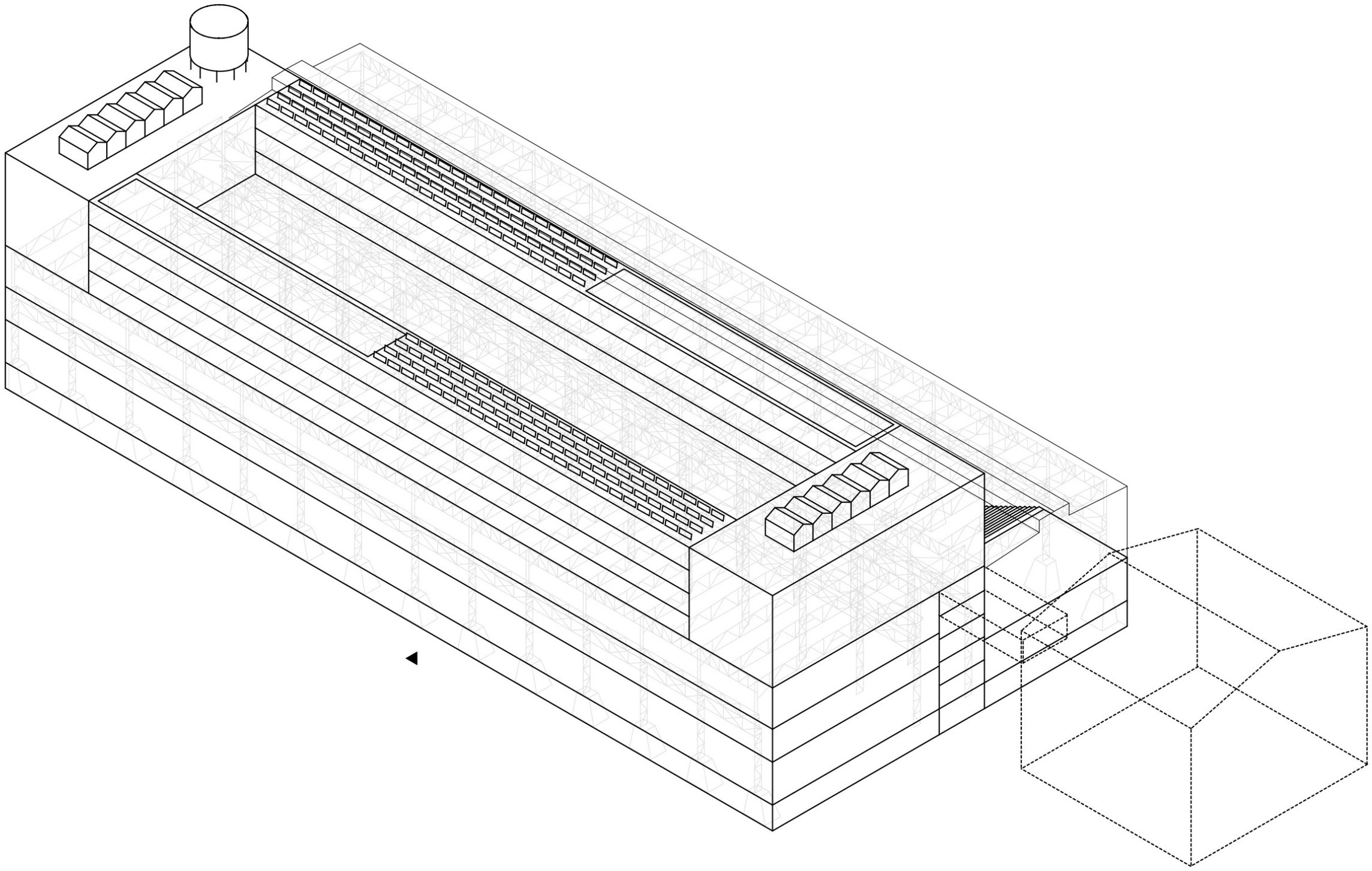
Reference Werkspoor Factory



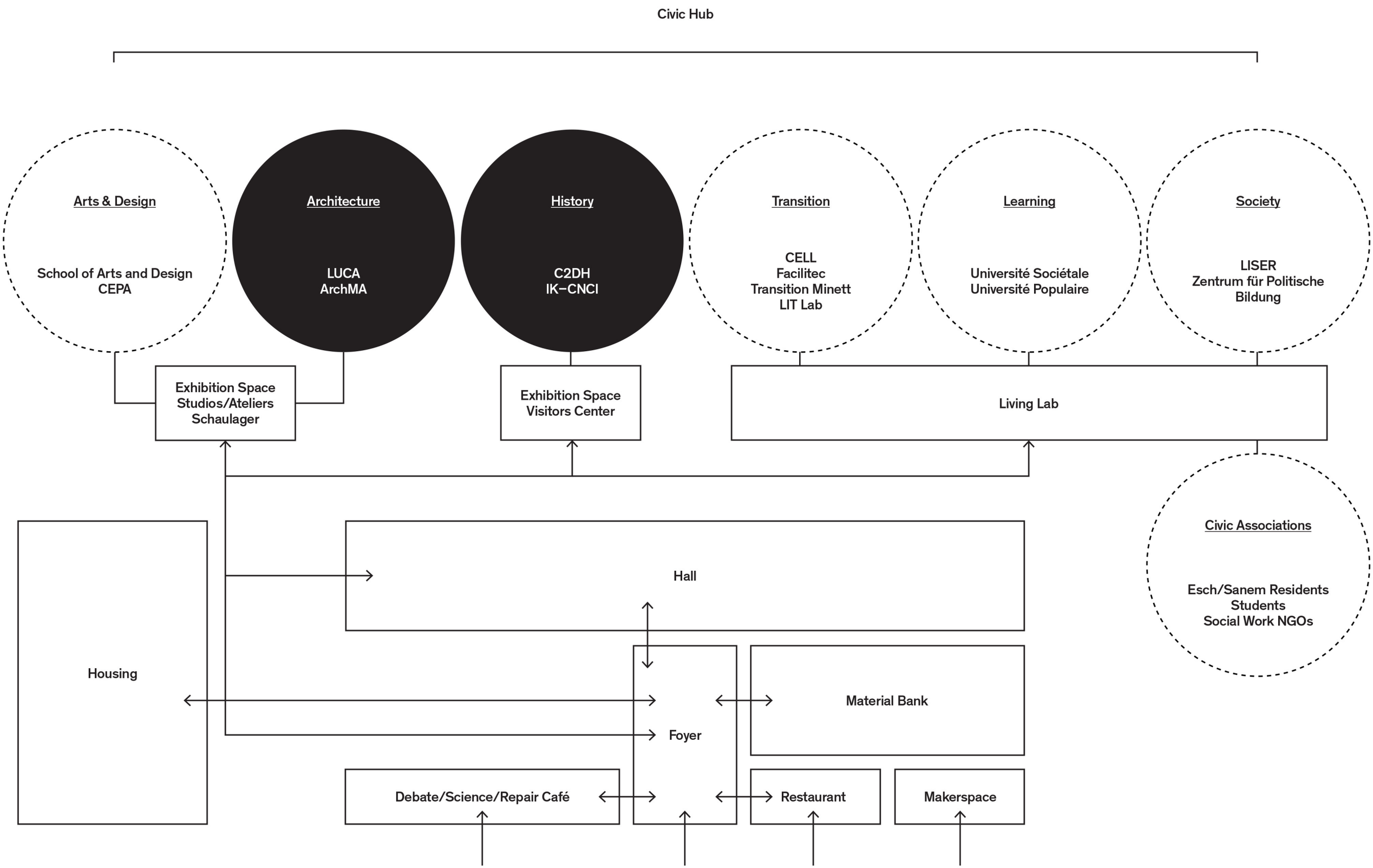
3rd Scenario Congestion — variant A.1



3rd Scenario Congestion — variant A.2

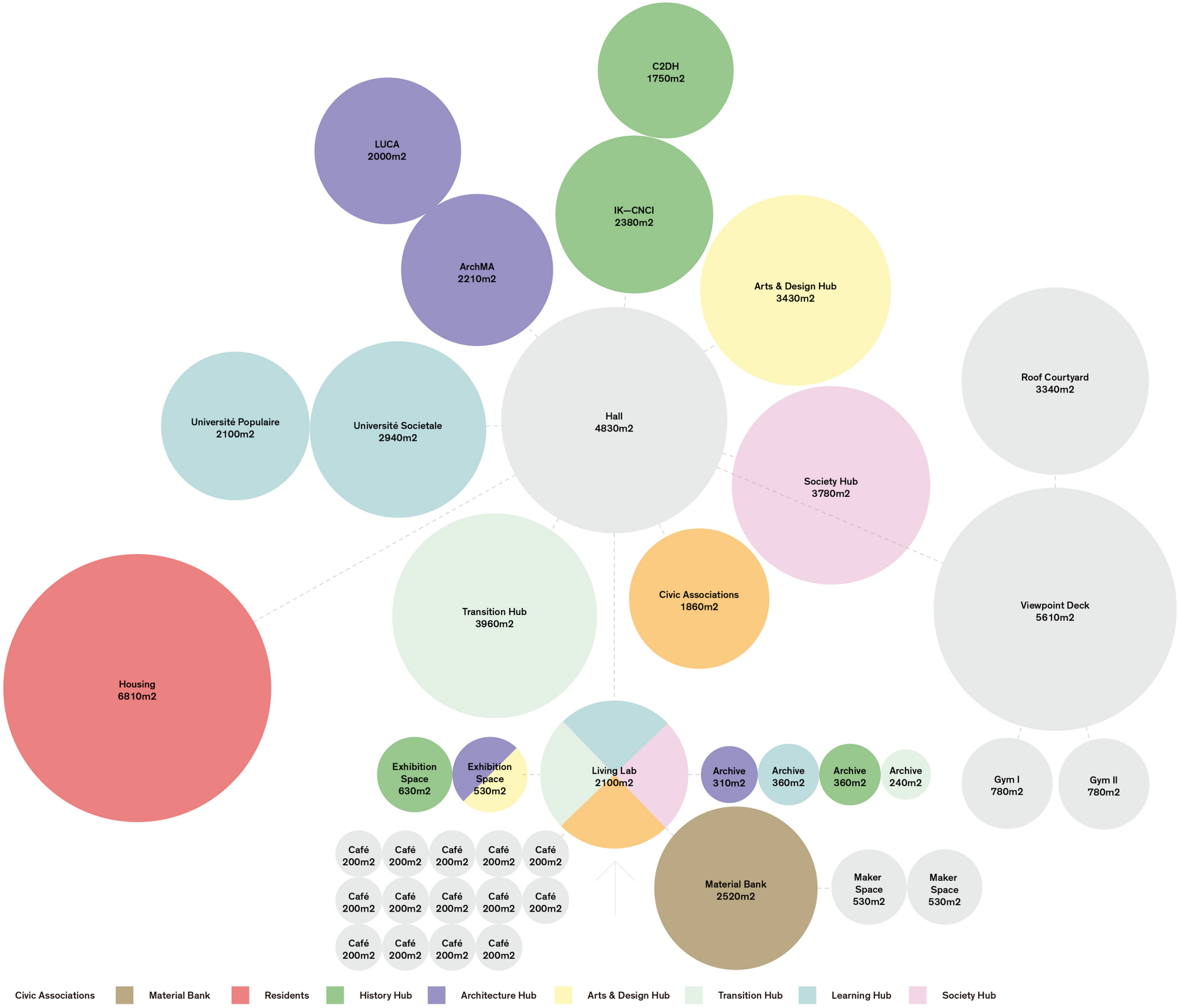


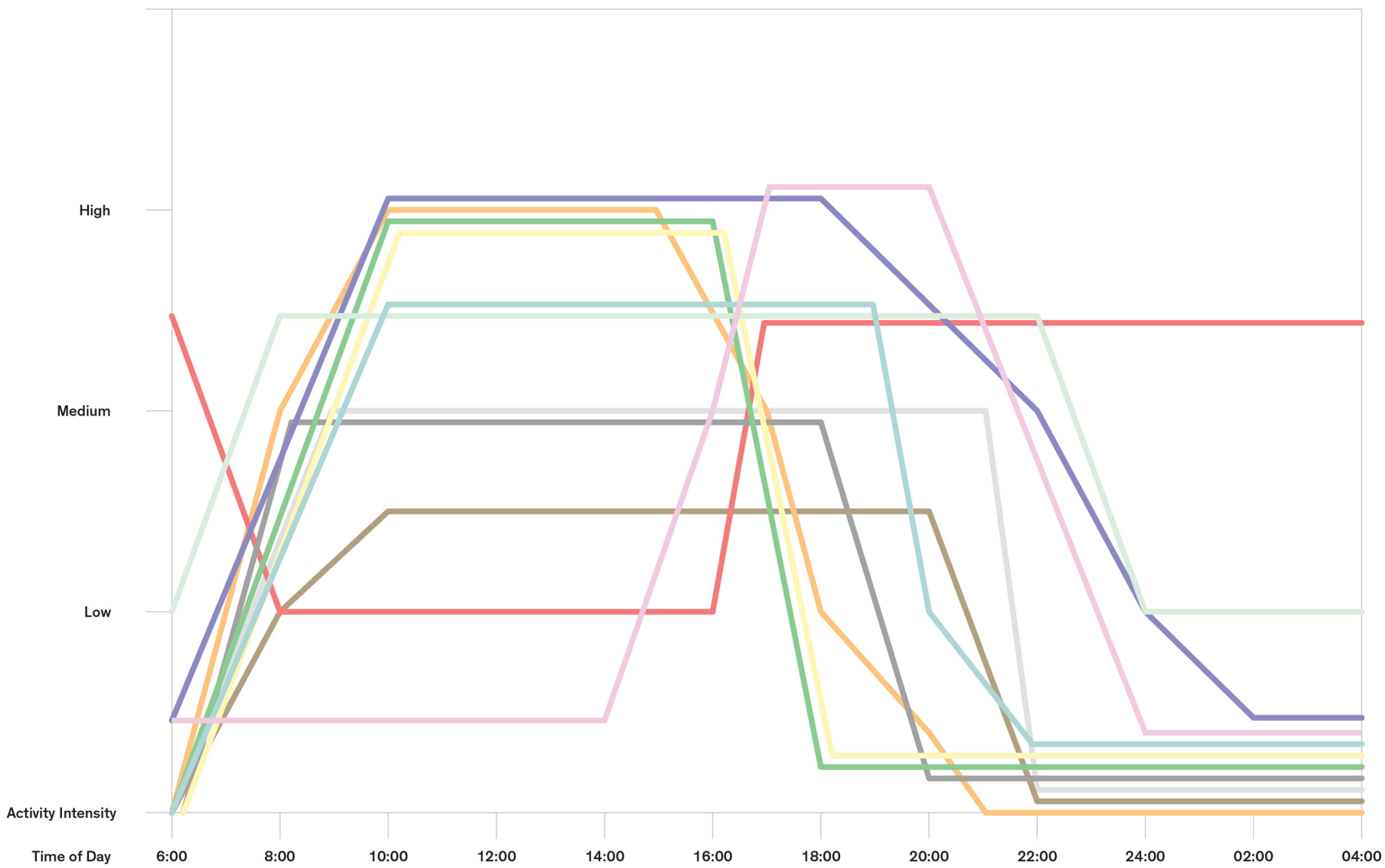
3rd Scenario Congestion — variant A
68 000 m2 / FAR 5,6



Congestion — variant A — Programme

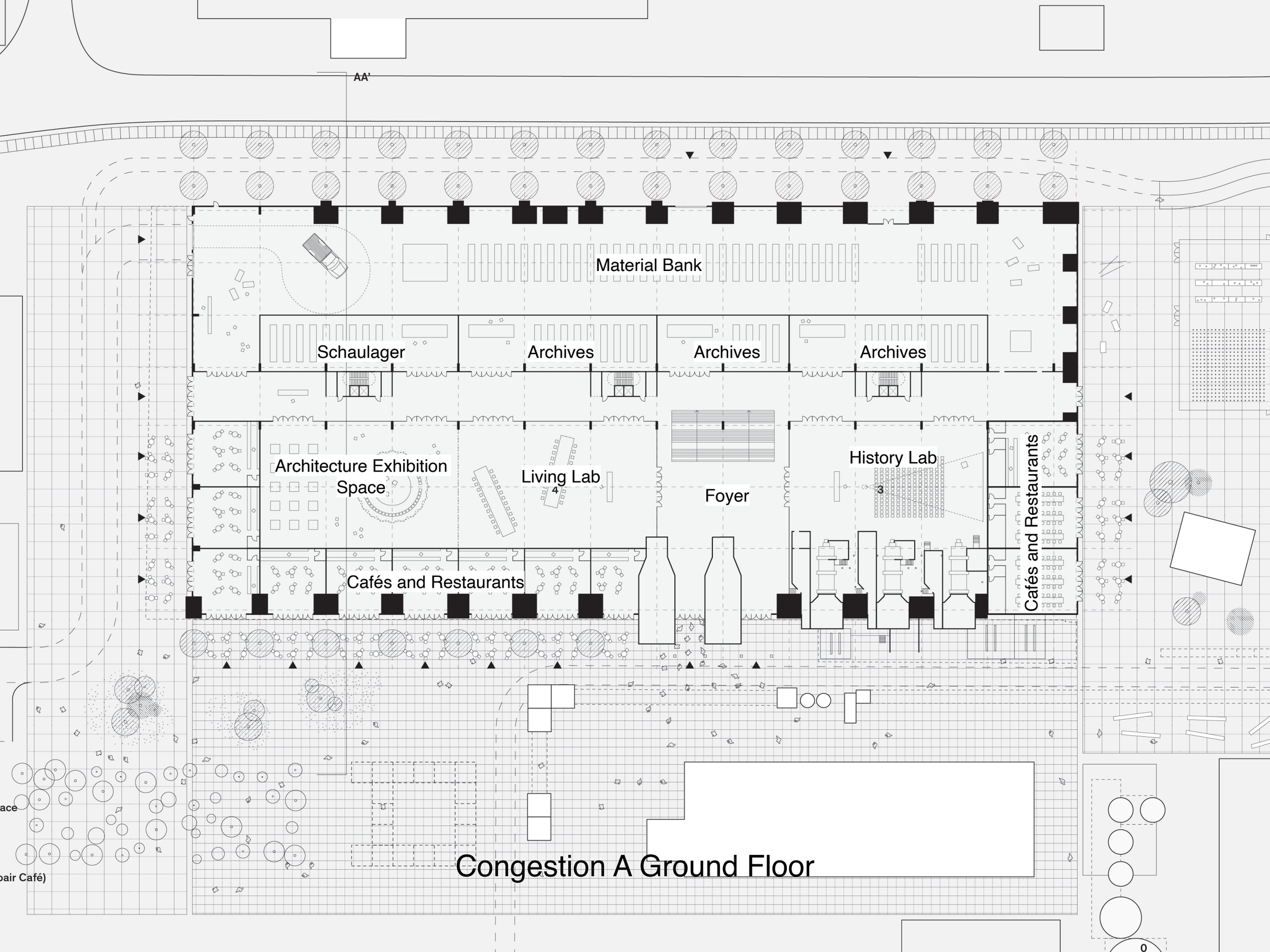
Outdoor Public Space

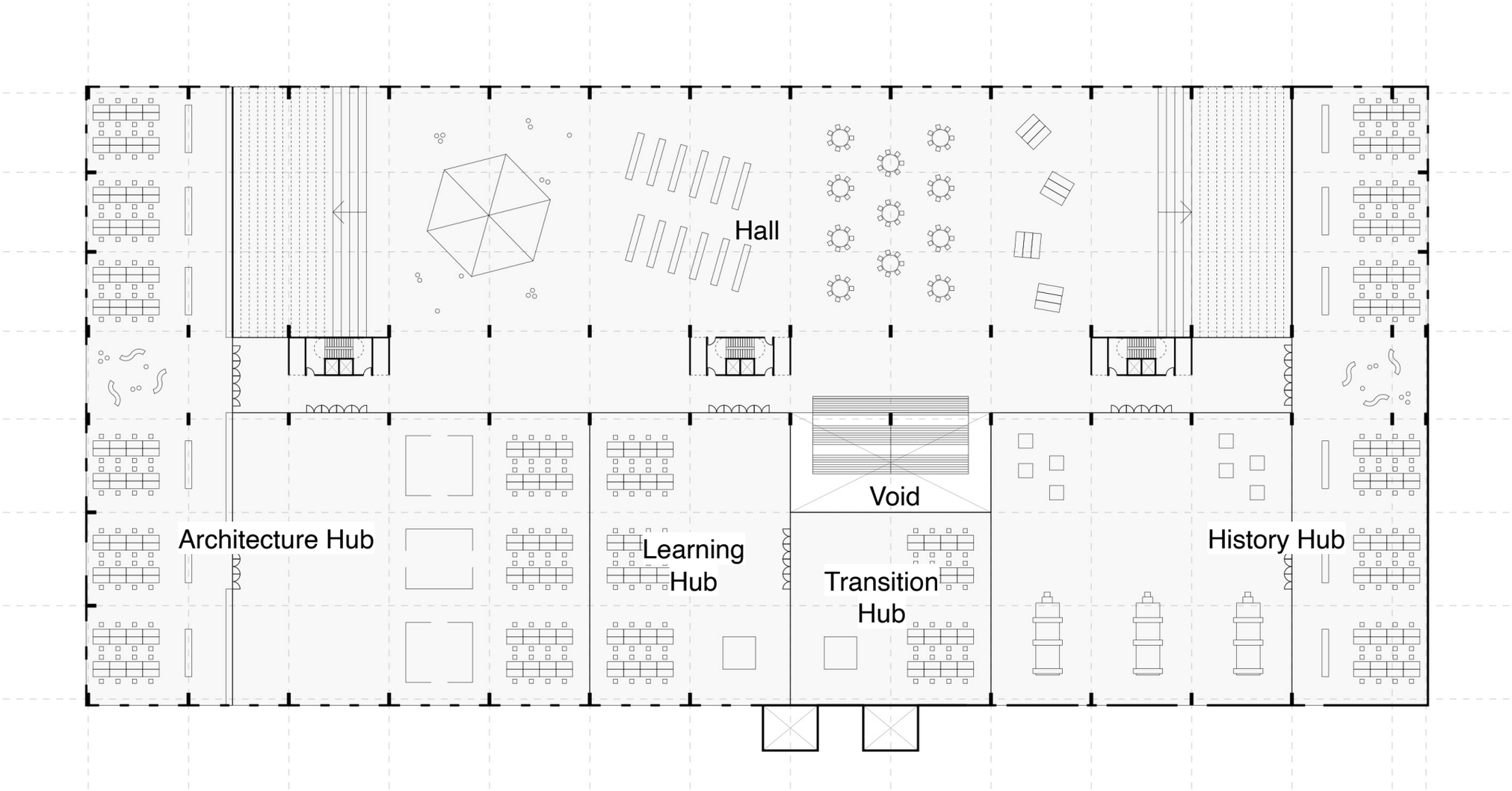

C2DH
1750m2
LUCA
2000m2
IK—CNCI
2380m2
ArchMA
2210m2
Arts & Design Hub
3430m2
Roof Courtyard
3340m2
Université Populaire
2100m2
Université Societale
2940m2
Hall
4830m2
Society Hub
3780m2
Transition Hub
3960m2
Civic Associations
1860m2
Viewpoint Deck
5610m2
Housing
6810m2
Exhibition Space
630m2
Exhibition Space
530m2
Living Lab
2100m2
Archive
310m2
Archive
360m2
Archive
360m2
Archive
240m2
Gym I
780m2
Gym II
780m2
Café
200m2
Material Bank
2520m2
Maker Space
530m2
Maker Space
530m2
All visitors
Civic Associations
Material Bank
Residents
History Hub
Architecture Hub
Arts & Design Hub
Transition Hub
Learning Hub
Society Hub



