



LINCOLN GARDENS



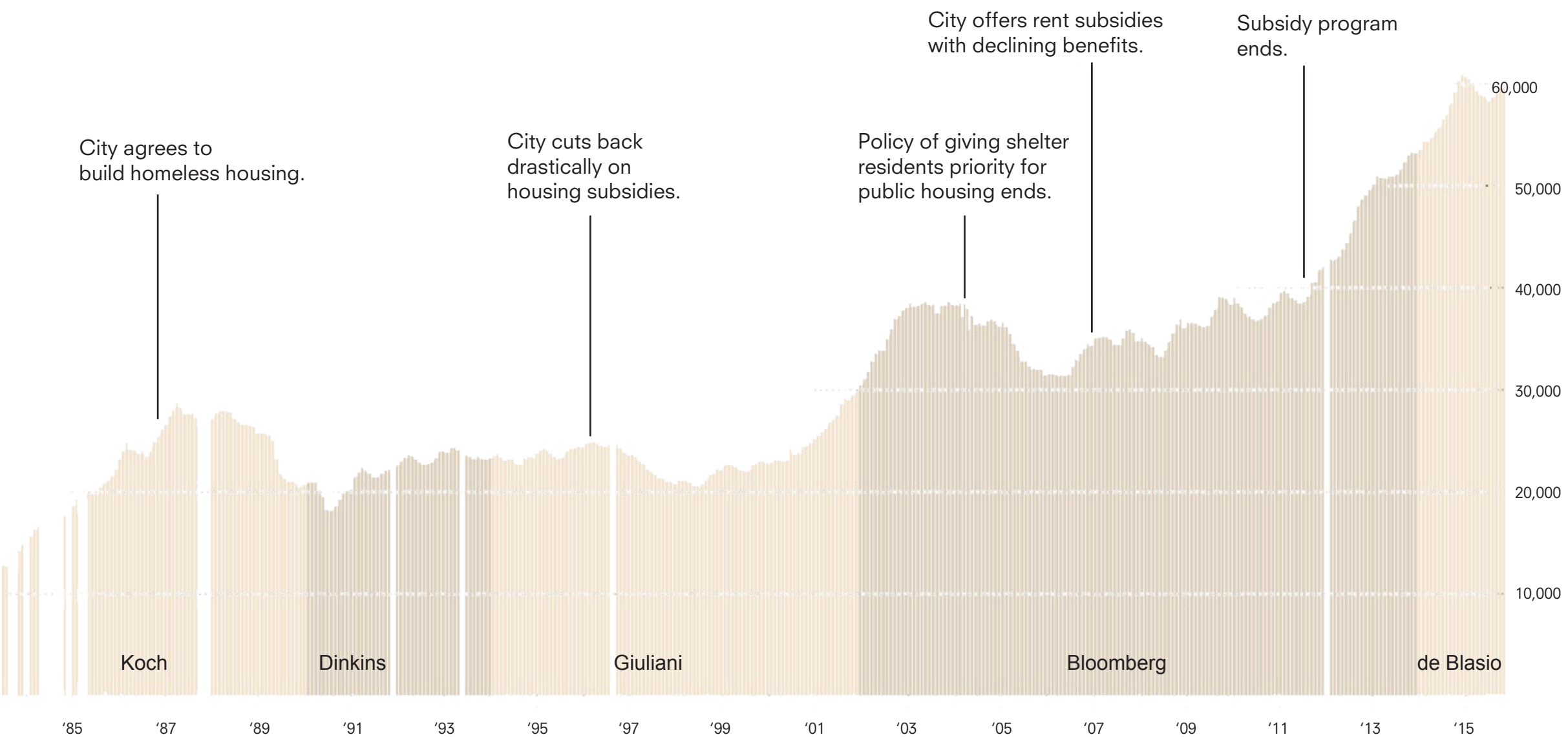


TRANSITIONAL YARDS





SHELTER POPULATION



New York City homeless shelter population, 2016

image: New York Times

Research Question

What is the relationship between architecture and homelessness?

Research Question

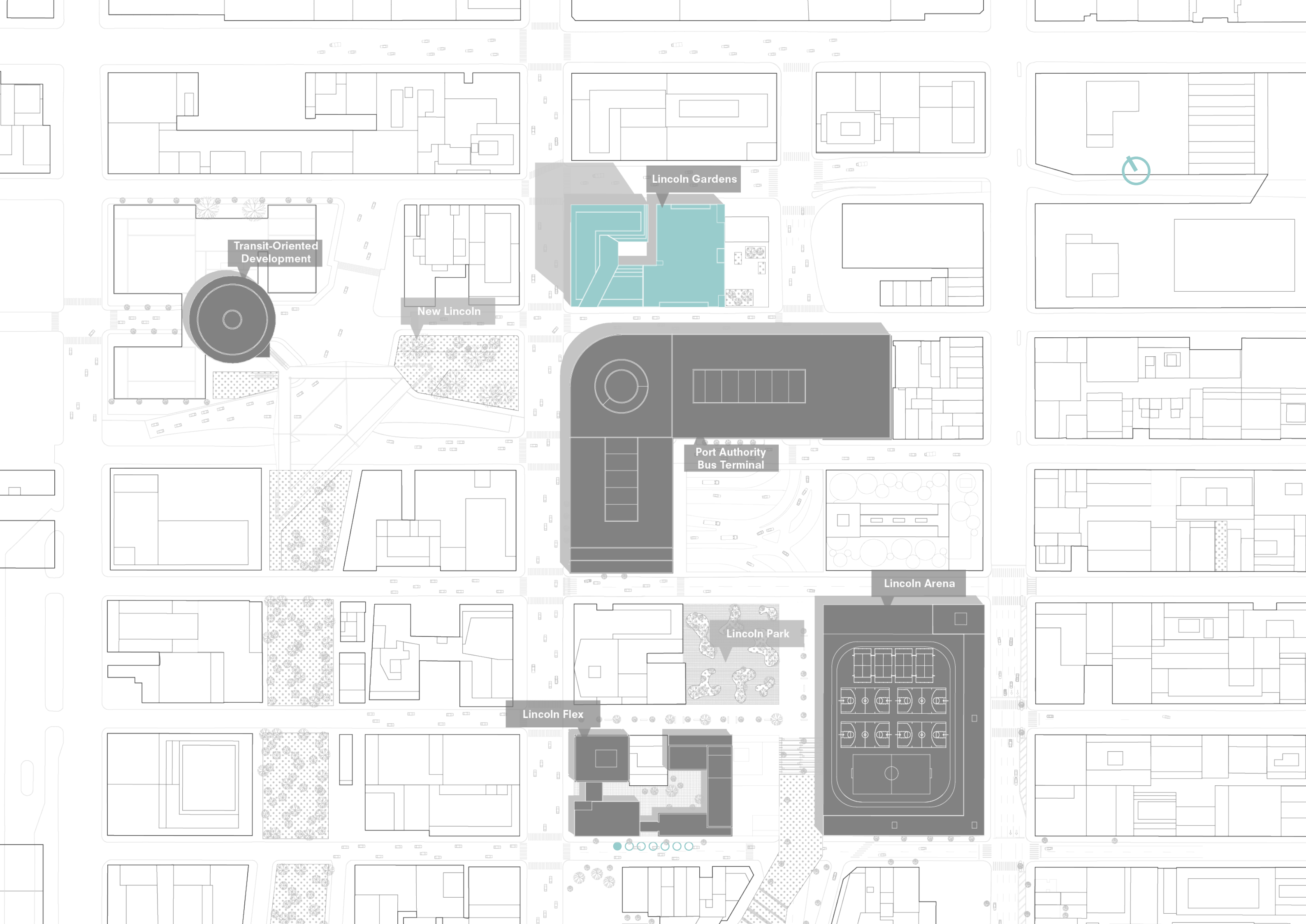
What is the relationship between
architecture and homelessness?

**And to what extent can architecture have
a positive impact on homelessness in
Transitional Yards?**

RE-IMAGINING COVENANT HOUSE







Transit-Oriented
Development

Lincoln Gardens

New Lincoln

Port Authority
Bus Terminal

Lincoln Arena

Lincoln Park

Lincoln Flex

CLIENTS



services for
homeless and
trafficked youth

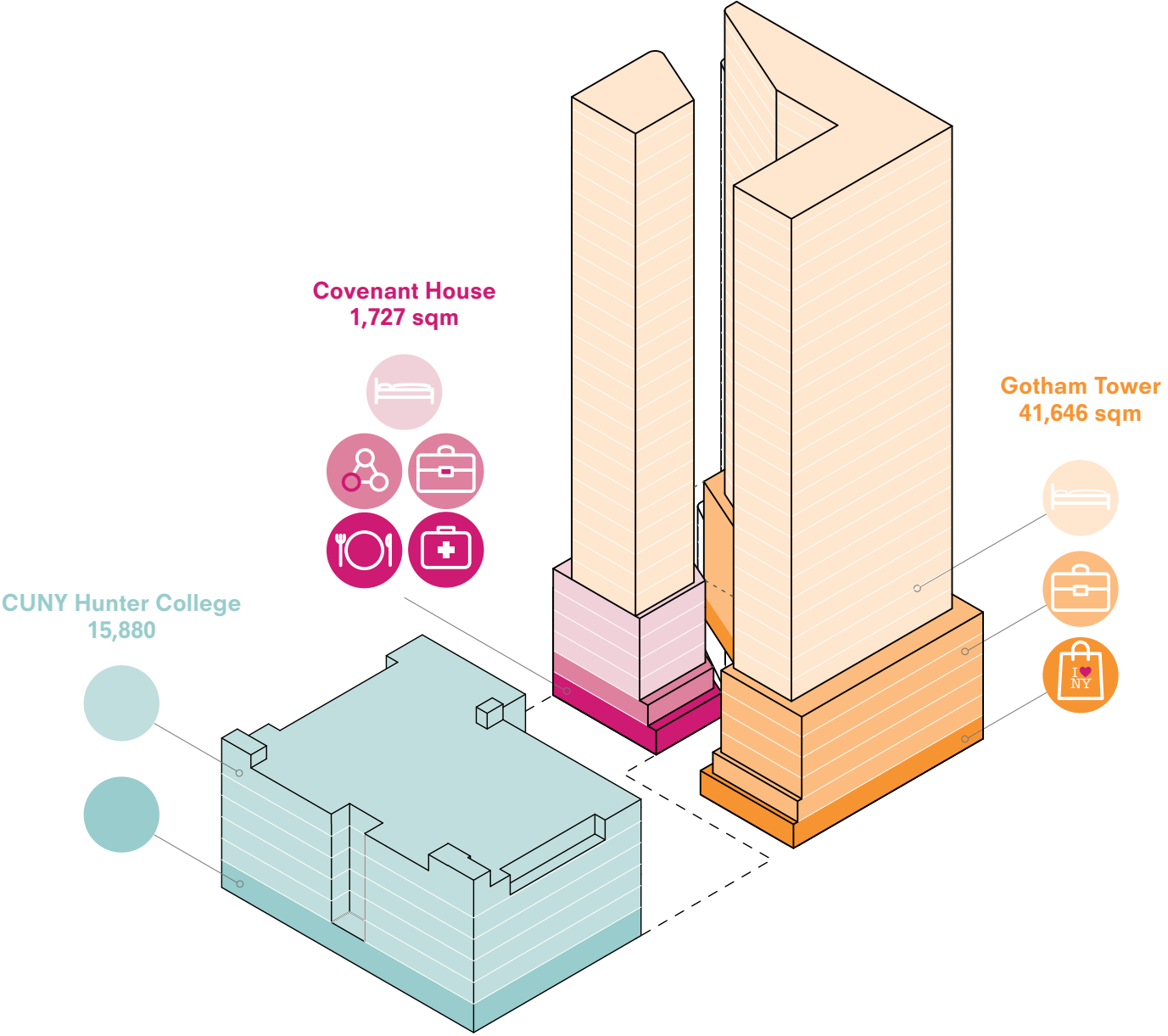


undergrad and
grad programs,
part of CUNY



real estate
development firm
operating in NYC

MIXED-USE COMPLEX



NEW SHARED IDENTITY





HOMELESS IN NEW YORK CITY

INCREASING WEALTH GAP

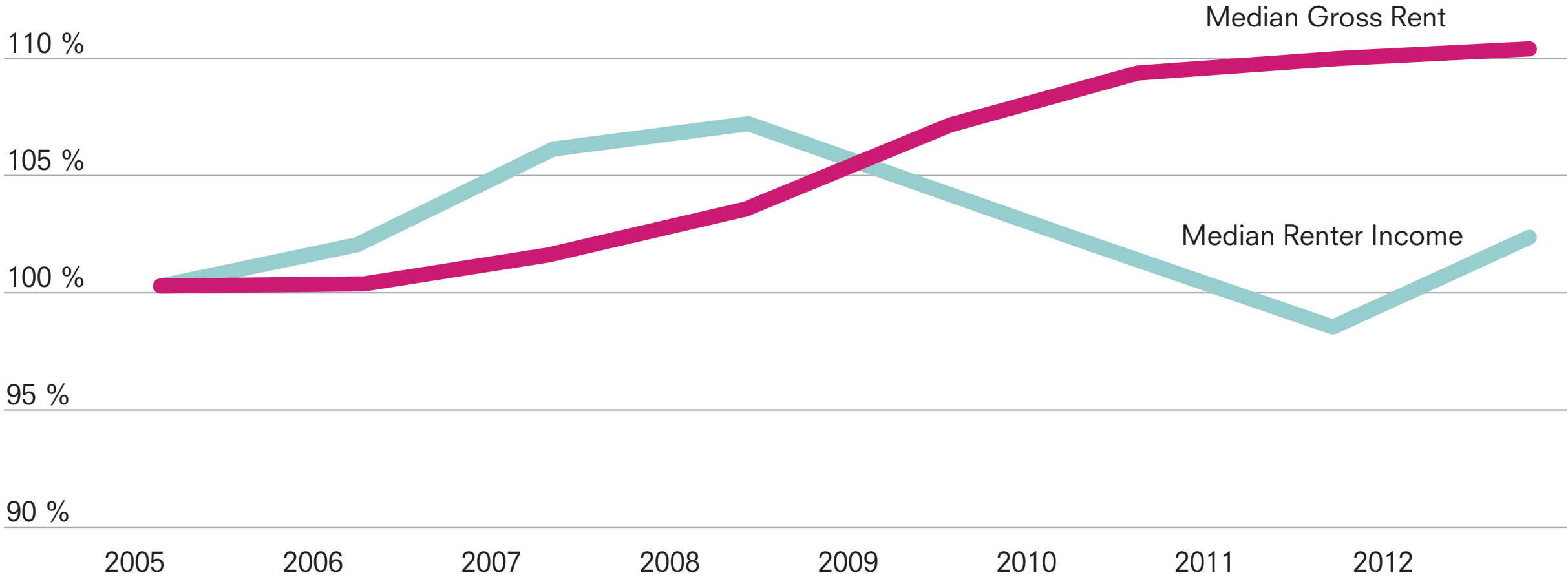


the rich get richer



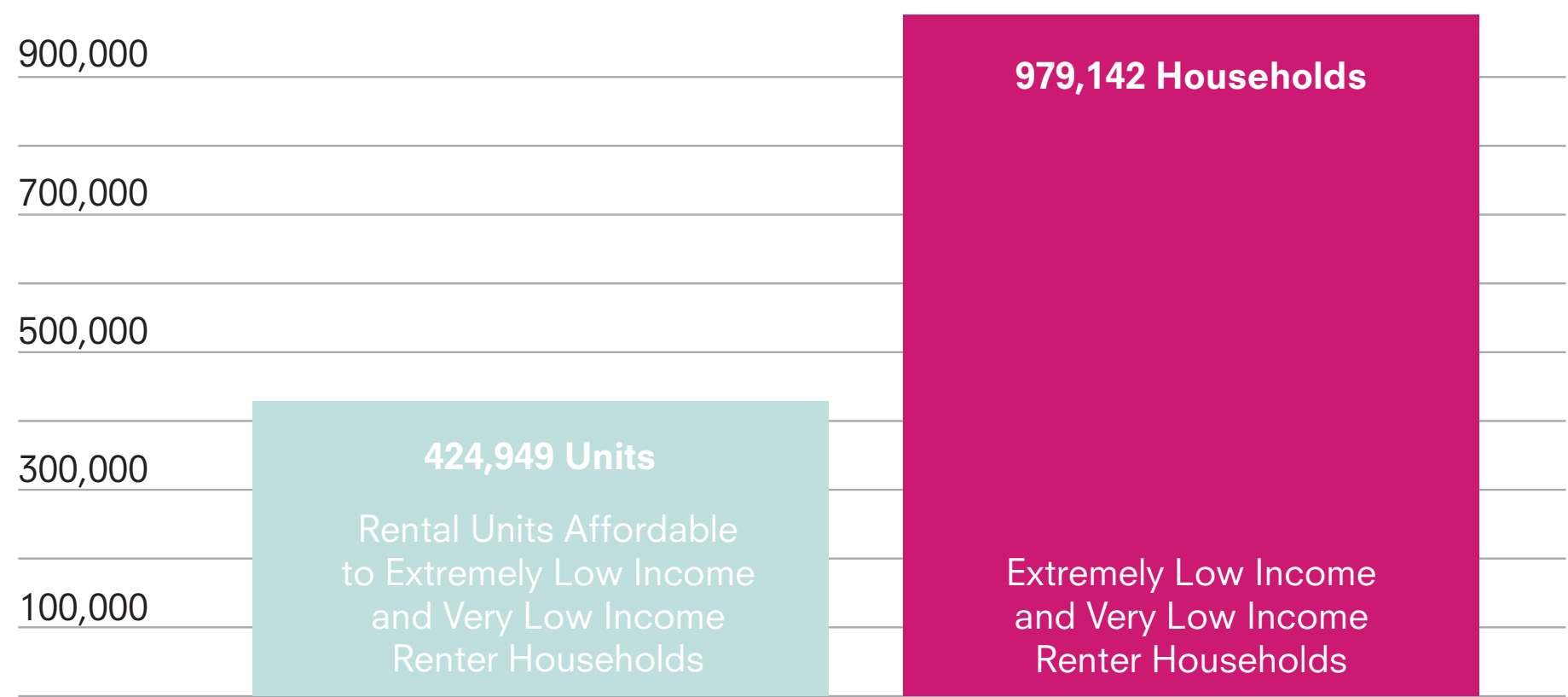
the poor stay poor

Index of New York City Median Gross Rent and Renter Household Income, 2005-2012



Data Source: 2005-2012 American Community Survey (1-Year Estimates); Bureau of Labor Statistics

Supply and Demand among Extremely Low Income and Very Low Income Renter Households



Data Source:
Housing and Vancancy Survey
(U.S. Census), 2011

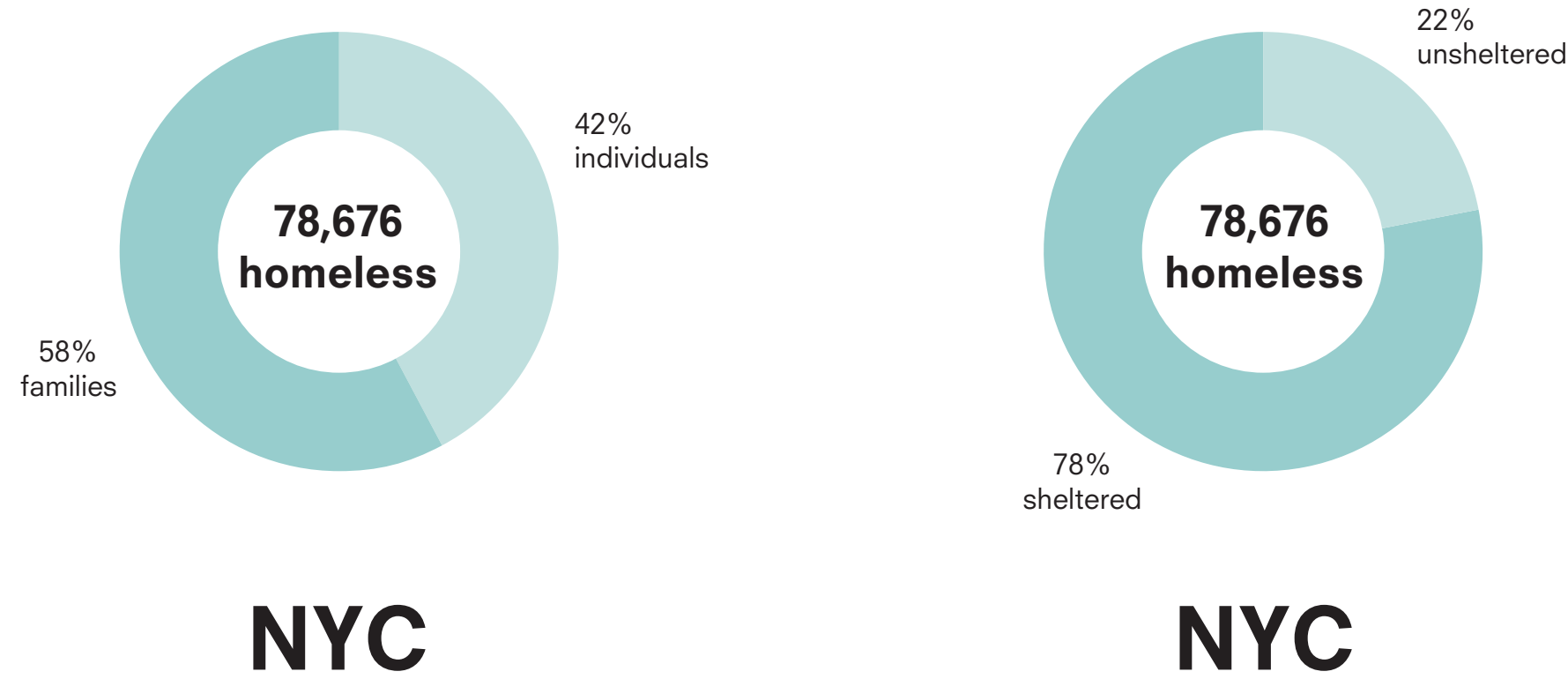


image: nytimes.com

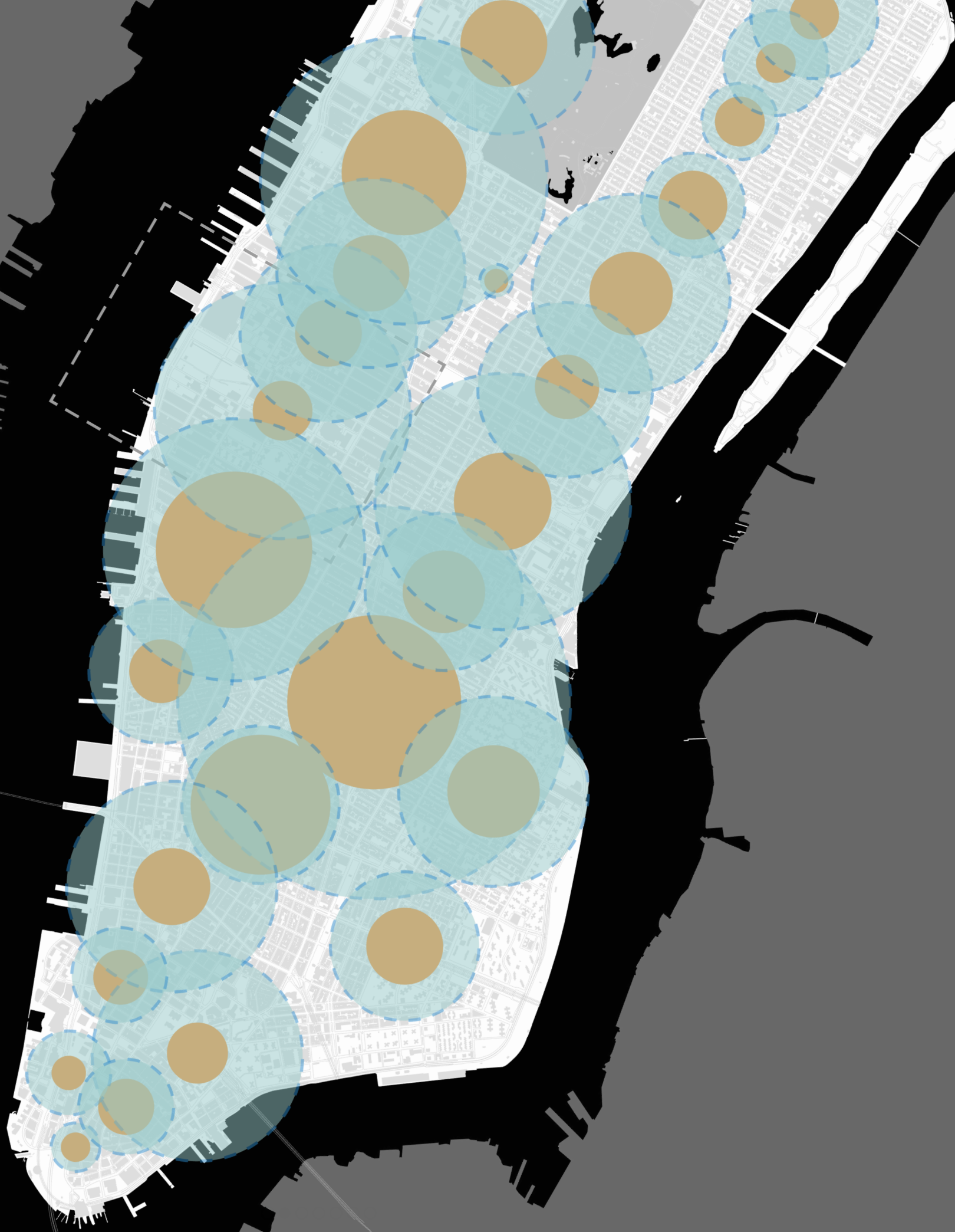
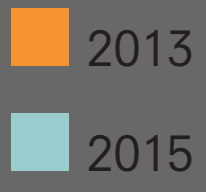
HOMELESS

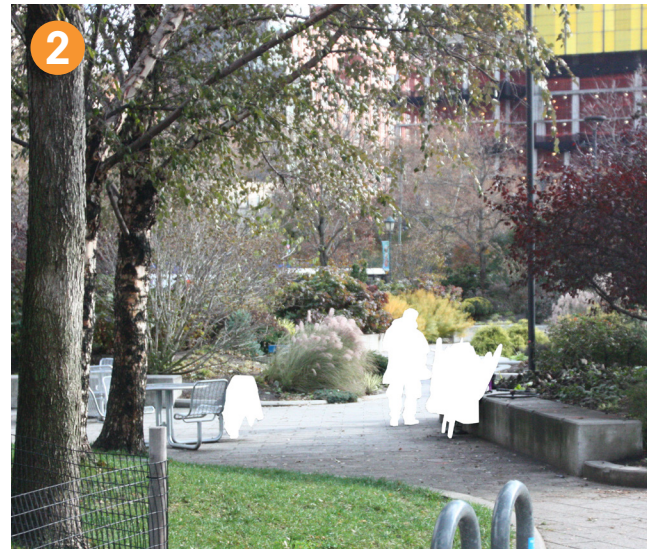


Homeless Individuals on a Single Night in January 2018



Data Source: The 2018 Annual Homeless Assessment Report (AHAR) to Congress





TAKE-AWAYS FROM THE SURVEY



key factors:
1) accessibility
2) warmth
3) physical shelter



no correlation to
building or building
block typologies



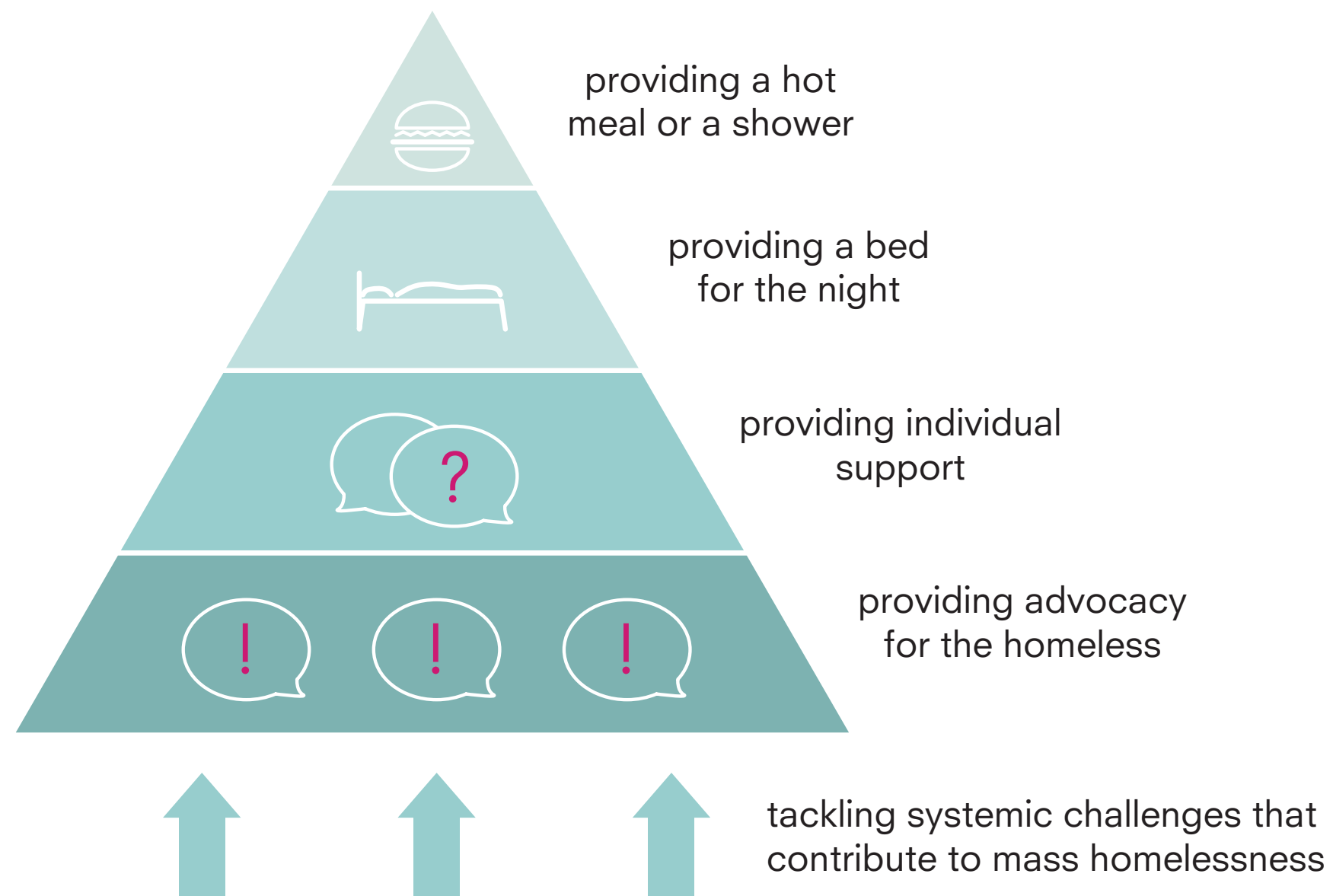
encampment
=
person + belongings

**HOMELESSNESS IS A PERSISTENT REALITY
OF NYC'S URBAN CONDITION.**

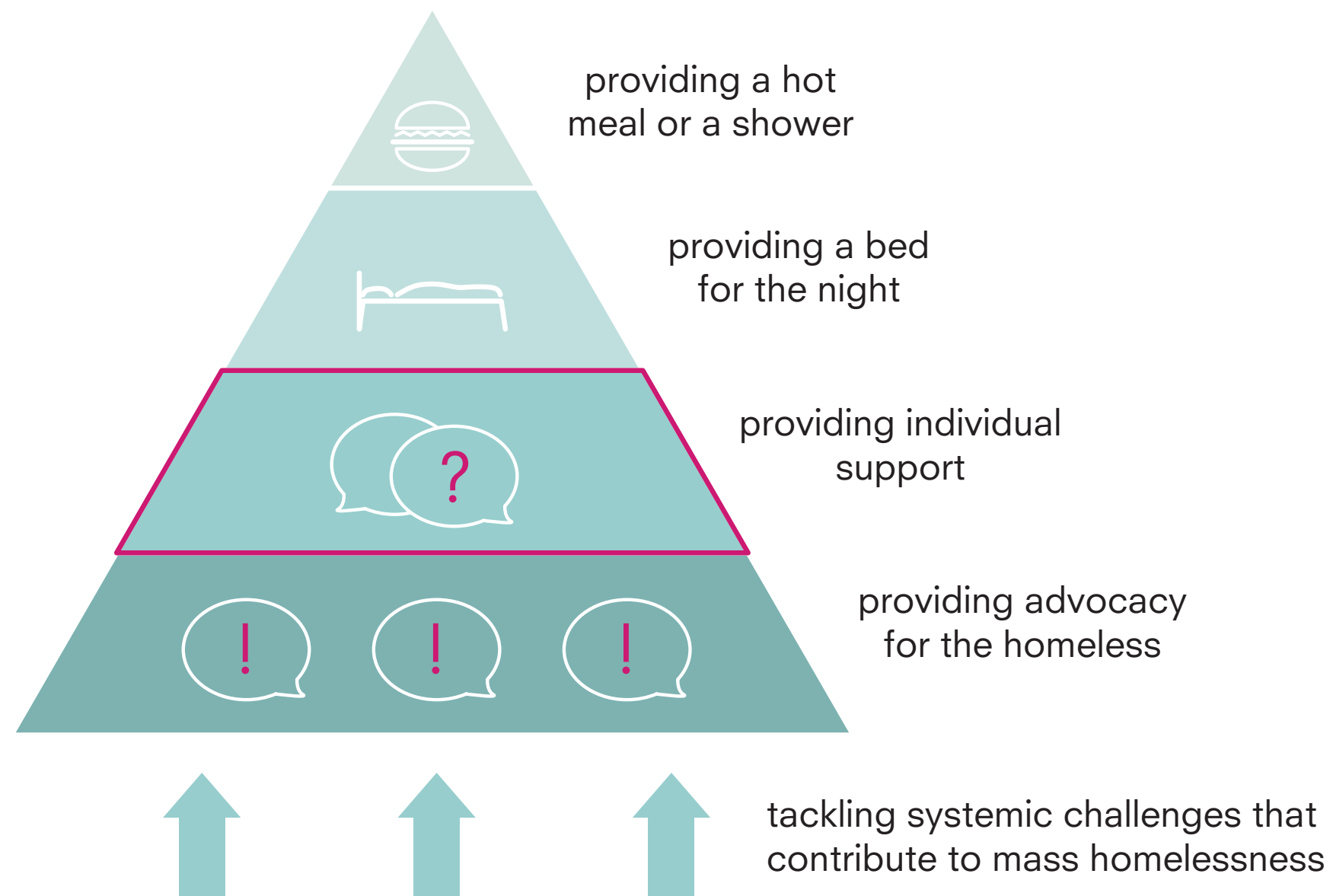
AND FINDING SOLUTIONS IS URGENT.



Different approaches reach different depths (but they're all valid and necessary).



Different approaches reach different depths (but they're all valid and necessary).

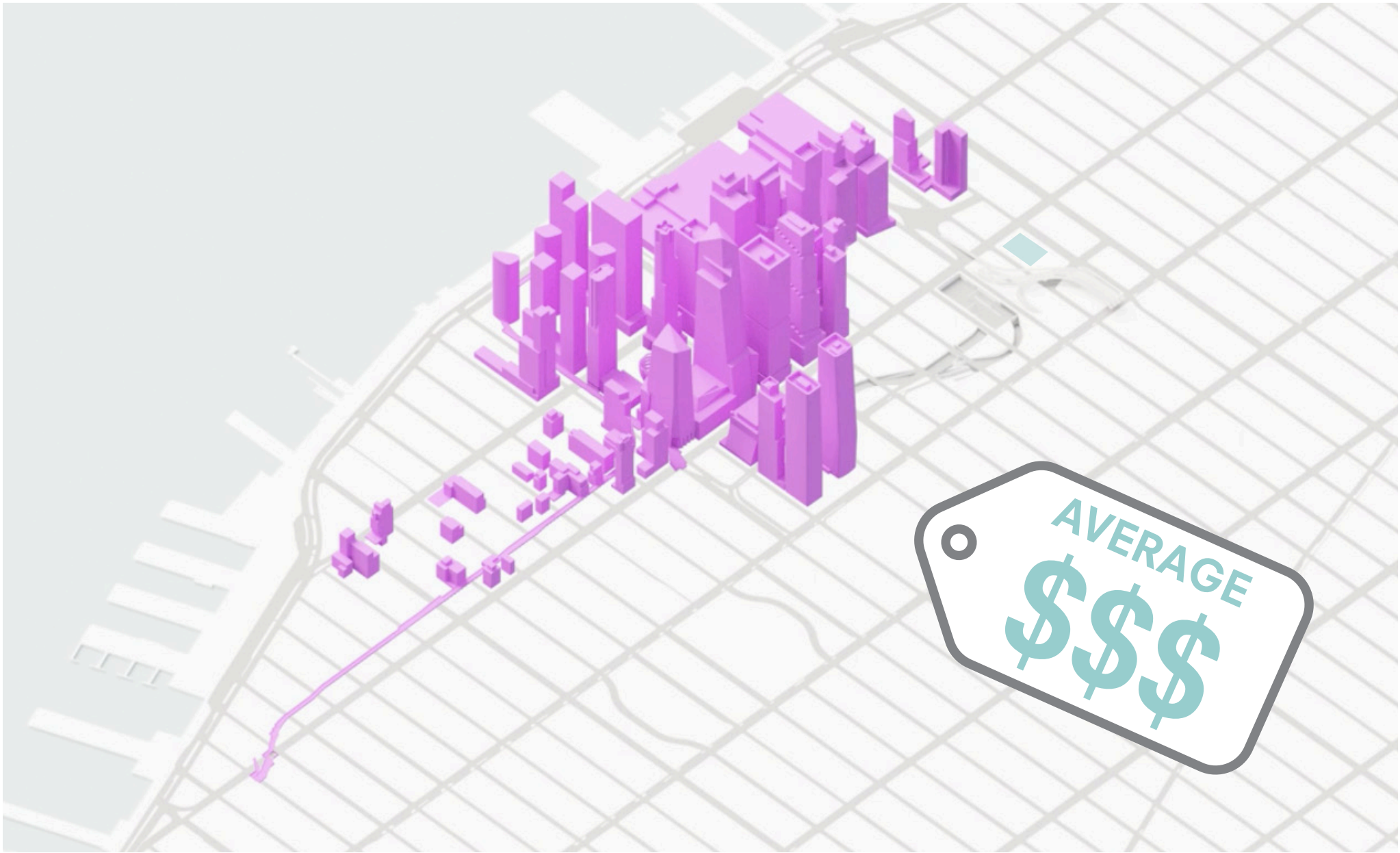


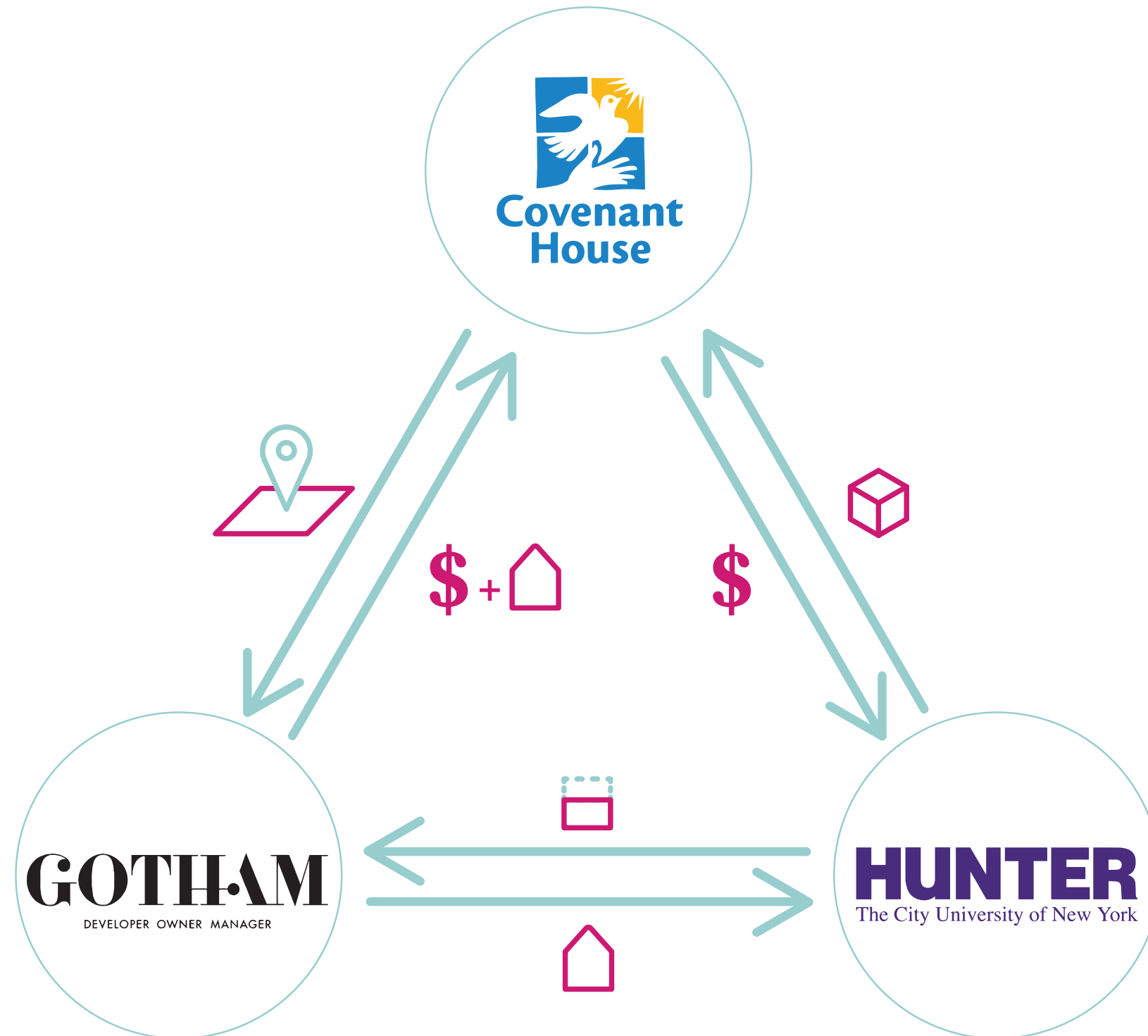
Architecture can not comprehensively address
this *complex issue* on its own, but it can
contribute to improving the situation in ways that
other disciplines can not.

RE-IMAGINING COVENANT HOUSE

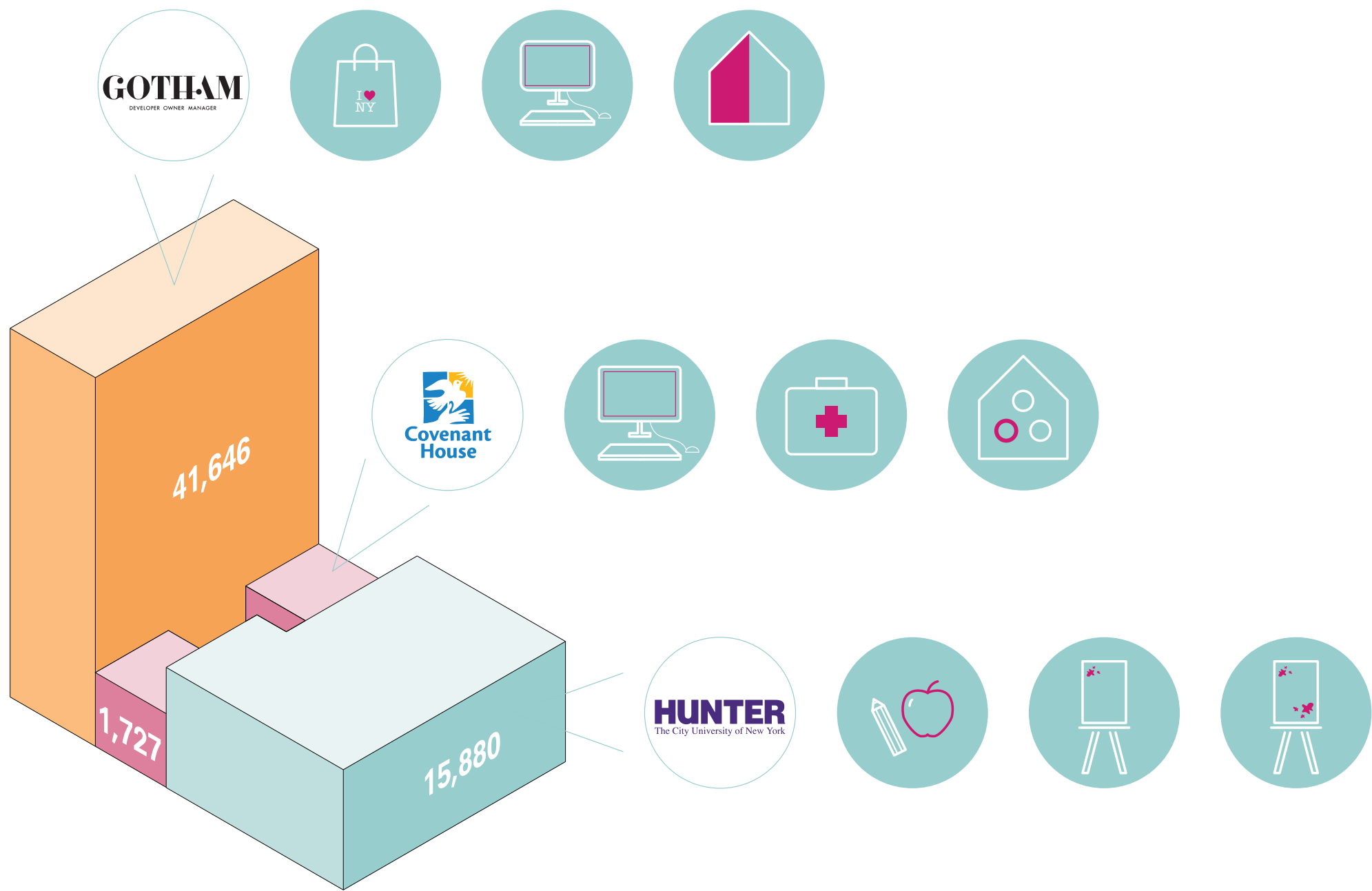


RISING LAND PRICES





PROGRAM





TRANSITIONAL YARDS

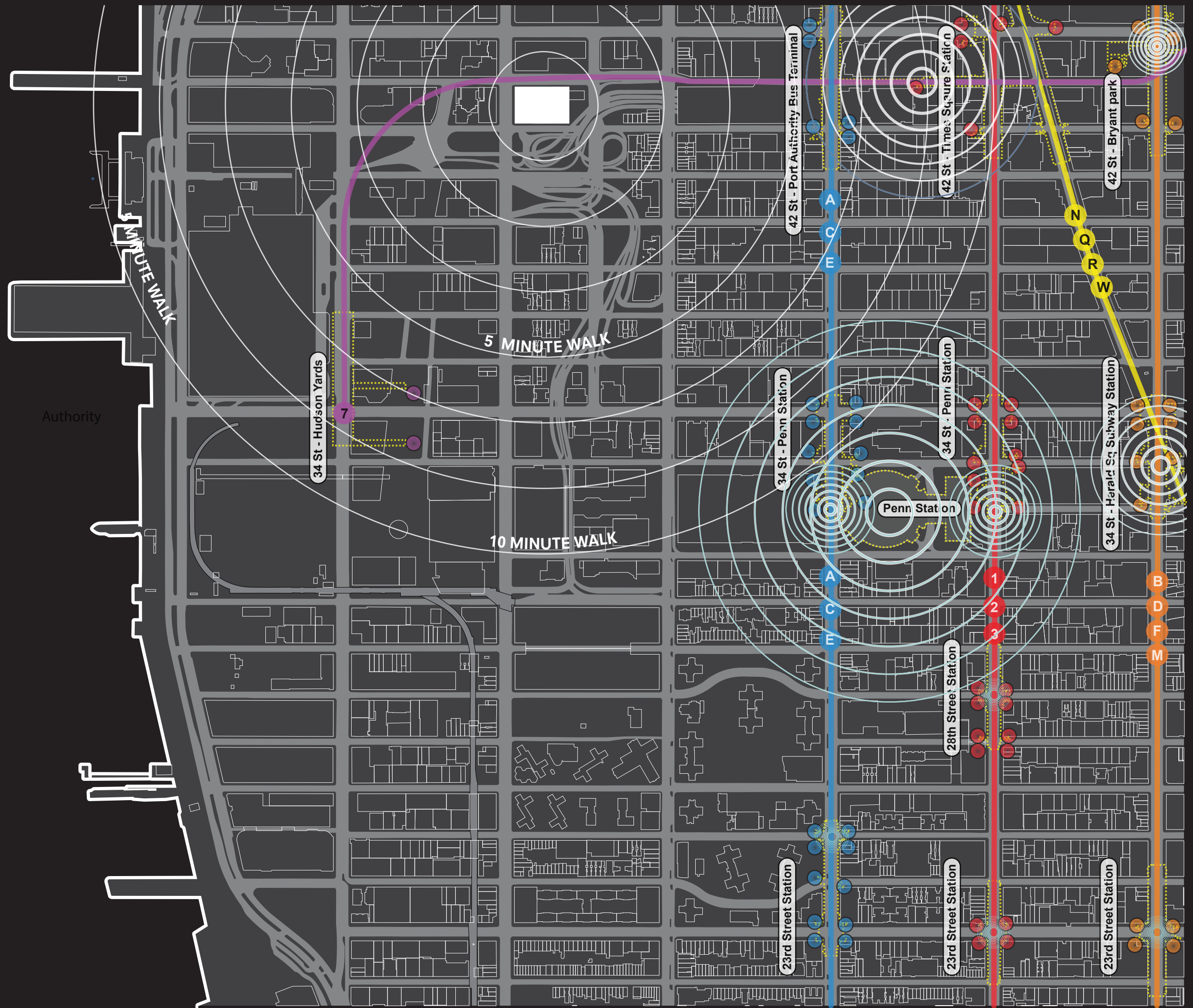
opportunities for mobility



subway ridership



0 25 50 150 m

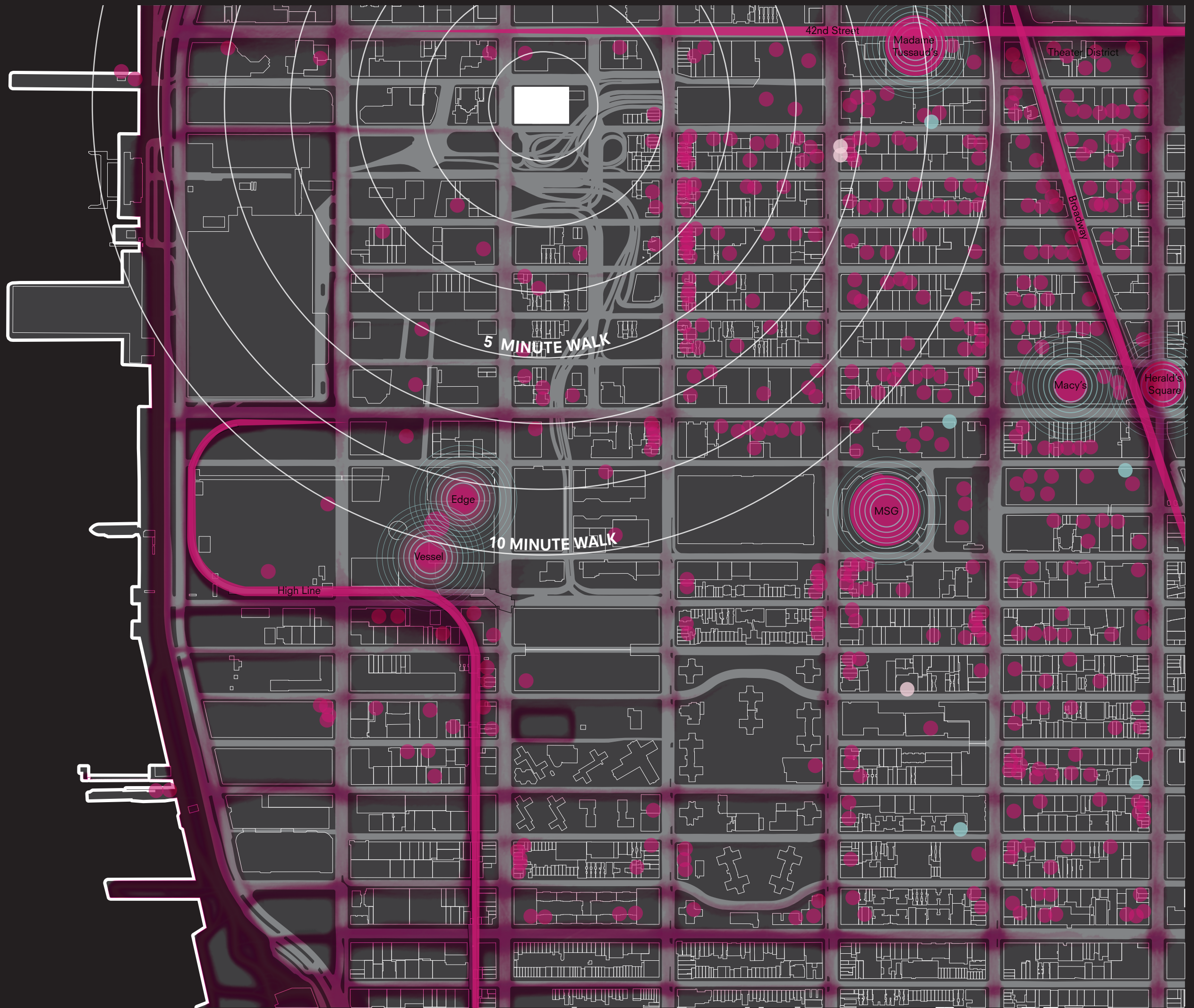




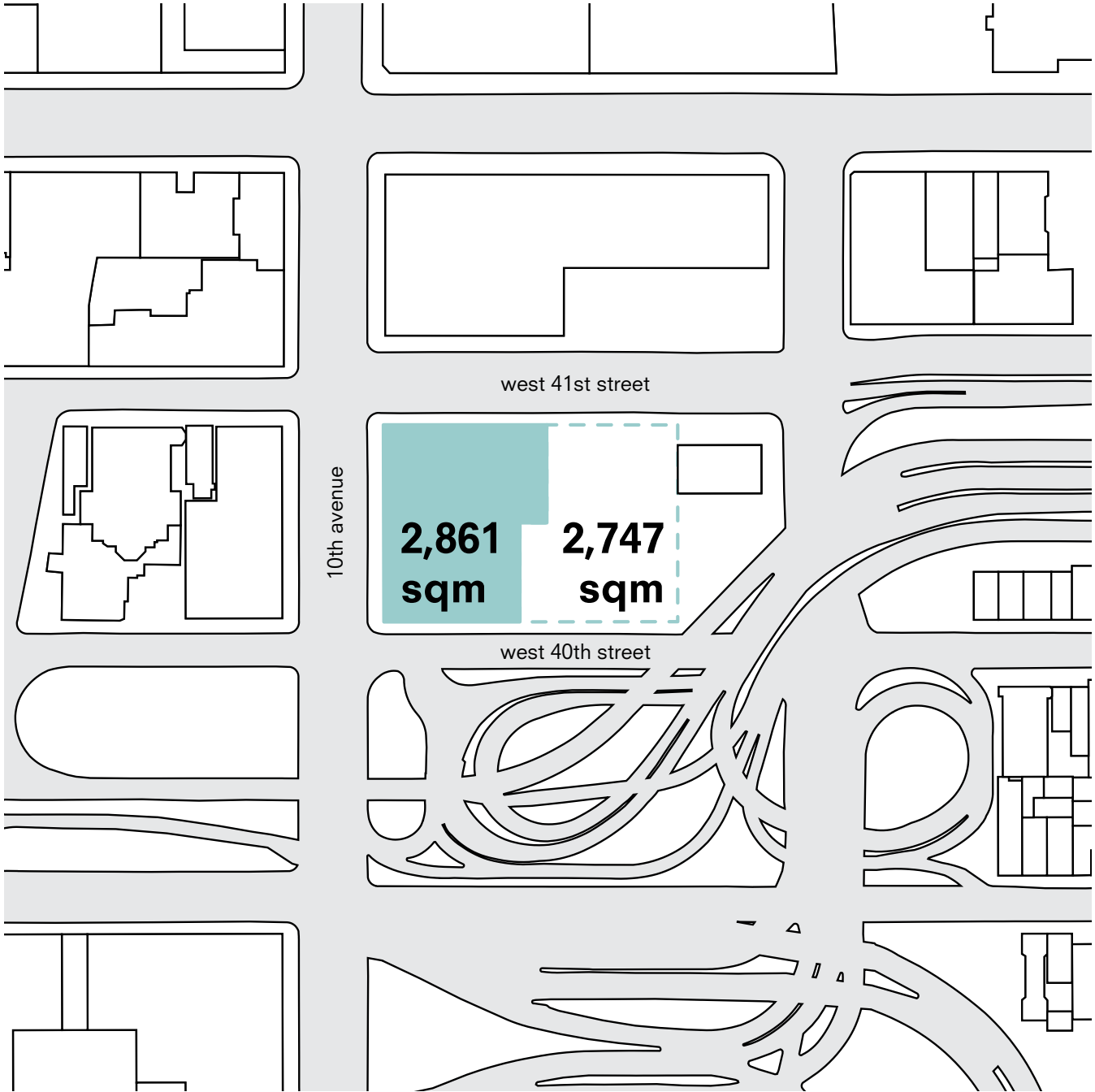
organizations for the homeless

- housing / shelter
- on-site service provider
- office

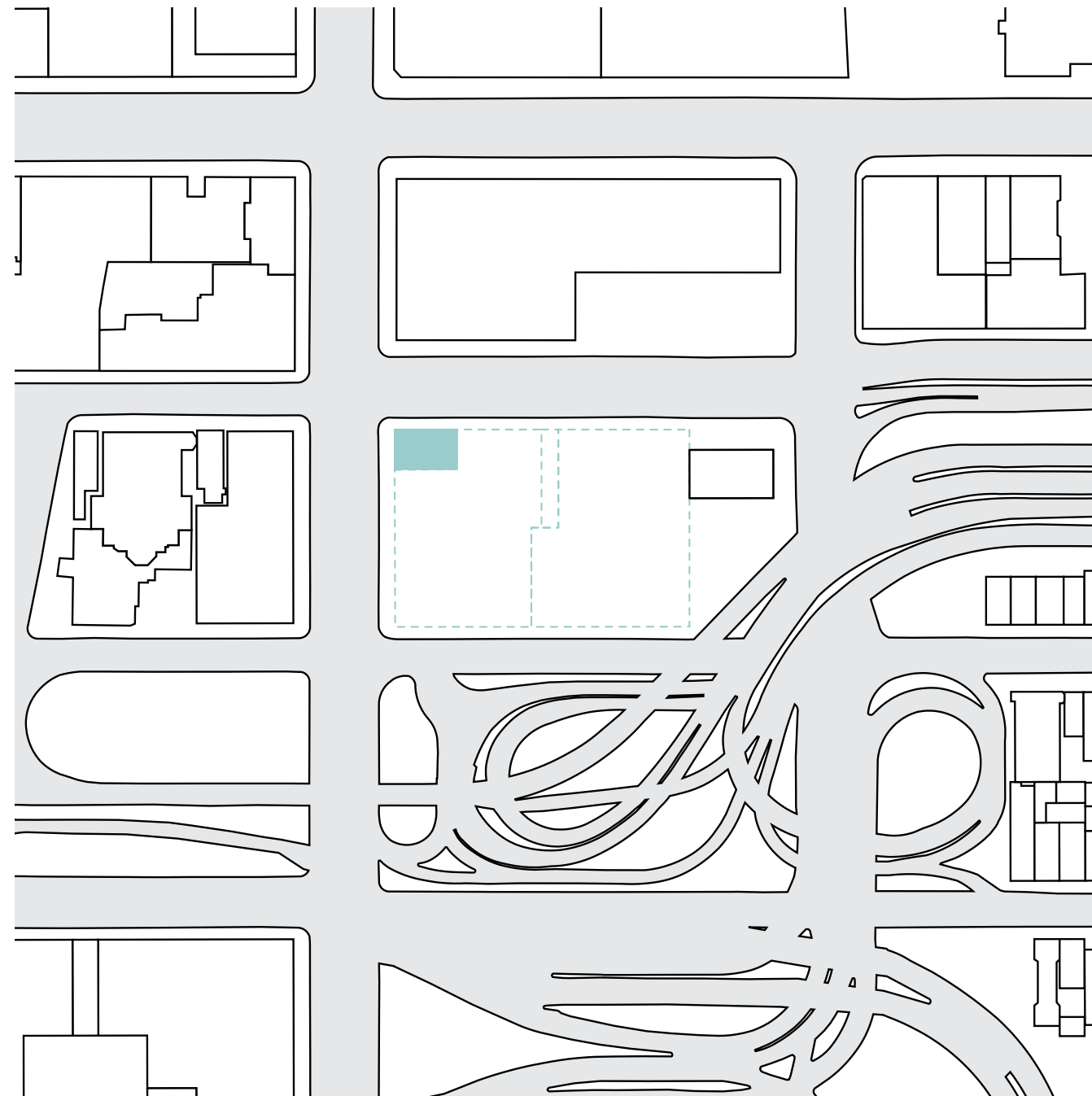




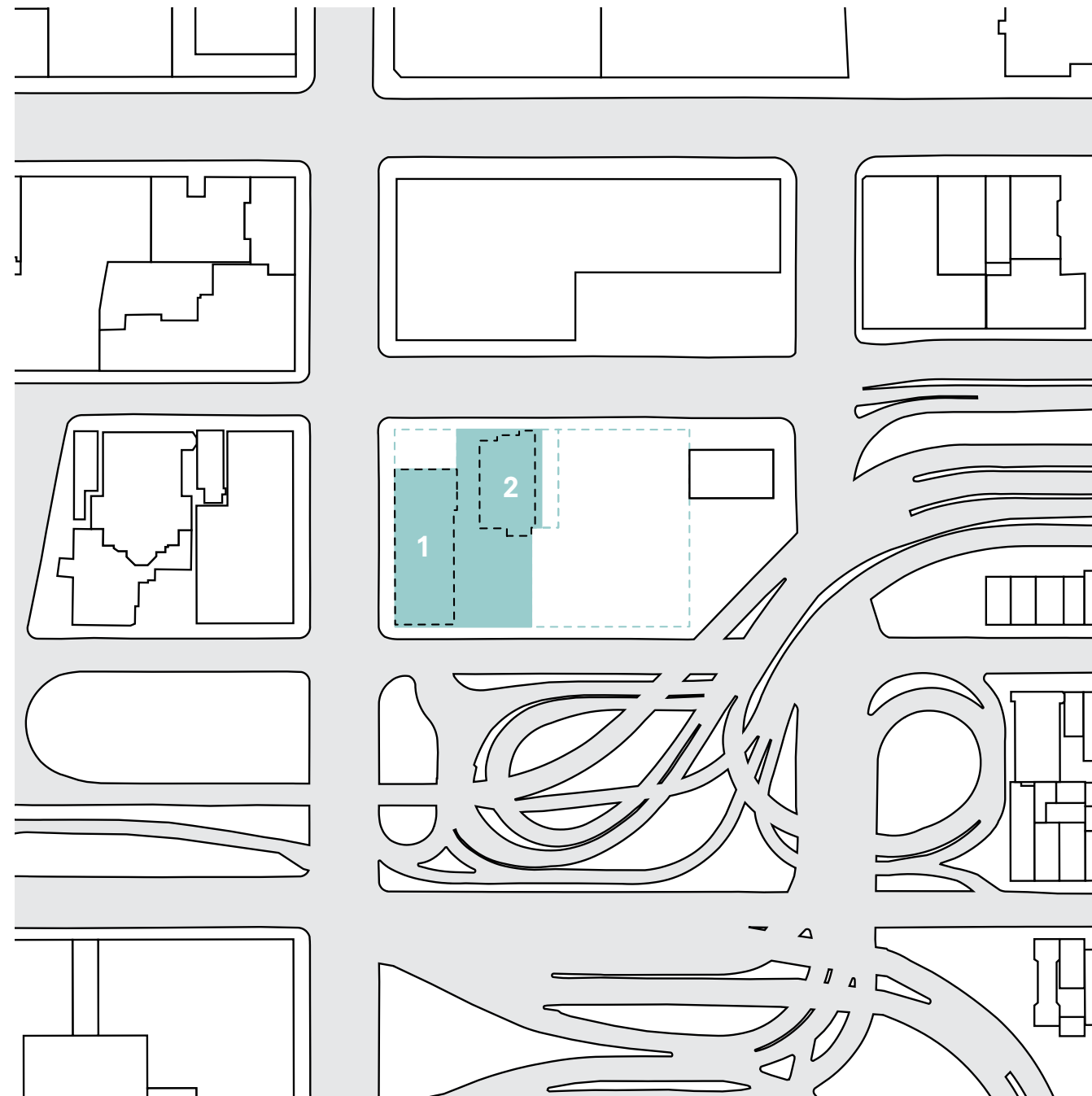
TOTAL SITE



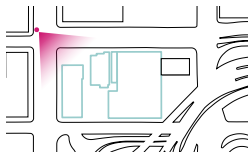
COVENANT HOUSE LOT 1



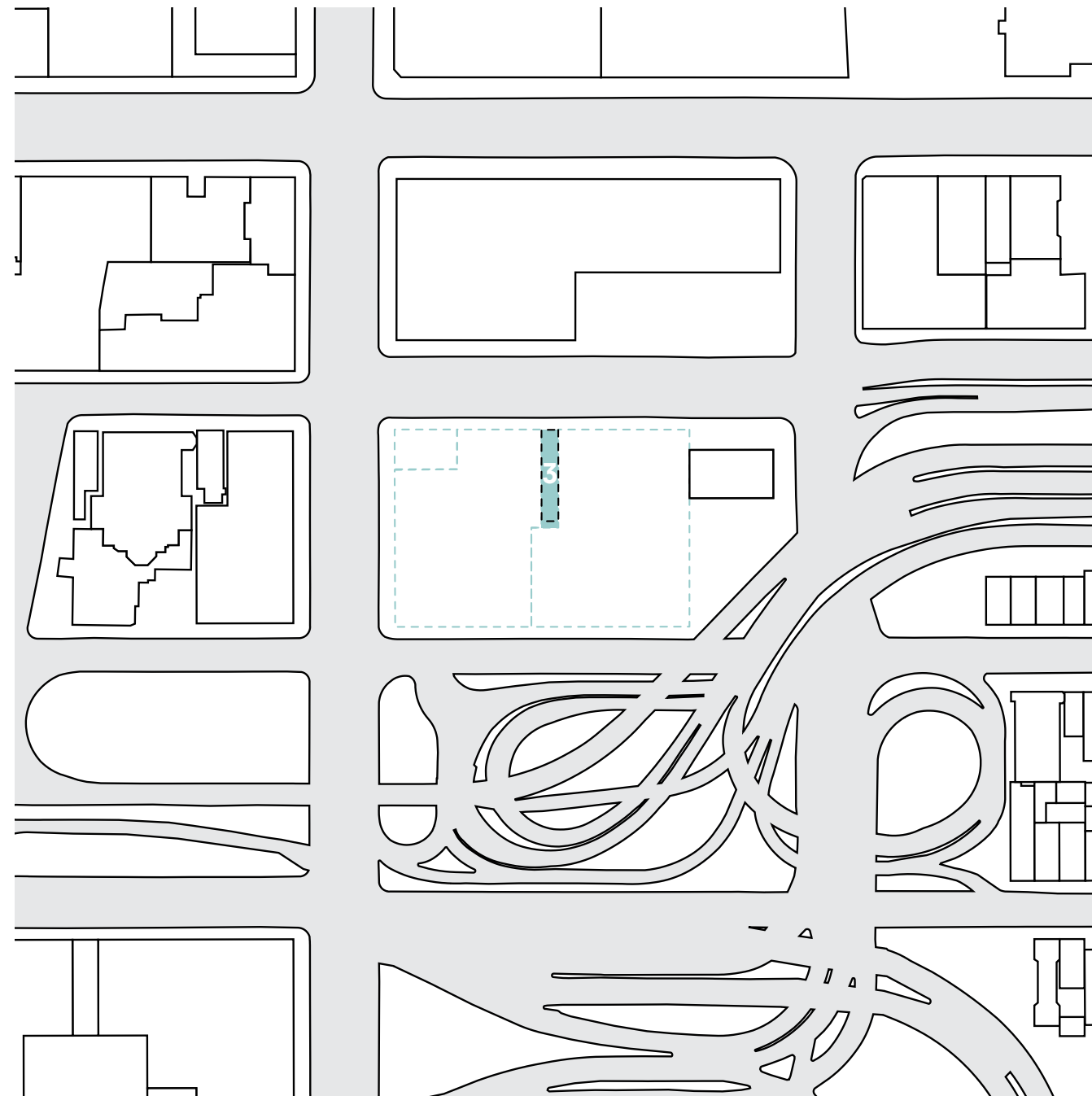
COVENANT HOUSE LOT 2



CURRENT COVENANT HOUSE BUILDINGS



J. ALDEN ENTERPRISE



TECH OPS TECHNICAL SERVICE

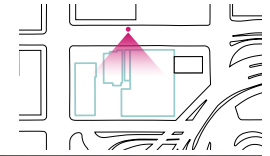
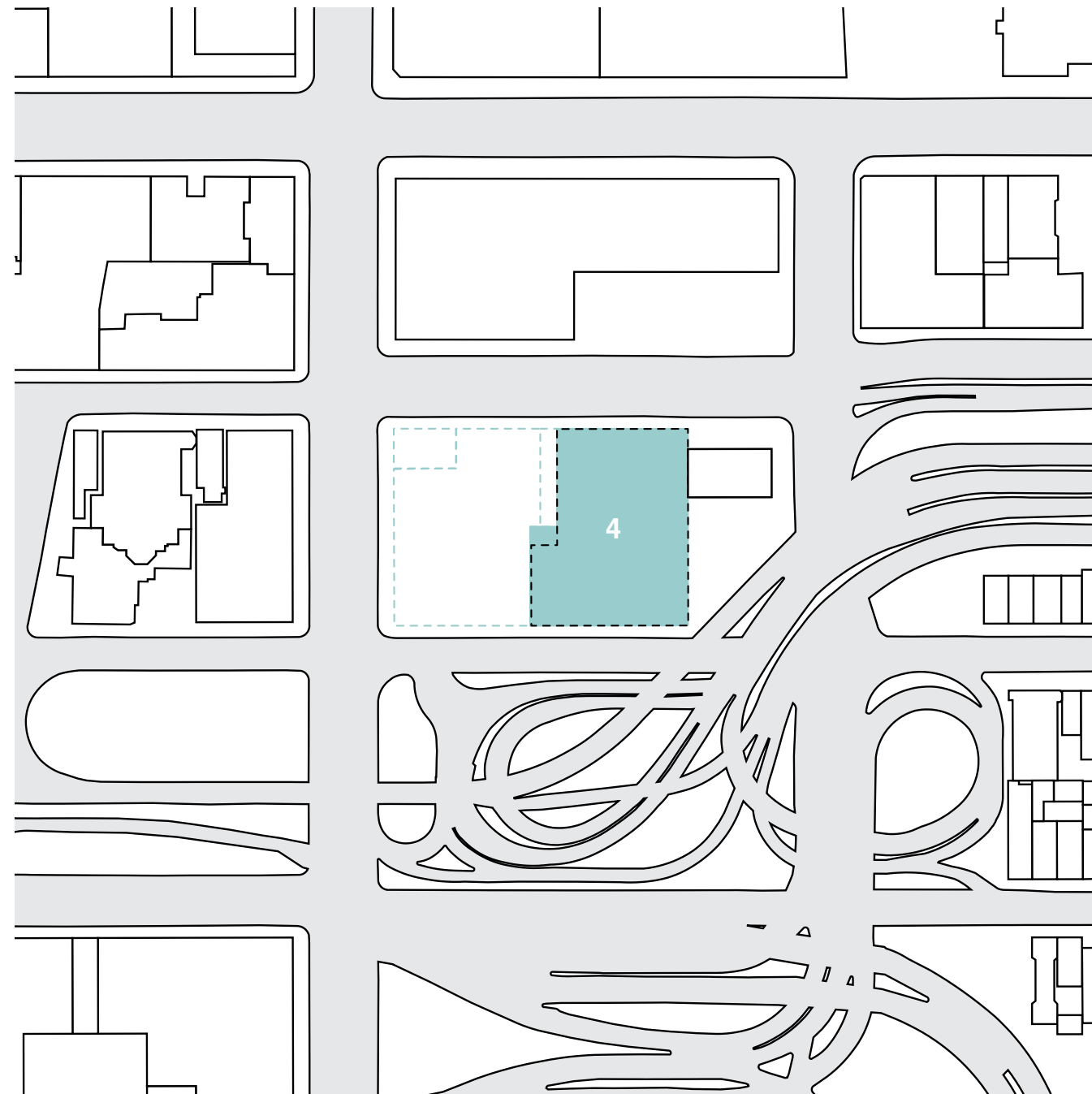
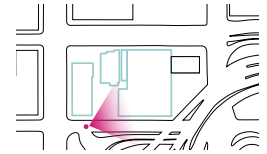


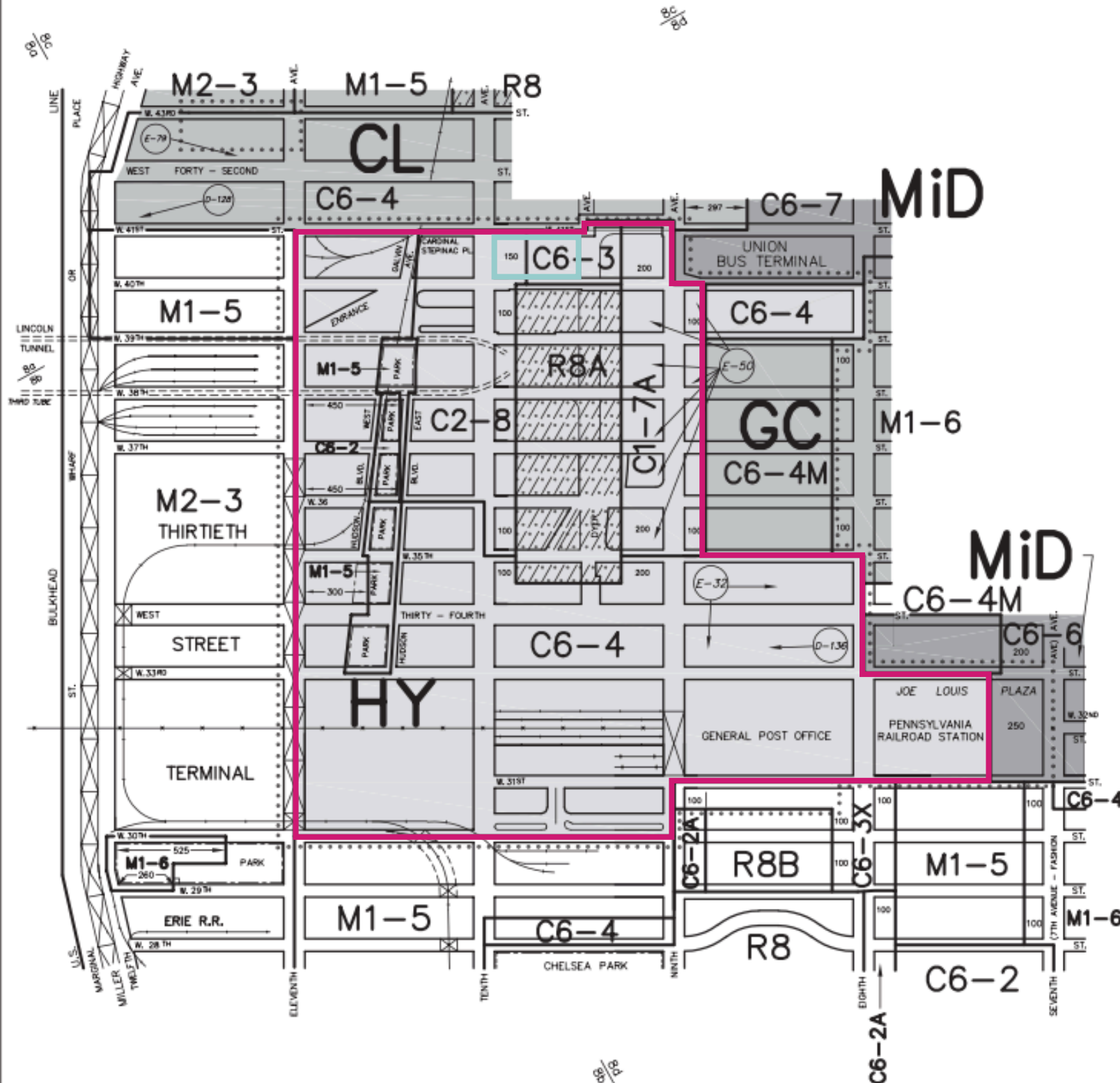
image: google streetview

PEOPLE OF THE STATE



CUNY HUNTER COLLEGE, MFA BUILDING





CITY PLANNING COMMISSION
CITY OF NEW YORK

DIAGRAM SHOWING
ZONING CHANGE
ON SECTIONAL MAPS
8b, 8c & 8d
BOROUGH OF
MANHATTAN

EFFECTIVE DATE
January 19, 2005
C. C. RESO. # 782

600 0 600
SCALE IN FEET

NOTE:

Indicates Zoning District boundary.

..... The area enclosed by the dotted line is rezoned by eliminating a Special Jacob K. Javits Convention Center District and a Special Garment Center District and by changing from C6-2, C6-2A, C6-2M, C6-3, C6-4, M1-5, M1-6 and M2-3 Districts to R8A, C1-7A, C2-8, C6-3, C6-3X, C6-4, C6-4M, and C6-6 Districts, and by establishing a C2-5 District within a R8A District, and by establishing a Special Midtown District and a Special Hudson Yards District.



Indicates a C2-5 District.



Indicates a Special Clinton Preservation District.



Indicates a Special Garment Center District.



Indicates a Special Midtown Development District.



Indicates a Special Hudson Yards District.



Indicates a City Environmental Quality Review Declaration, refer to C.E.Q.R. sheet.



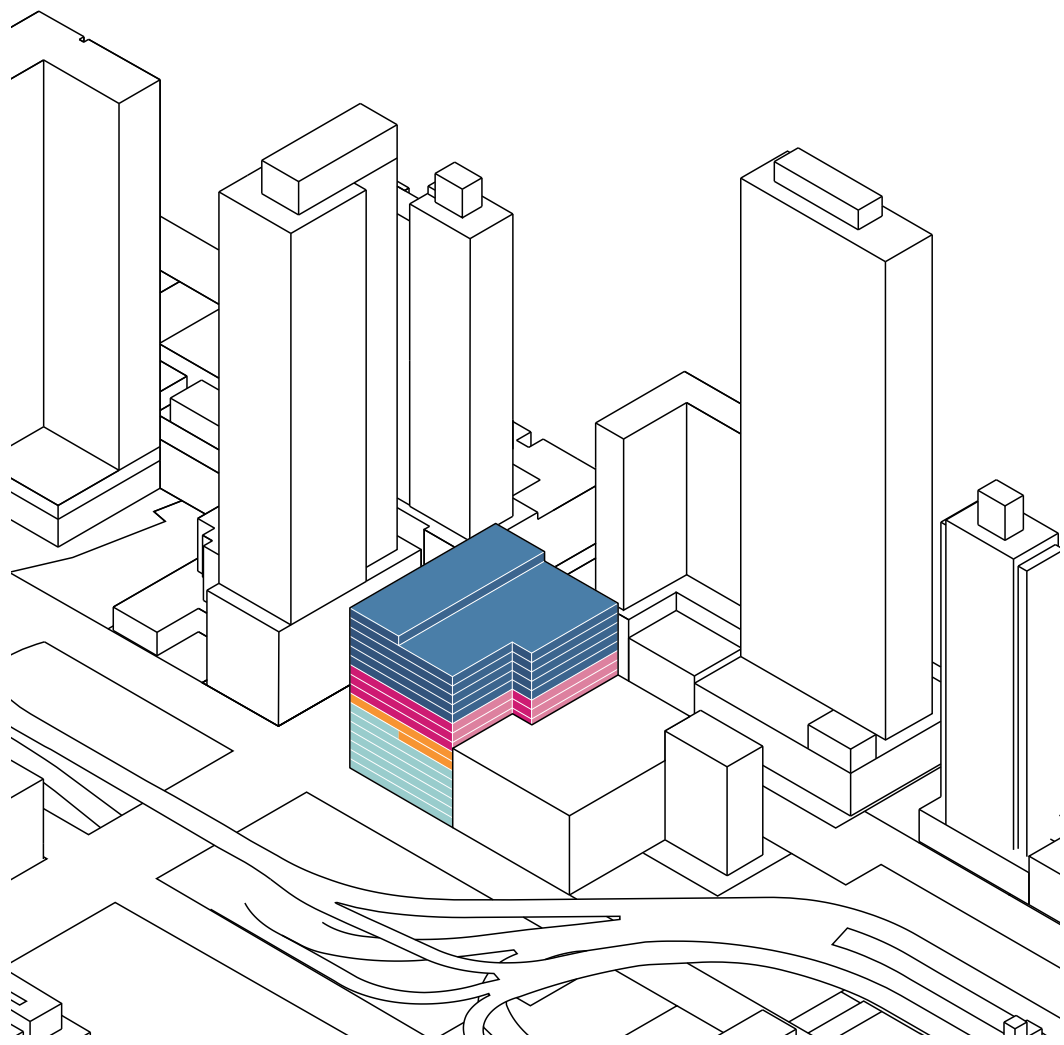
Please See Attached Listing For E-137 Locations

Indicates a Restrictive Declaration Area, refer to R.D. sheet.