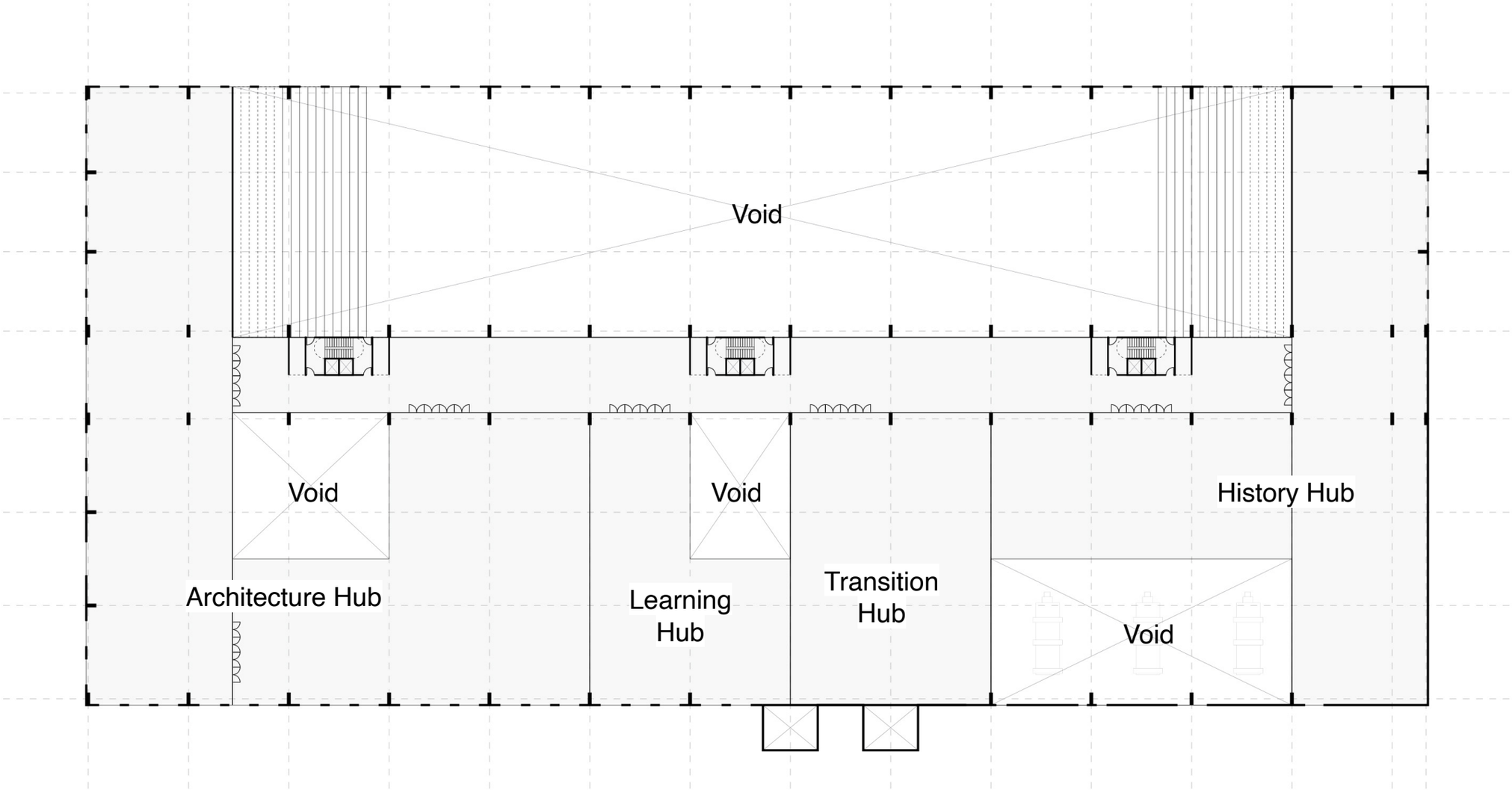
Frequency of Use Scenario Congestion — variant A

All visitors · Civic Associations · Material Bank · Residents · History Hub · Architecture Hub · Arts & Design Hub · Transition Hub · Learning Hub · Society Hub

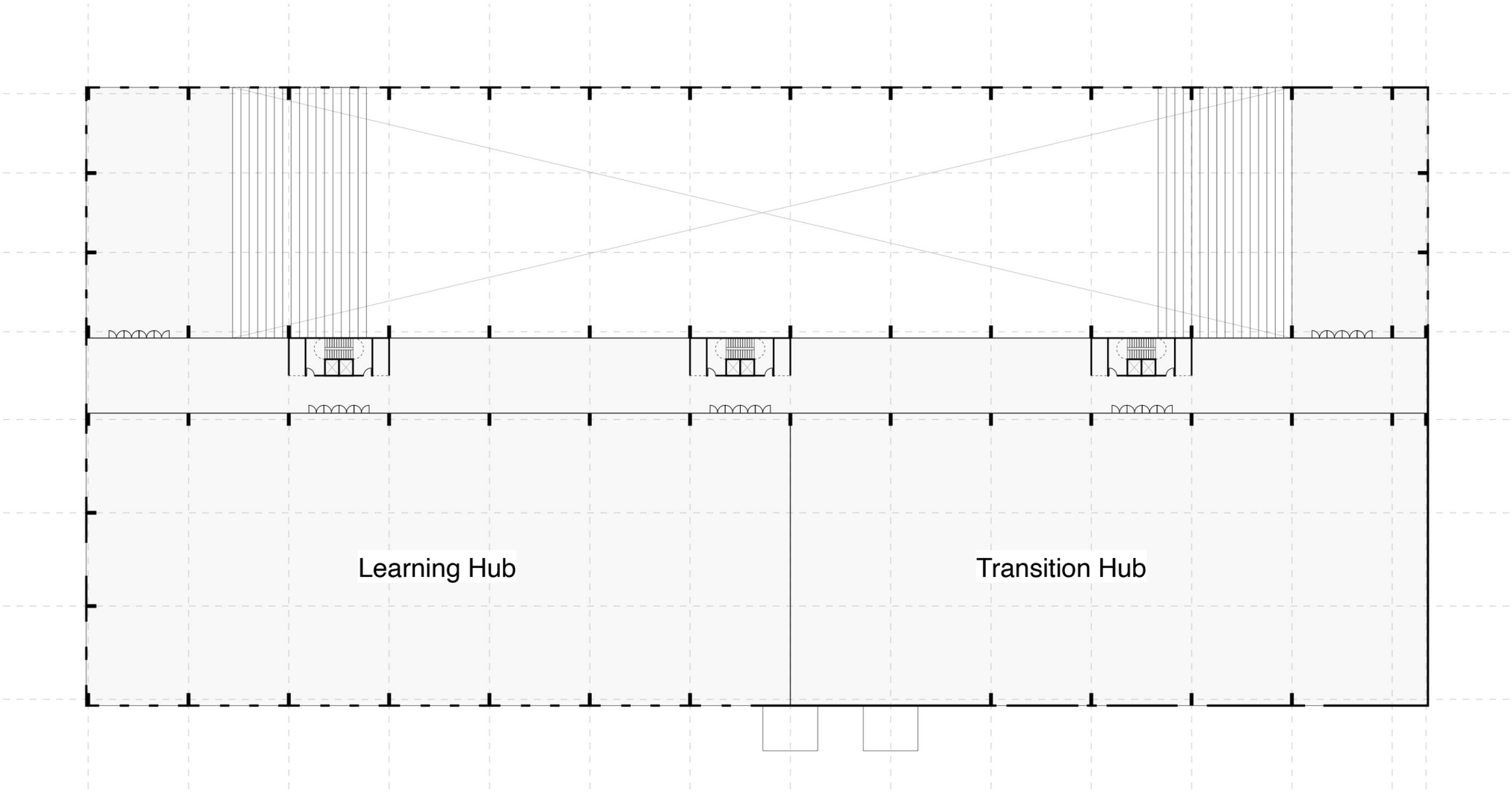

AA'
Material Bank
Schaulager
Archives
Archives
Archives
Architecture Exhibition Space
Living Lab
4
Foyer
History Lab
3
Cafés and Restaurants
Cafés and Restaurants
Congestion A Ground Floor