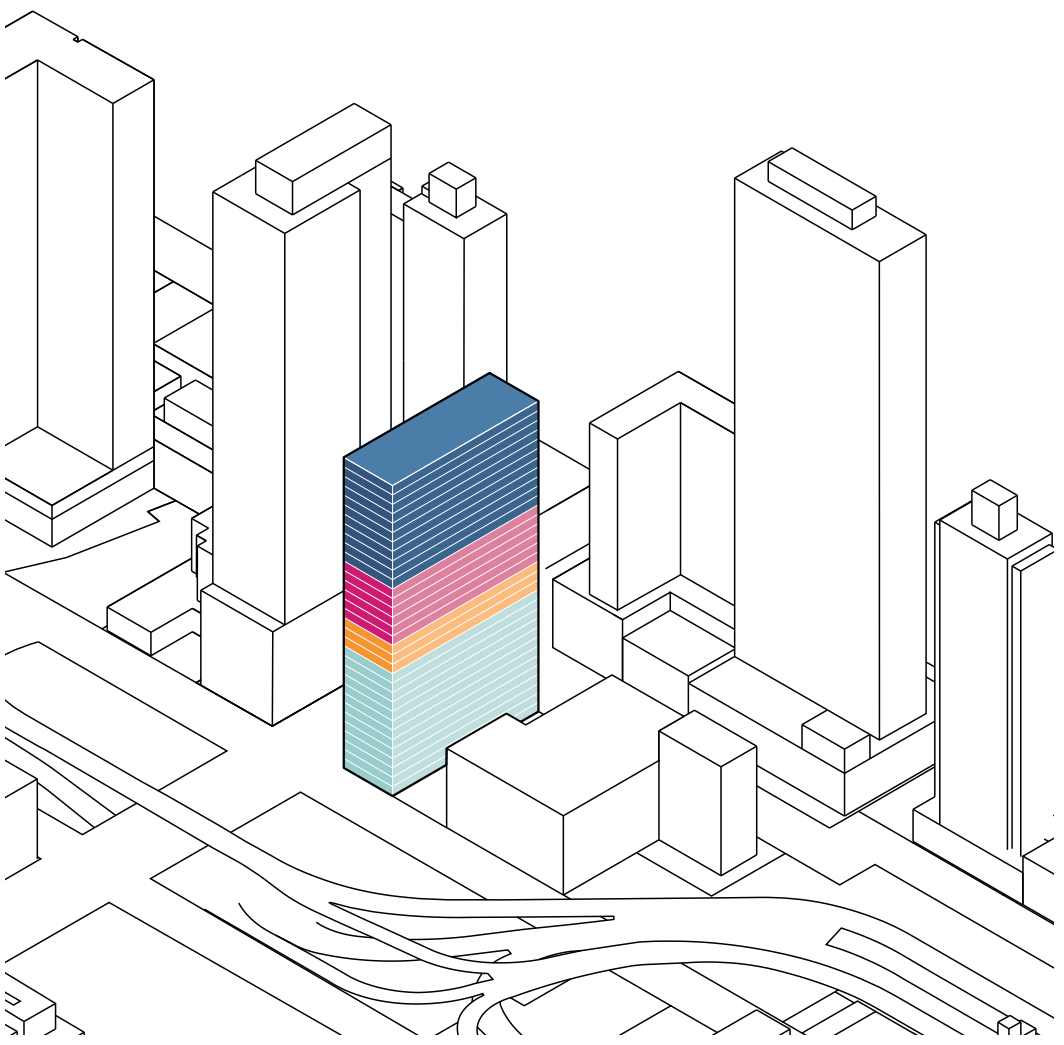
THIS DIAGRAM IS FOR ILLUSTRATIVE PURPOSES ONLY.
THIS DIAGRAM REFLECTS PROPOSED CHANGES IN THE CITY MAP
PURSUANT TO RELATED MAPPING APPLICATIONS C 040507 MMM & C 040508 MMM

ALLOWABLE FLOOR AREA RATIO (FAR)

- 5.5 inclusionary zoning
- 3 district improvement bonus
- 1.5 air rights
- 6.5 as-of-right

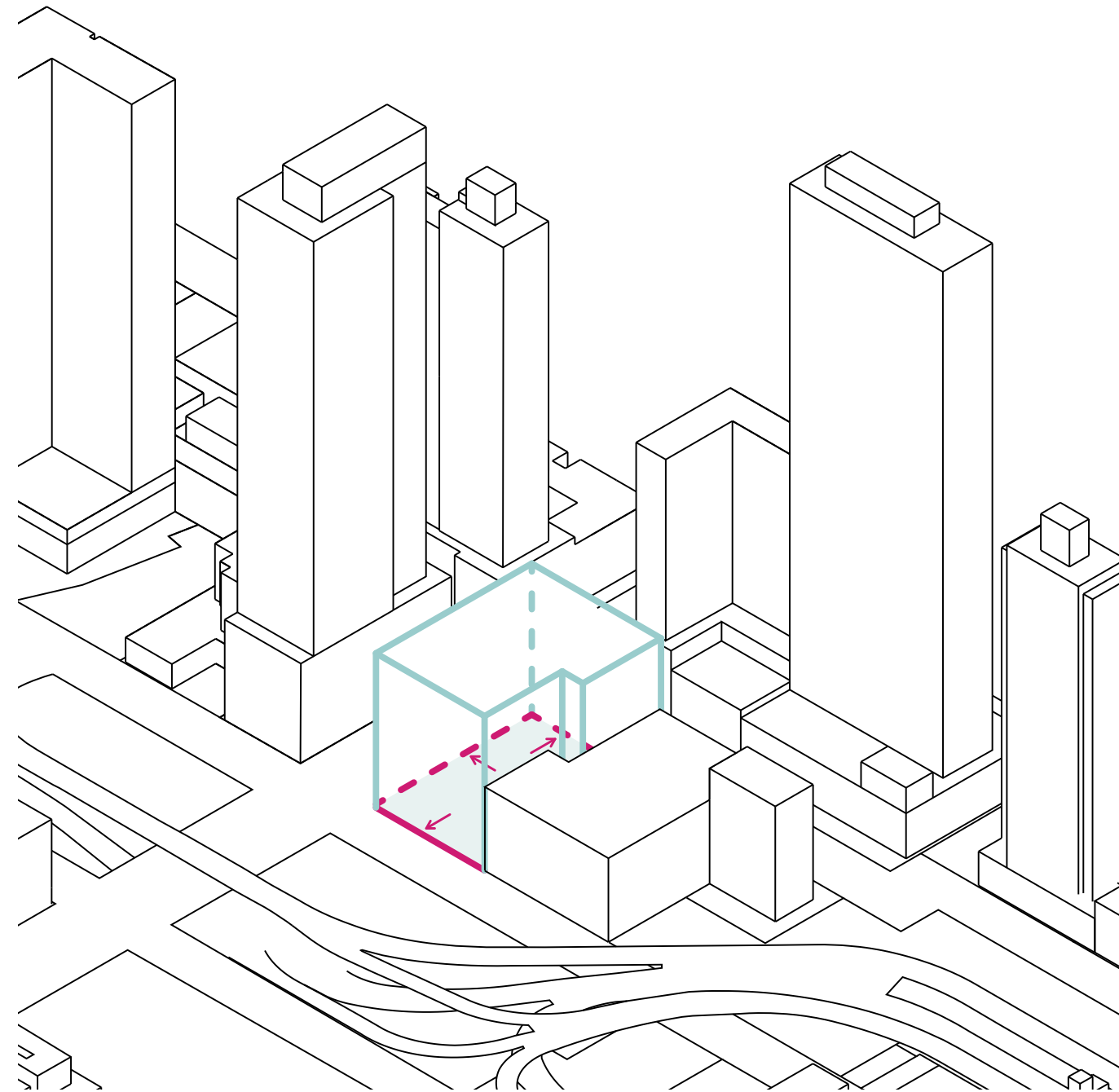


full lot coverage



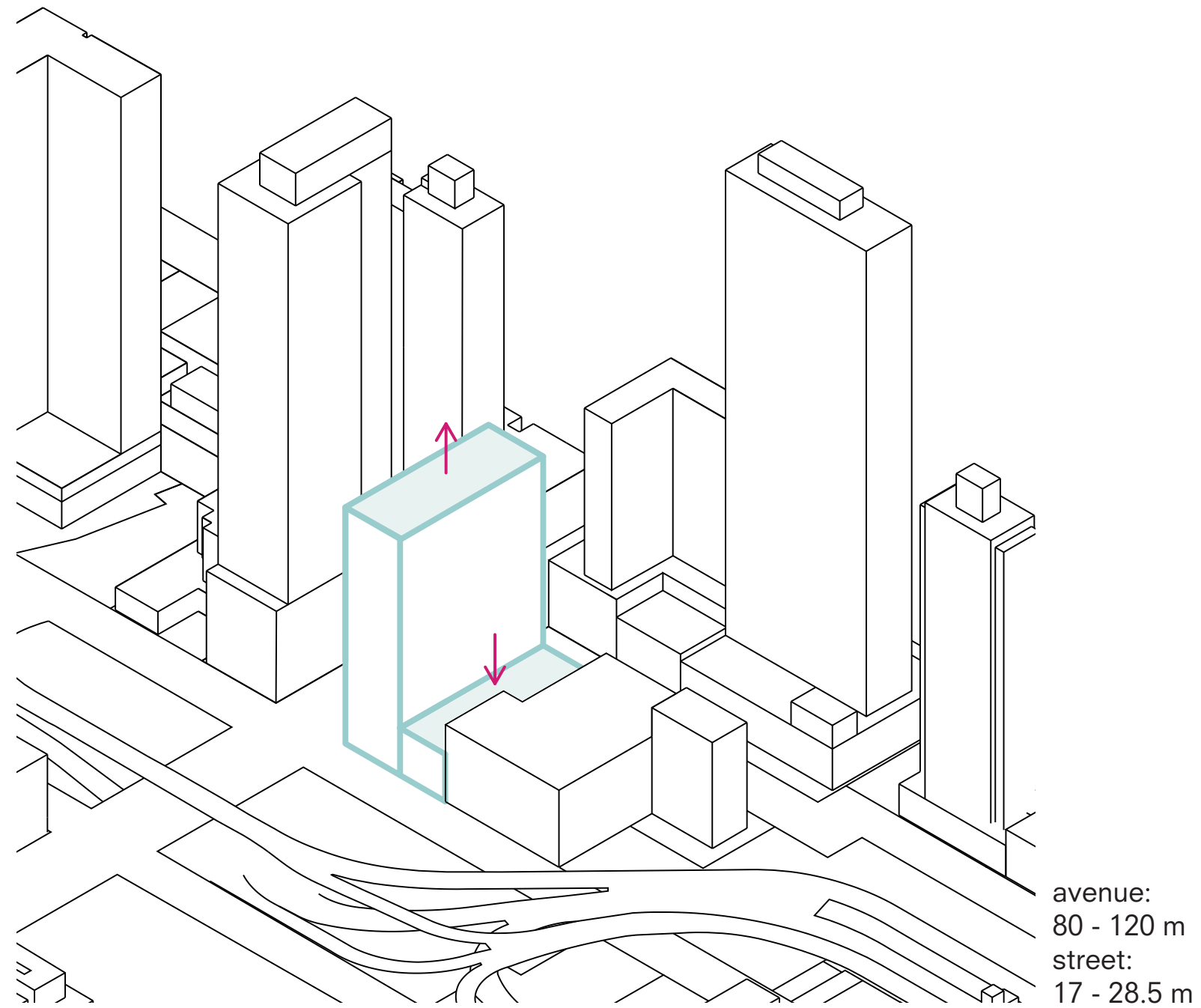
half lot coverage

#1: BUILD TO LOT LINE

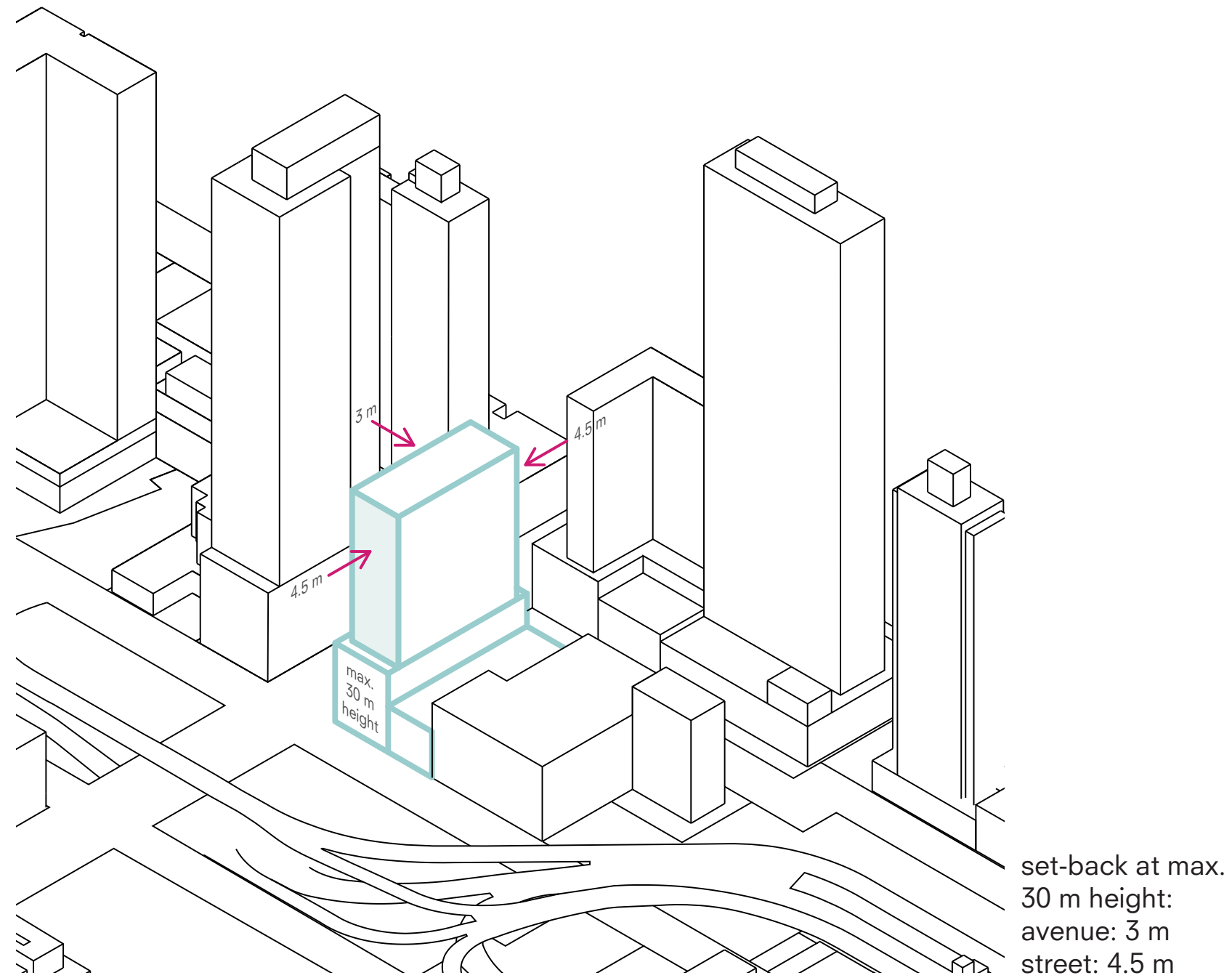


80% of lot line
facing streets
should be built

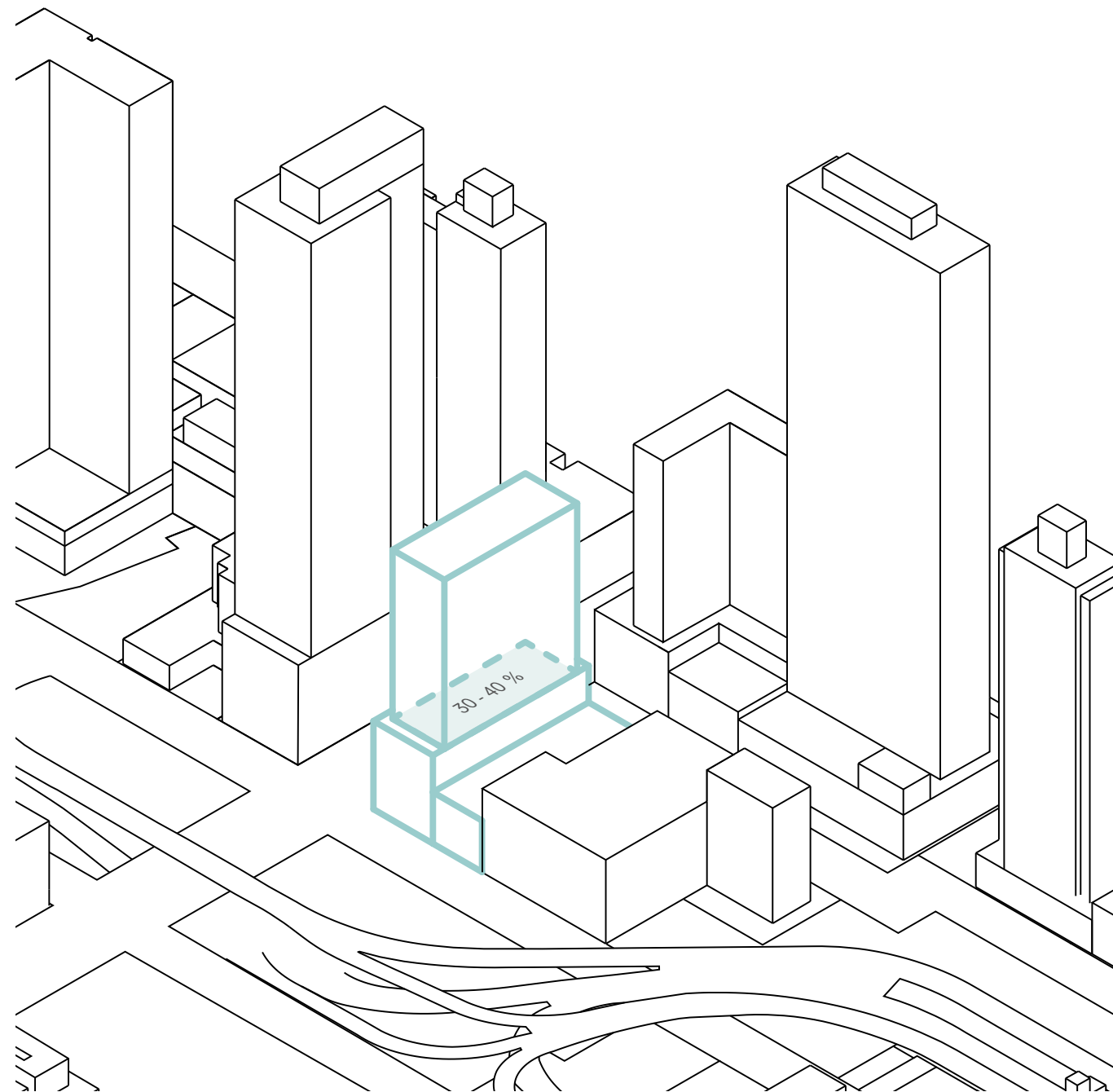
#2: HIGH AT AVE, LOW ON ST



#3: SET BACK

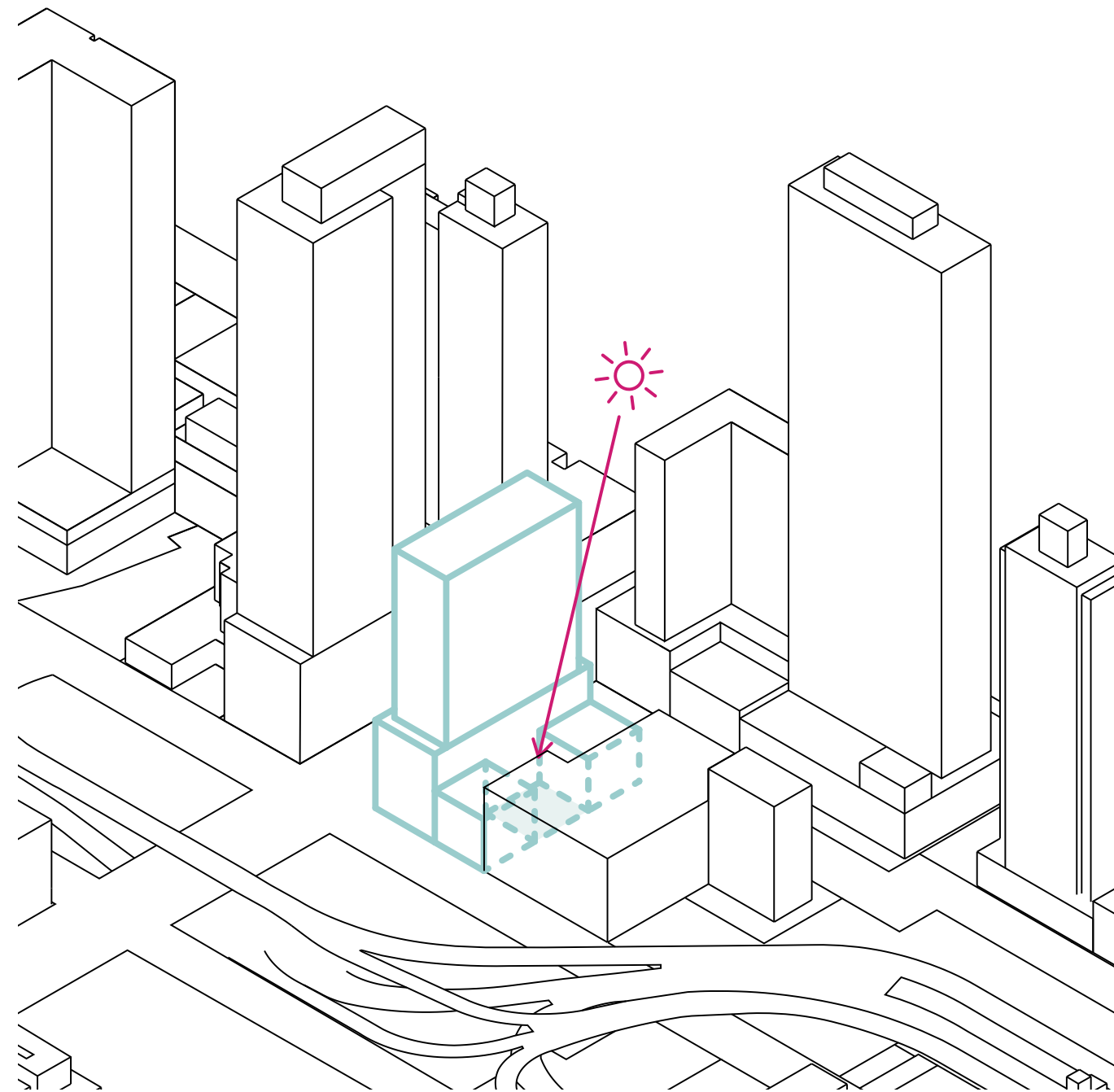


#4: TOWER COVERAGE



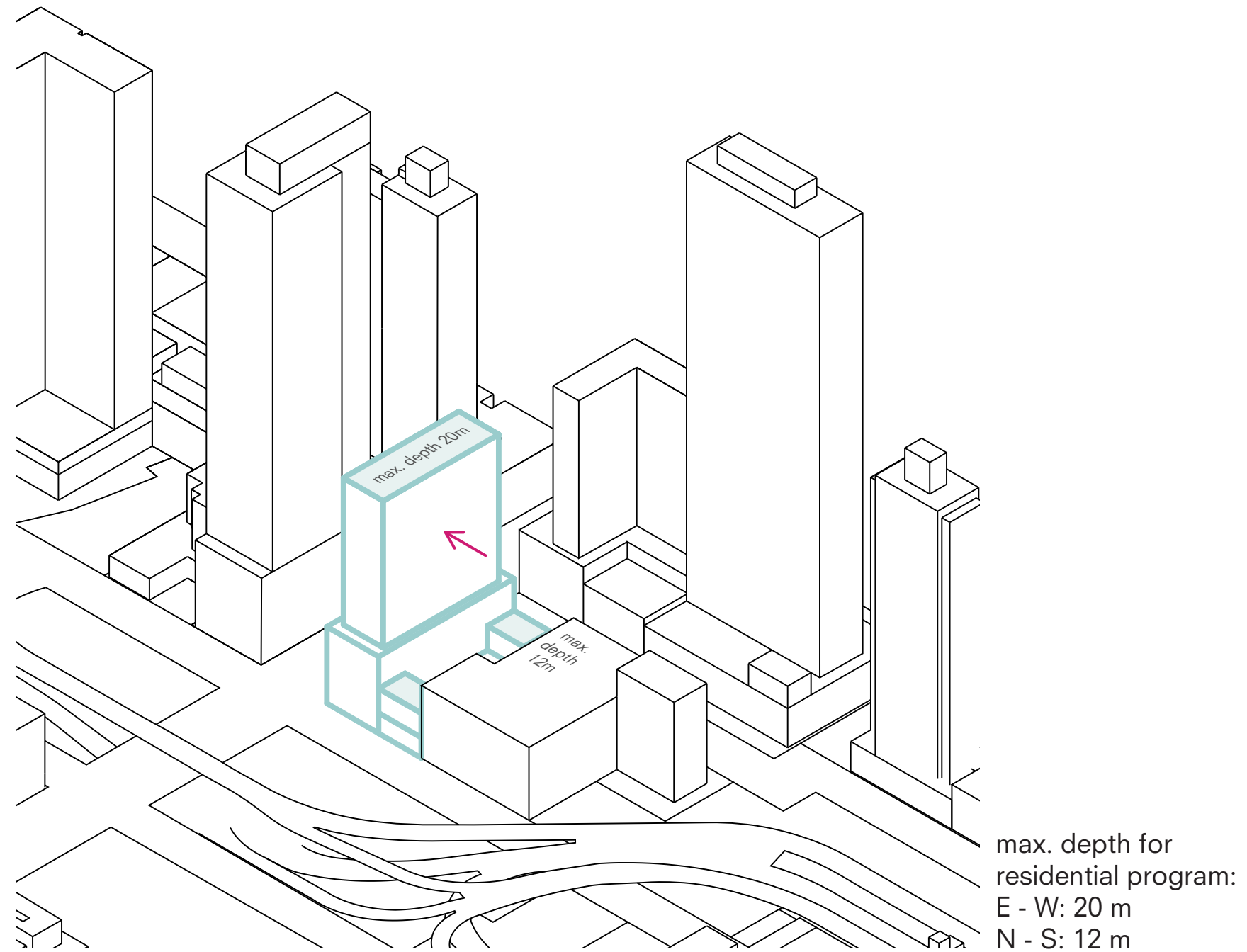
tower coverage
30 - 40% of lot

#5: LET IN LIGHT



make incision in
form of courtyard /
terrace / patio

#6: MAX. RESIDENTIAL DEPTH



ARCHITECTURAL GOAL

To design the new Covenant House based on the *users' behavior and needs* so that the architecture will *support the client* on their journey to recovery.

To set a design precedent for a type of project that is so far *underexplored*, but quickly gaining in urgency.

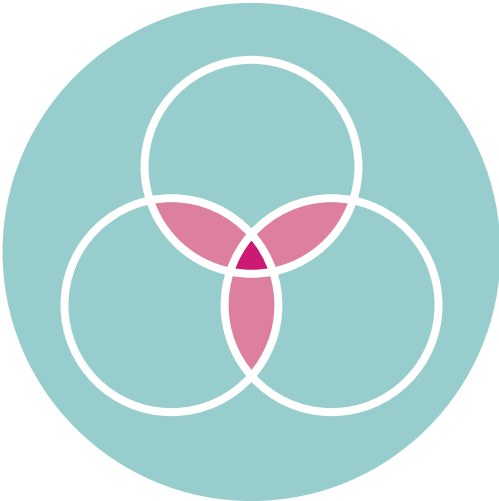
OVERALL AMBITIONS

#1



attain the *democratic goal* of
an *inclusive city* within in a
neoliberal framework

#2



use the research results in a
constructive way that aims to
benefit *all parties involved*

#3



lean into the *potential of*
architectural solutions to
make a *tangible impact*



LINCOLN GARDENS

TWO POSSIBLE CONCEPTS

PALACE FOR THE PEOPLE

- . loud and proud
 - . extravagant
- . expression of social equality through materialistic values



THE PEOPLE'S PALACE

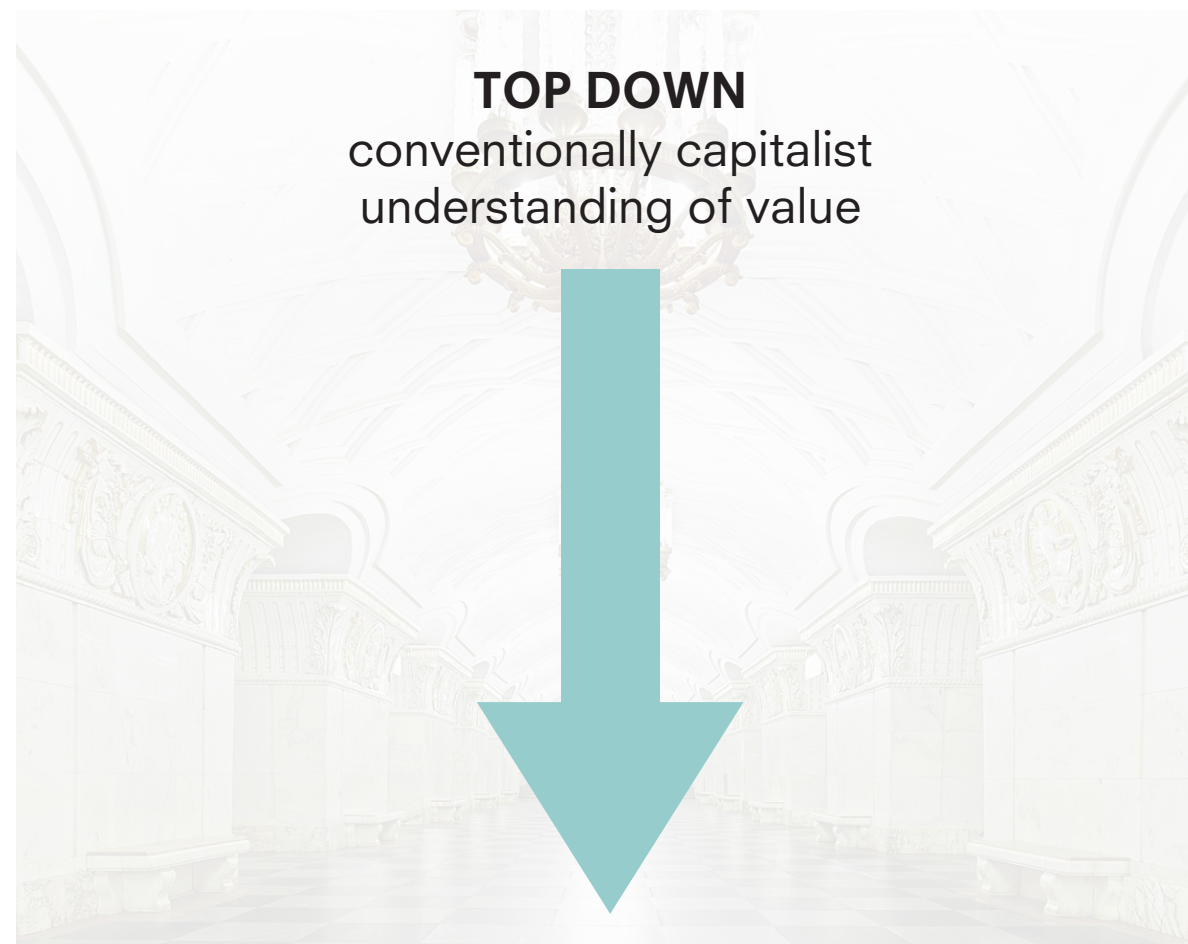
- . elegant and humble
 - . welcoming but protective
- . expression of social solidarity through symbolic values



TWO POSSIBLE CONCEPTS

PALACE FOR THE PEOPLE

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TWO POSSIBLE CONCEPTS

PALACE FOR THE PEOPLE

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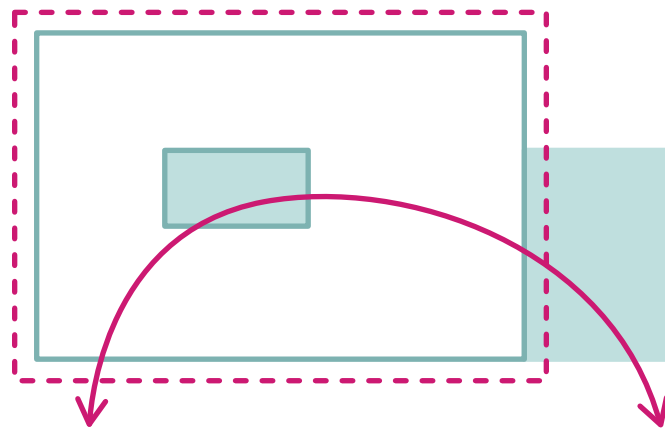
THE PEOPLE'S PALACE

- . elegant and humble
- . welcoming but protective
- . expression of social solidarity through symbolic values



CONCEPT: SOCIAL SOLIDARITY

LINCOLN GARDENS

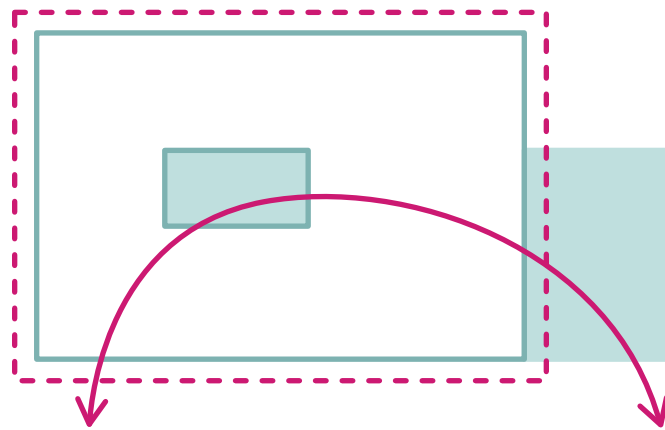


urban implementation

. welcoming to all, but
protective of those who
need it most

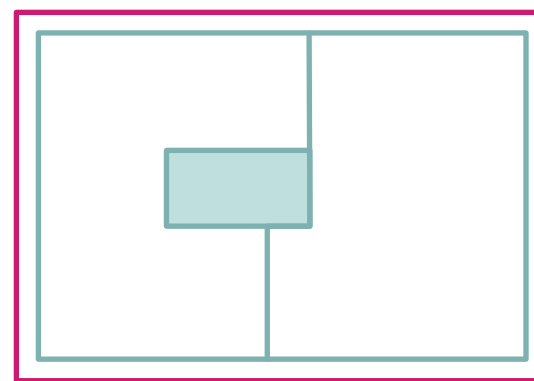
CONCEPT: SOCIAL SOLIDARITY

LINCOLN GARDENS



urban implementation

. welcoming to all, but
protective of those who
need it most

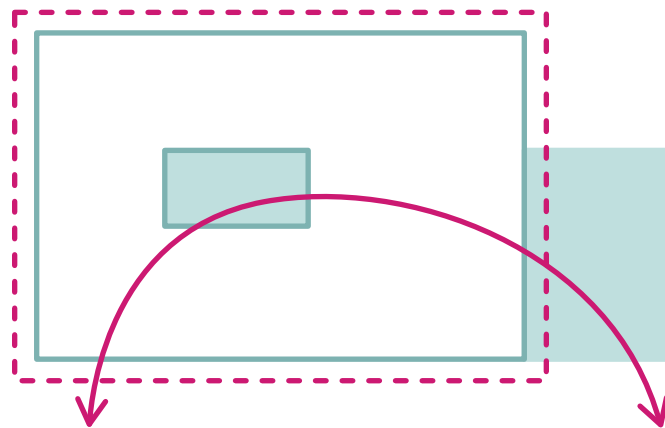


program

. one complex, no
“poor doors”
or spatial segregation

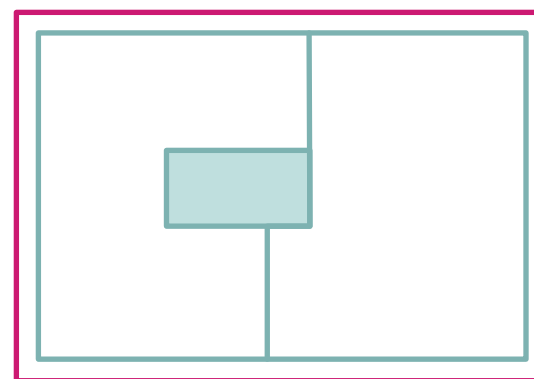
CONCEPT: SOCIAL SOLIDARITY

LINCOLN GARDENS



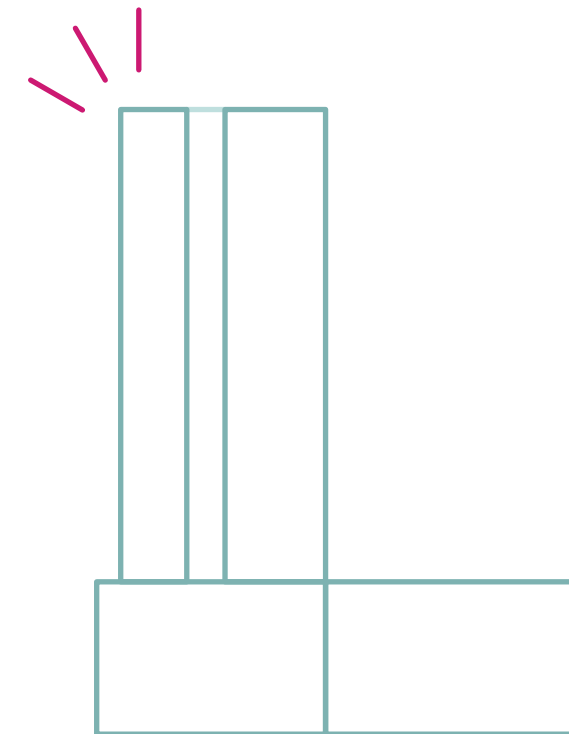
urban implementation

. welcoming to all, but
protective of those who
need it most



program

. one complex, no
“poor doors”
or spatial segregation



expression

. standing tall like the
Statue of Liberty
. value through good
quality and design

NEW SHARED IDENTITY



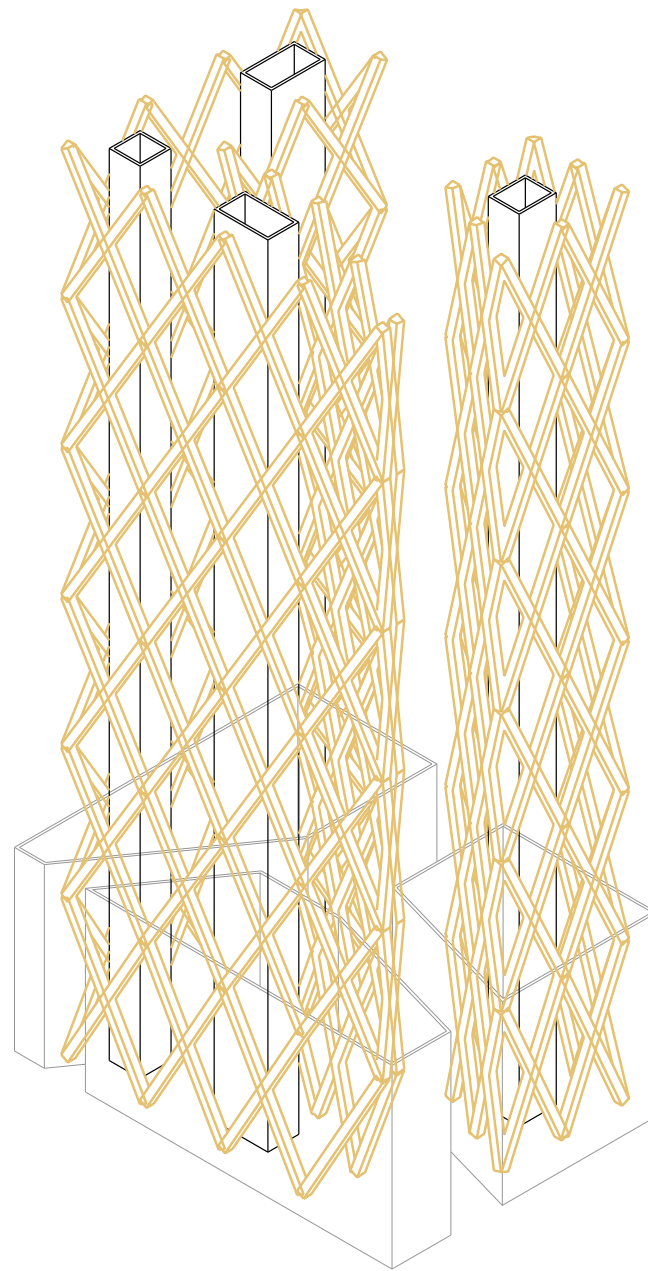
CITY OASIS



VISIBLE SUSTAINABILITY = SOCIAL SOLIDARITY



HONESTY AND TRANSPARENCY IN STRUCTURE AND MATERIAL



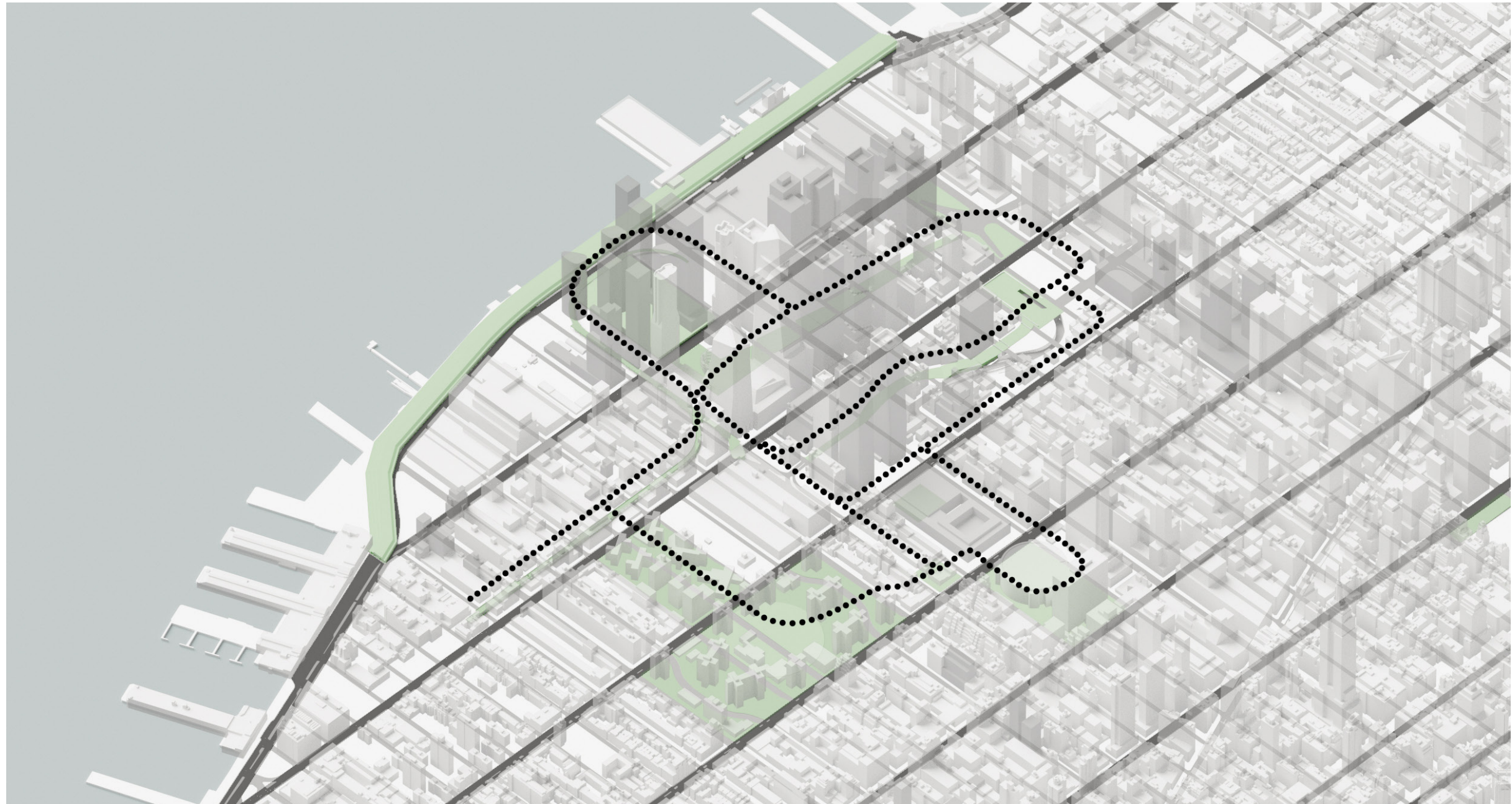
IMPLEMENTATION



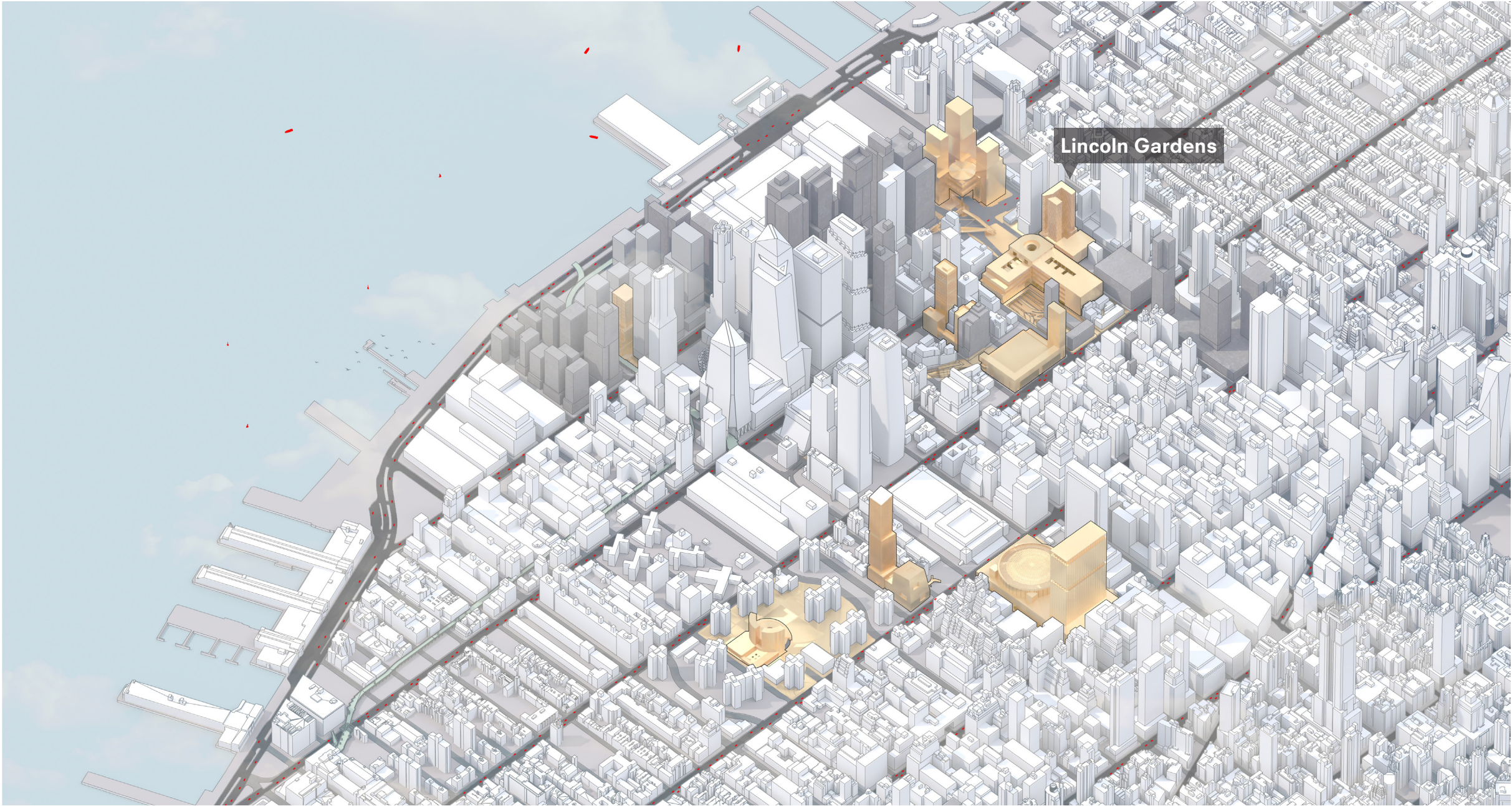
EXISTING AND IN CONSTRUCTION

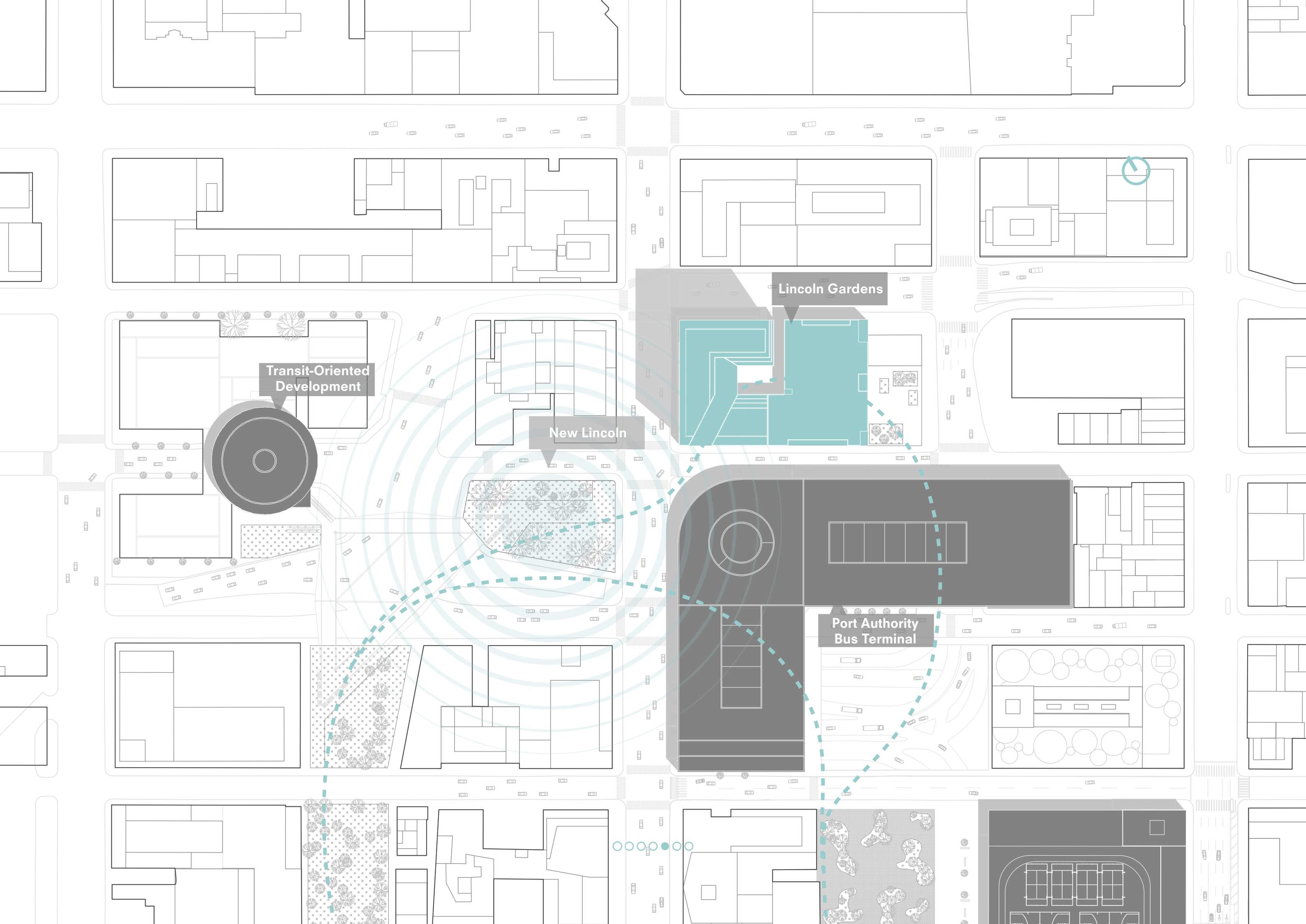


INFORMAL GREEN ROUTE



CATALYST PROJECTS





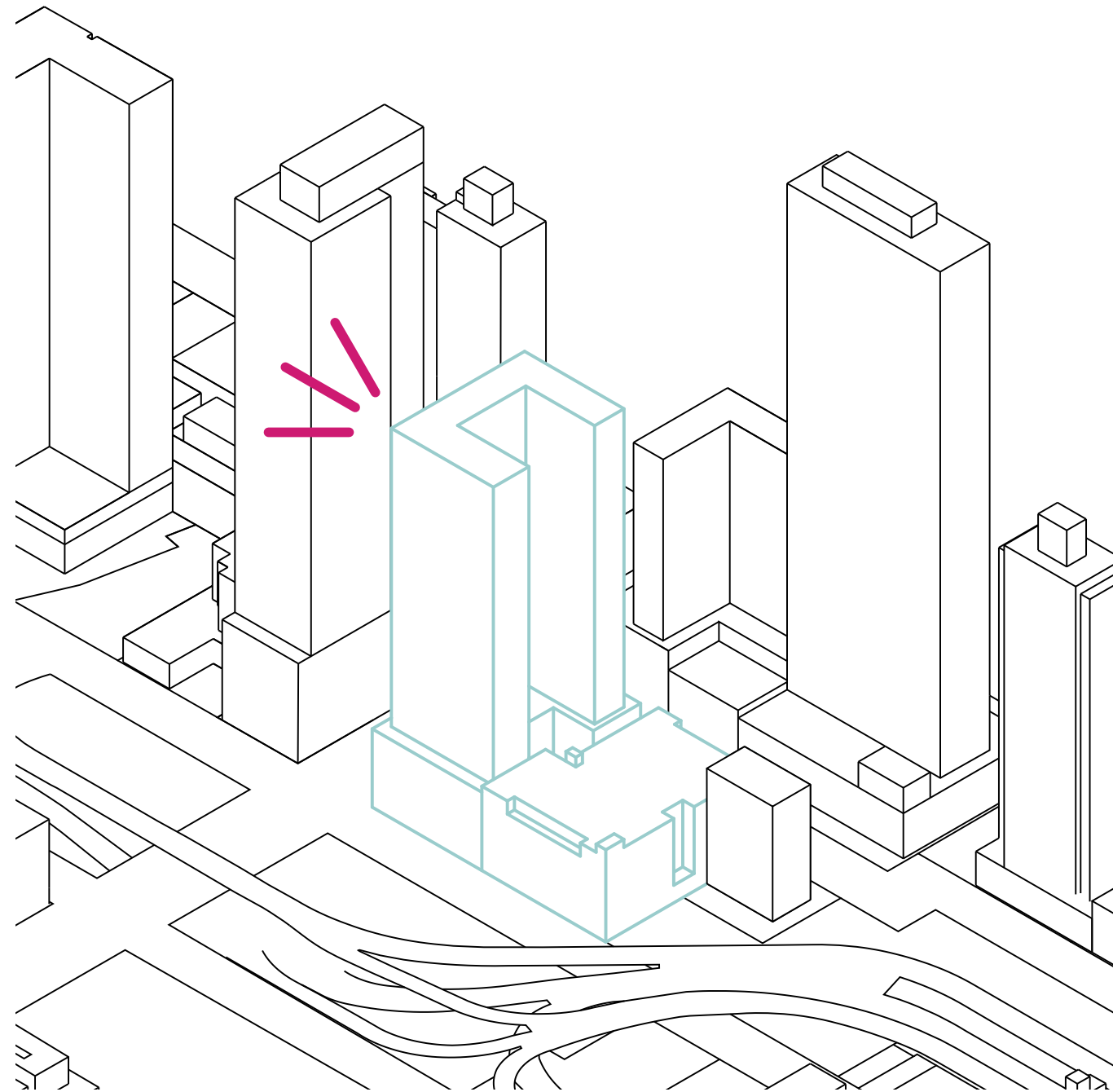
Transit-Oriented
Development

New Lincoln

Lincoln Gardens

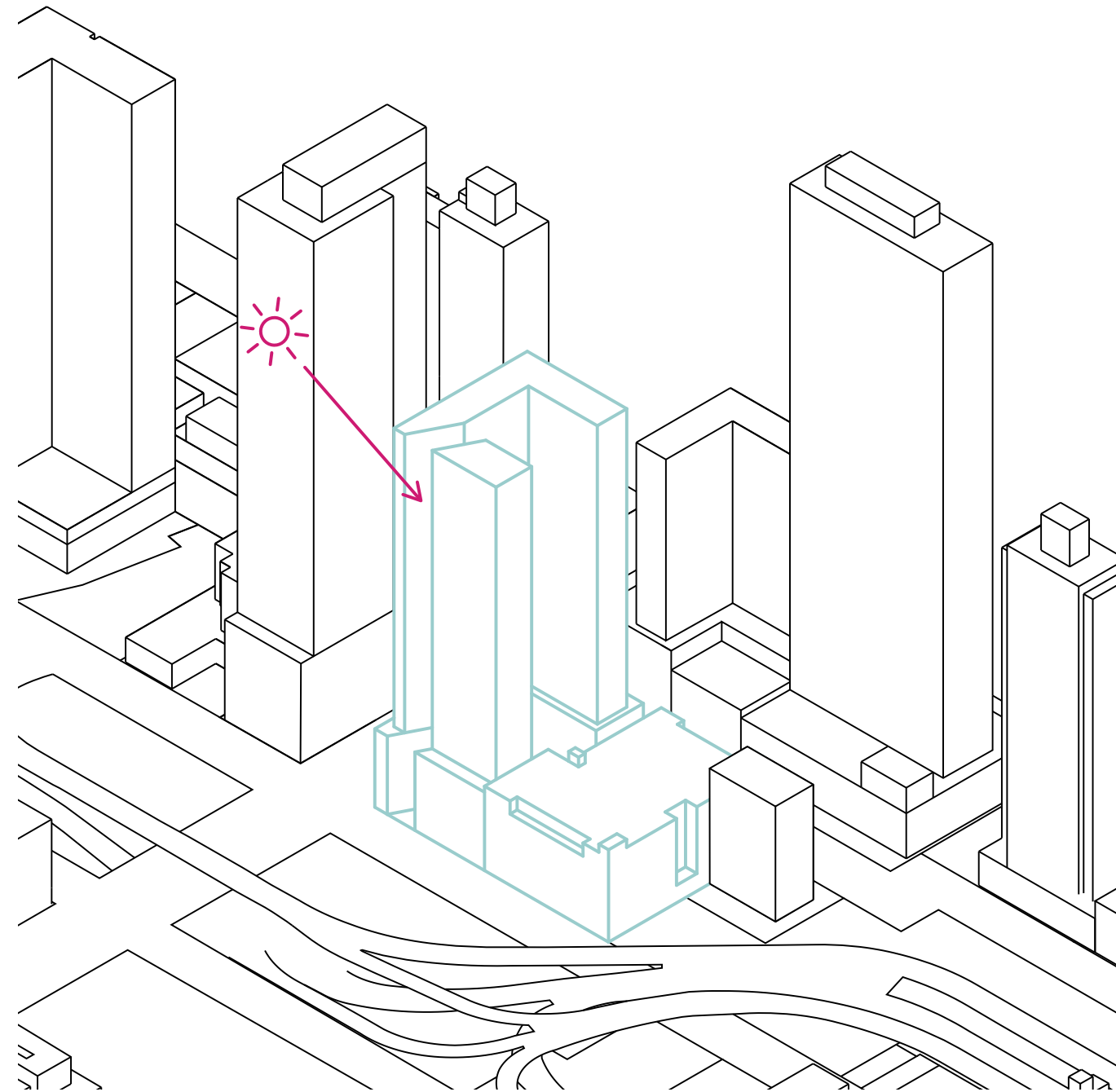
Port Authority
Bus Terminal

NEW FOCAL POINT



focal point oriented
towards the new
urban intervention

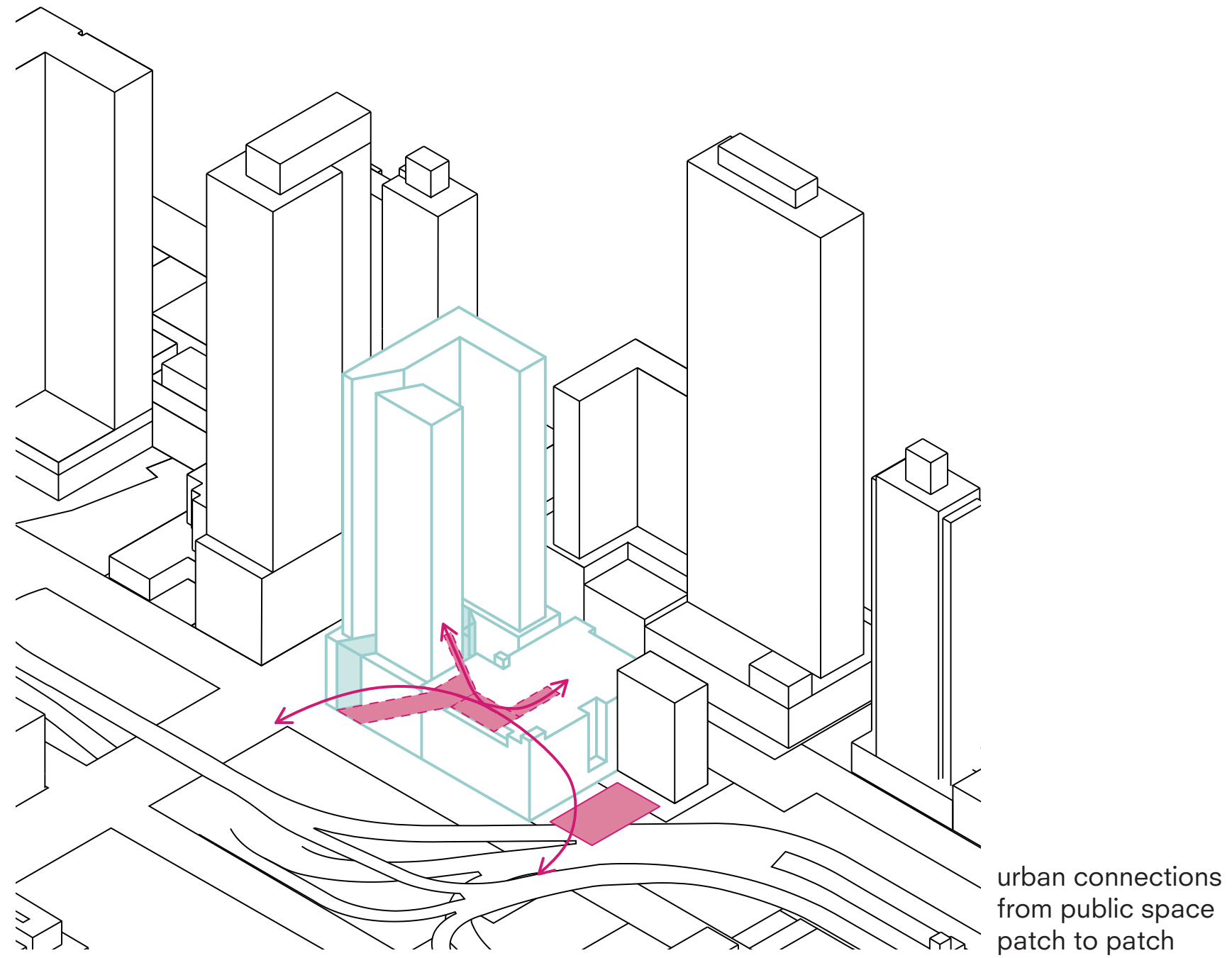
LIGHTING



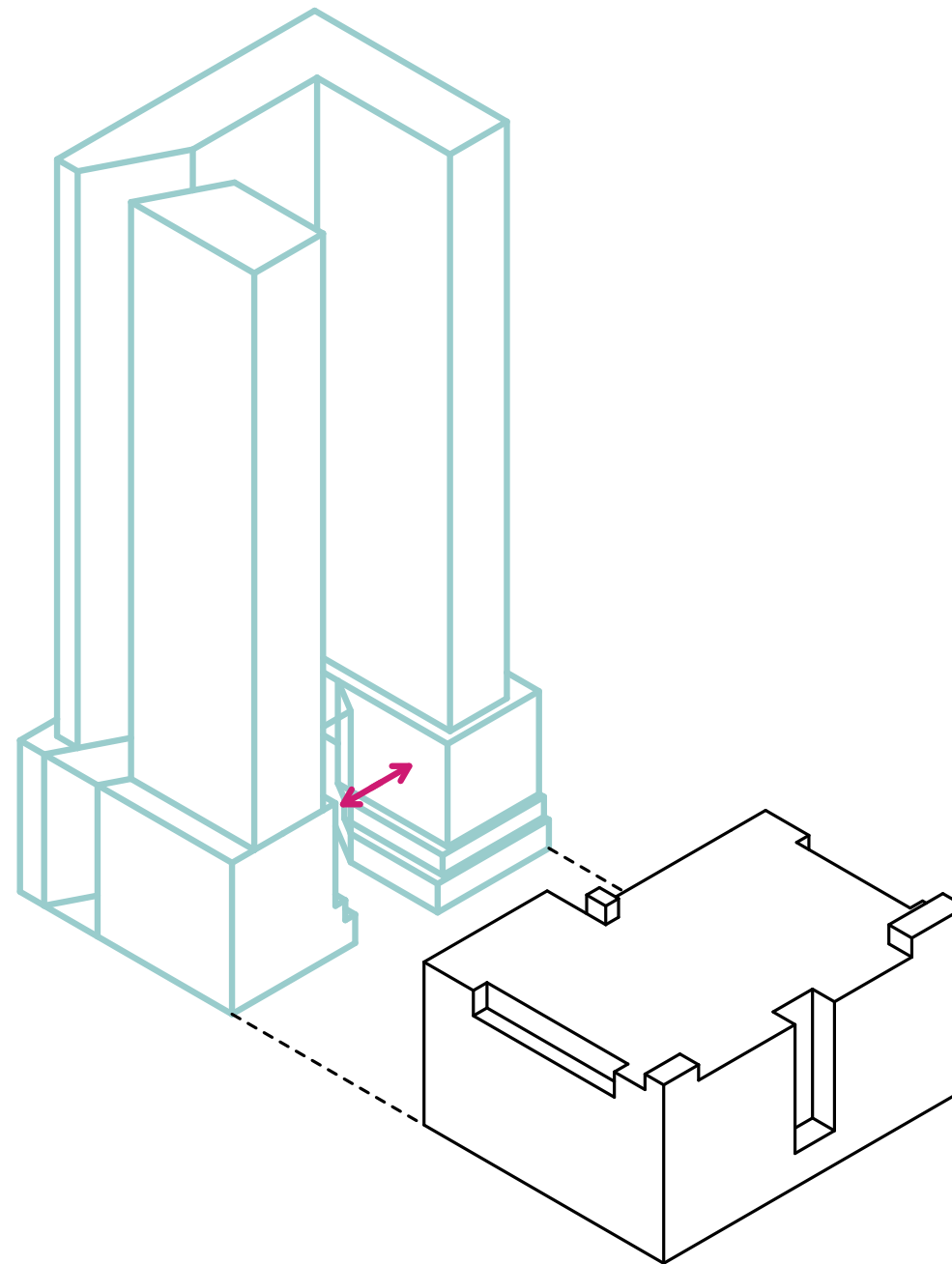
south-west corner is
the most important
for natural lighting



PUBLIC SPACE CONNECTION



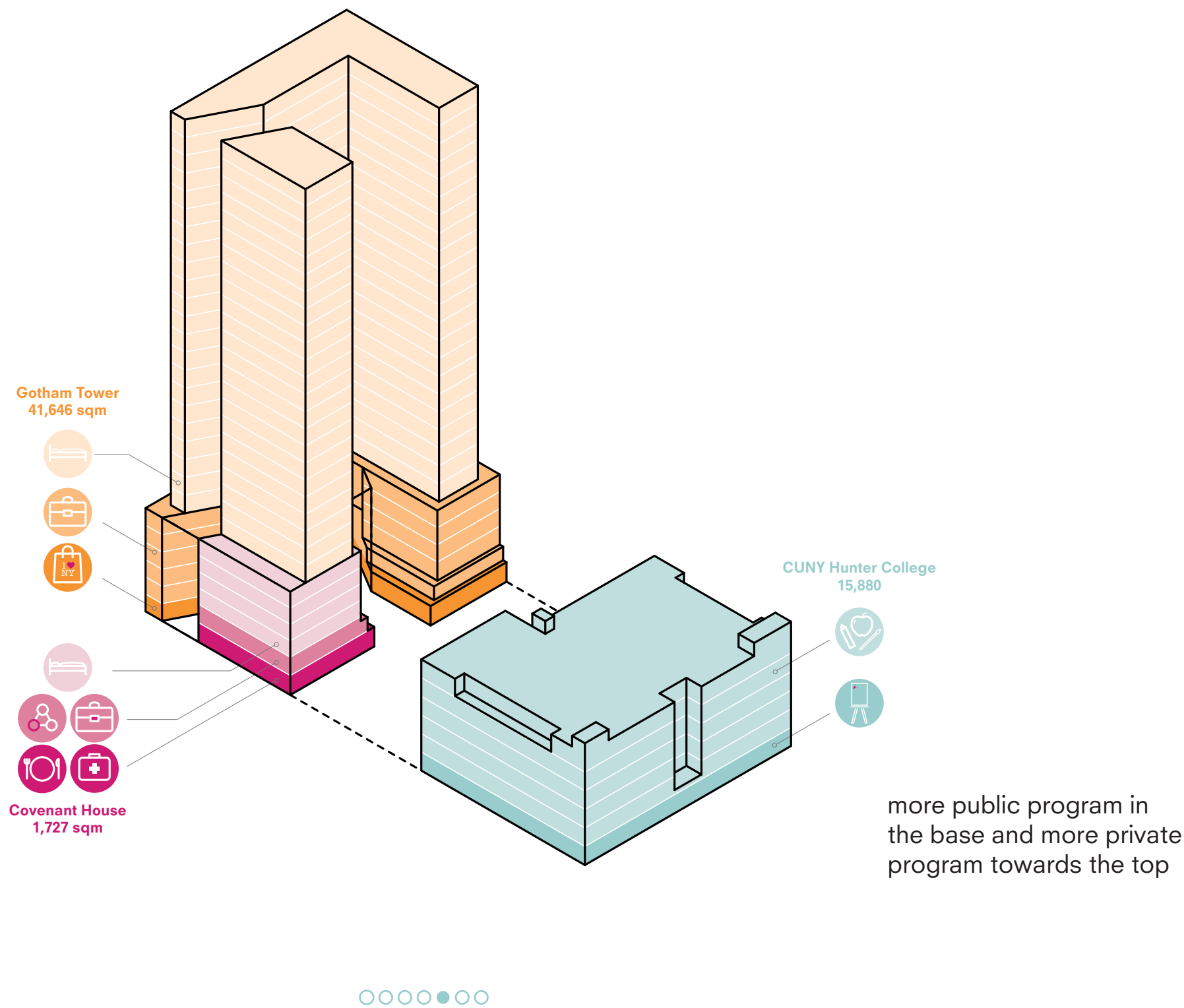
TERRACING



creating terraces
opens up the courtyard
towards the top



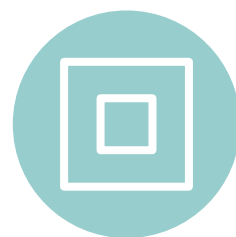
PROGRAM DISTRIBUTION



SAFETY IS THE #1 CONCERN



SAFETY VS. URBAN INTEGRATION



closed
courtyard



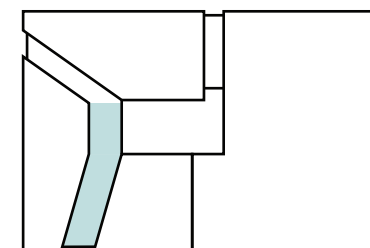
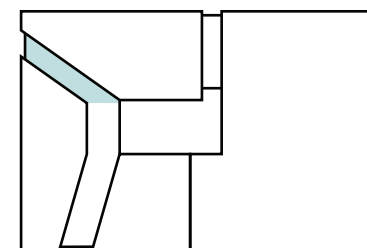
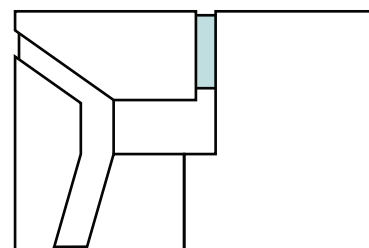
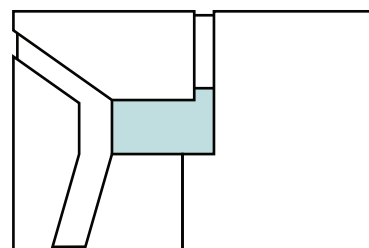
entrance
street

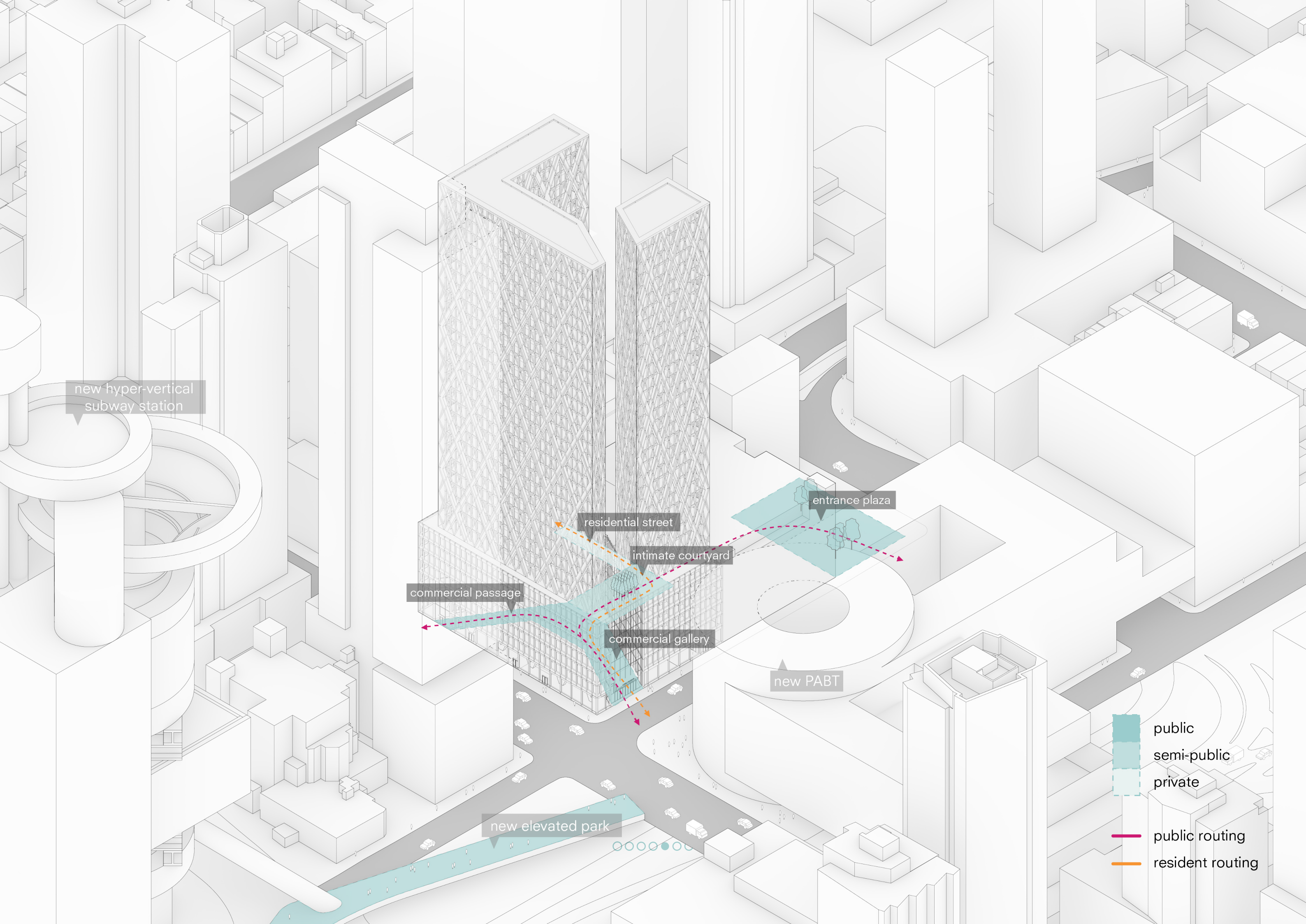


hidden
passage



public
atrium





new hyper-vertical
subway station

residential street

intimate courtyard

commercial passage

commercial gallery

entrance plaza

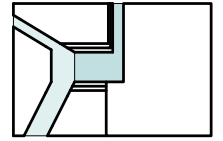
new PABT

new elevated park

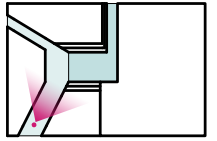
public
semi-public
private

public routing
resident routing

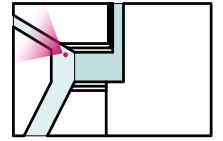
APPROACH FROM PARK



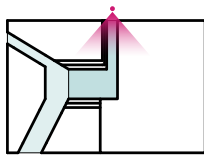
COMMERCIAL GALLERY

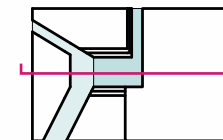


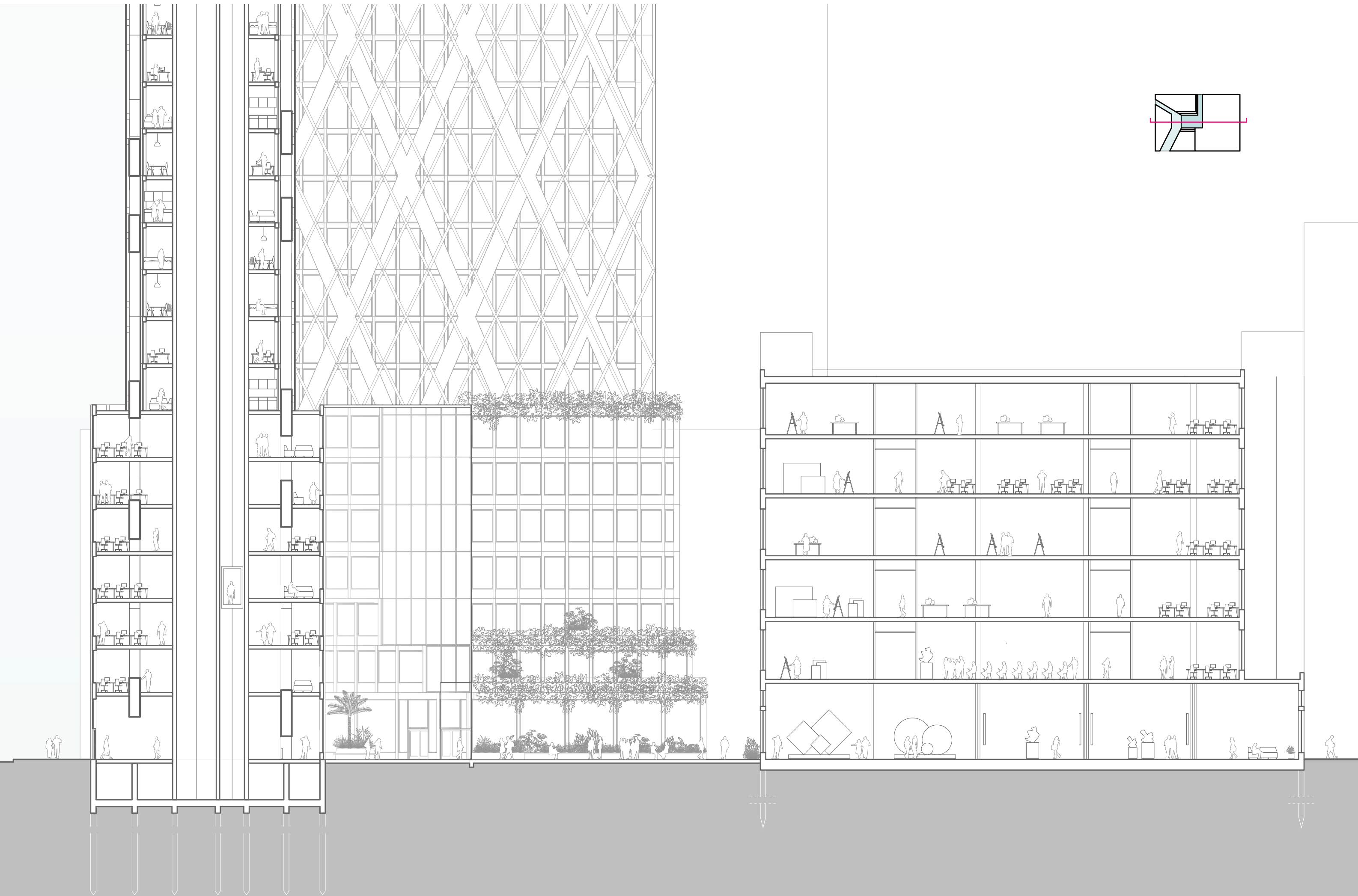
COMMERCIAL PASSAGE

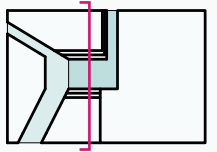
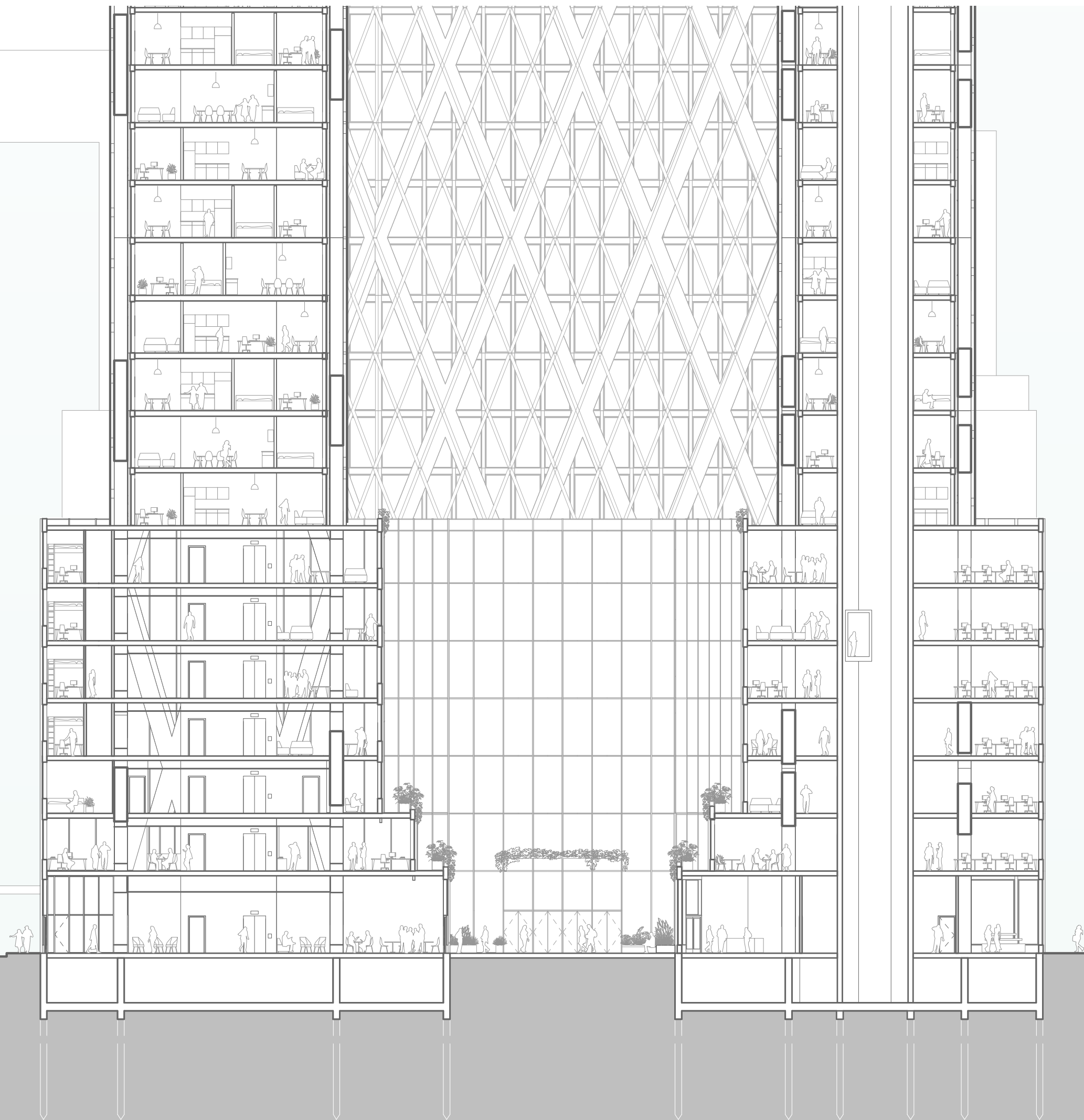