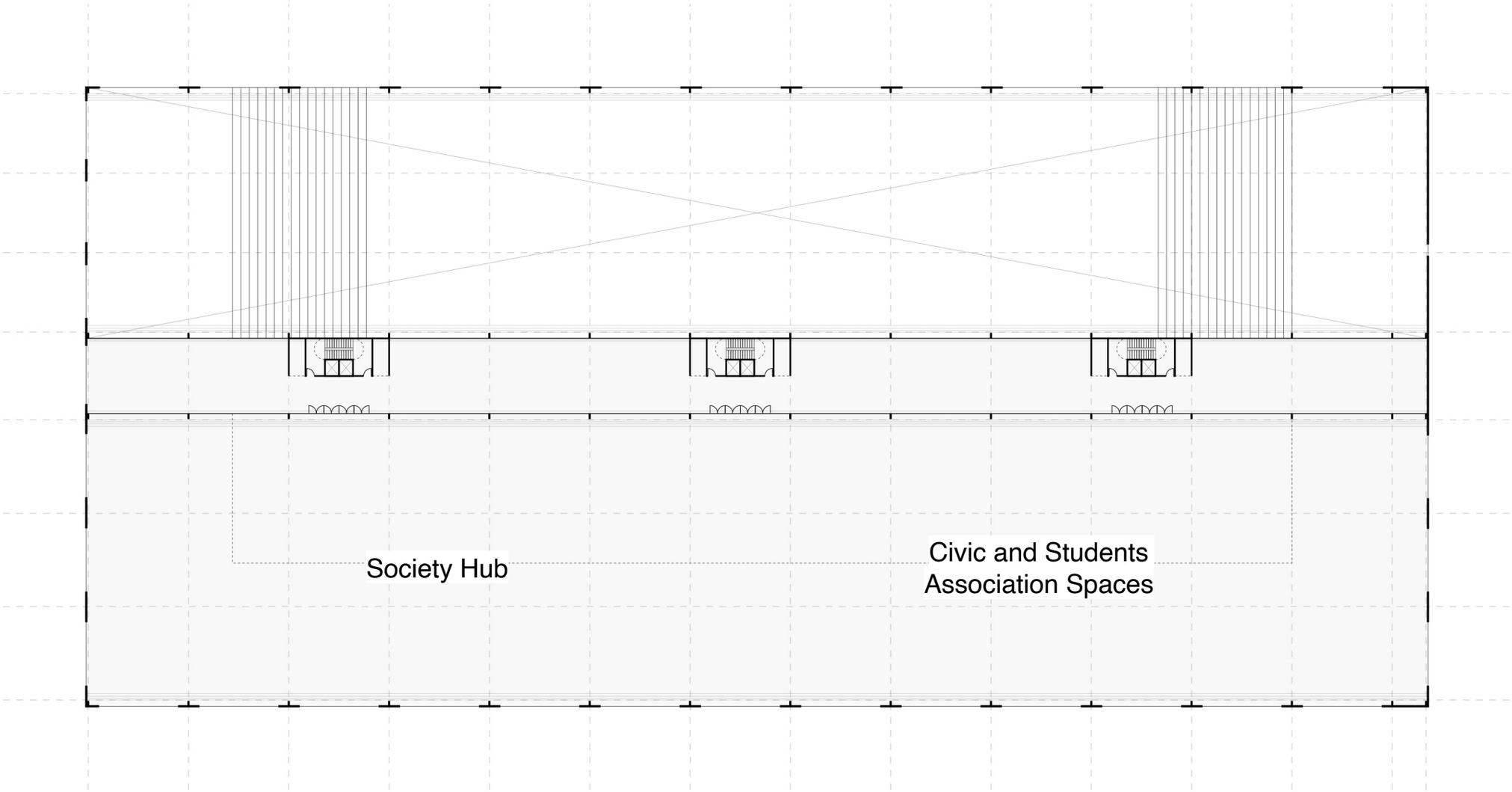
Congestion A First Floor



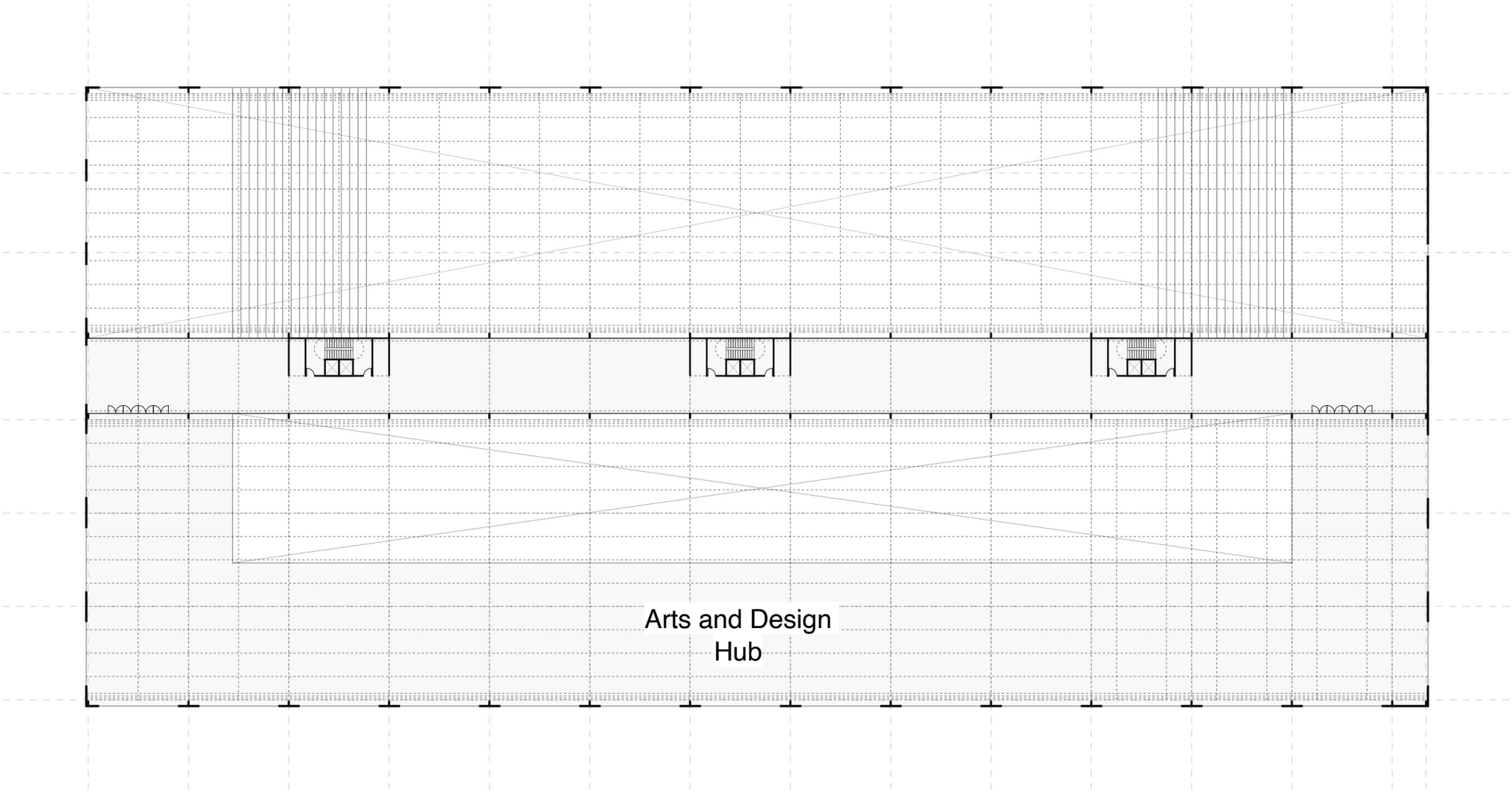
Congestion A Mezzanine Floor



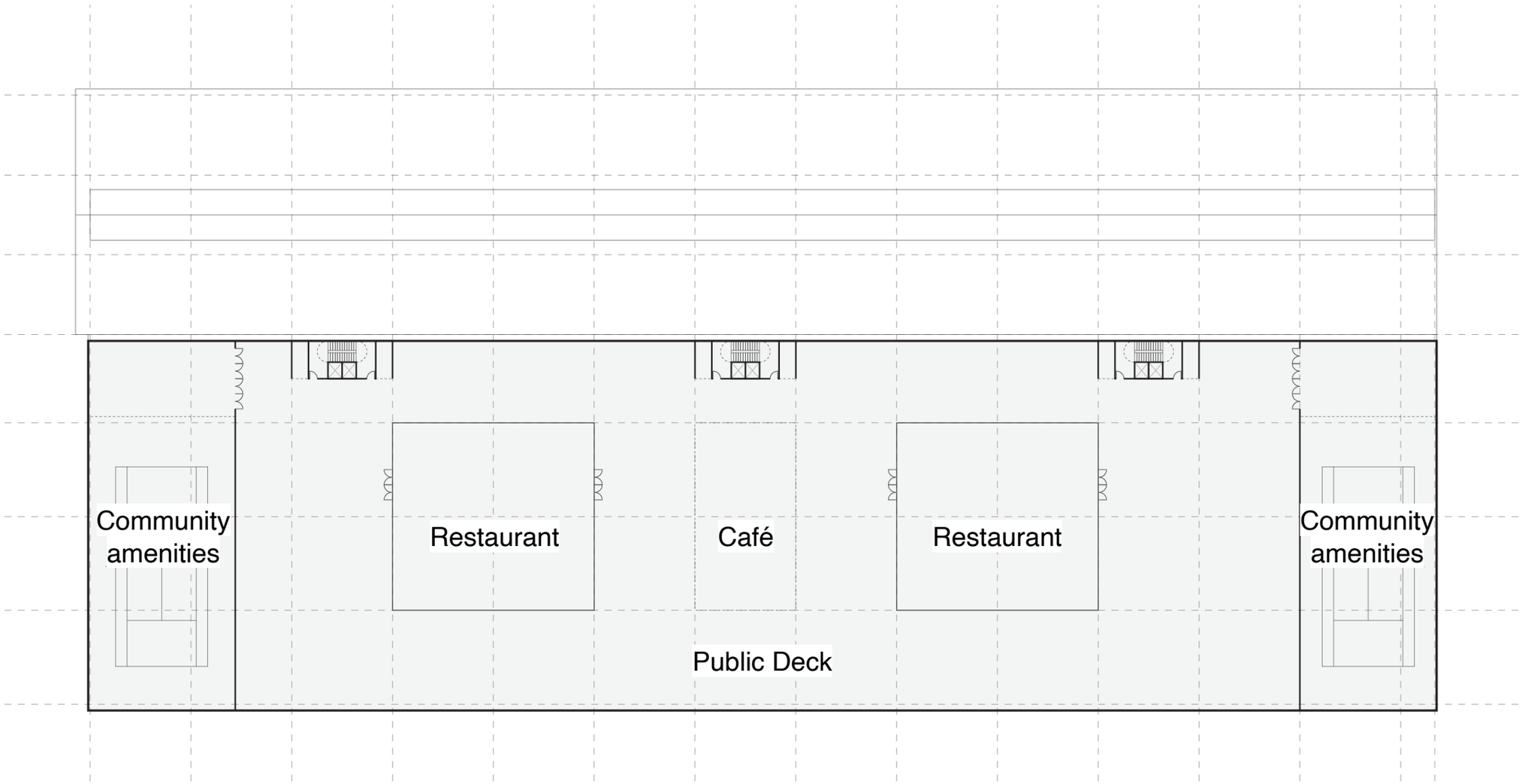
Congestion A Second Floor



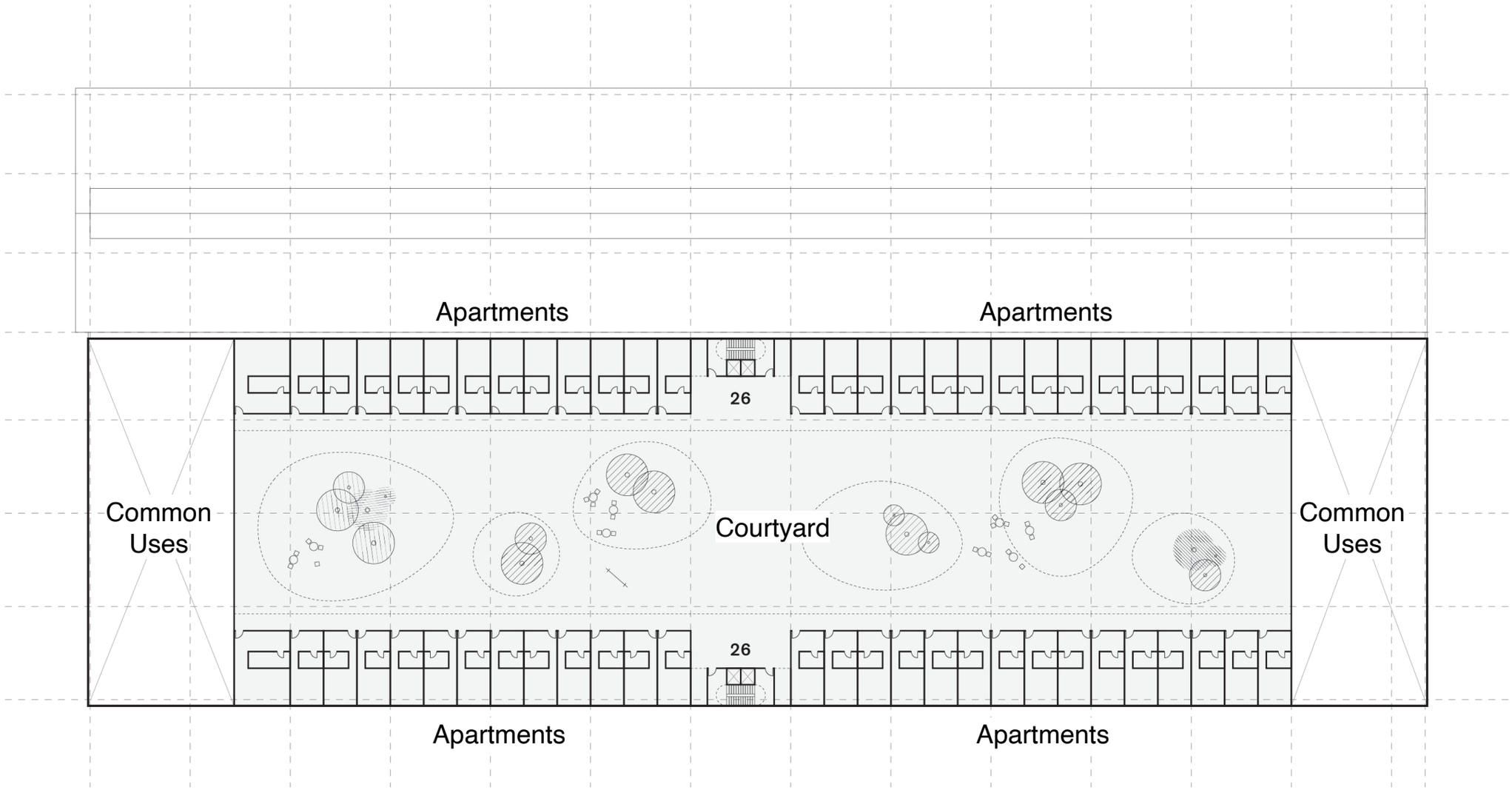
Congestion A Third Floor



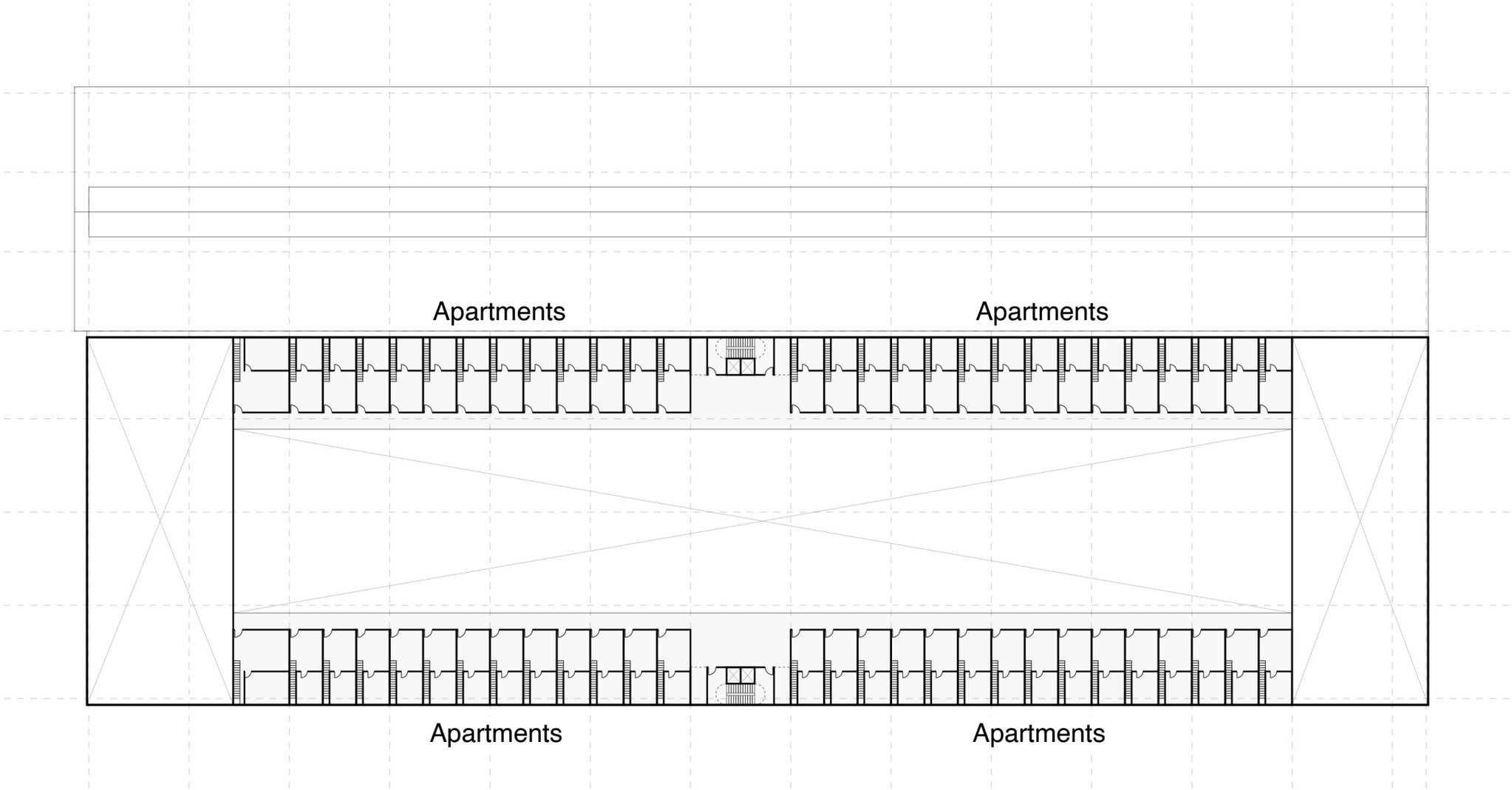
Congestion A Mezzanine Floor



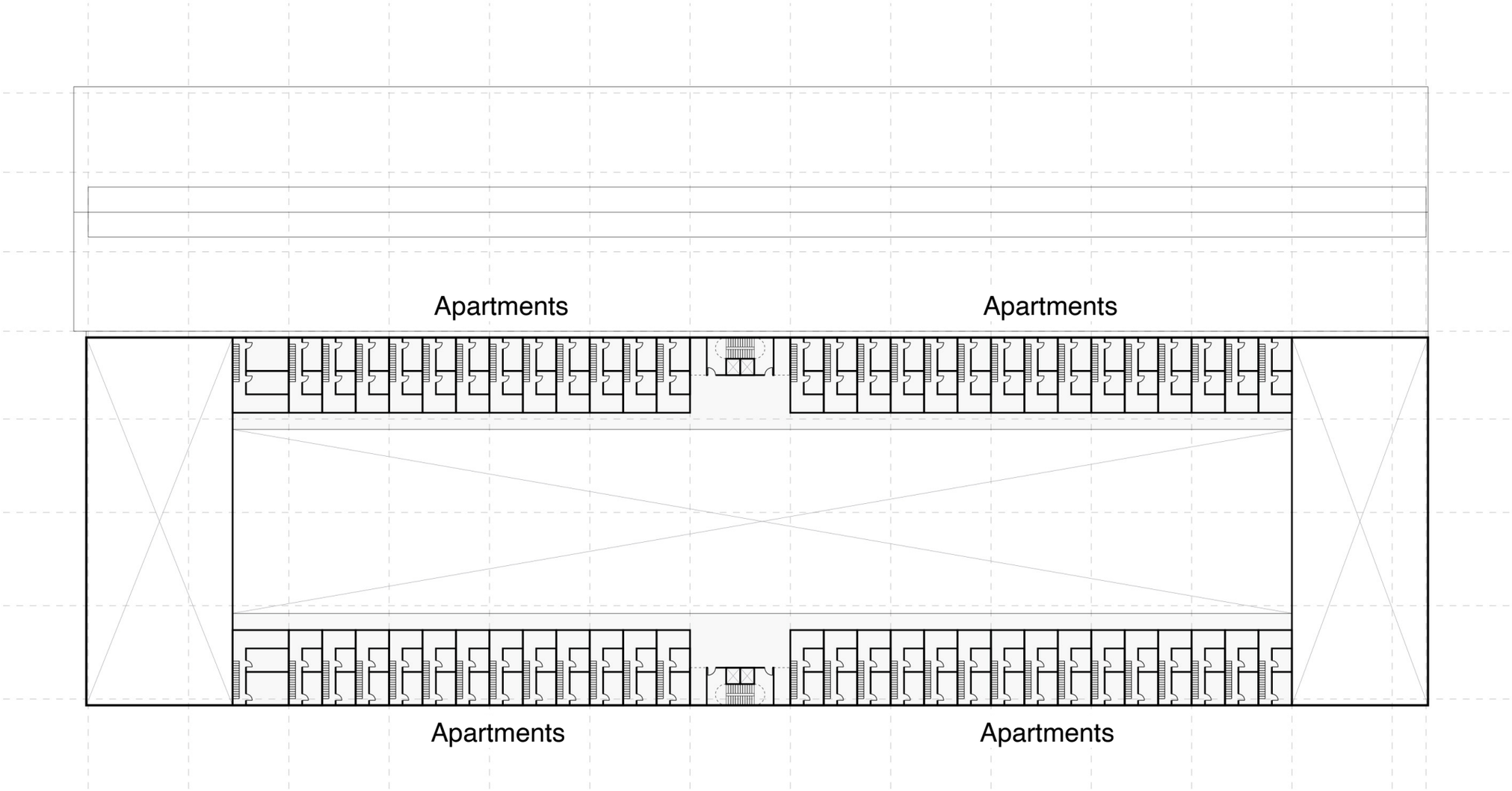
Congestion A.1 Fourth Floor