RESIDENTIAL STREET

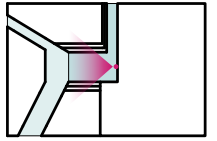




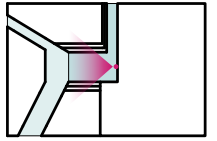




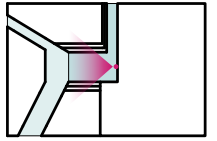
COURTYARD



COURTYARD

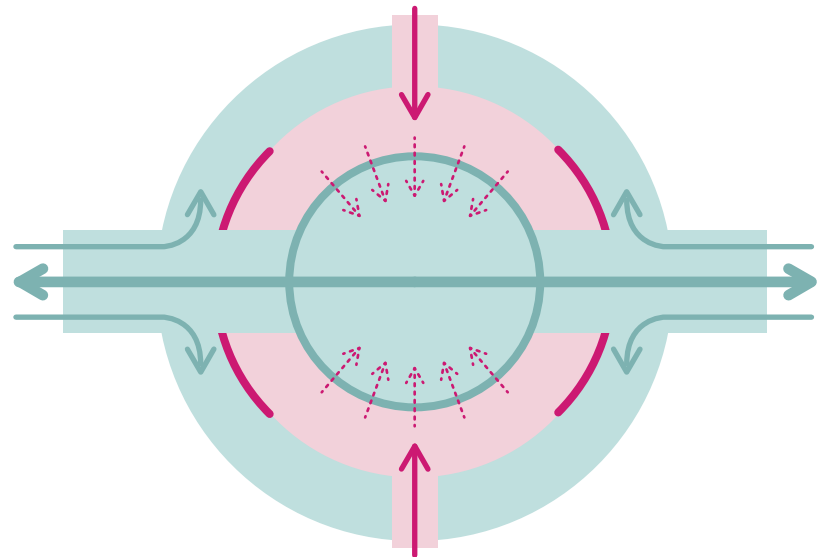


COURTYARD

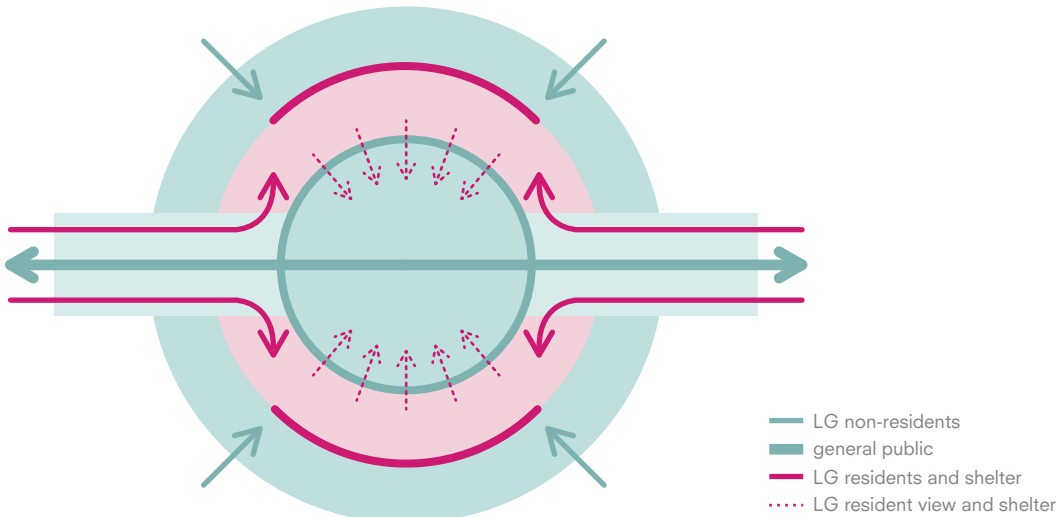


USAGE ANALYSIS

SEPARATE USER FLOWS



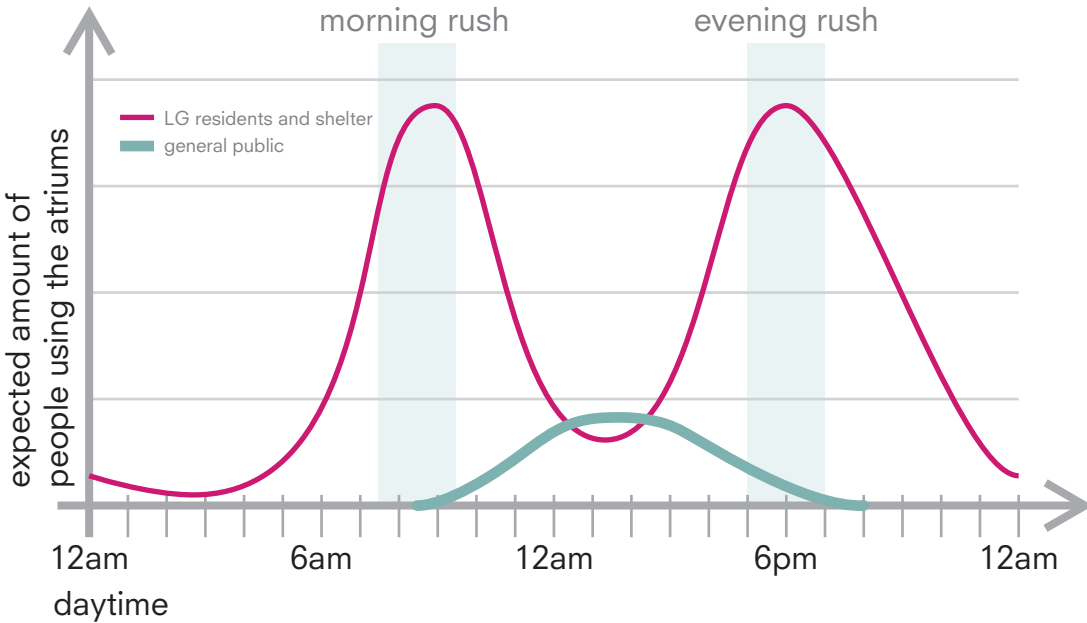
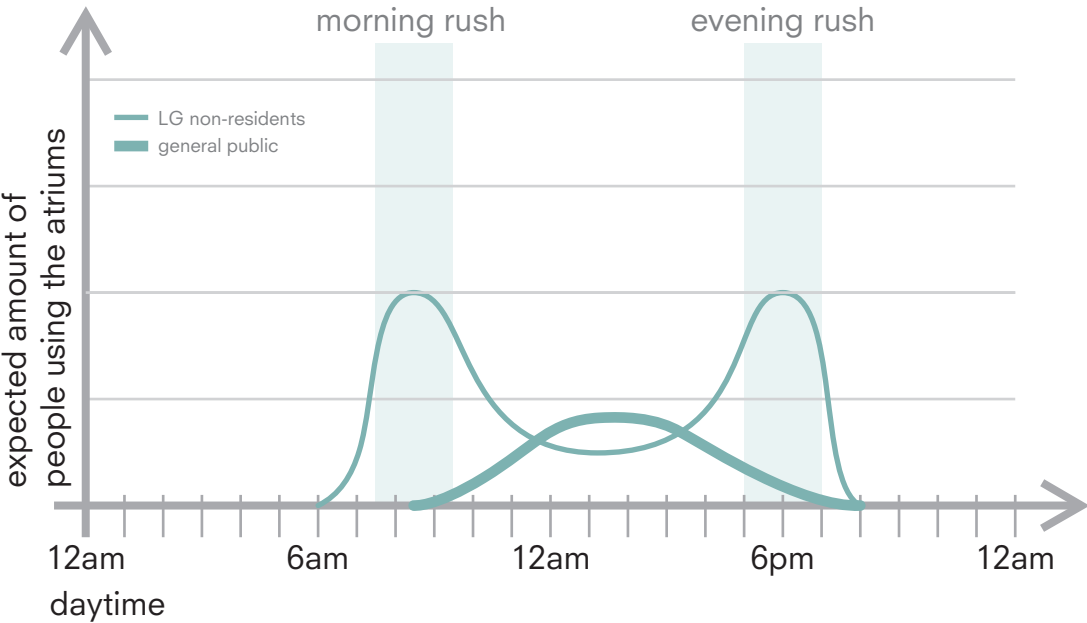
MIXED USER FLOWS



- LG non-residents
- general public
- LG residents and shelter
- ... LG resident view and shelter

user flow

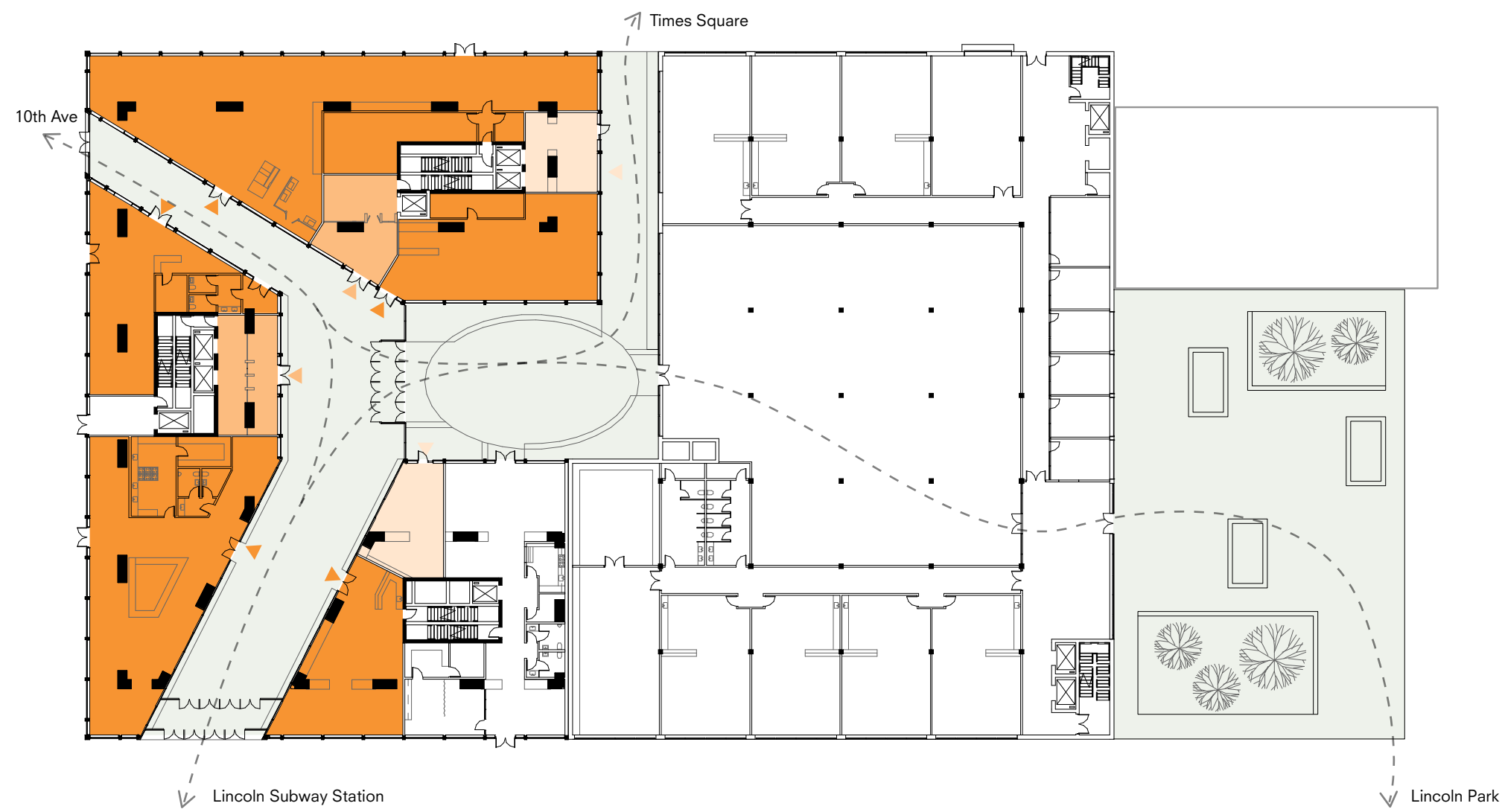
daily timeline



GROUND FLOOR PLAN - PROGRAMMATIC



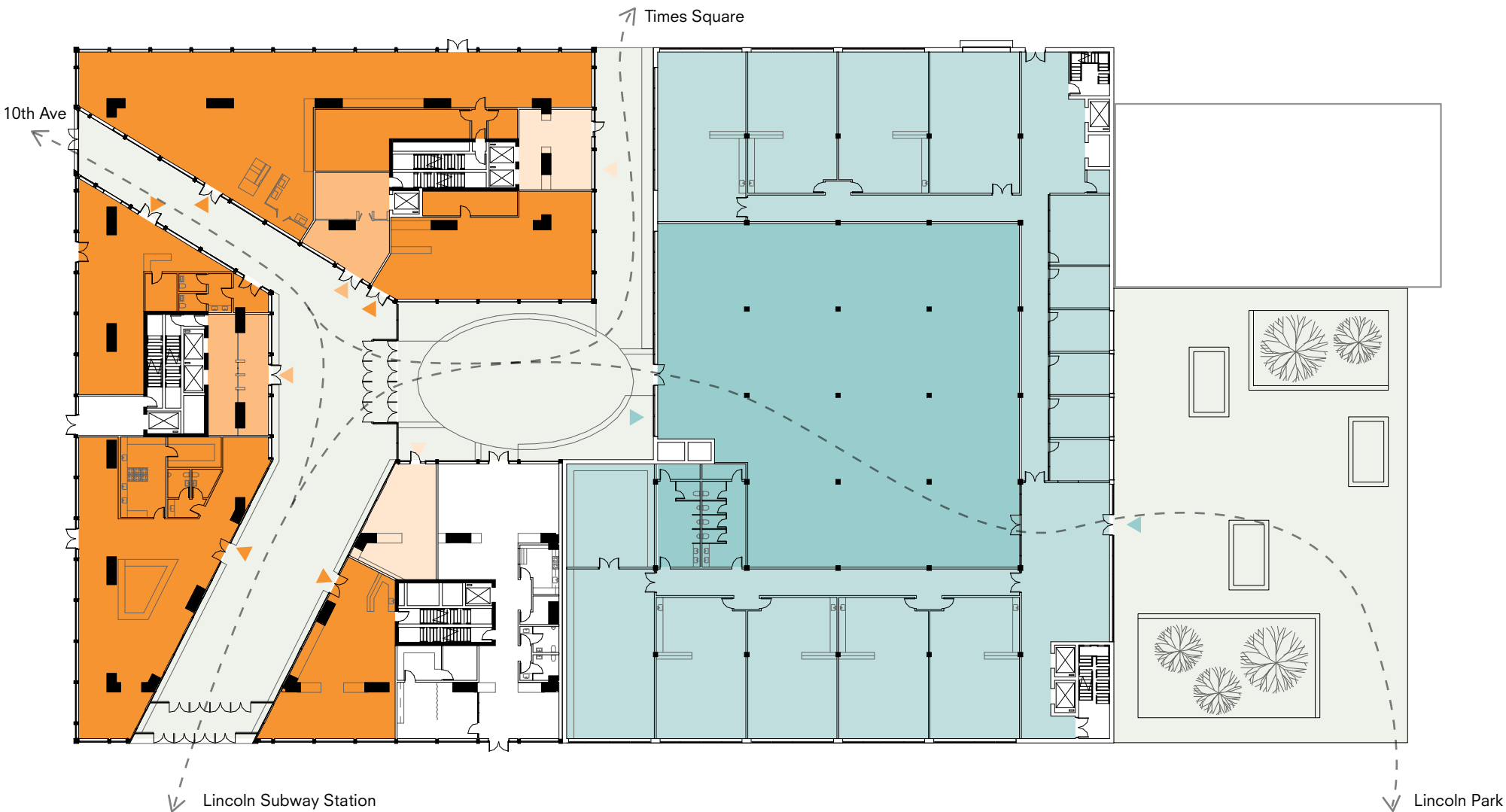
Gotham Tower



GROUND FLOOR PLAN - PROGRAMMATIC



Gotham Tower

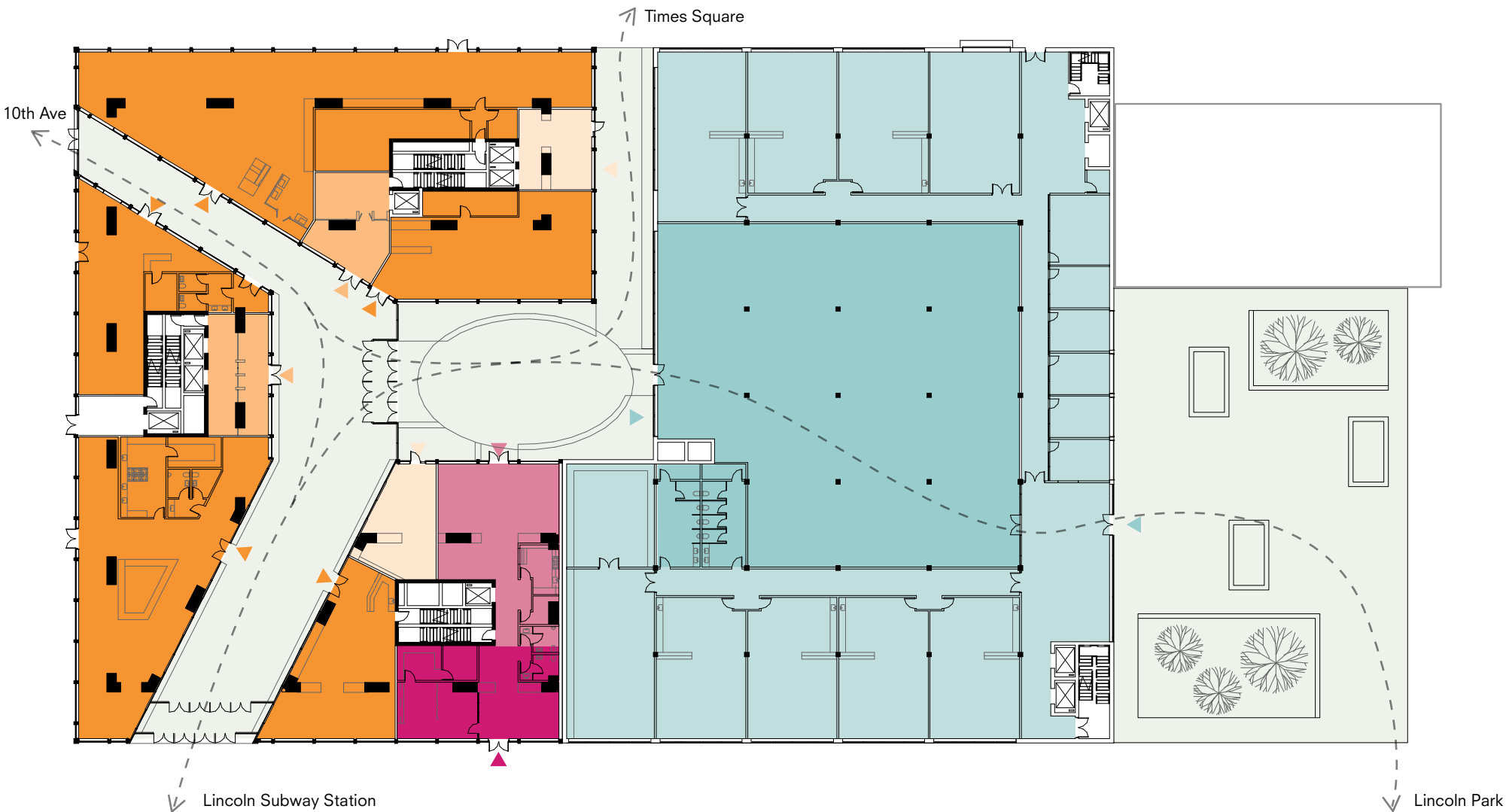


CUNY Hunter College

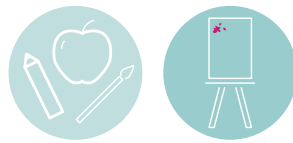
GROUND FLOOR PLAN - PROGRAMMATIC



Gotham Tower

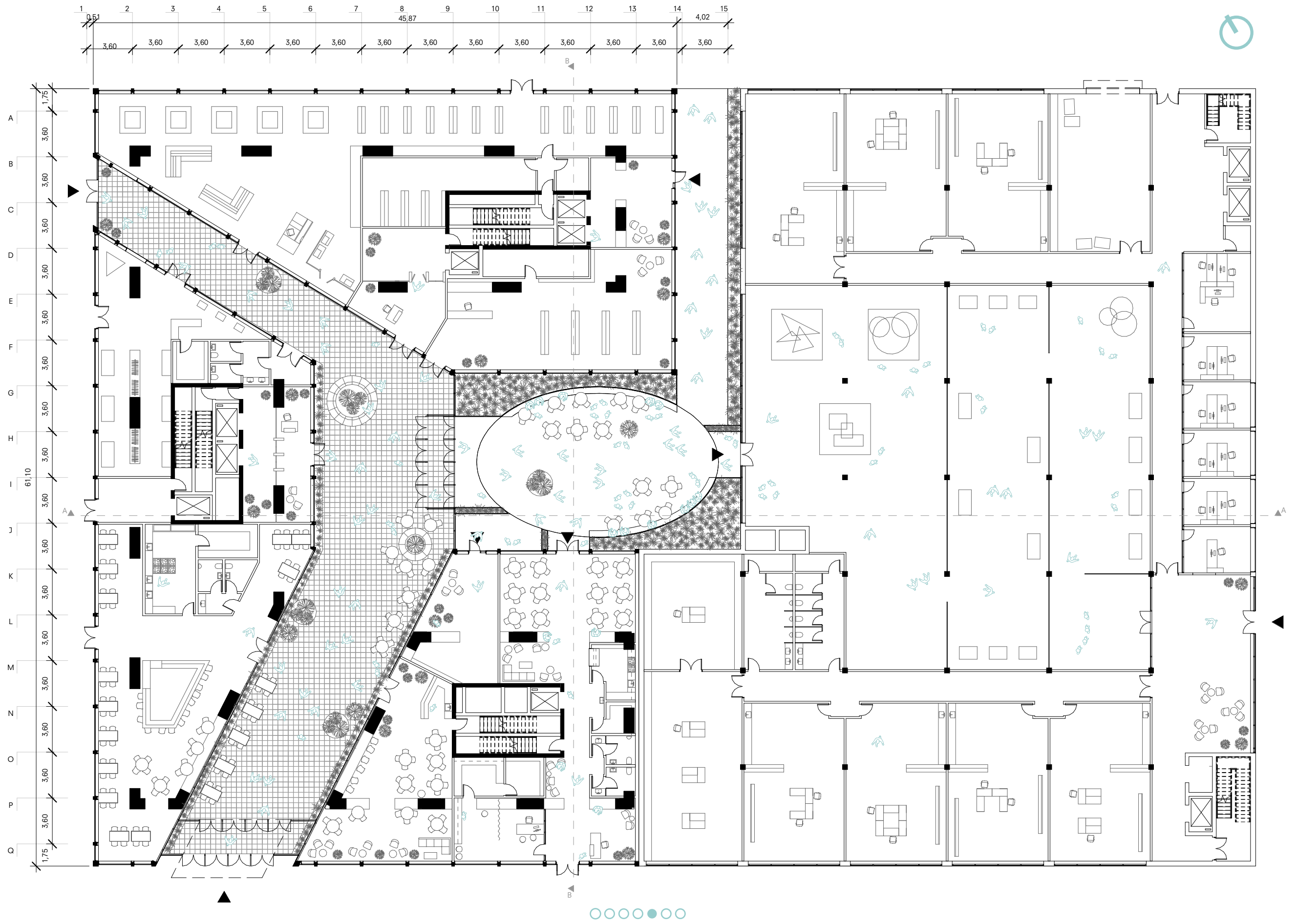


Covenant House

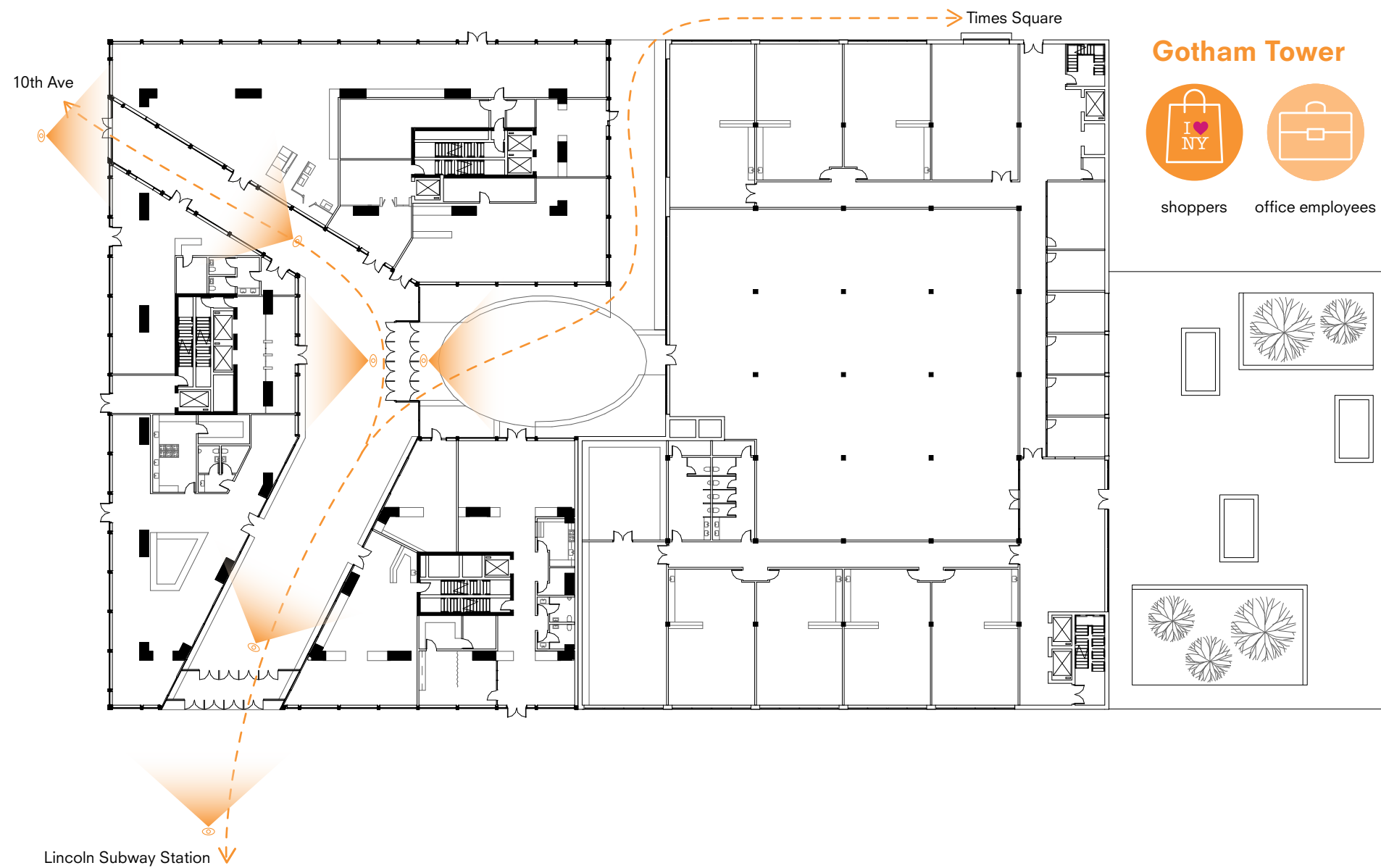


CUNY Hunter College

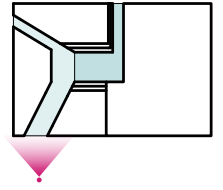




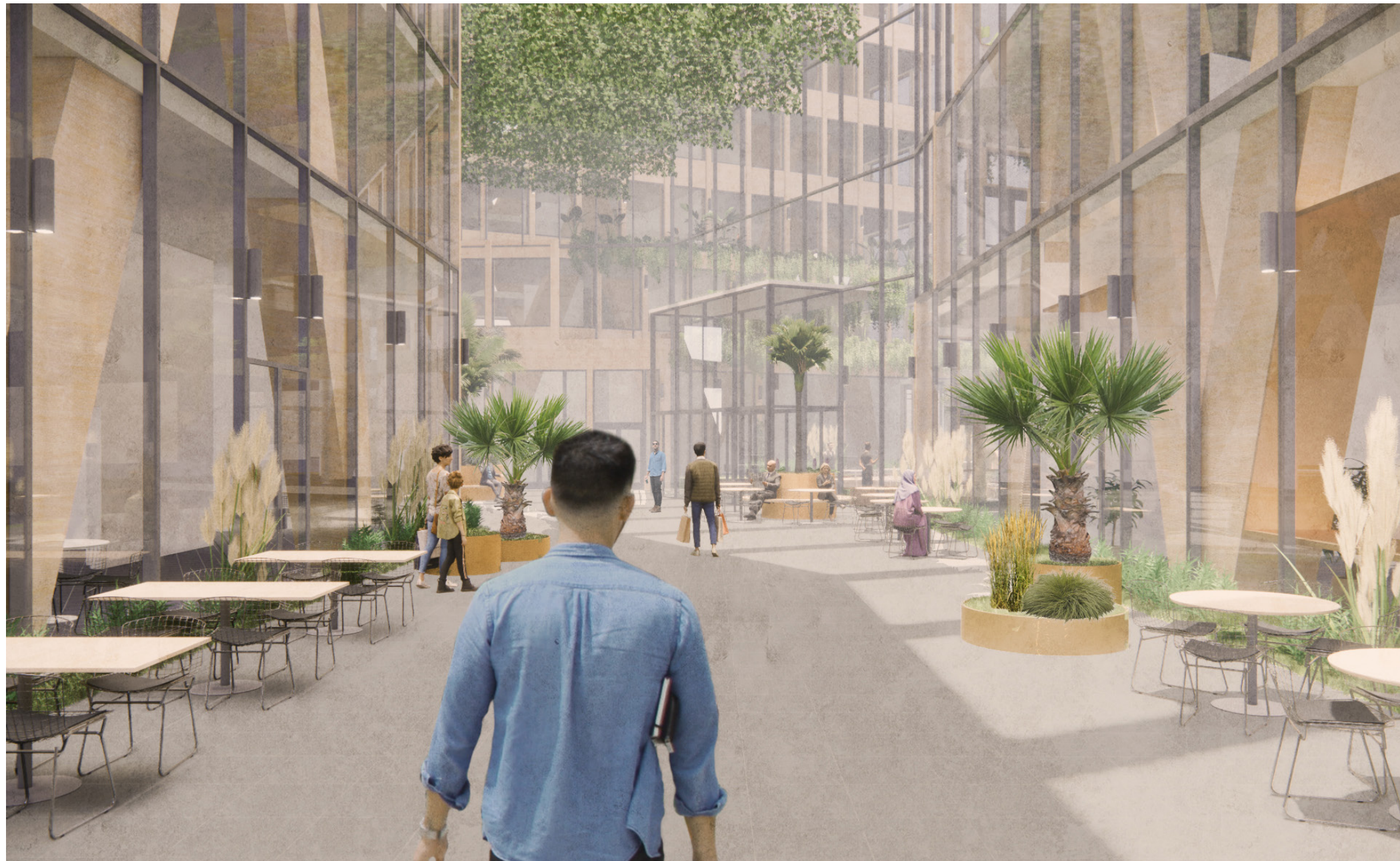
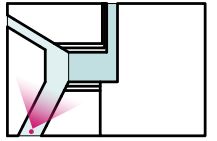
GENERAL PUBLIC AND OFFICE EMPLOYEES



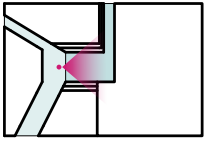
MAIN ENTRANCE



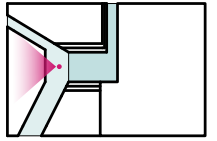
GALLERY



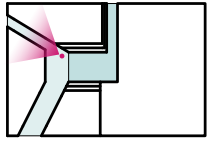
COURTYARD (LOOKING EAST)



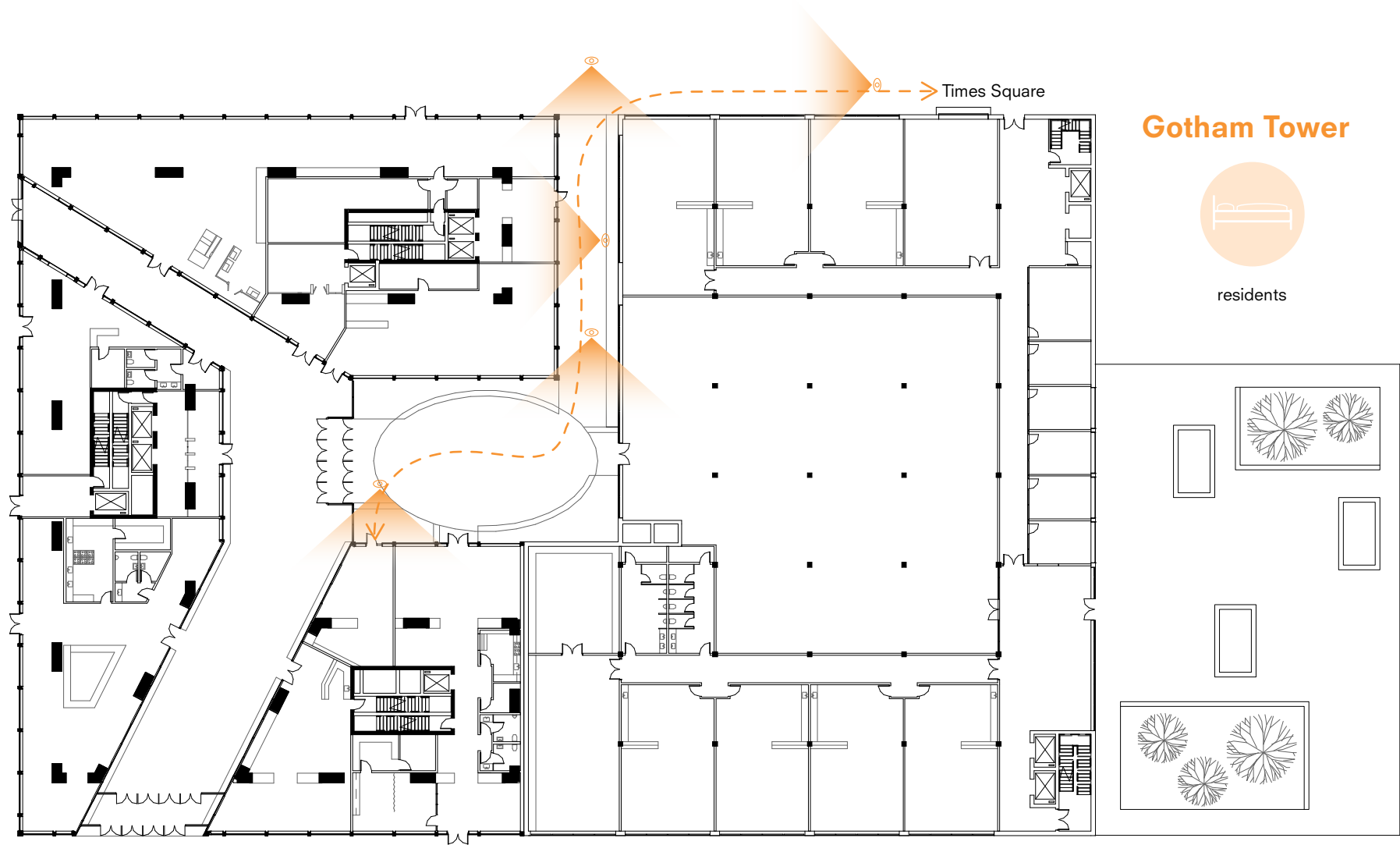
OFFICE LOBBY



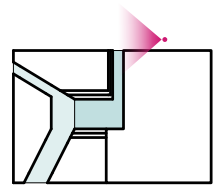
PASSAGE



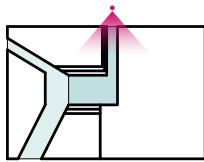
GOTHAM TOWER RESIDENTS



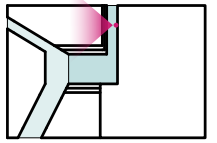
41ST STREET



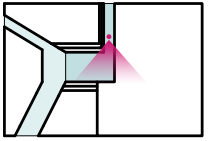
RESIDENTIAL STREET



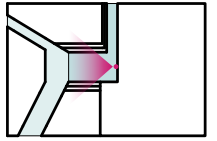
RESIDENTIAL LOBBY



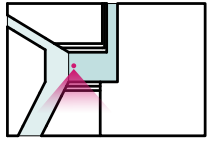
COURTYARD (LOOKING SOUTH)



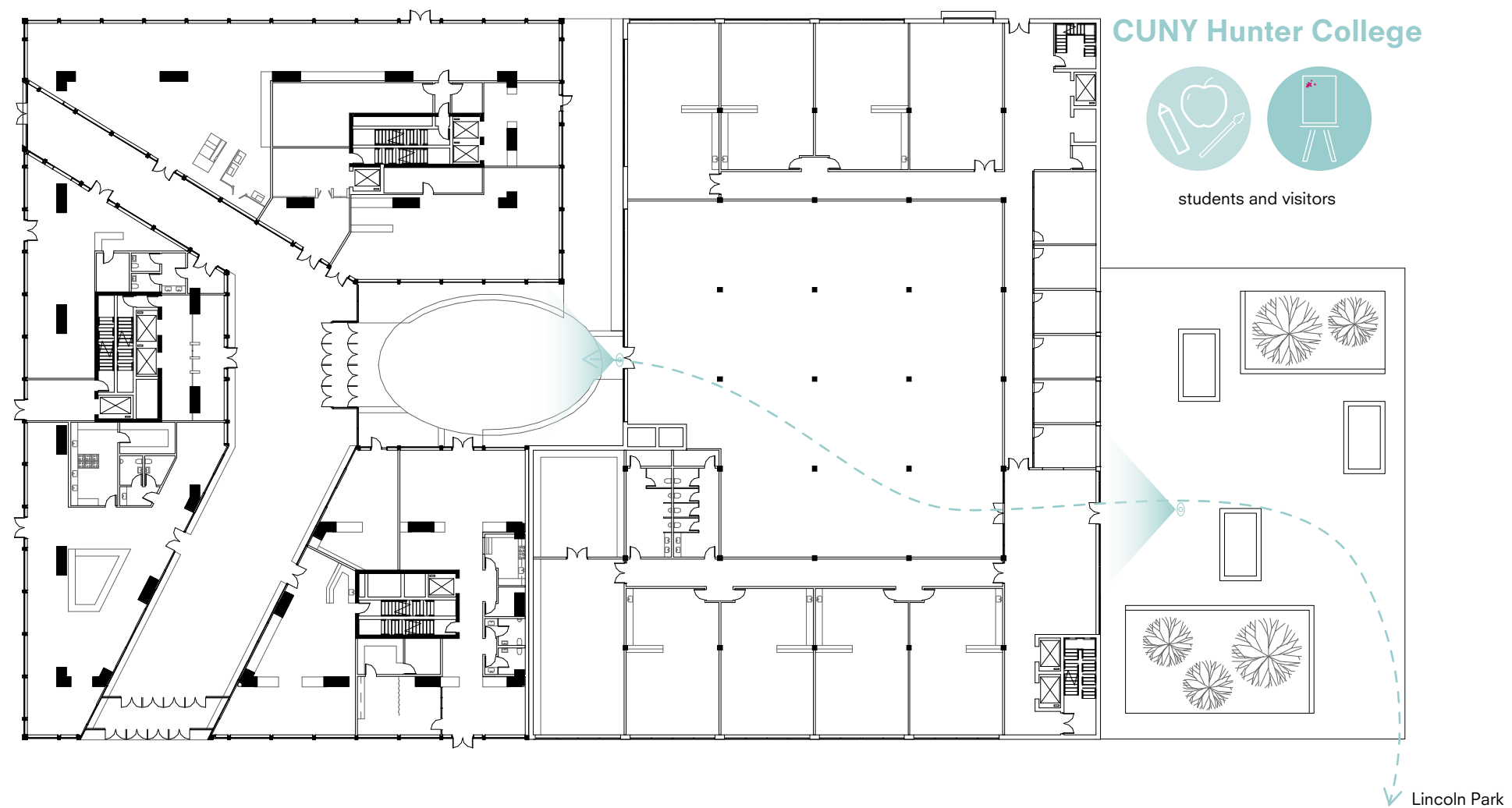
COURTYARD (LOOKING WEST)



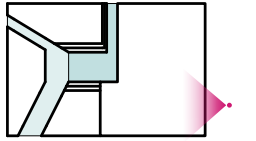
RESIDENTIAL LOBBY



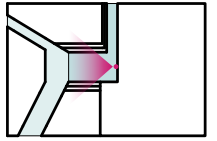
STUDENTS



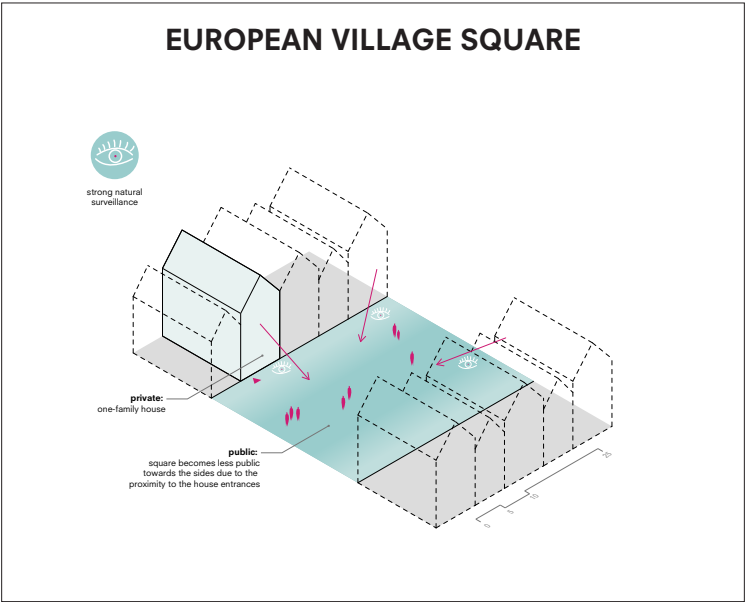
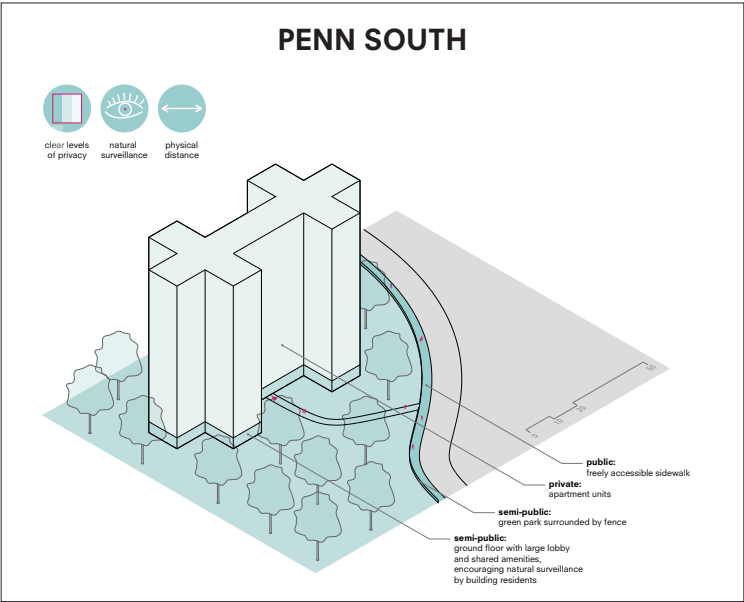
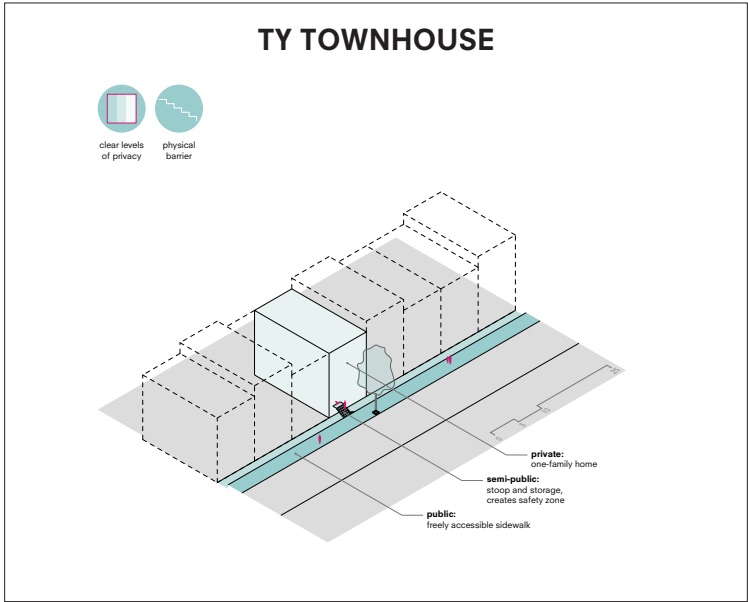
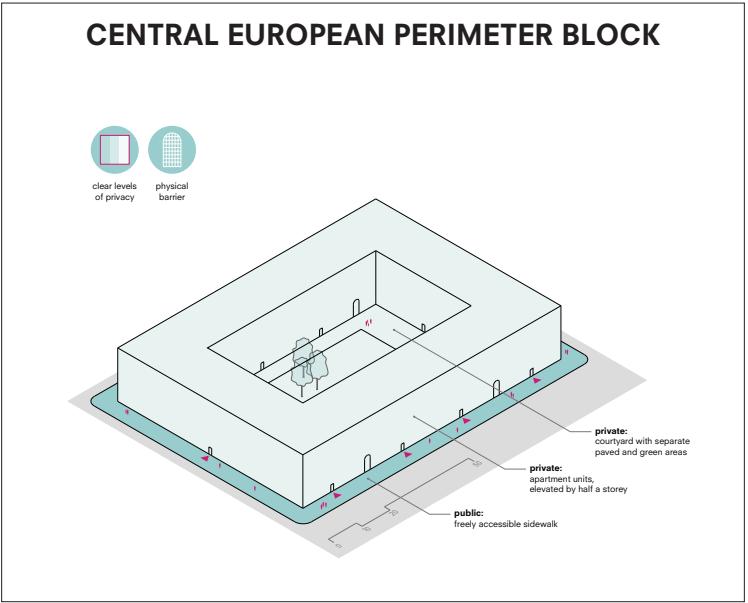
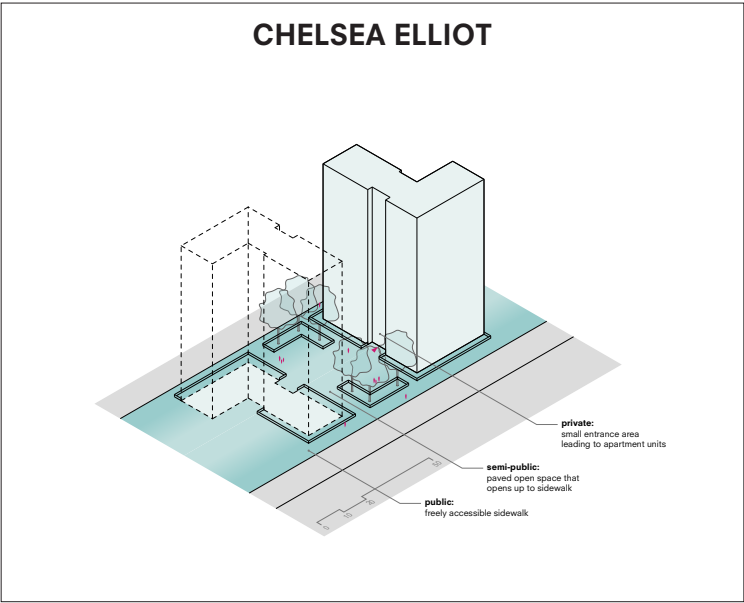
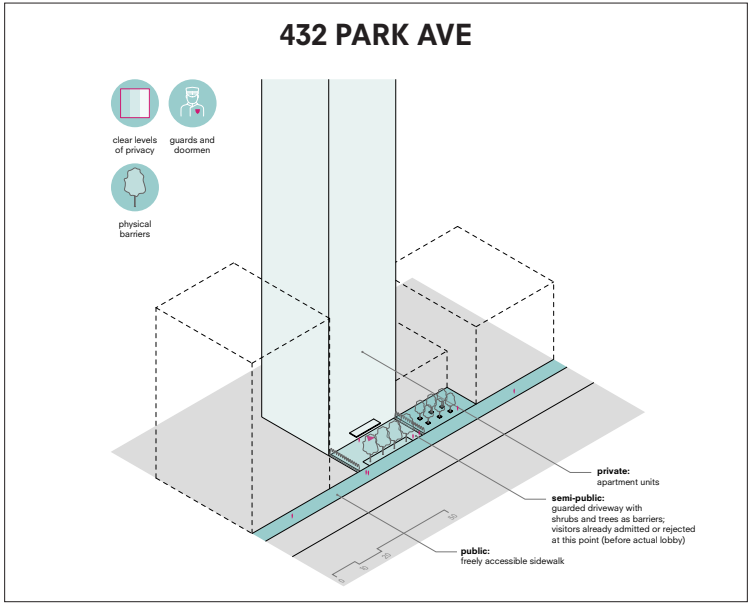
HUNTER COLLEGE ENTRANCE



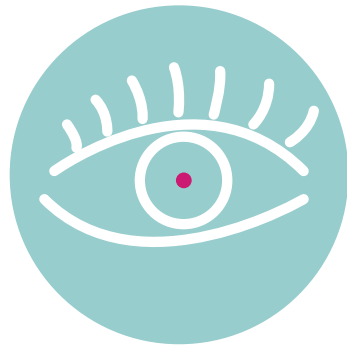
COURTYARD (LOOKING WEST)



SAFETY AT THE ENTRANCE



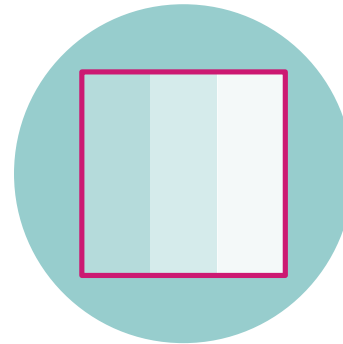
COMMON SAFETY MECHANISMS



natural
surveillance



physical
barrier

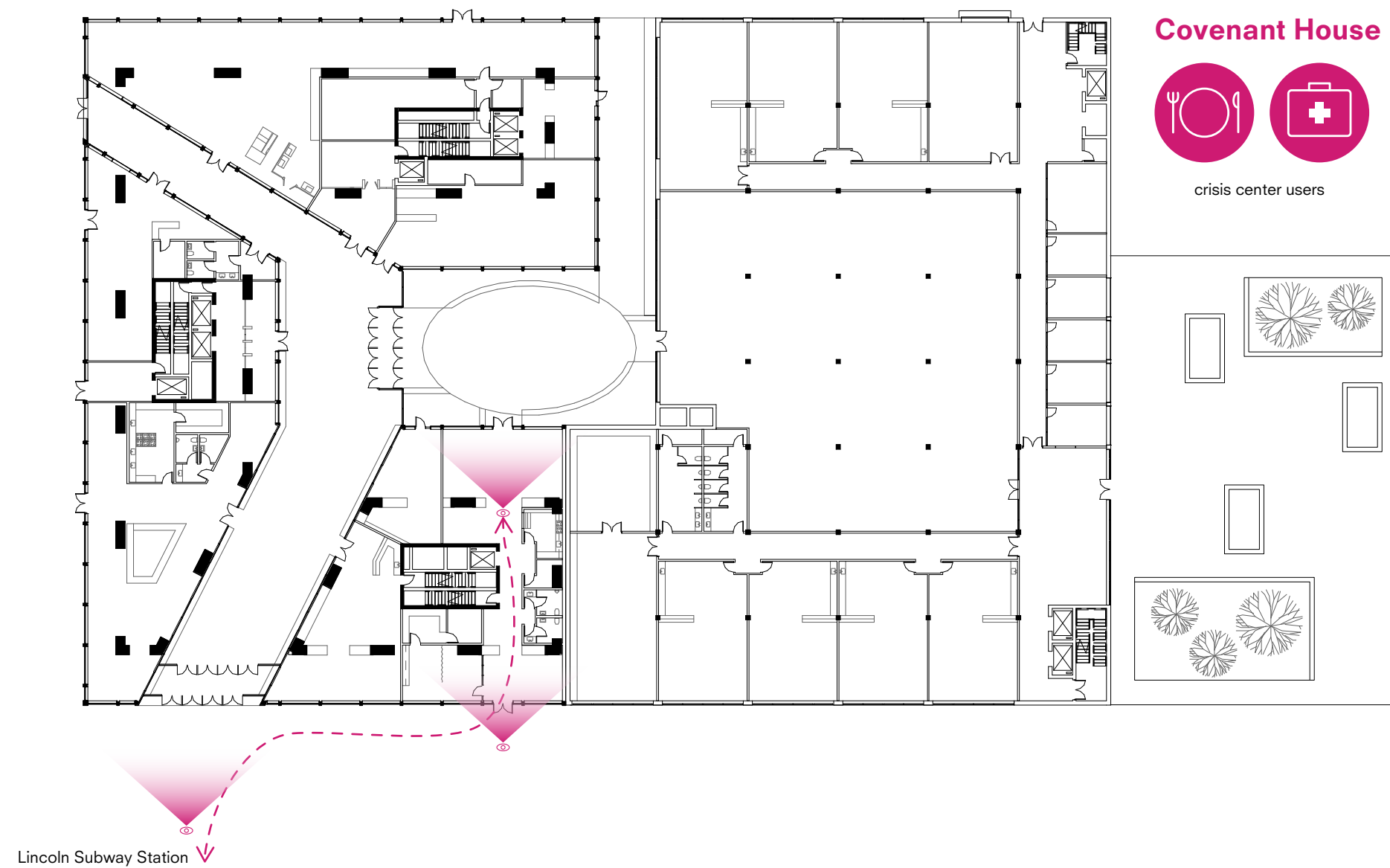


clear levels
of privacy

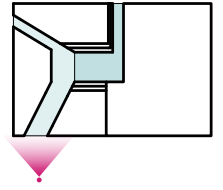


reception

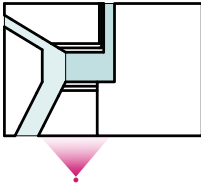
COVENANT HOUSE (PUBLIC ENTRANCE)



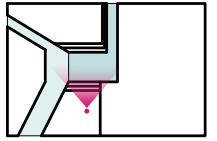
MAIN ENTRANCE



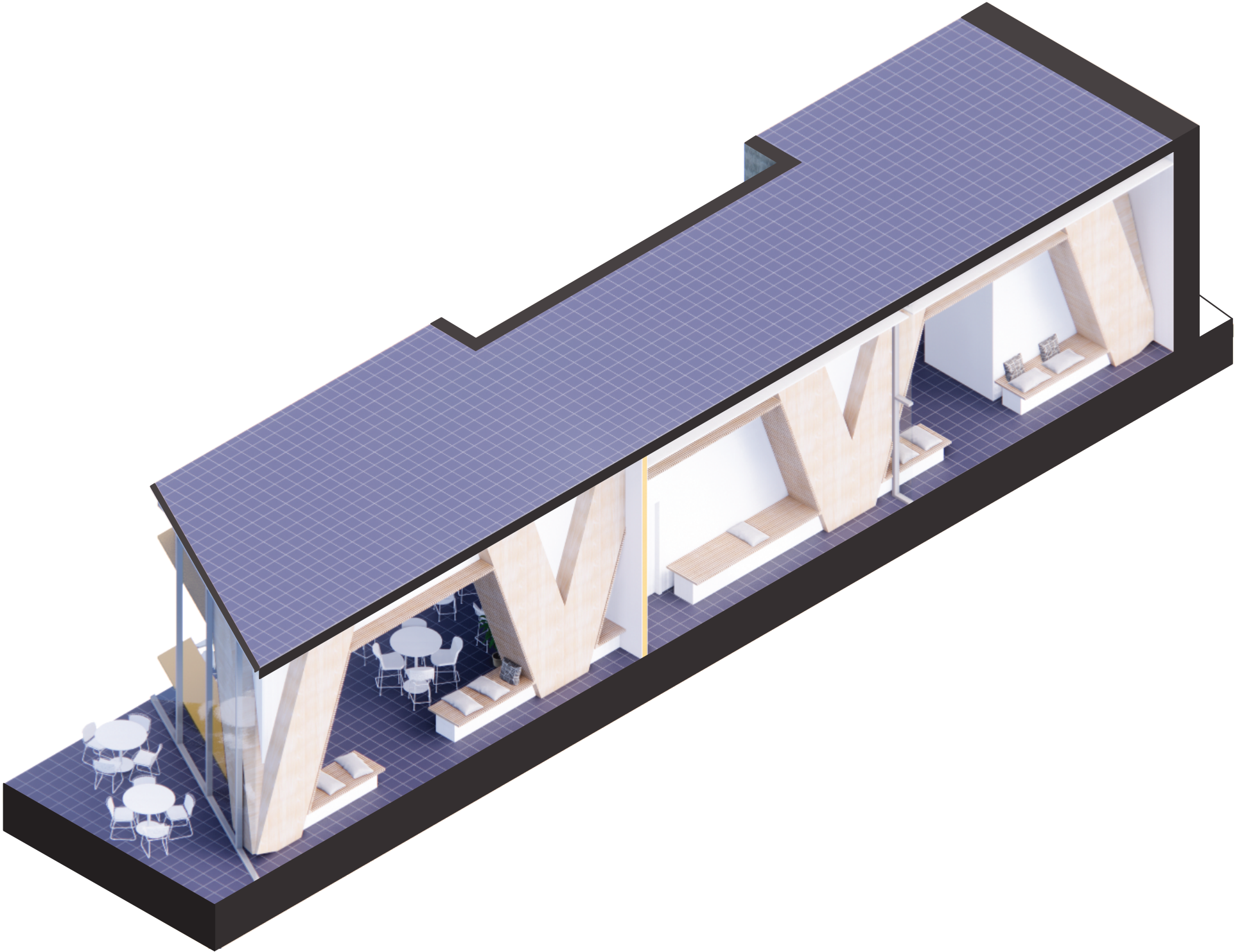
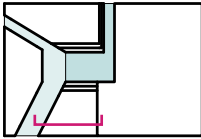
COVENANT HOUSE PUBLIC ENTRANCE



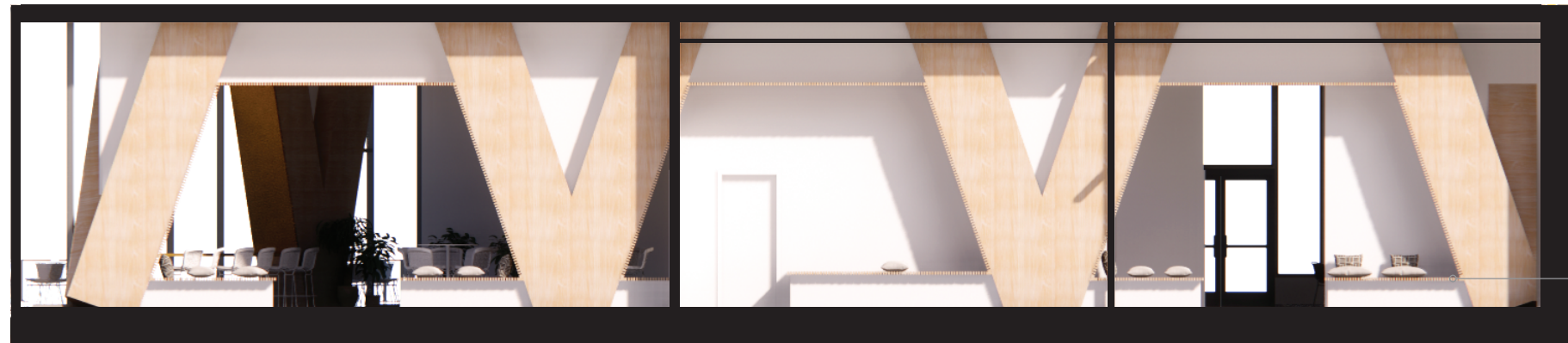
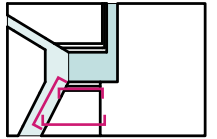
CAFETERIA



DIAGRID INTEGRATION

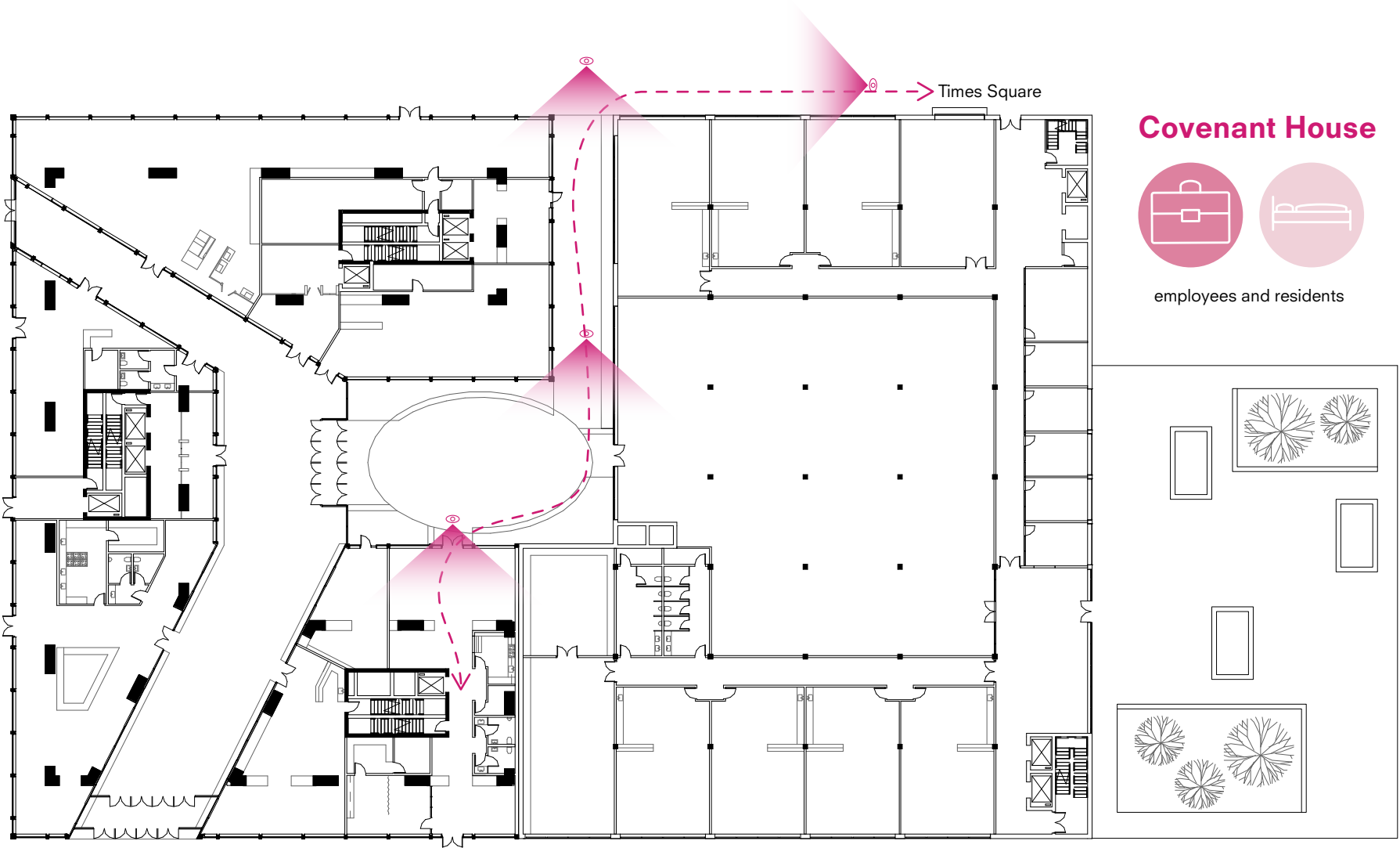


INTERIOR ELEVATIONS

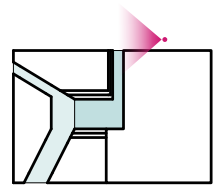


COVENANT HOUSE

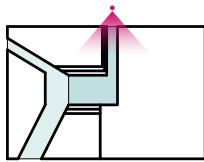
(EMPLOYEE / RESIDENT ENTRANCE)



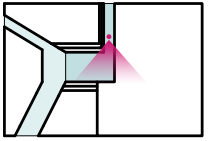
41ST STREET



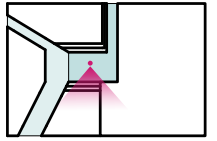
RESIDENTIAL STREET



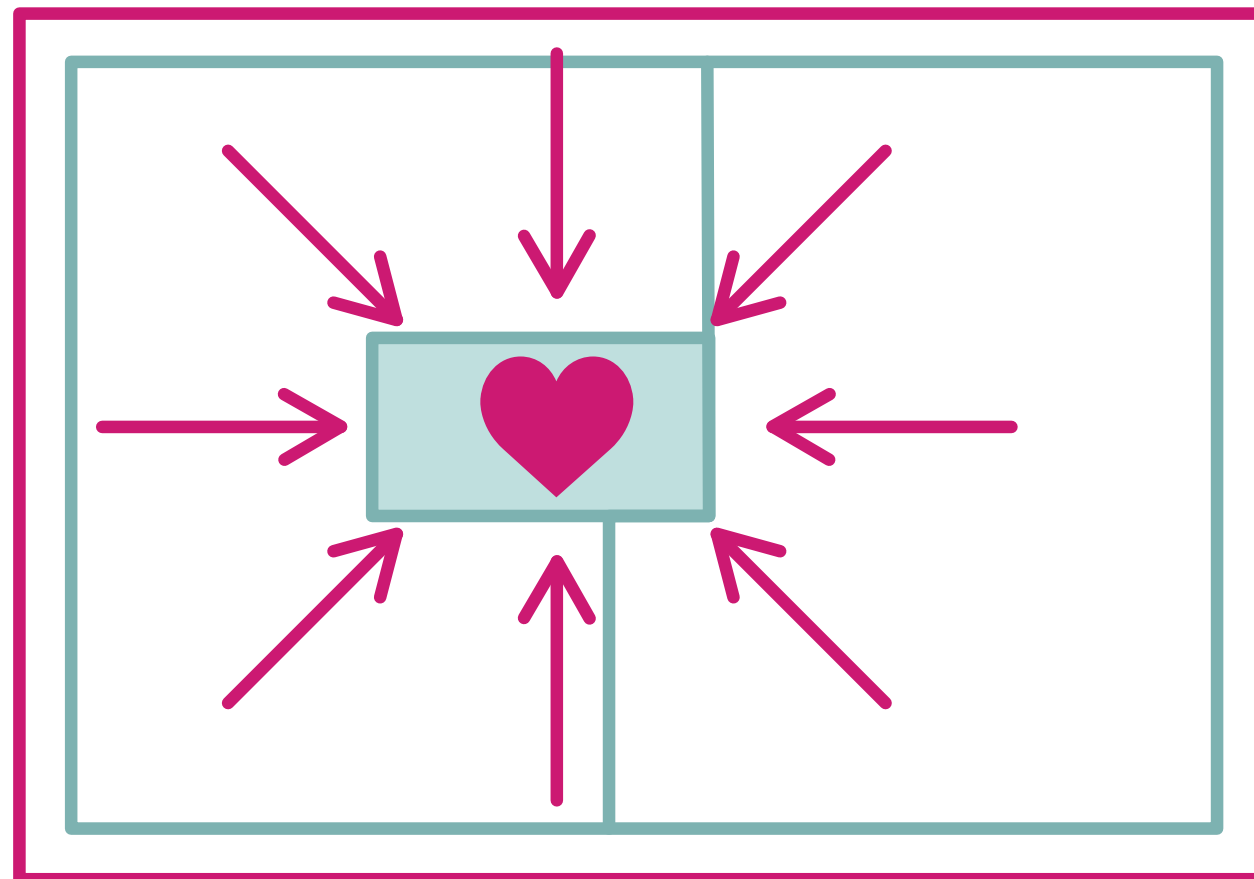
COURTYARD (LOOKING SOUTH)



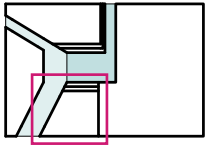
COVENANT HOUSE EMPLOYEE AND RESIDENT ENTRANCE



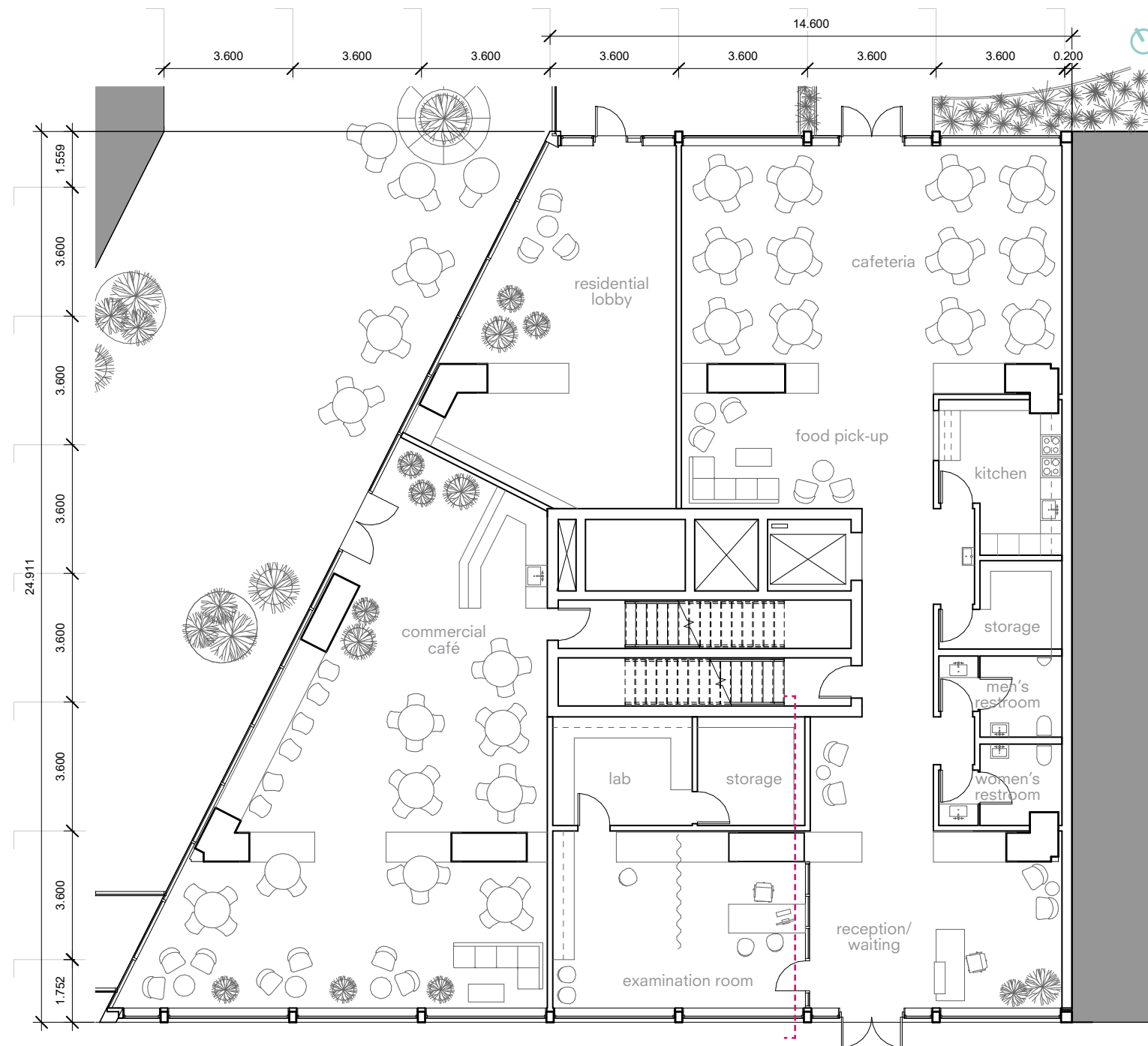
CENTRAL COURTYARD AS THE BUILDING'S HEART