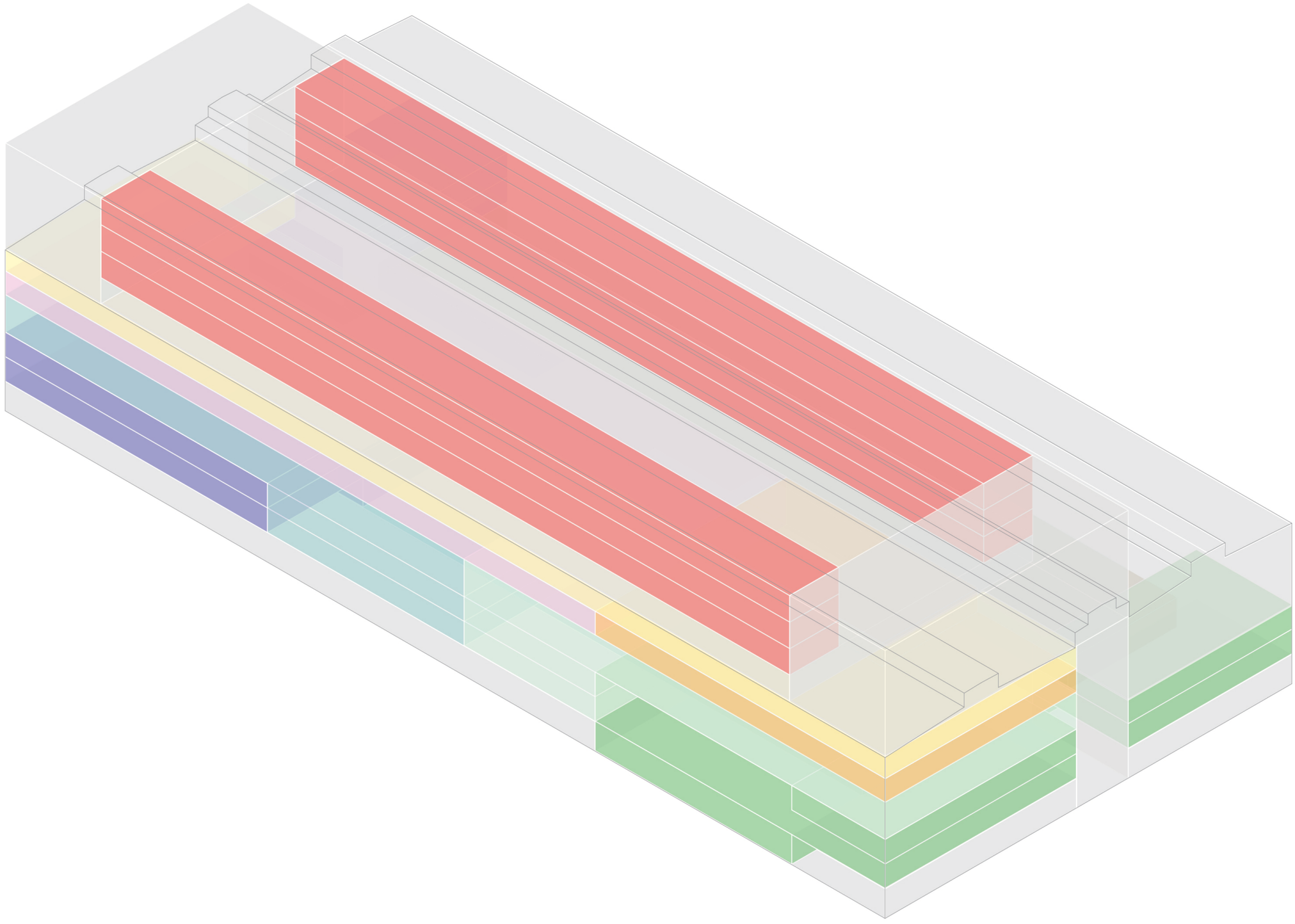
Congestion A.1 Fifth Floor



Congestion A.1 Sixth Floor

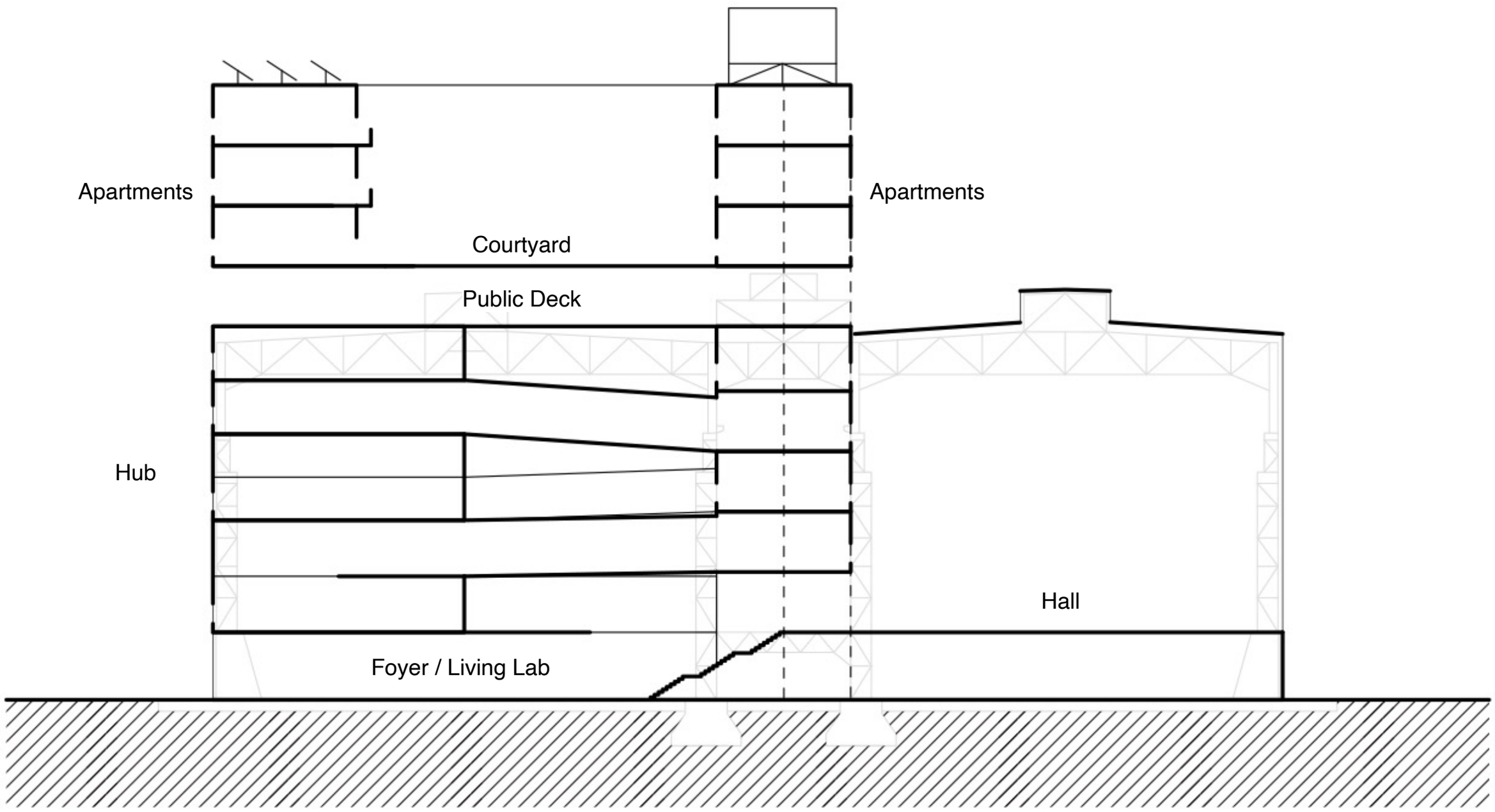


Congestion A.1 Seventh Floor

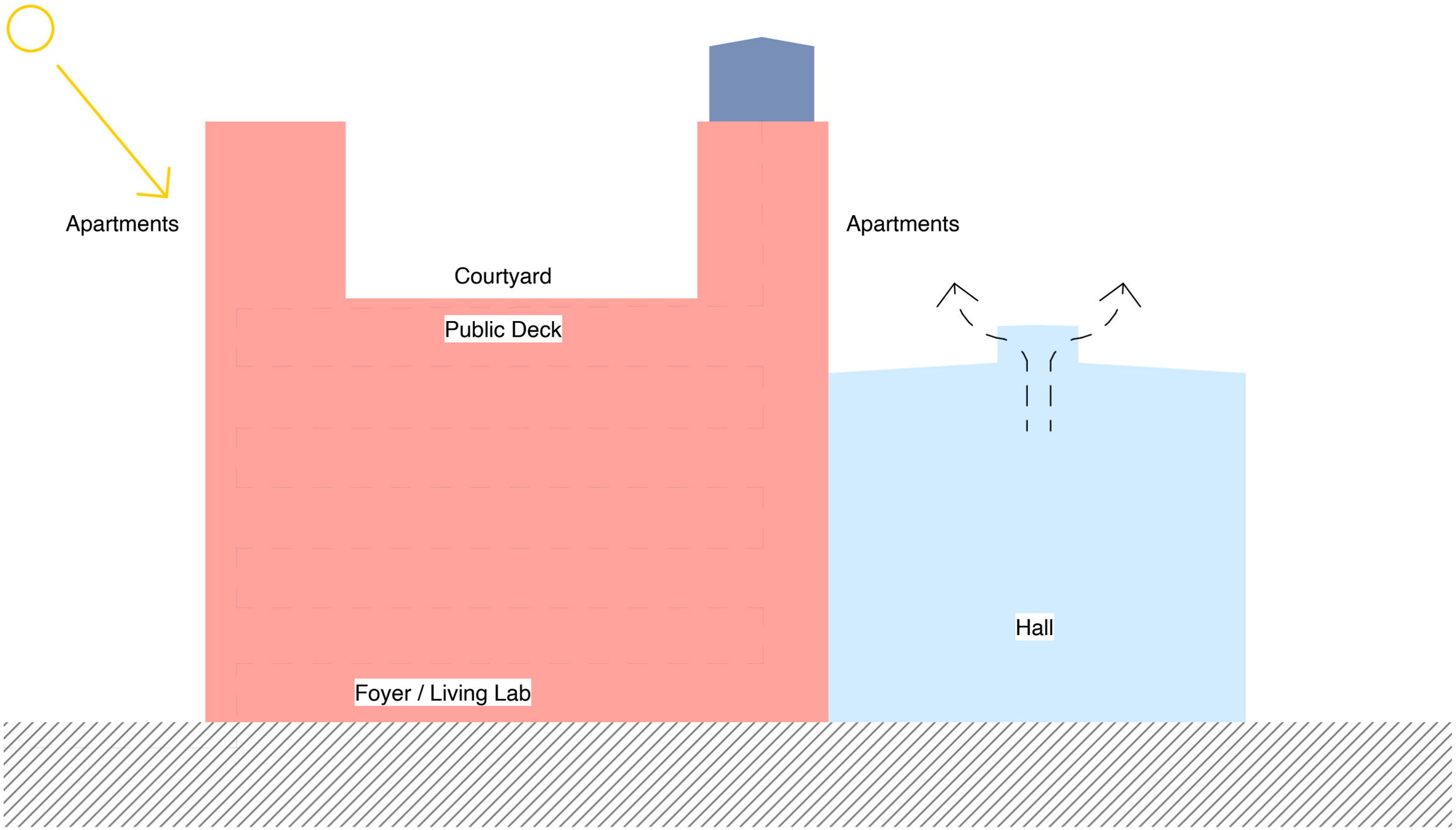


Congestion Programmatic Imbrication

+ 195 residents



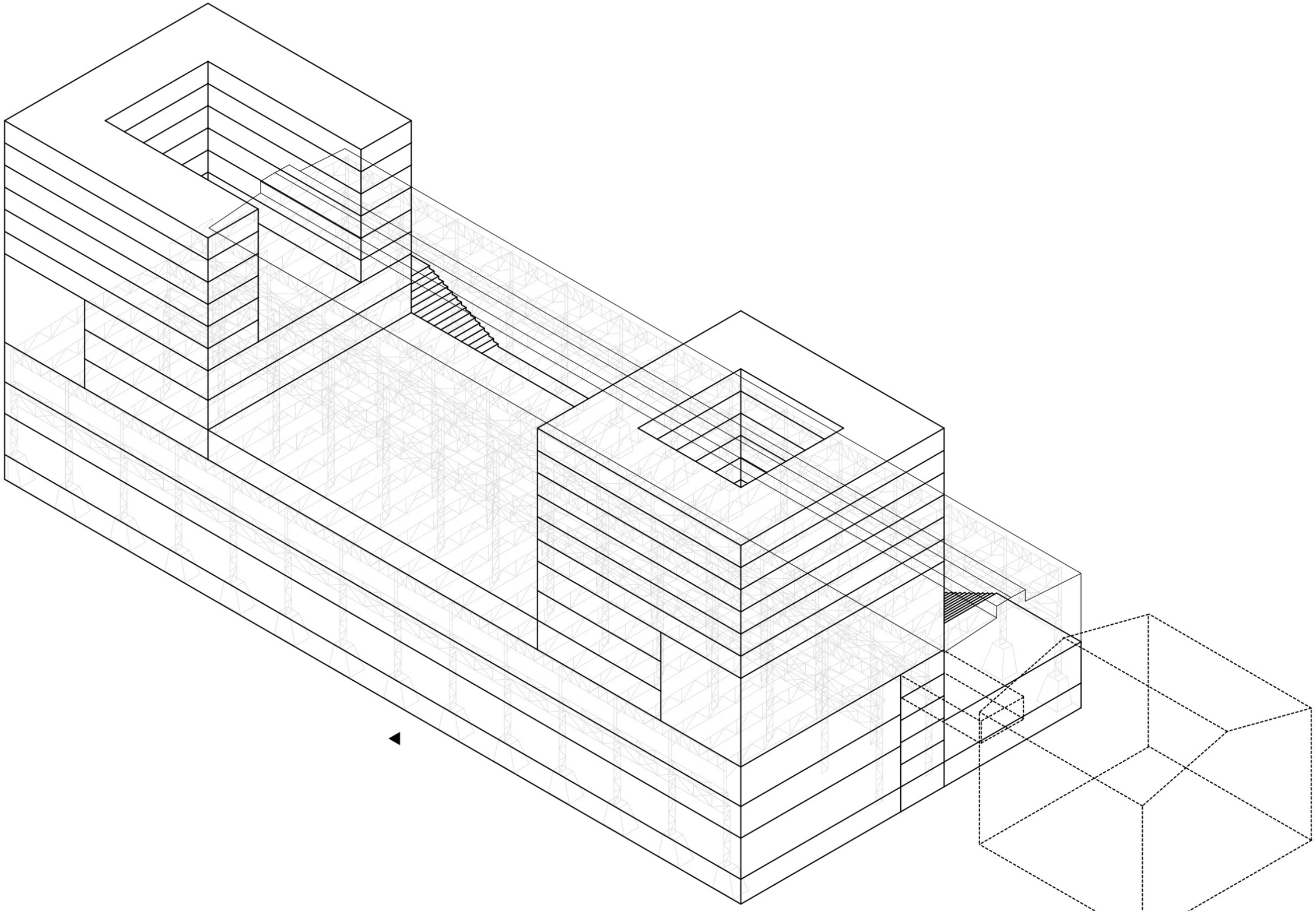
3rd Scenario Congestion — variant A.1



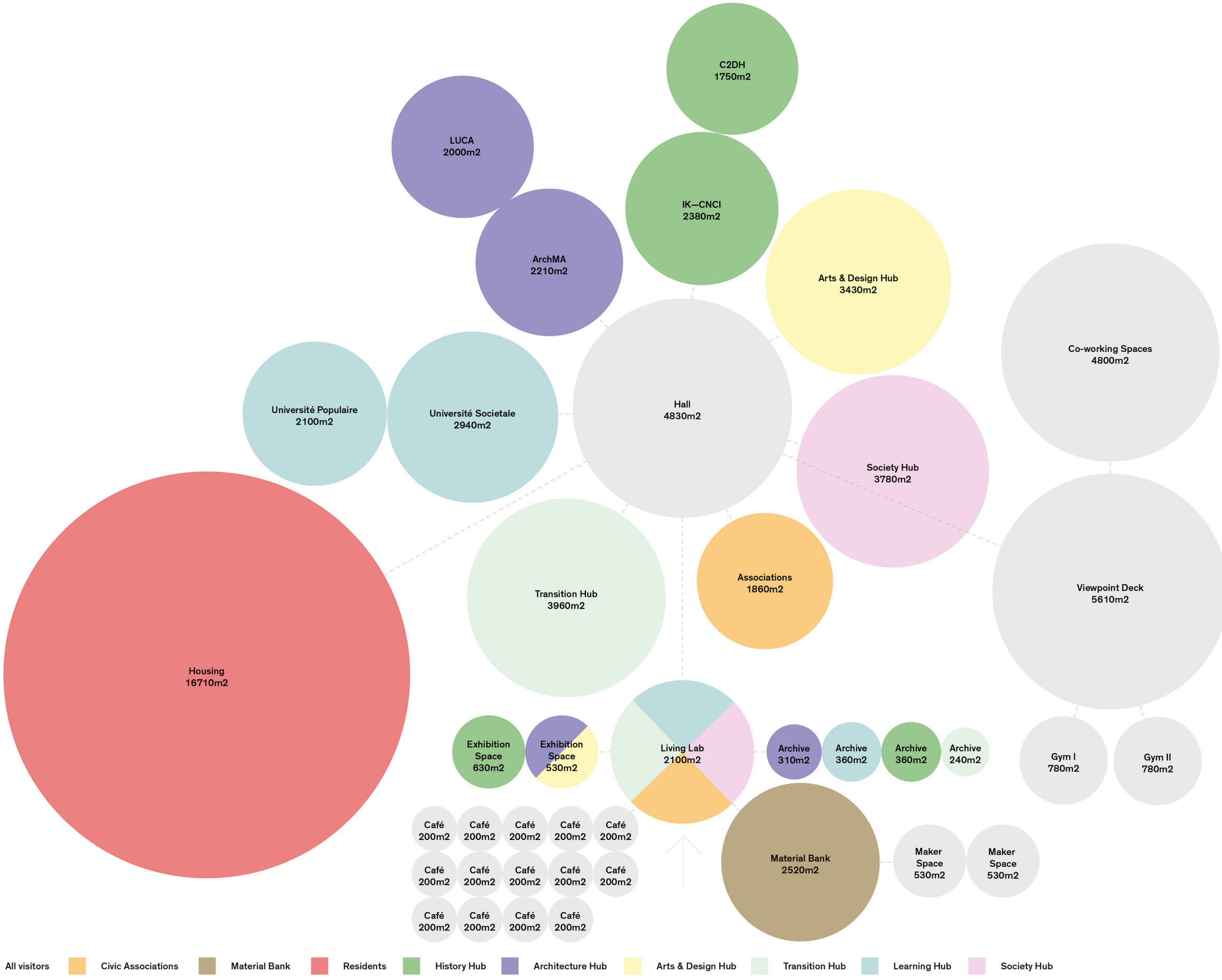
3rd Scenario Congestion — variant A.1