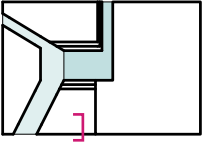


COVENANT HOUSE - GROUND FLOOR



Covenant House
ICS Reception,
ICS, cafeteria

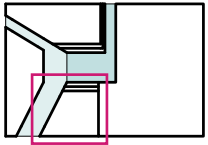




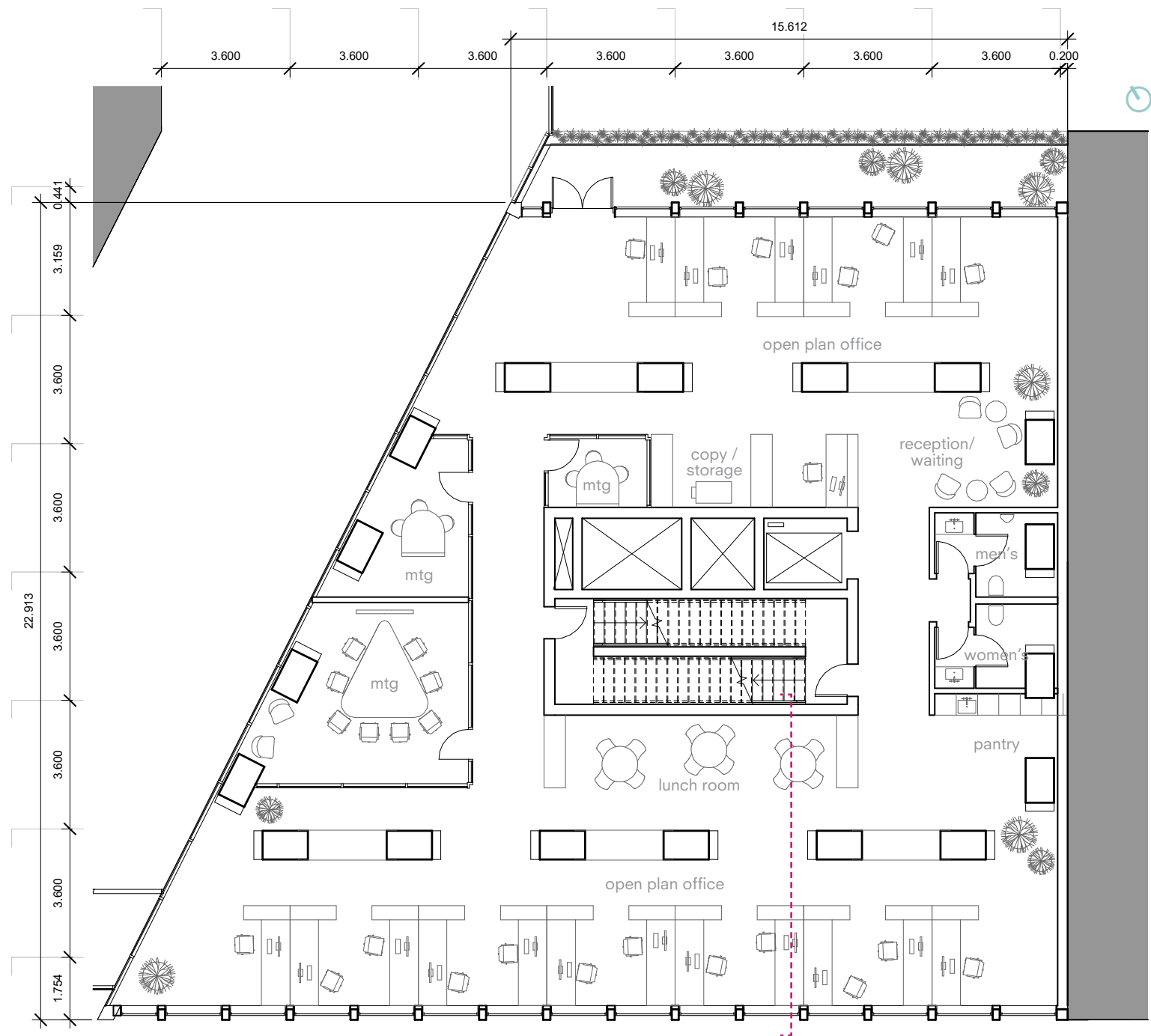
INTAKE AND CRISIS CENTER

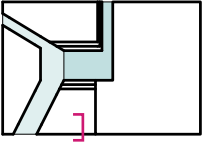


COVENANT HOUSE - FIRST FLOOR



Covenant House
Offices

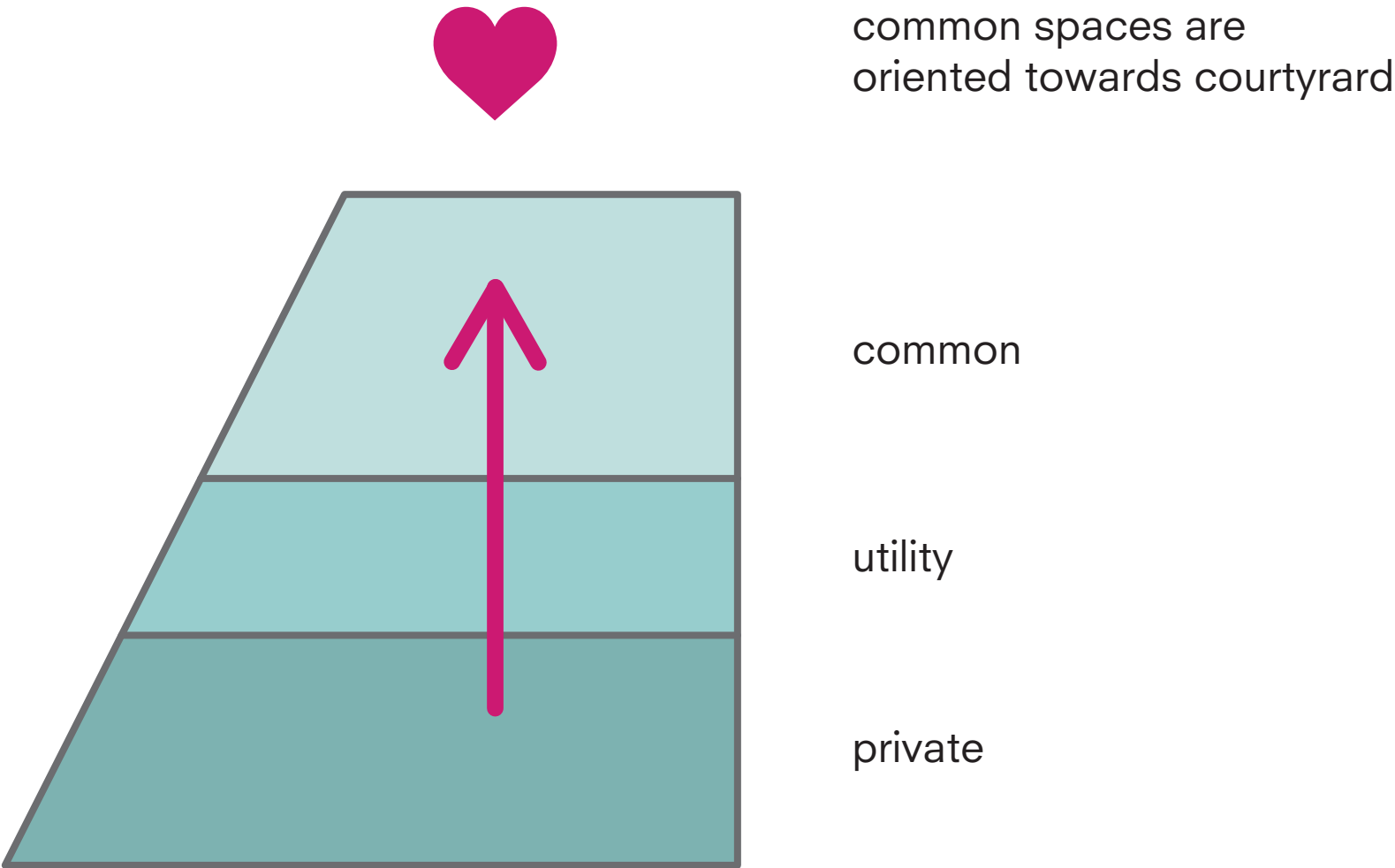




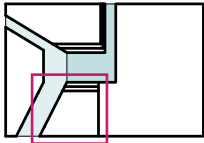
COVENANT HOUSE OFFICES



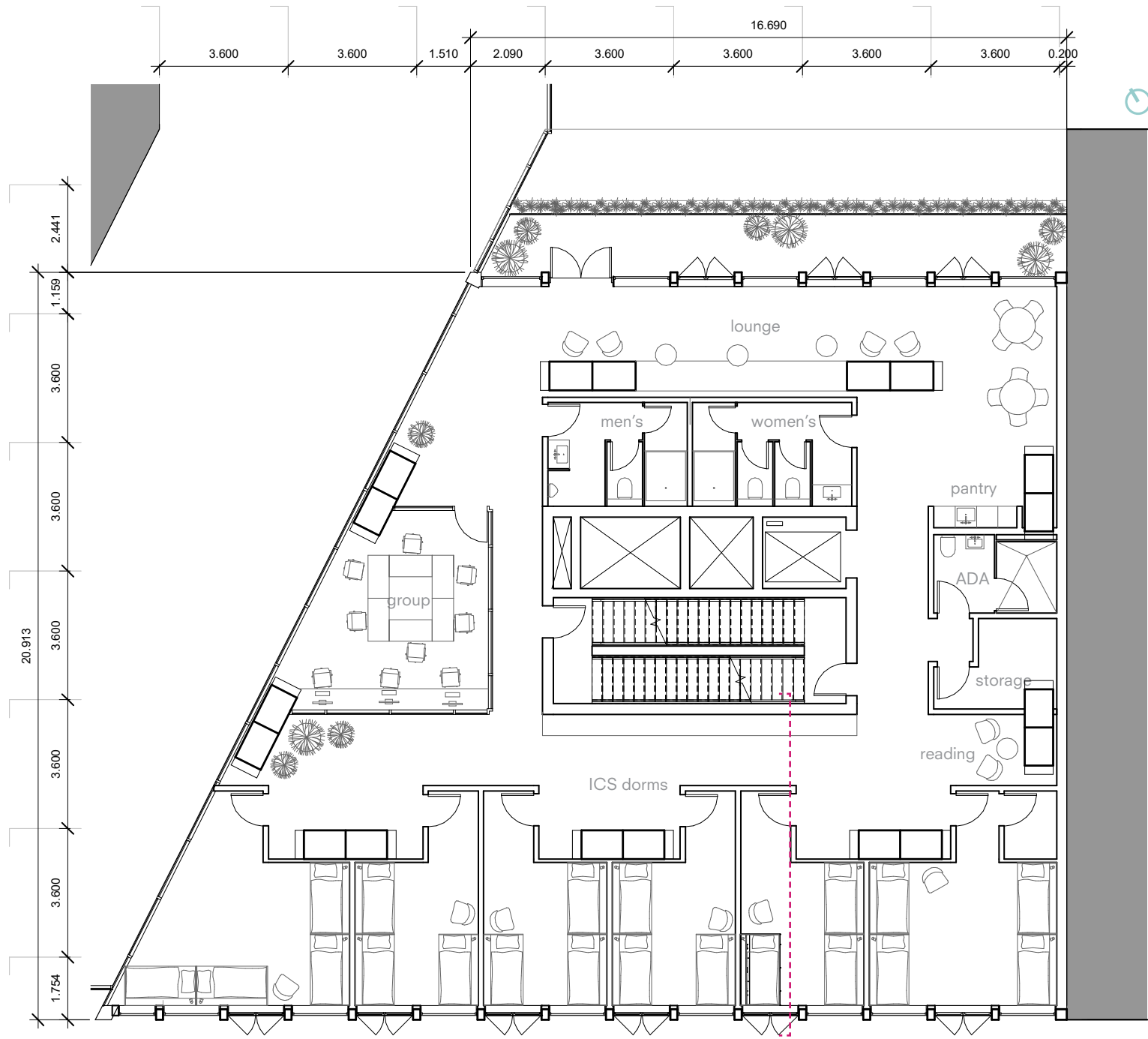
FLOOR PLAN ZONING



COVENANT HOUSE - SECOND FLOOR

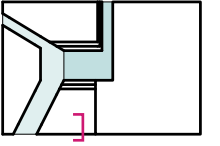


Covenant House
Crisis Shelter



1:100 @ A2

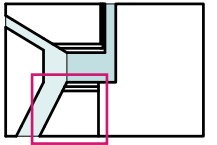




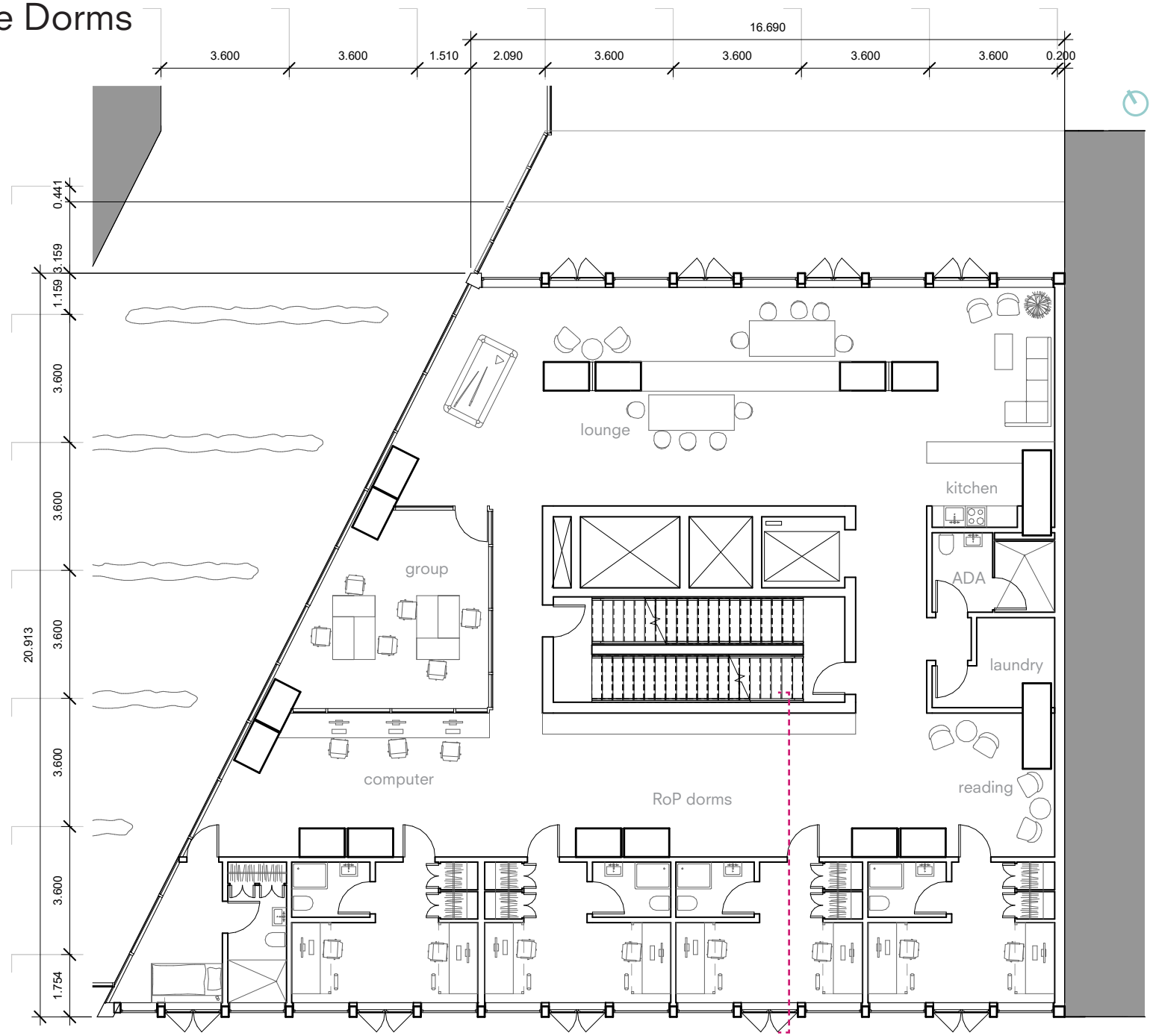
CRISIS SHELTER DORM



COVENANT HOUSE - THIRD FLOOR

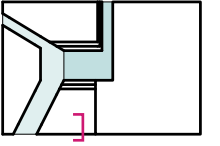


Covenant House
Rights of Passage Dorms



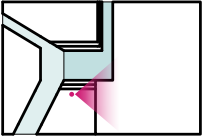
1:100 @ A2





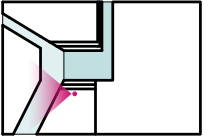
SUPPORTIVE HOUSING DORM





COMMON ROOM LOOKING EAST





COMMON ROOM LOOKING WEST



VISIBLE SUSTAINABILITY = SOCIAL SOLIDARITY



MATERIAL EXPRESSION ALSO IN STRUCTURE?

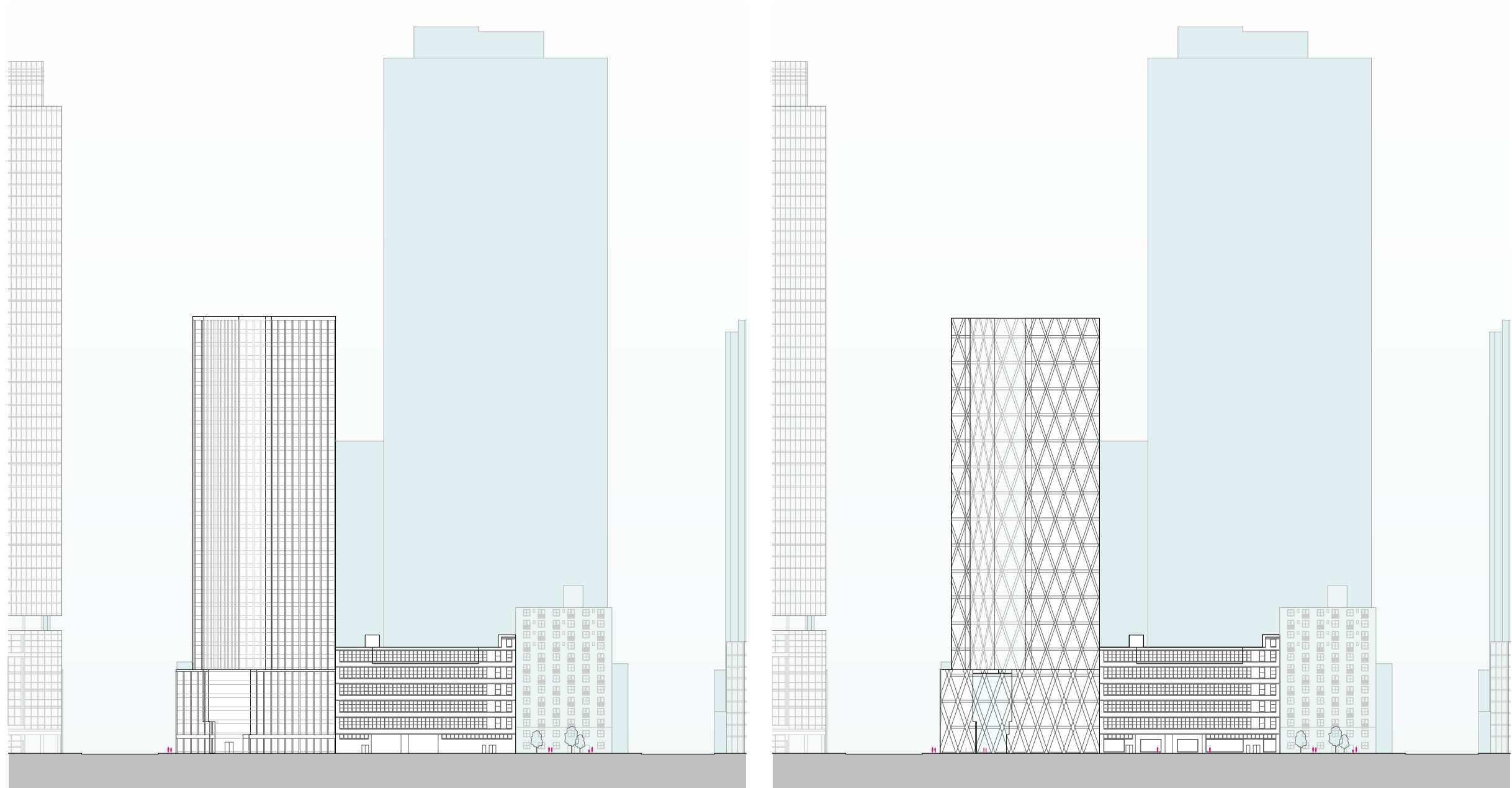




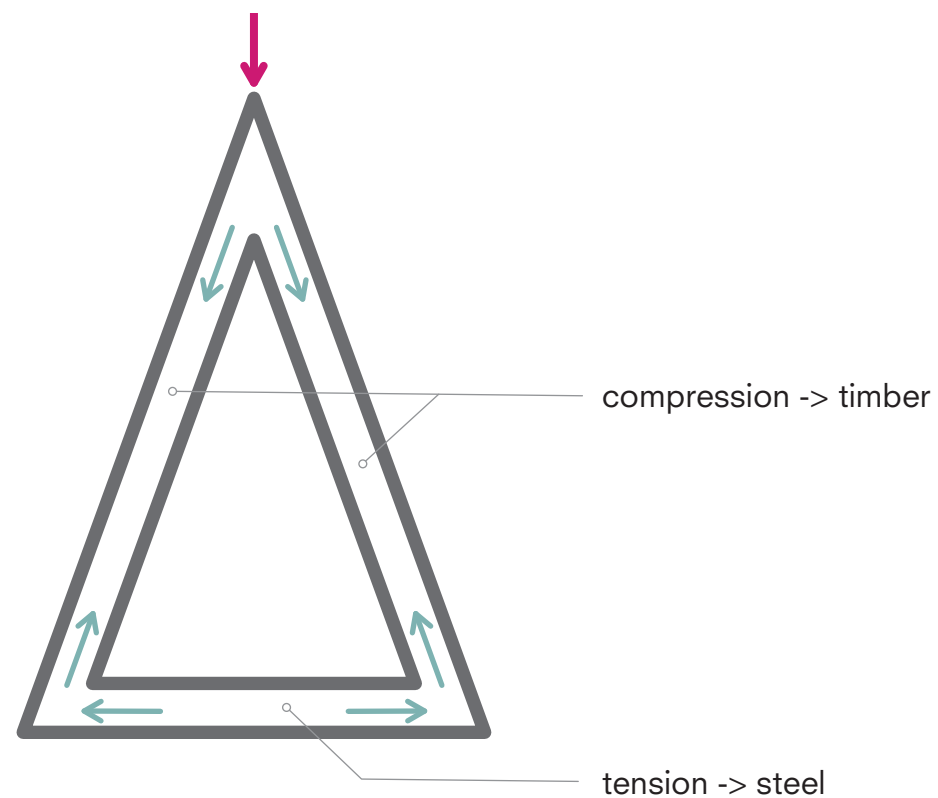
DEVELOPMENT



FACADE COLUMNS VS. DIAGRID



ADVANTAGES OF A DIAGRID



more adequate stresses
(as opposed to columns)

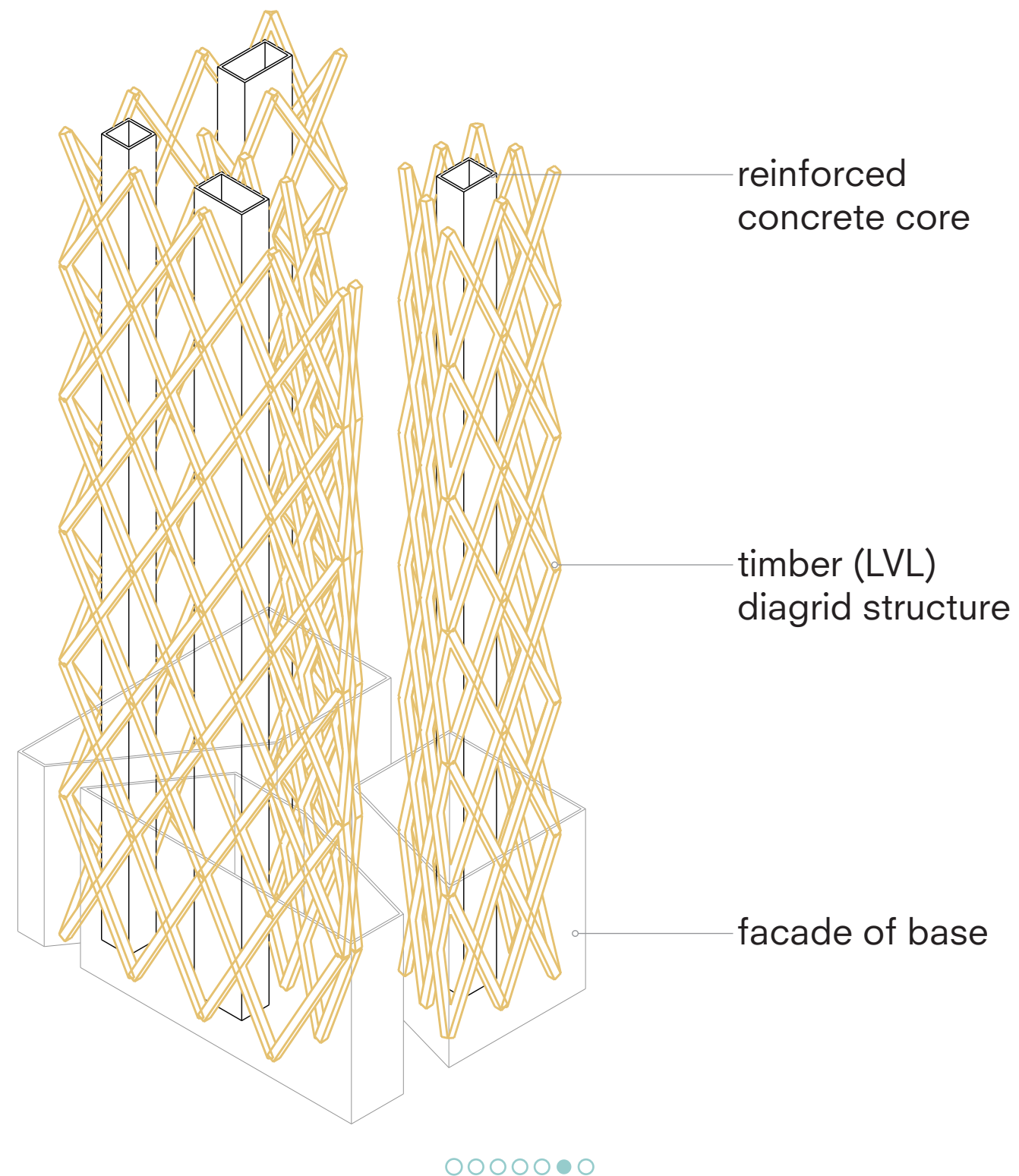


less material needed

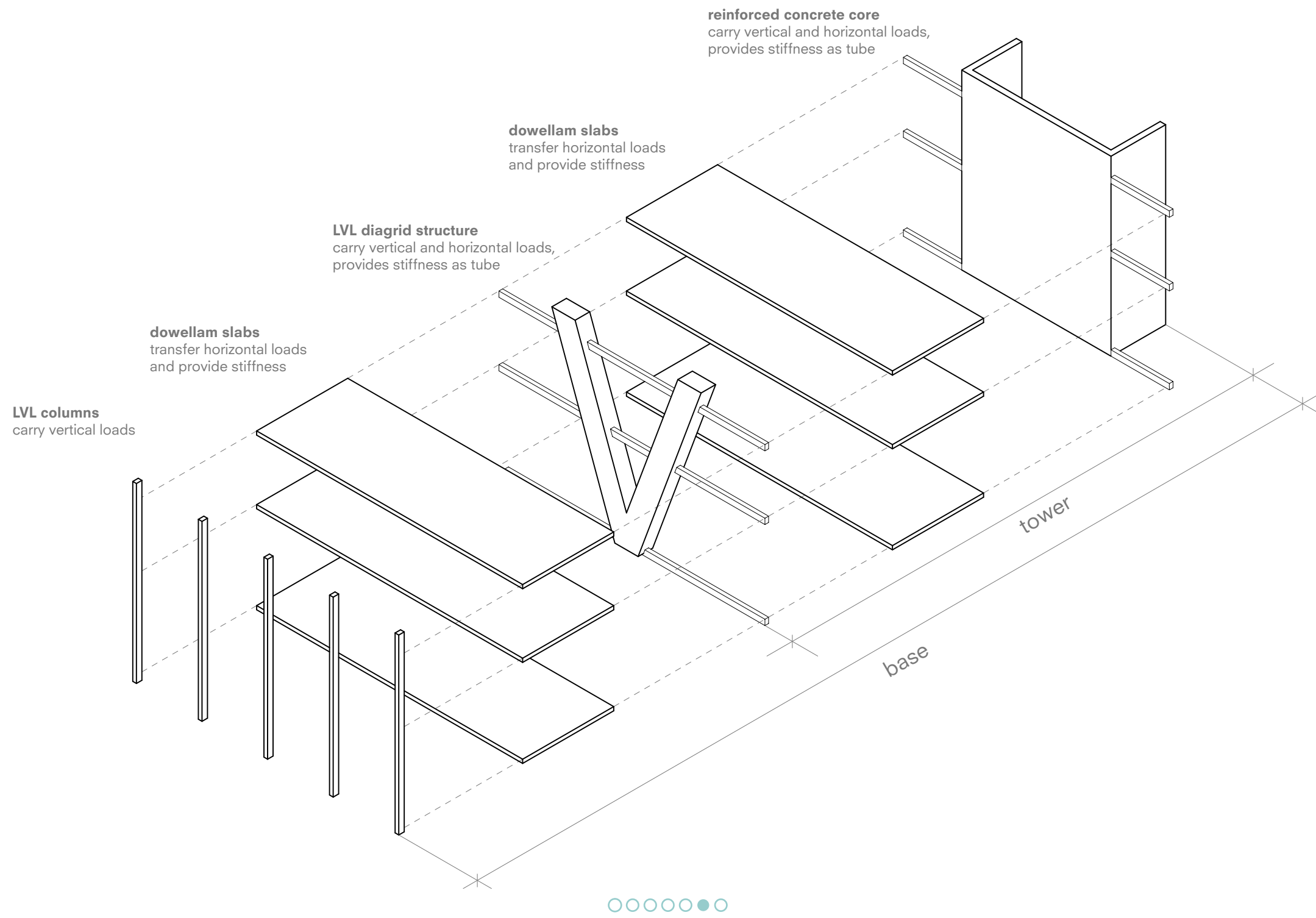


overall more sustainable!
. less resource depletion
. smaller CO2 footprint for
transportation
etc.

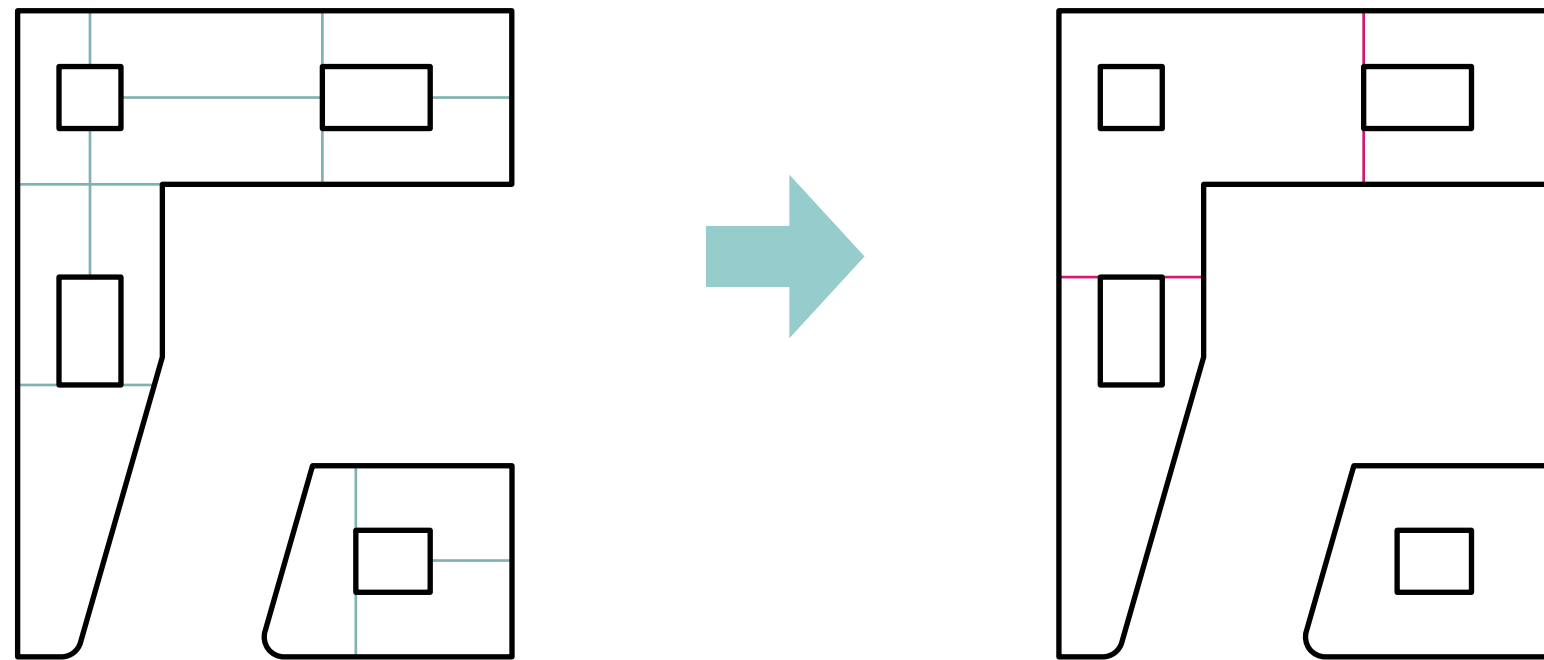
STABILITY: TUBE-IN-A-TUBE SYSTEM



STABILITY AND STRUCTURE



MAXIMAL ADAPTABILITY IN FLOOR PLAN



no additional structural walls -> layout can be changed easier
if building needs to be adapted in the future

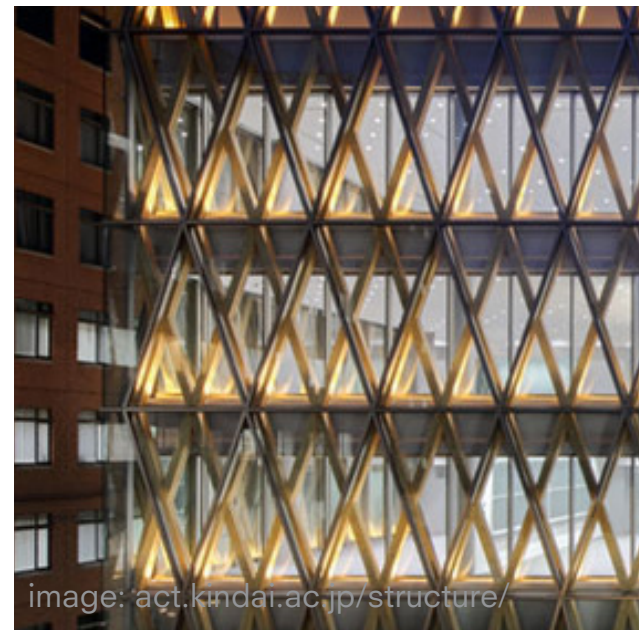
TOWER FACADE

in front of structure



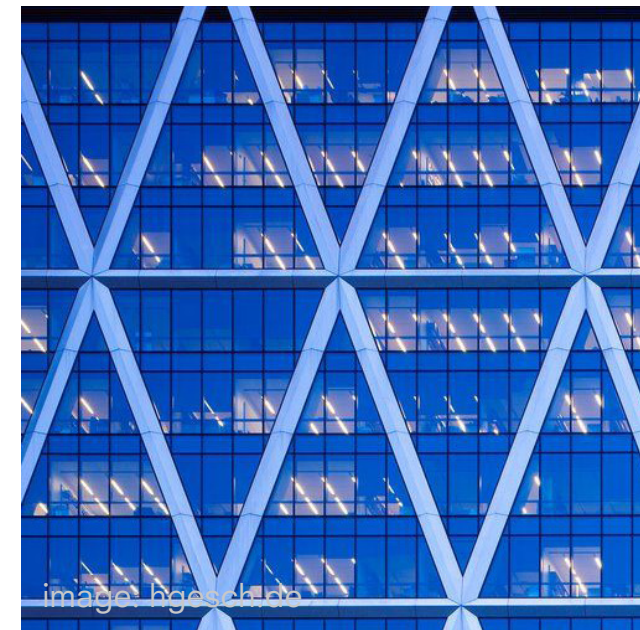
- ✚ construction is well protected
- ✚ cost efficient (single facade)
- ✖ no climate design benefit

double facade
around structure



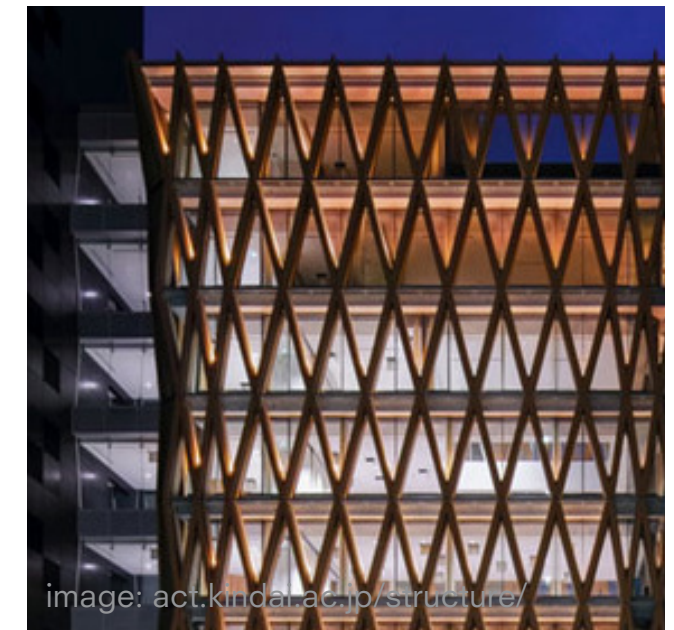
- ✚ construction is well protected
- ✚ can be used for climate benefit
- ✚ acts as acoustic barrier to street
- ✖ more costly
- ✖ more material use

inset in structure



- ✚ expression of structure intact
- ✖ construction only partially protected
- ✖ many custom facade pieces
- ✖ irregular floor slabs

behind structure



- ✚ expression of structure intact
- ✚ regular facade elements
- ✚ regular floor slabs
- ✖ construction not protected
- ✖ no benefits for climate design

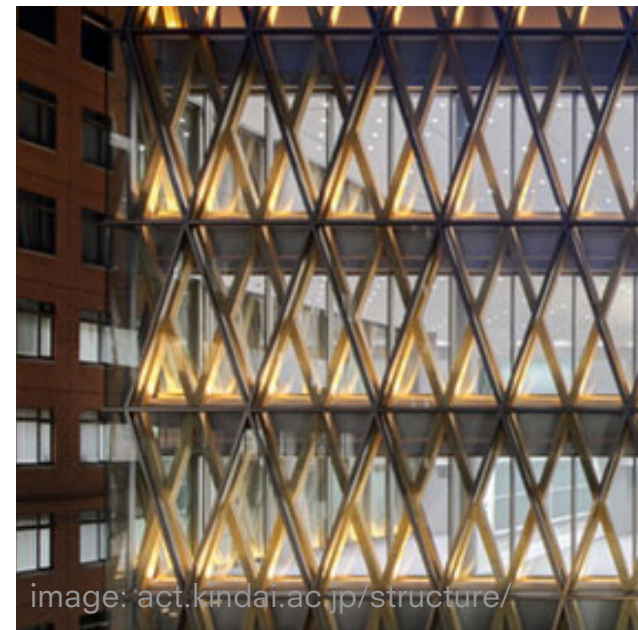
TOWER FACADE

in front of structure



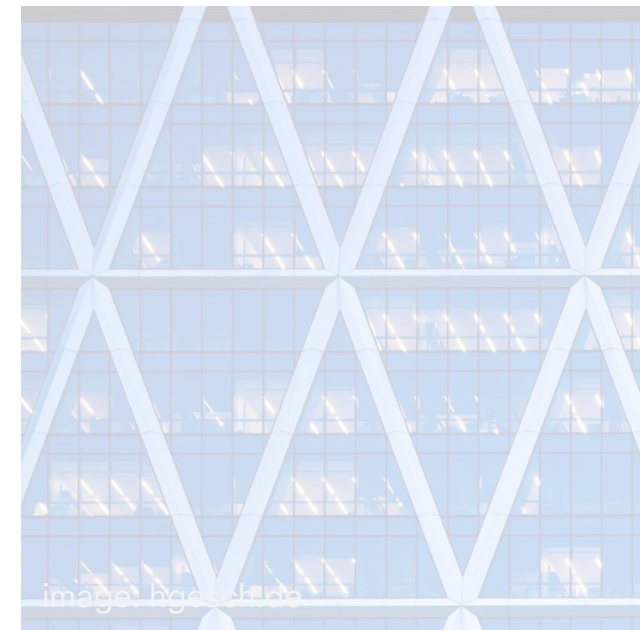
- + construction is well protected
- + cost efficient (single facade)
- no climate design benefit

double facade
around structure



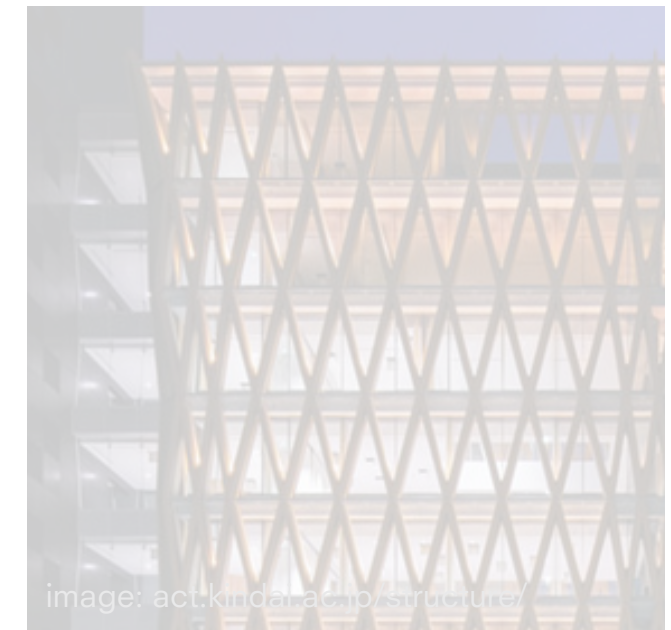
- + construction is well protected
- + can be used for climate benefit
- + acts as acoustic barrier to street
- more costly
- more material use

inset in structure



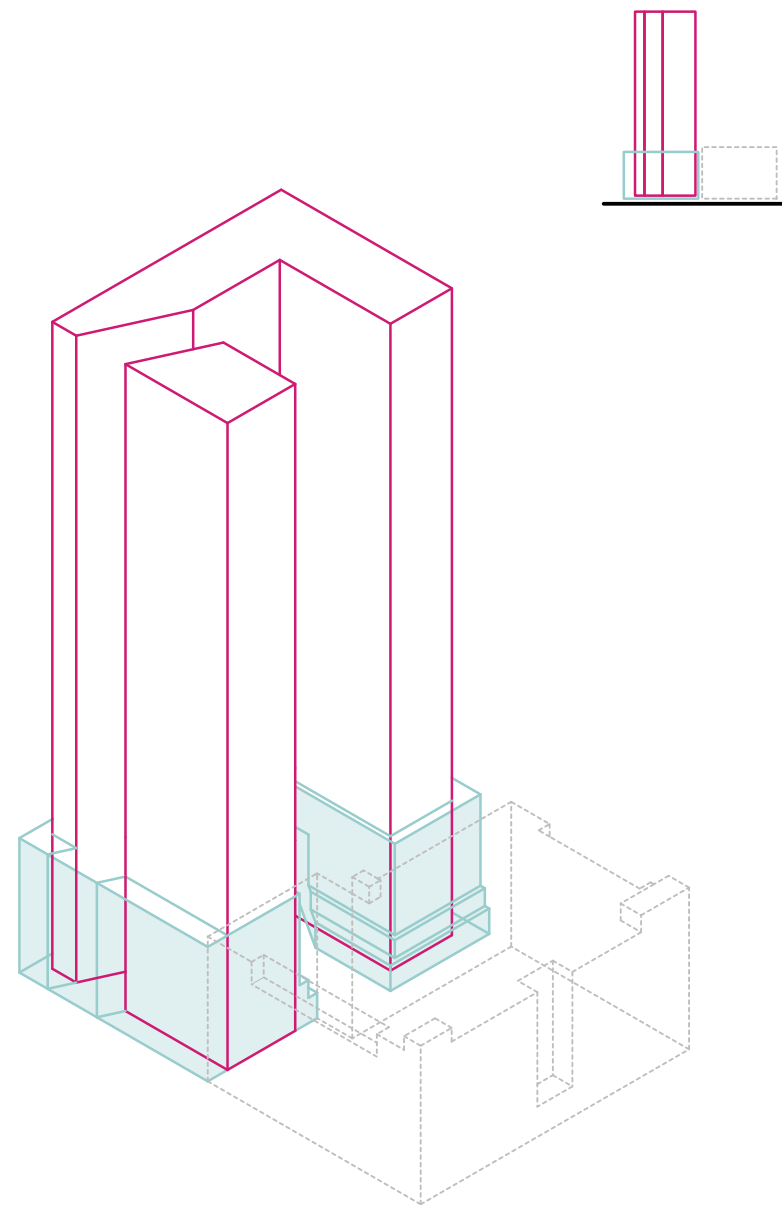
- + expression of structure intact
- construction only partially protected
- many custom facade pieces
- irregular floor slabs

behind structure



- + expression of structure intact
- + regular facade elements
- + regular floor slabs
- construction not protected
- no benefits for climate design