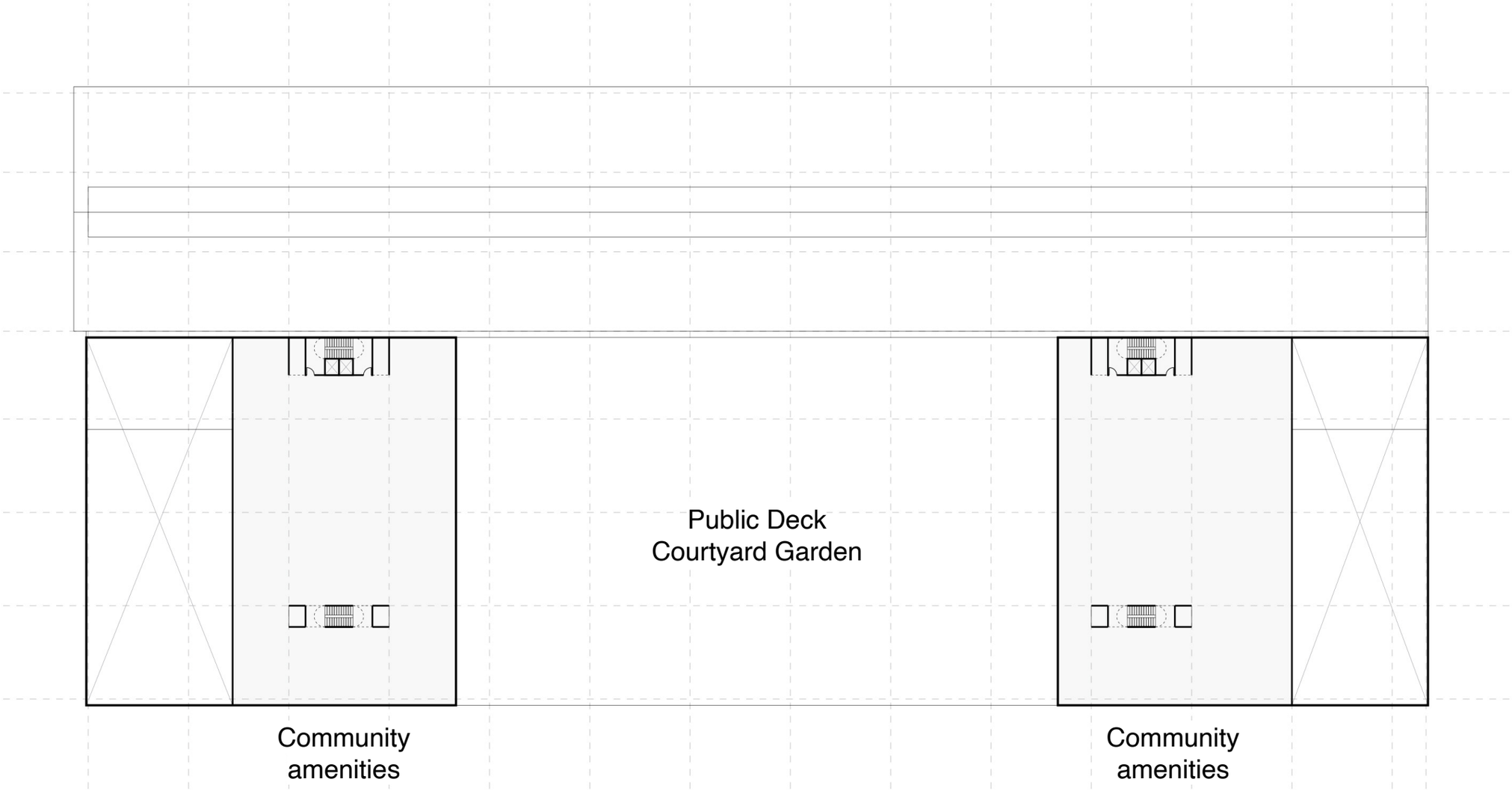
Reference LocHal

Reference Tate Modern

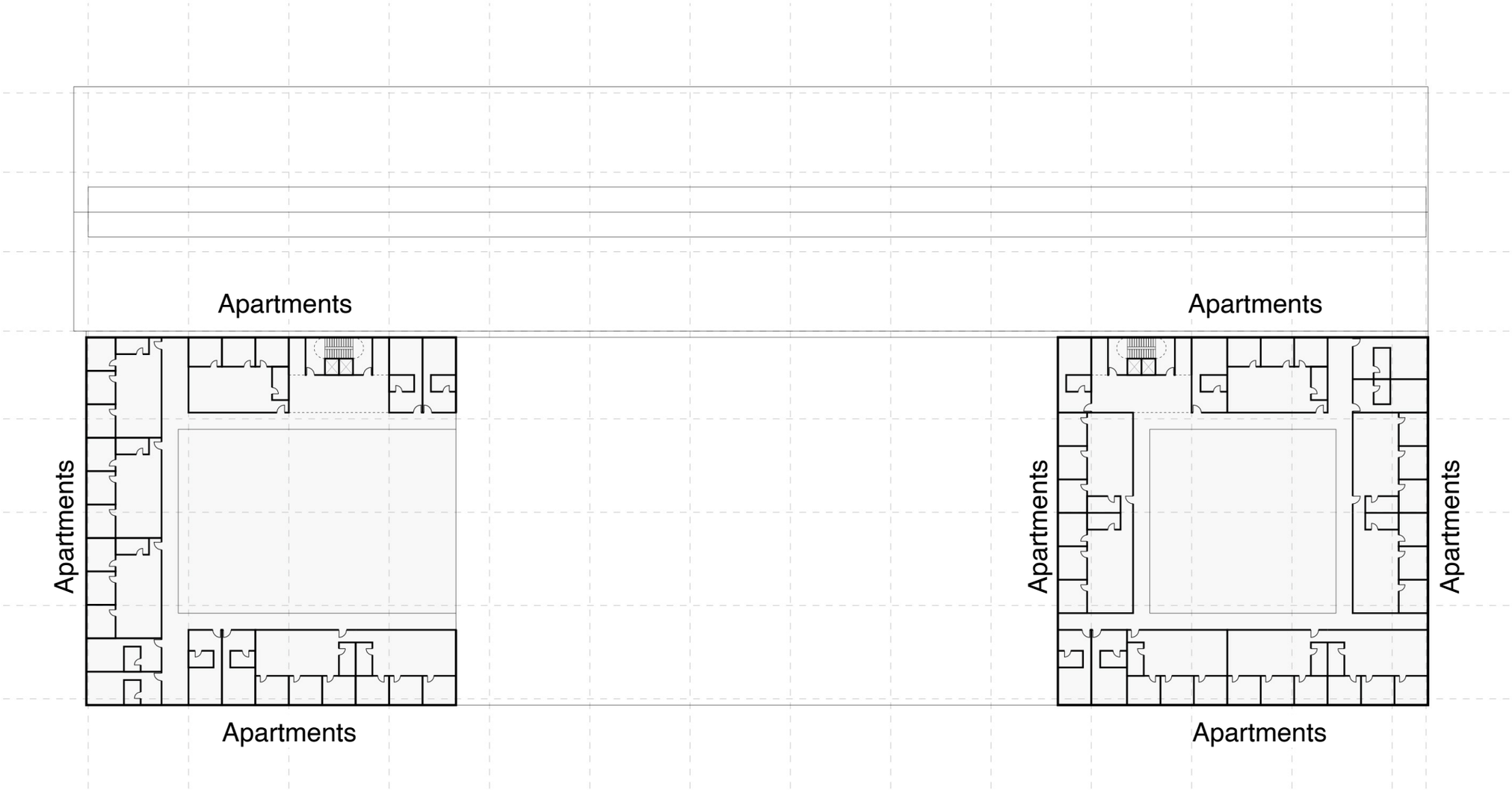


Scenario B powerful Congestion B
83 000 m2 / FAR 7

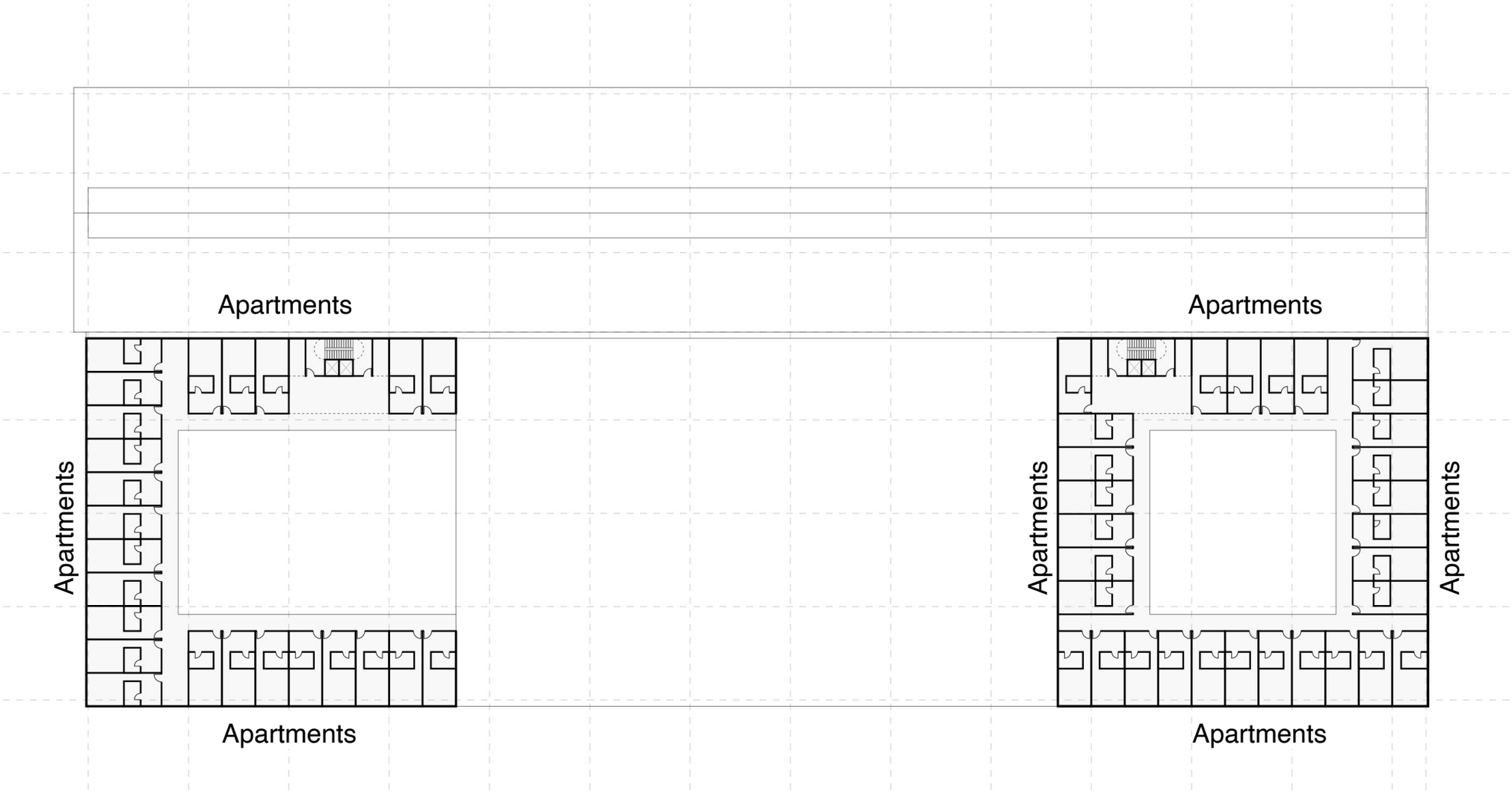

C2DH
1750m2
LUCA
2000m2
IK—CNCI
2380m2
ArchMA
2210m2
Arts & Design Hub
3430m2
Co-working Spaces
4800m2
Université Populaire
2100m2
Université Societale
2940m2
Hall
4830m2
Society Hub
3780m2
Housing
16710m2
Transition Hub
3960m2
Associations
1860m2
Viewpoint Deck
5610m2
Exhibition Space
630m2
Exhibition Space
530m2
Living Lab
2100m2
Archive
310m2
Archive
360m2
Archive
360m2
Archive
240m2
Gym I
780m2
Gym II
780m2
Café
200m2
Material Bank
2520m2
Maker Space
530m2
Maker Space
530m2
All visitors
Civic Associations
Material Bank
Residents
History Hub
Architecture Hub
Arts & Design Hub
Transition Hub
Learning Hub
Society Hub



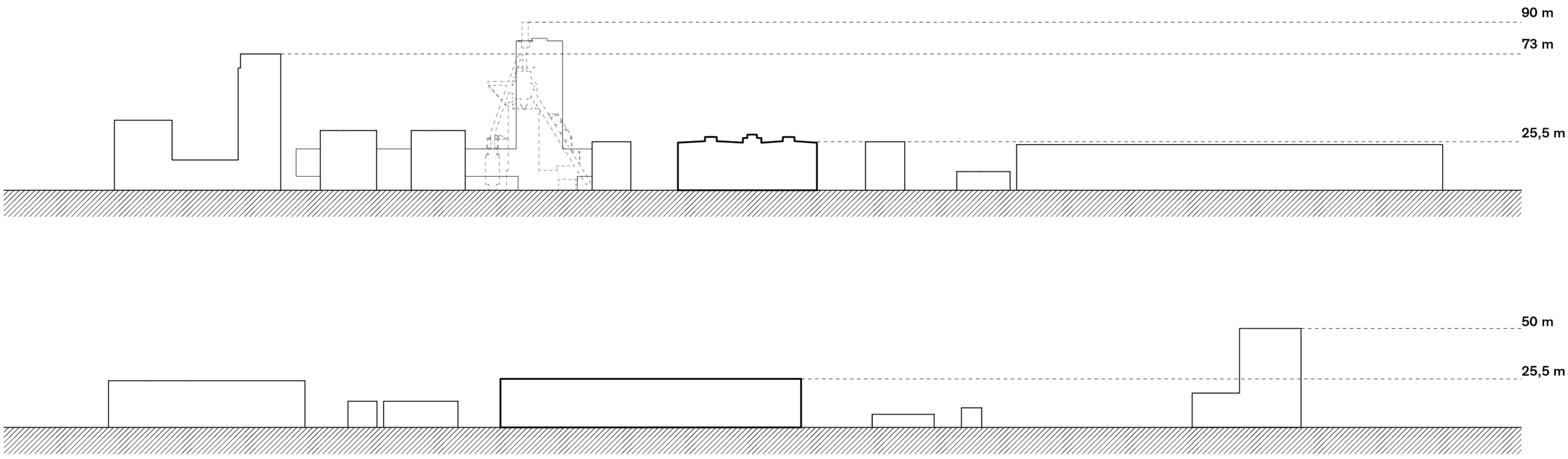
Congestion B Fifth to Sixth Floor



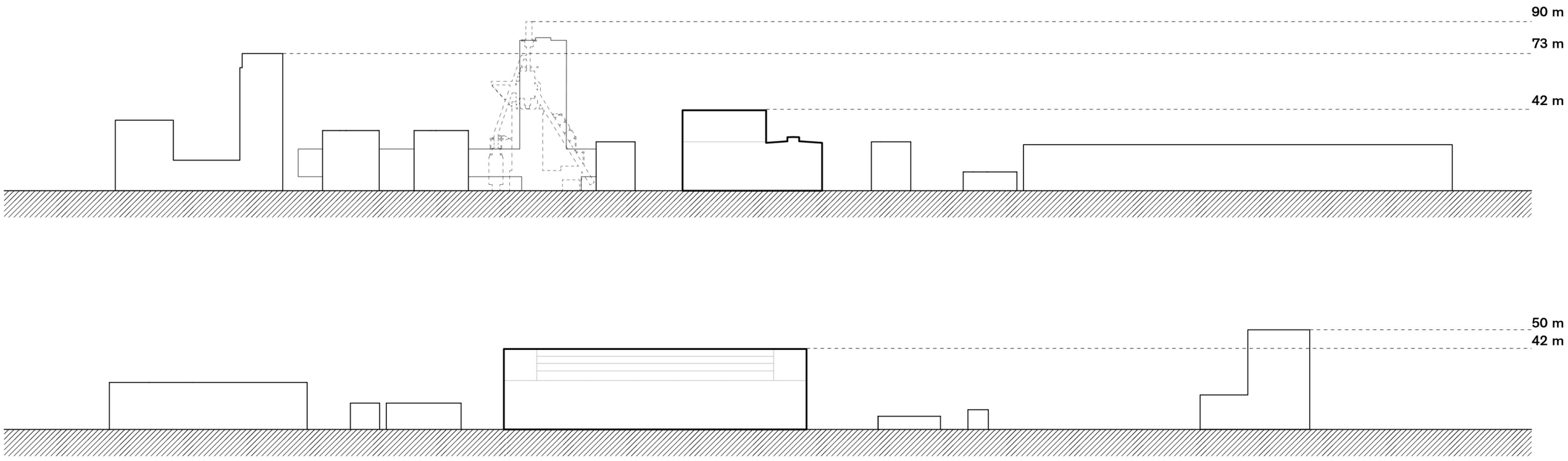
Congestion B Seventh to Ninth Floor



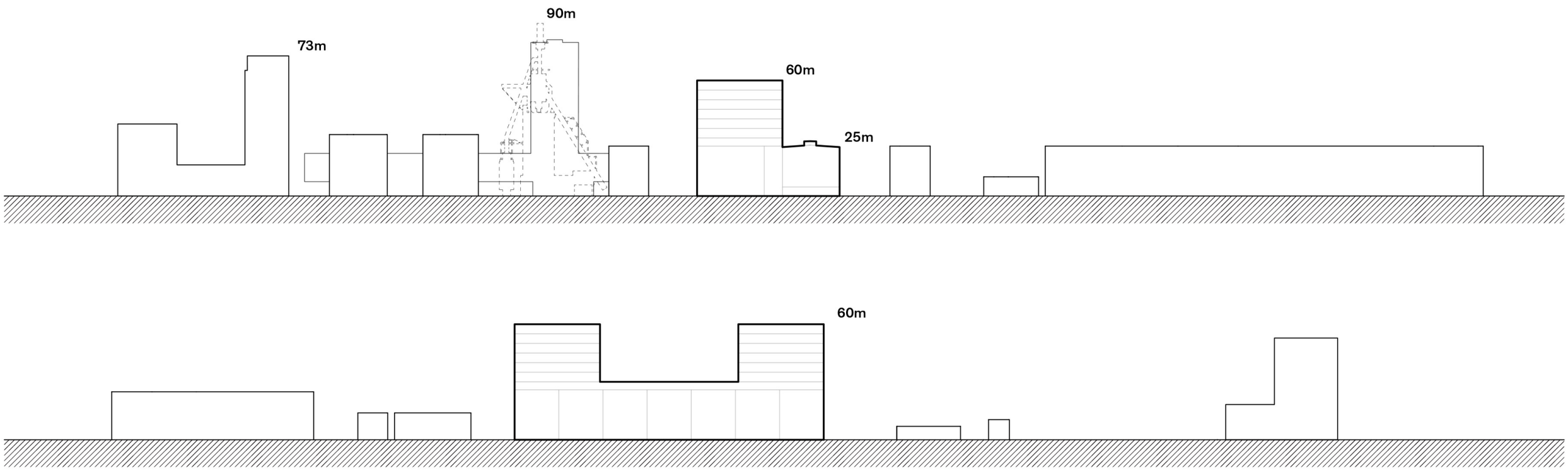
Congestion B Tenth to twelfth Floor



Scenario Restoration and Nesting



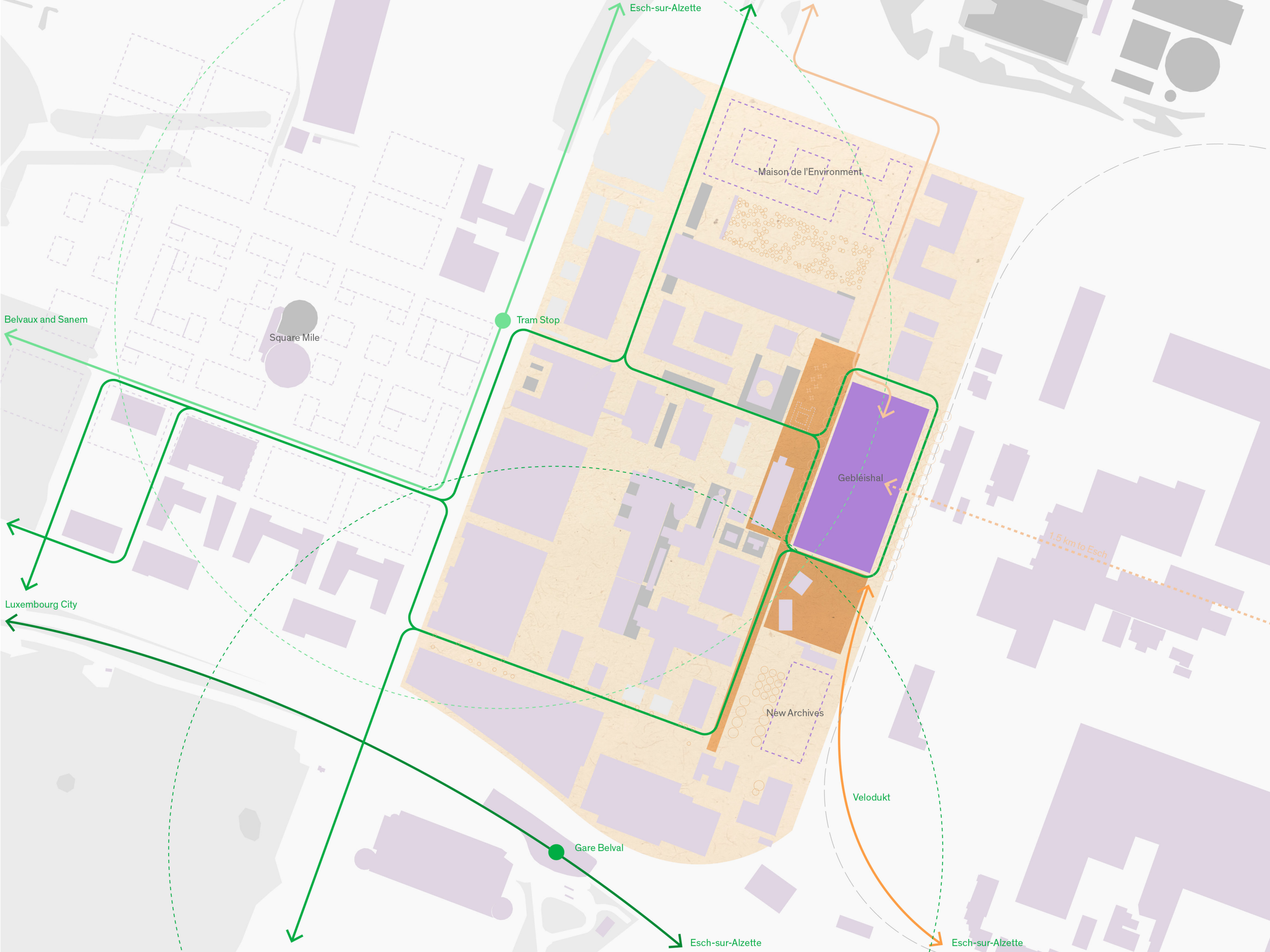
Scenario moderate Congestion



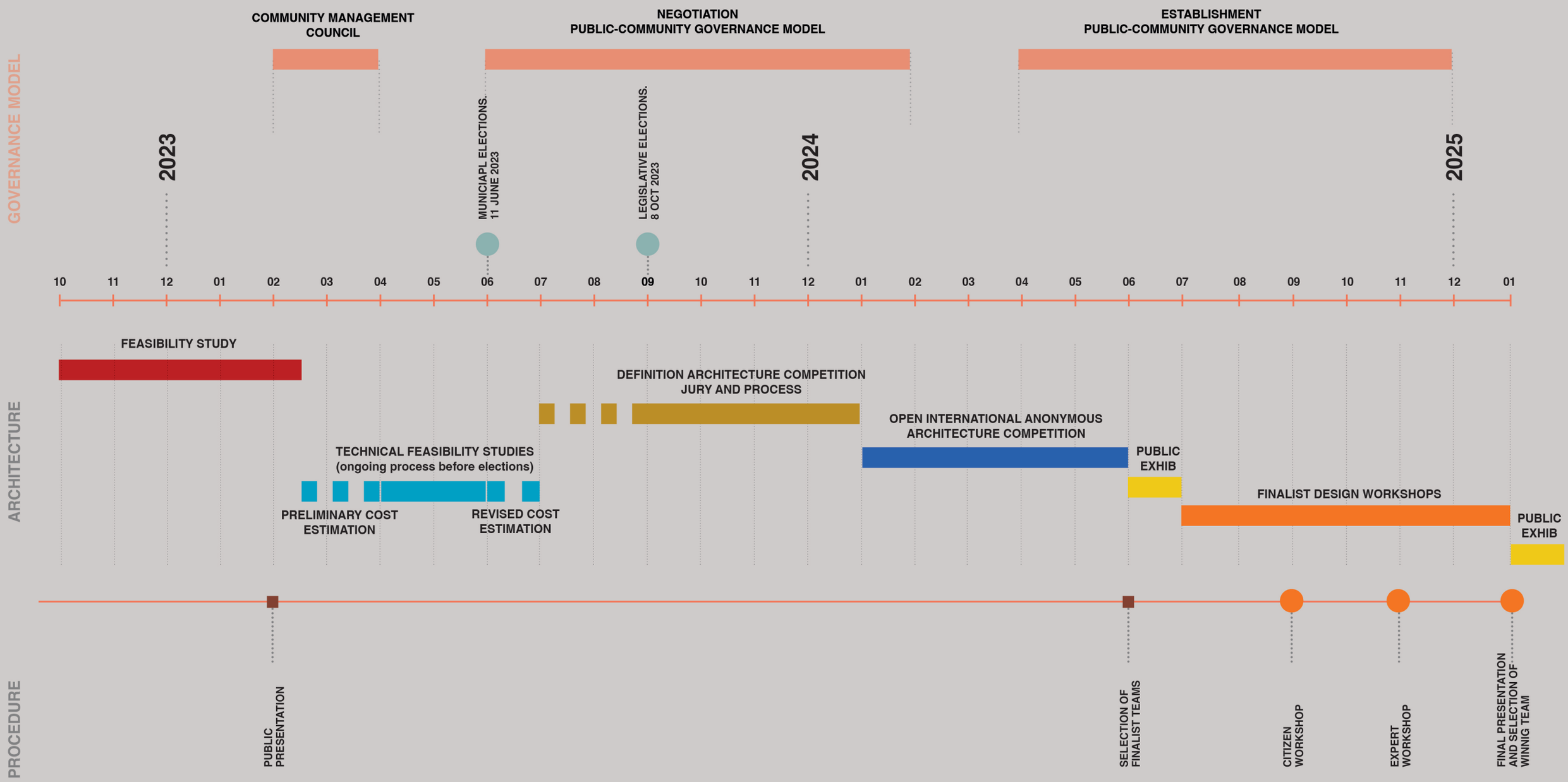
Scenario powerful Congestion

Reference Work for Life Center Hambourg

Reference San Francisco Power Station


Esch-sur-Alzette
Maison de l'Environment
Belvaux and Sanem
Tram Stop
Square Mile
Gebléishal
1.5 km to Esch
Luxembourg City
New Archives
Velodukt
Gare Belval
Esch-sur-Alzette
Esch-sur-Alzette

Process Design


GOVERNANCE MODEL
COMMUNITY MANAGEMENT COUNCIL
NEGOTIATION PUBLIC-COMMUNITY GOVERNANCE MODEL
ESTABLISHMENT PUBLIC-COMMUNITY GOVERNANCE MODEL
2023
2024
2025
MUNICIAPL ELECTIONS. 11 JUNE 2023
LEGISLATIVE ELECTIONS. 8 OCT 2023
10 11 12 01 02 03 04 05 06 07 08 09 10 11 12 01 02 03 04 05 06 07 08 09 10 11 12 01
ARCHITECTURE
FEASIBILITY STUDY
DEFINITION ARCHITECTURE COMPETITION JURY AND PROCESS
OPEN INTERNATIONAL ANONYMOUS ARCHITECTURE COMPETITION
PUBLIC EXHIB
TECHNICAL FEASIBILITY STUDIES (ongoing process before elections)
PRELIMINARY COST ESTIMATION
REVISED COST ESTIMATION
FINALIST DESIGN WORKSHOPS
PUBLIC EXHIB
PROCEDURE
PUBLIC PRESENTATION
SELECTION OF FINALIST TEAMS
CITIZEN WORKSHOP
EXPERT WORKSHOP
FINAL PRESENTATION AND SELECTION OF WINNIG TEAM

Concours type atelier transparent et participatif

Public-Community-Partnership

Utilité publique

Diversité fonctionnelle

Petite granularité

Evolutivité

Co-Design

Auto-Gouvernance

merci