TOWER-BASE RELATIONSHIP

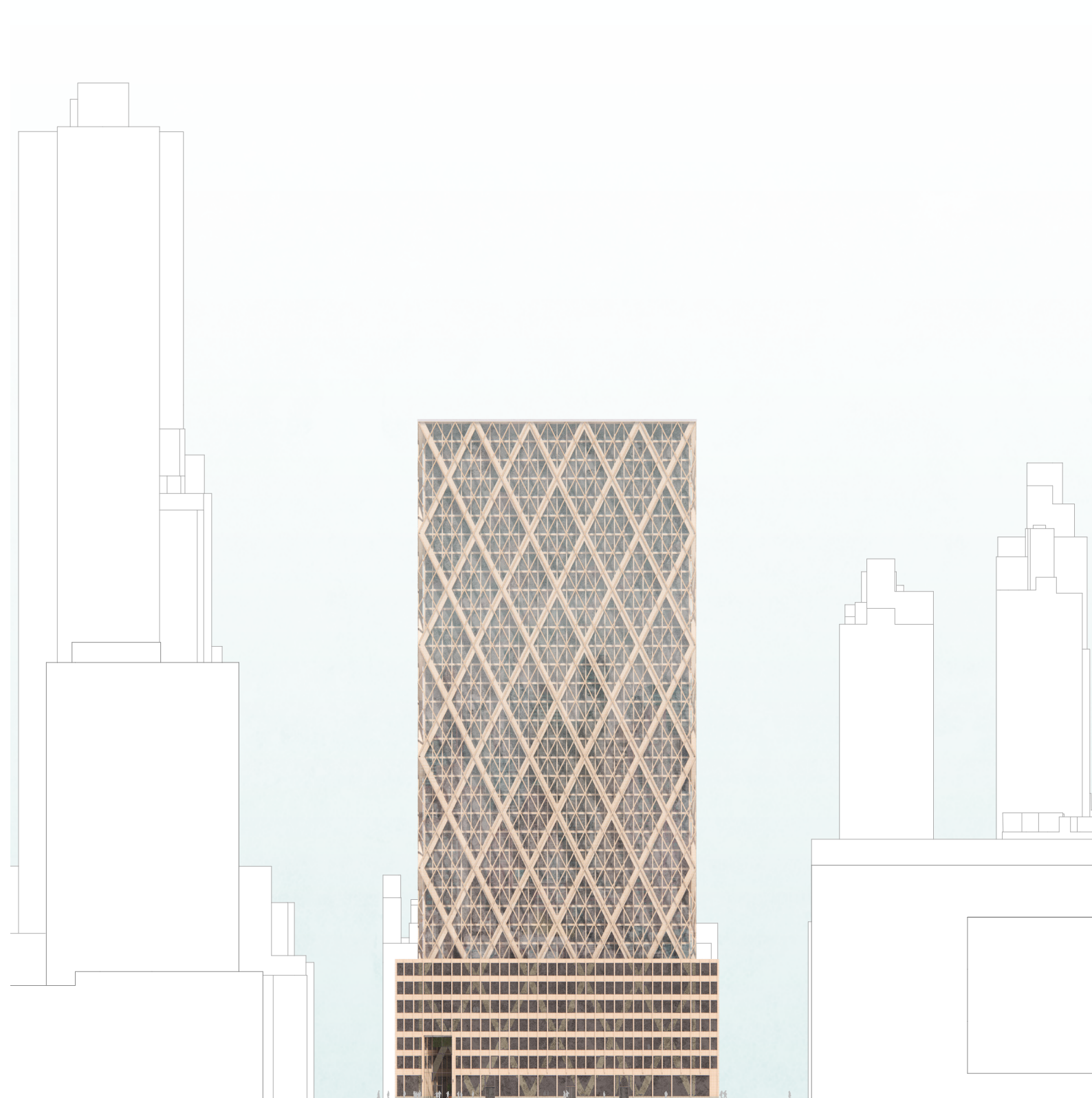


base as a surrounding facade





south elevation



west elevation



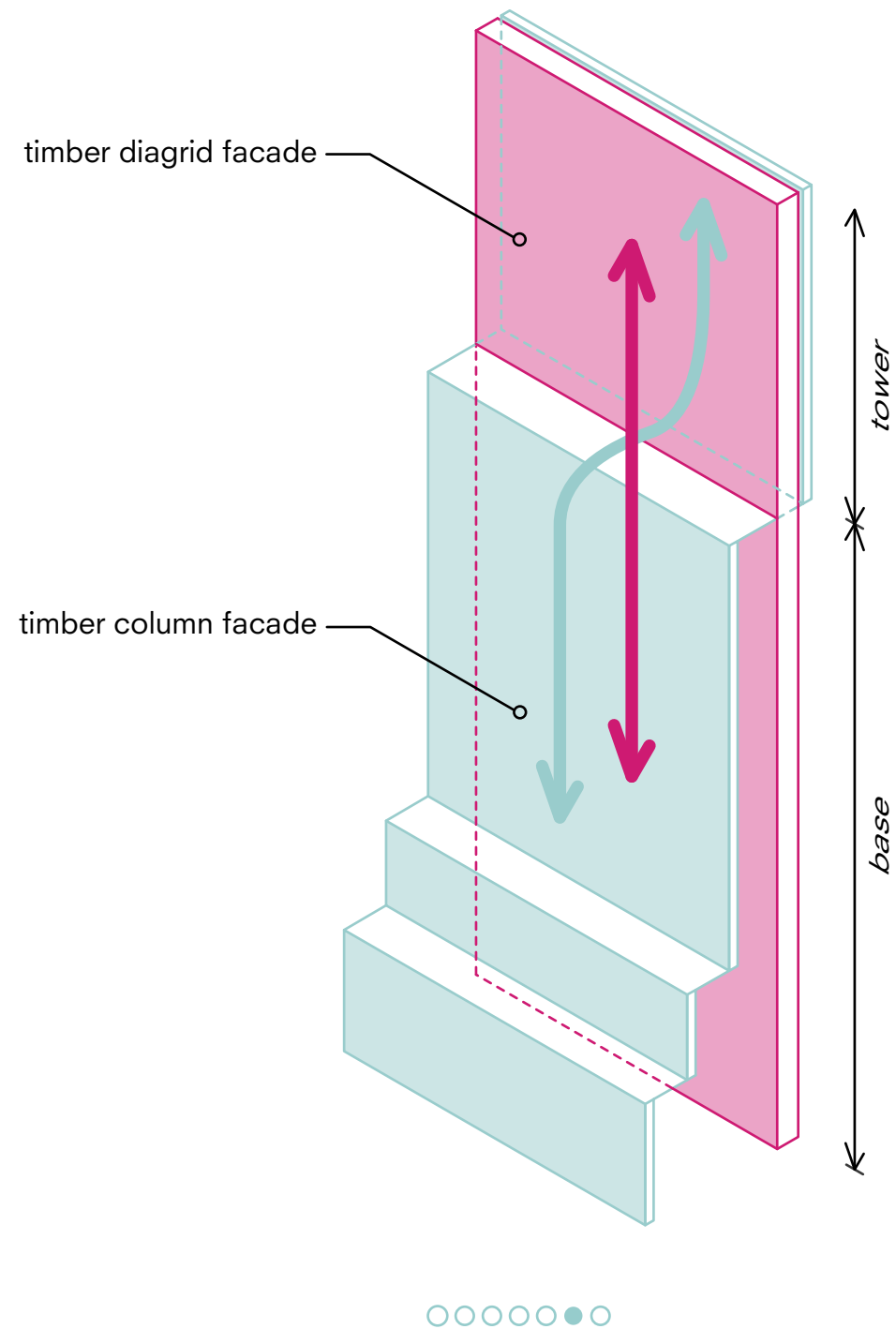
W 40 St

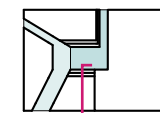
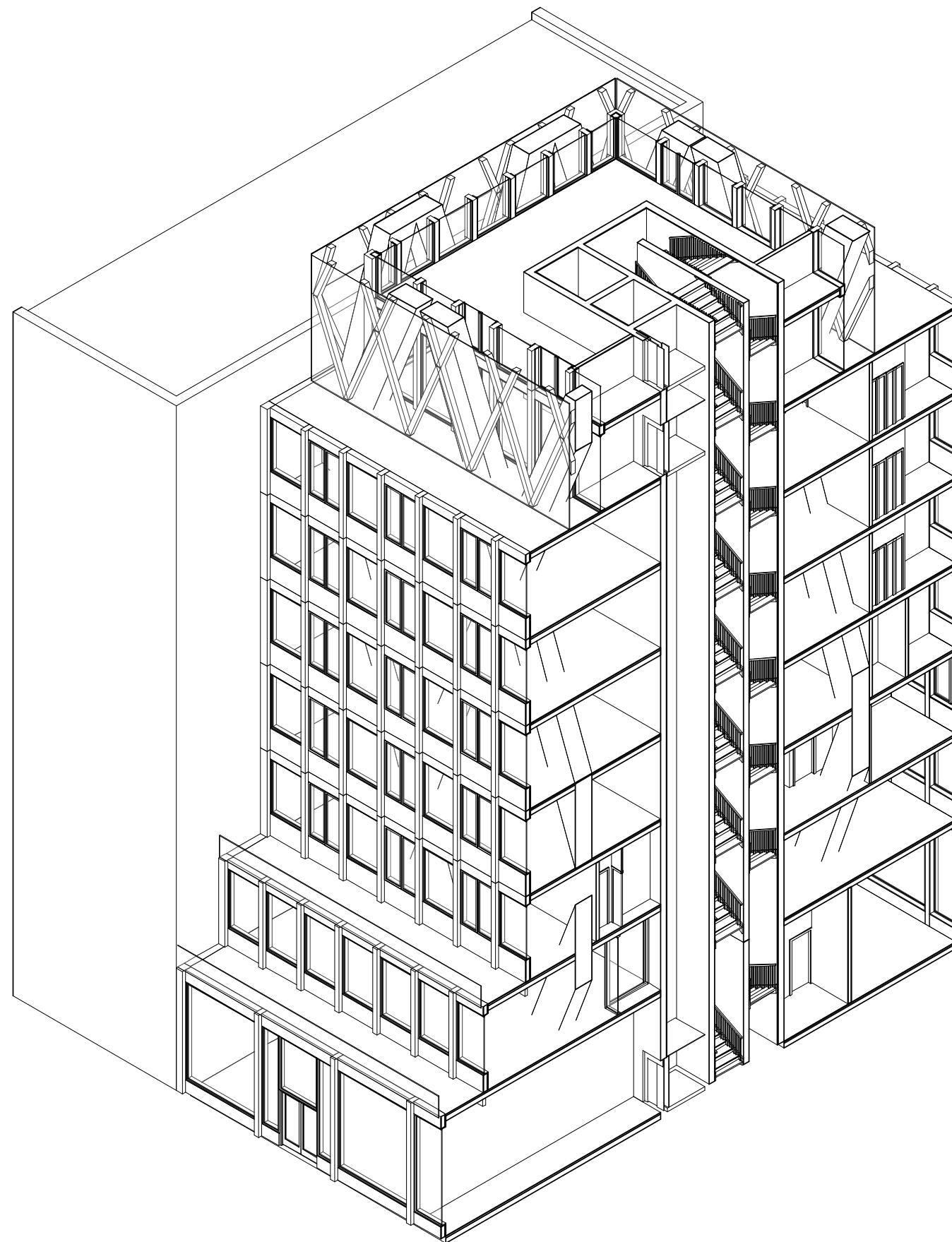
WAY

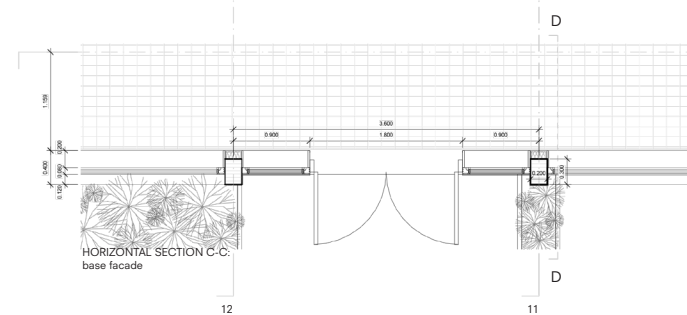
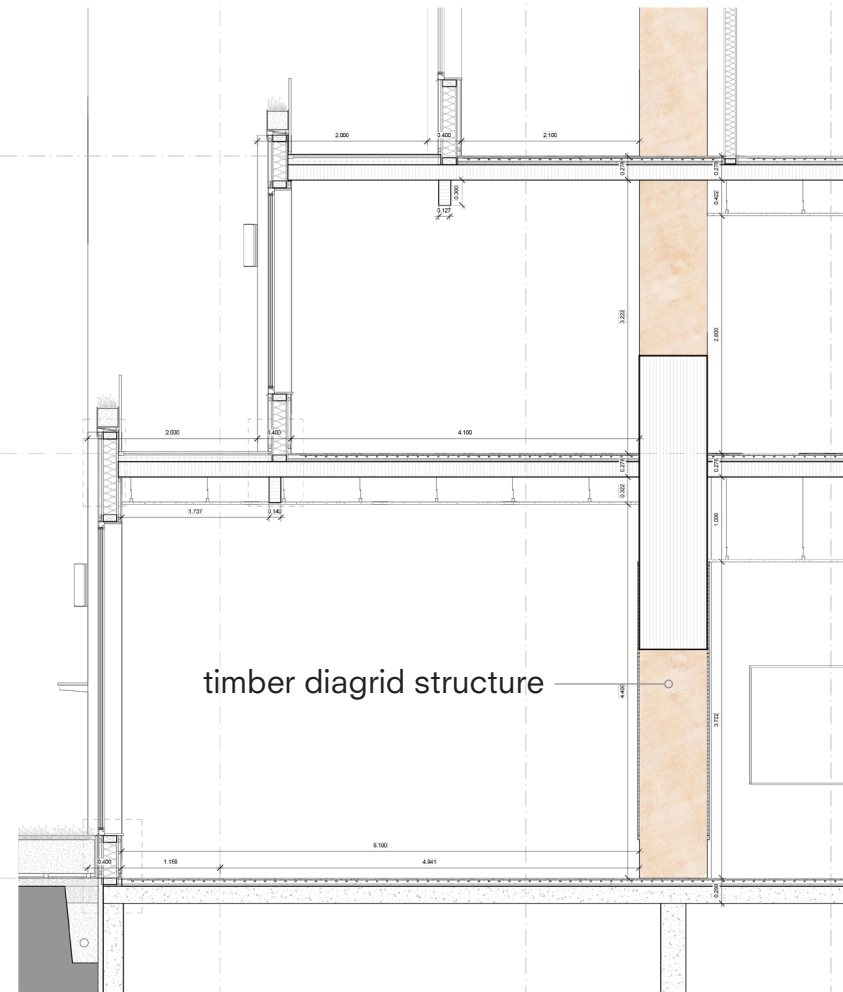
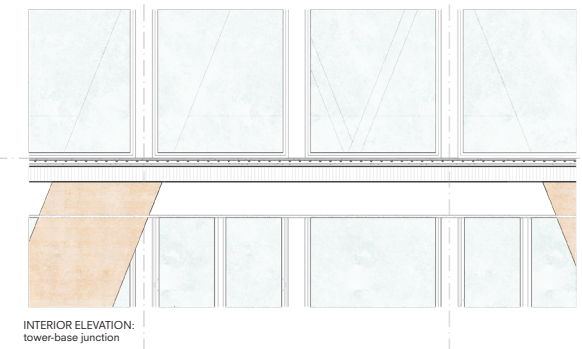
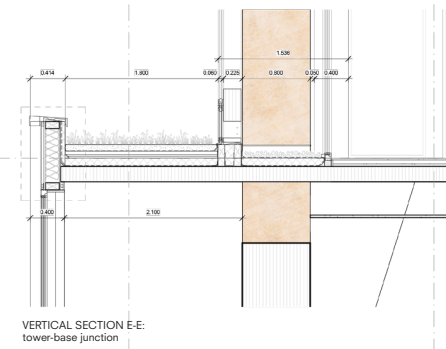
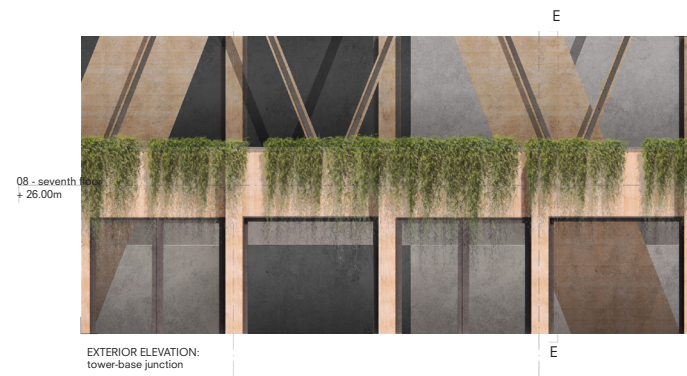
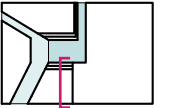
W 40 St

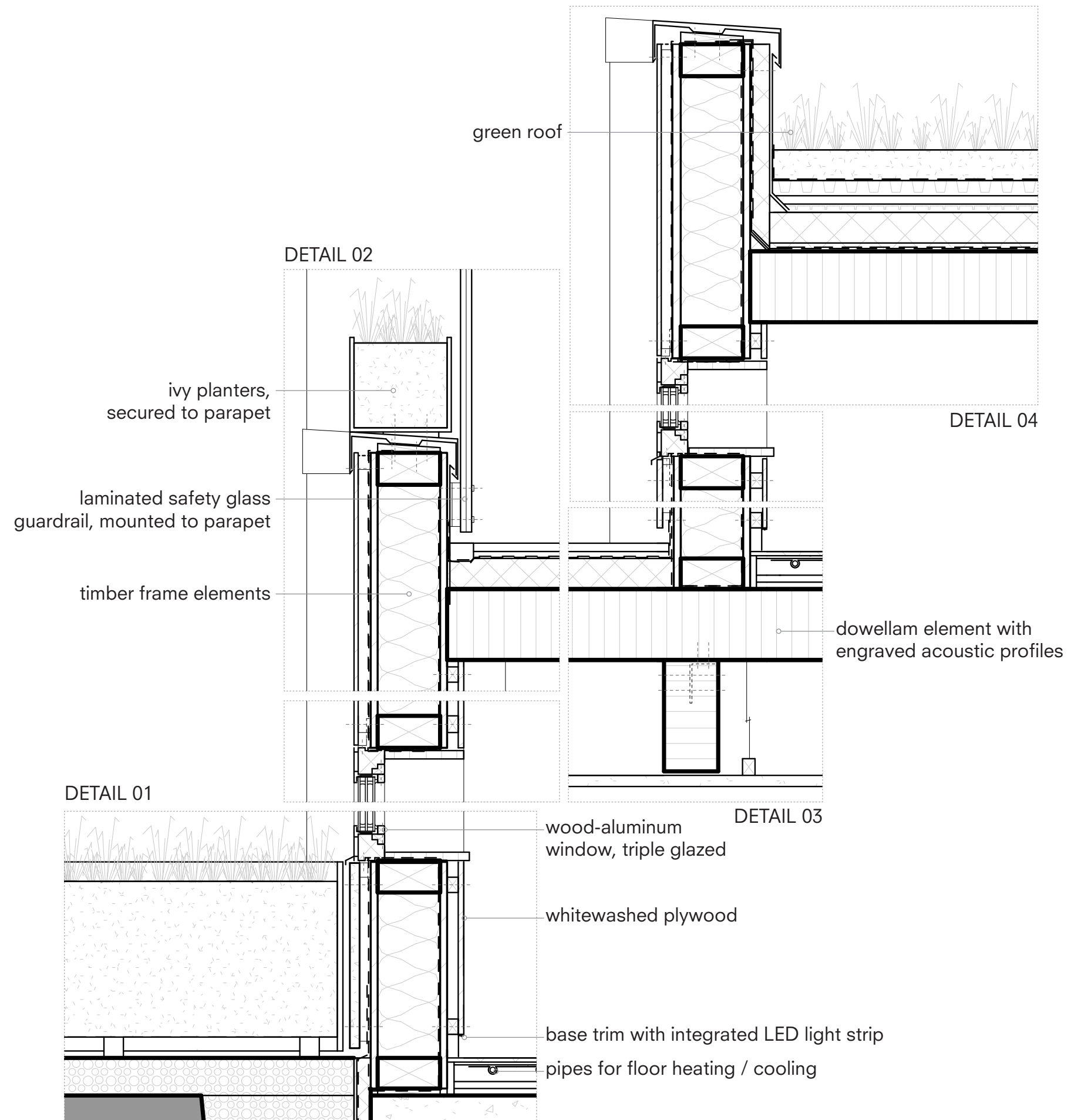
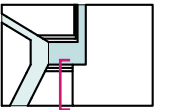
LINCOLN GARDENS

RELATIONSHIP BETWEEN TOWER AND BASE FACADES

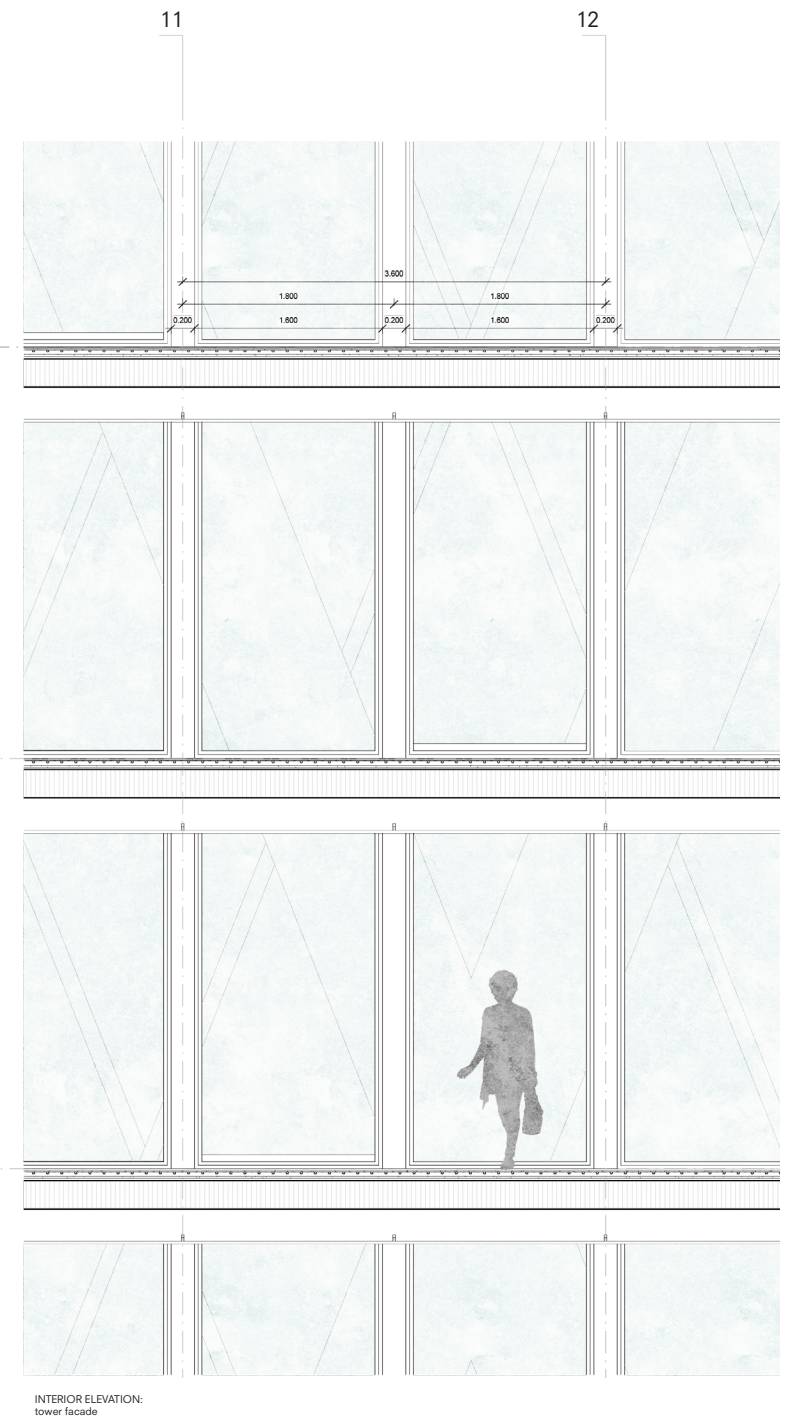
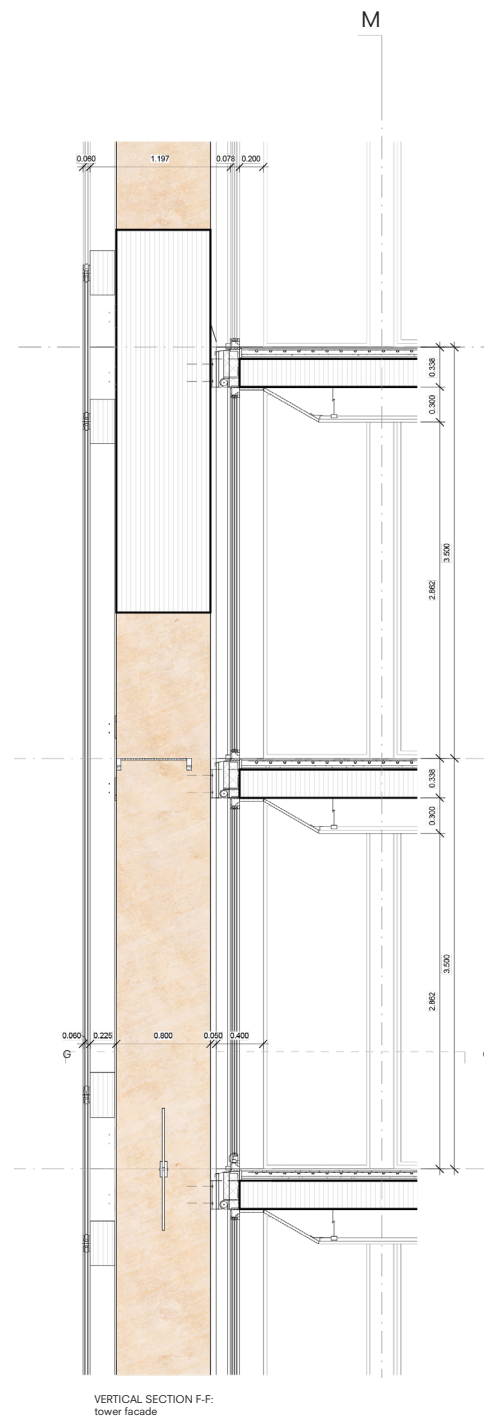
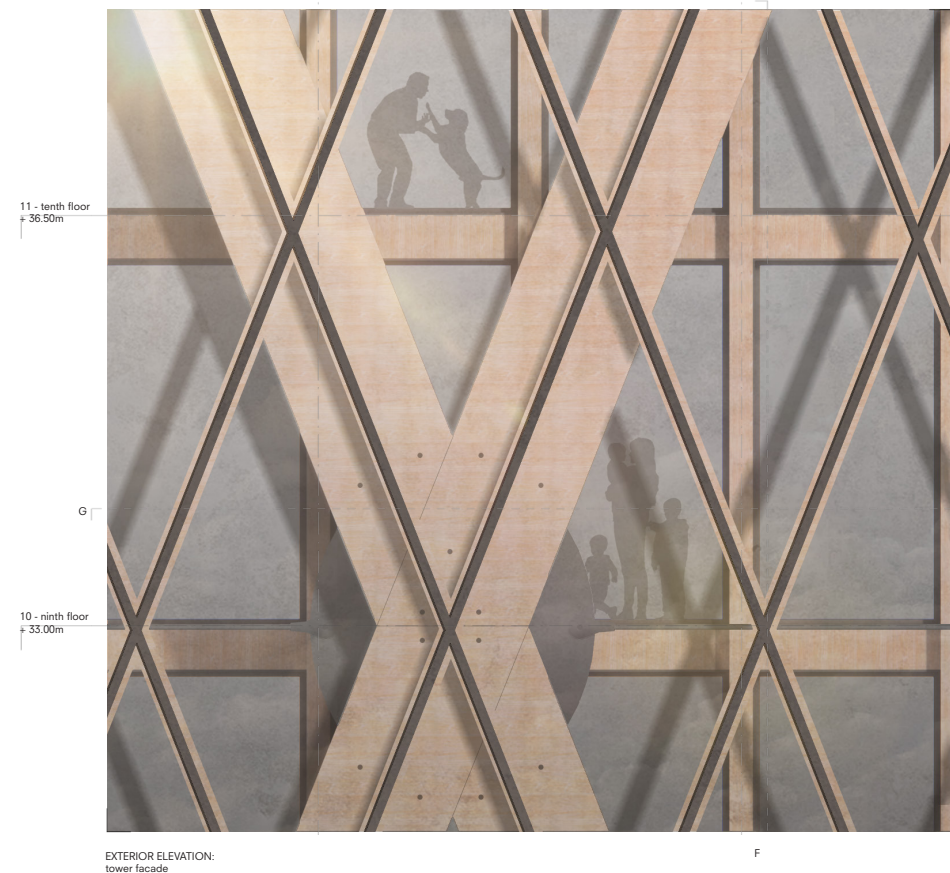
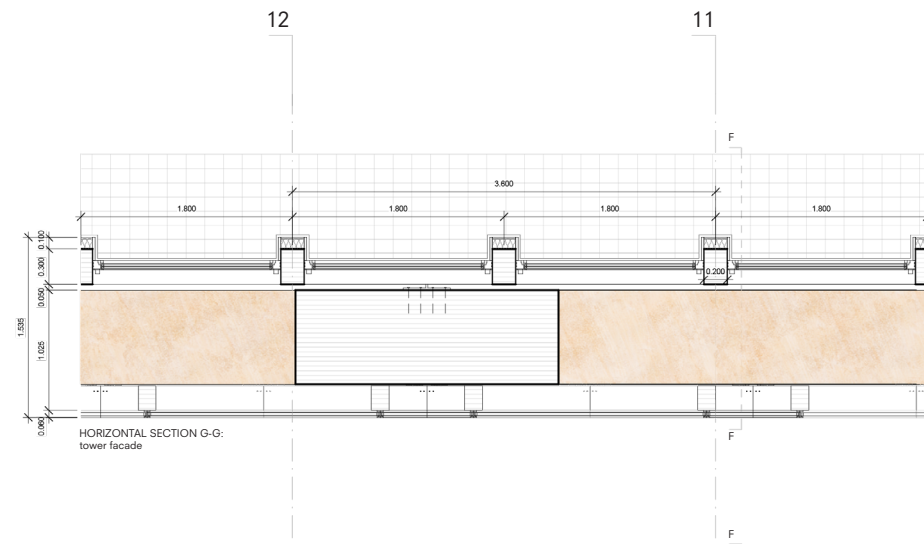
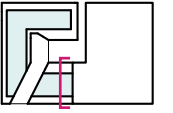




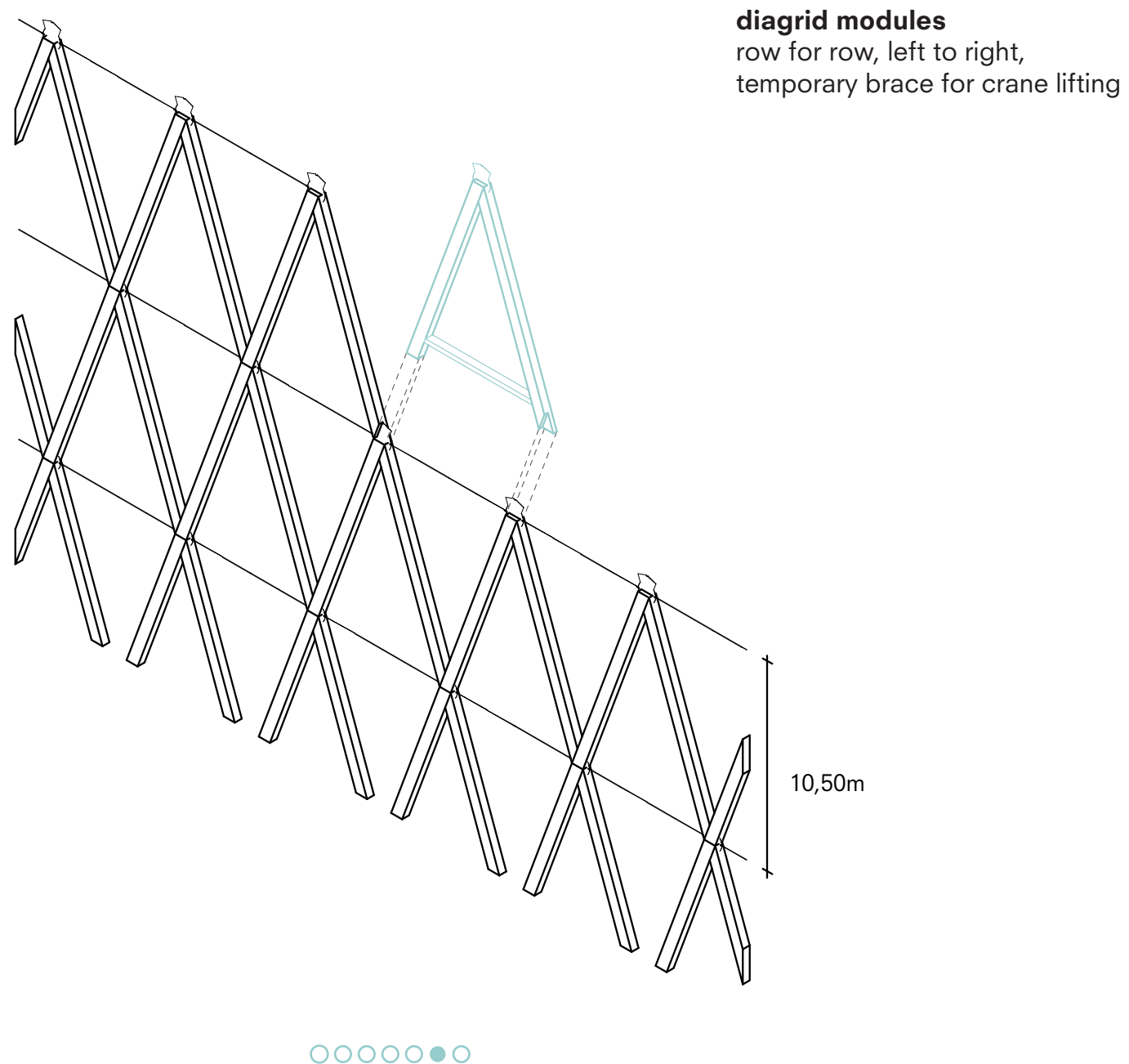




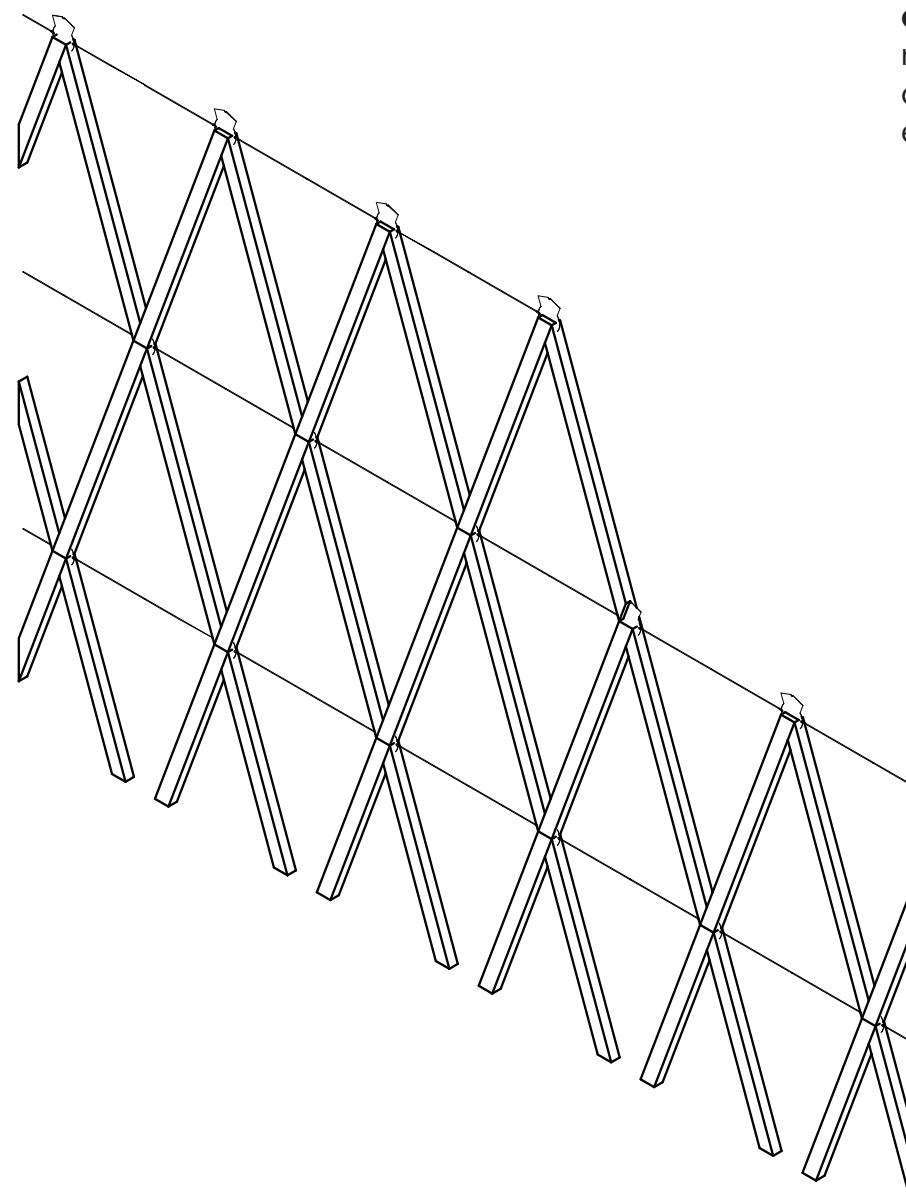




EXTERIOR TOWER FACADE ASSEMBLY



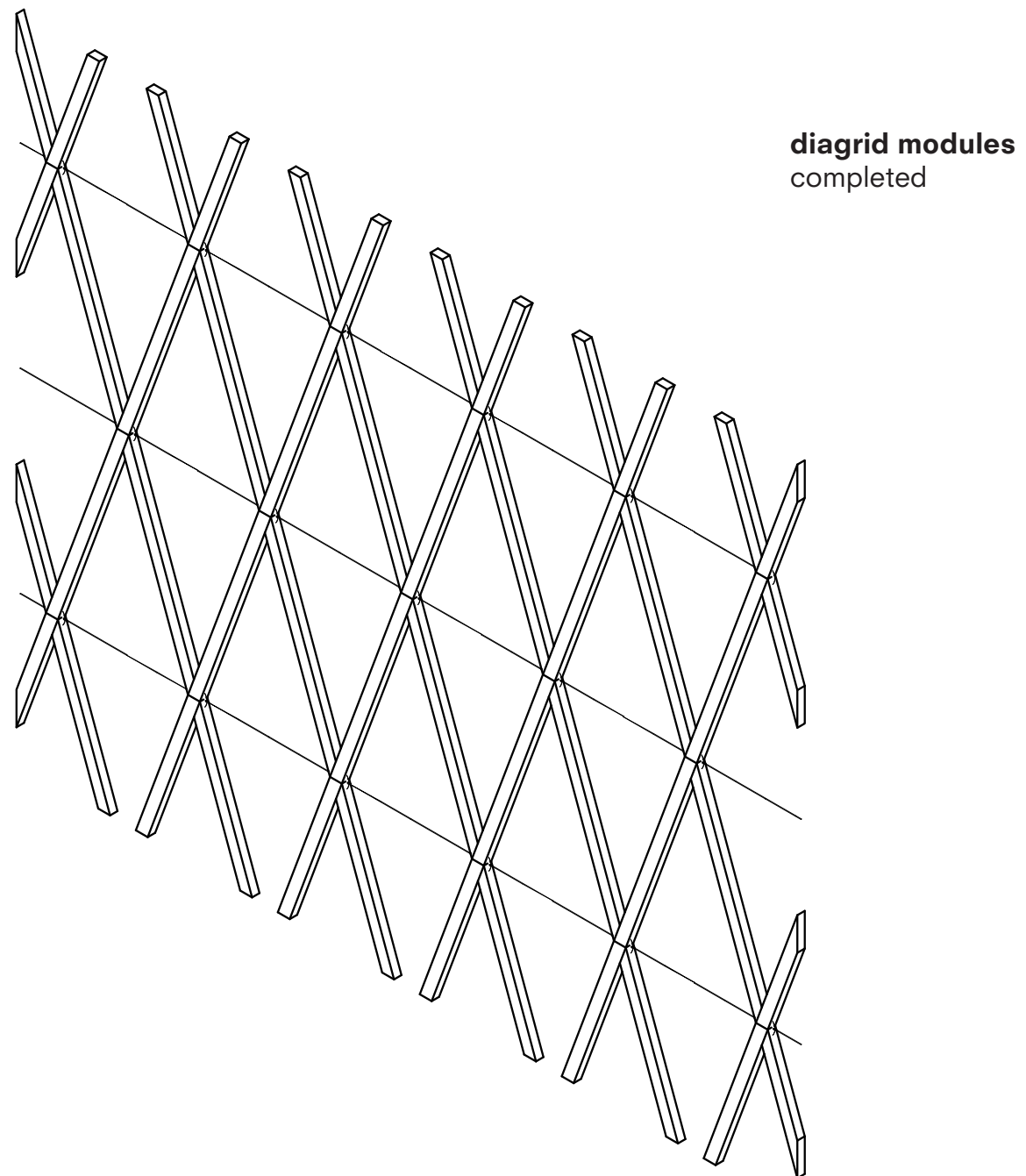
EXTERIOR TOWER FACADE ASSEMBLY



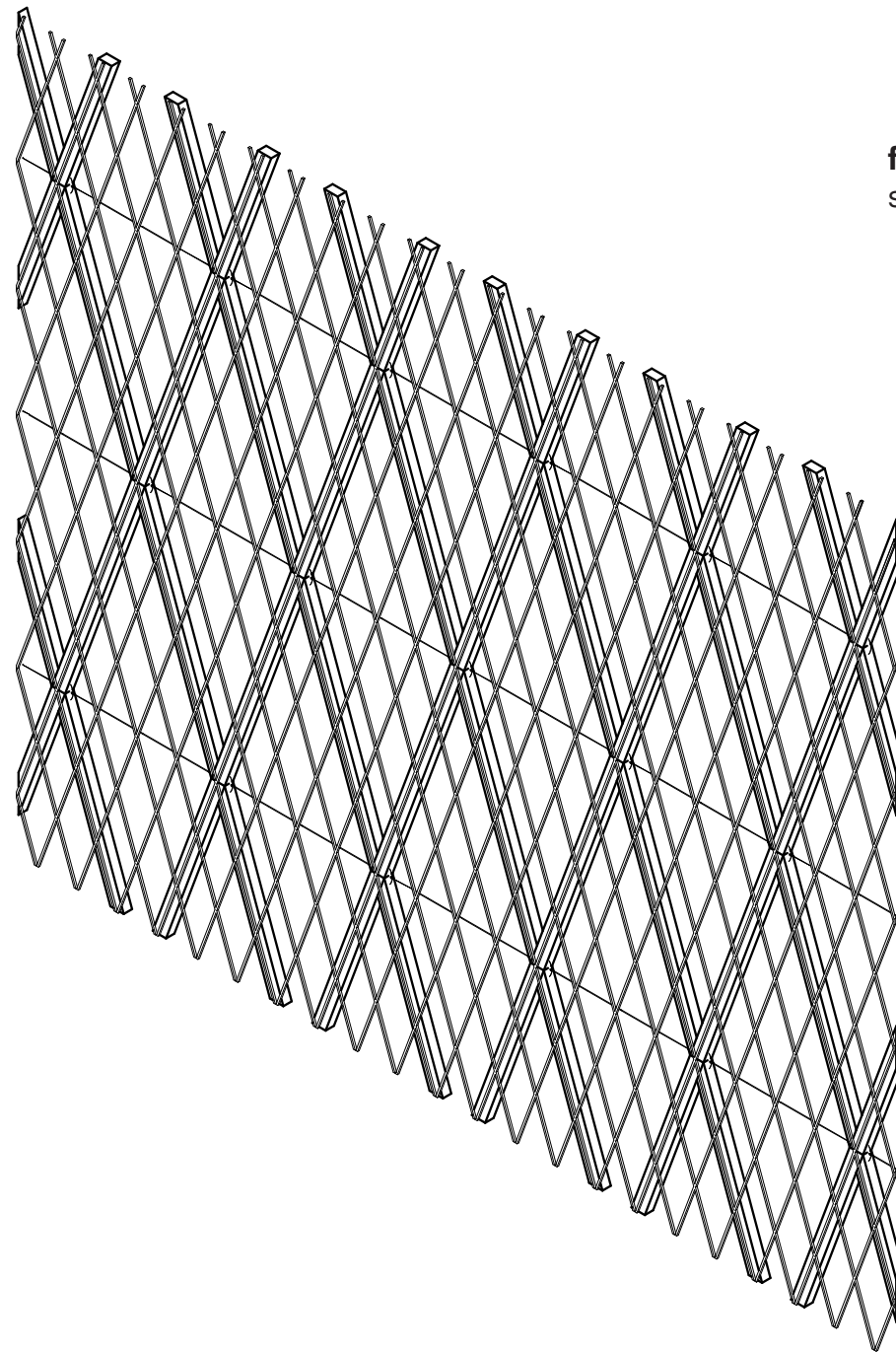
diagrid modules
row for row, left to right,
connecting of tension rod after
every module



EXTERIOR TOWER FACADE ASSEMBLY



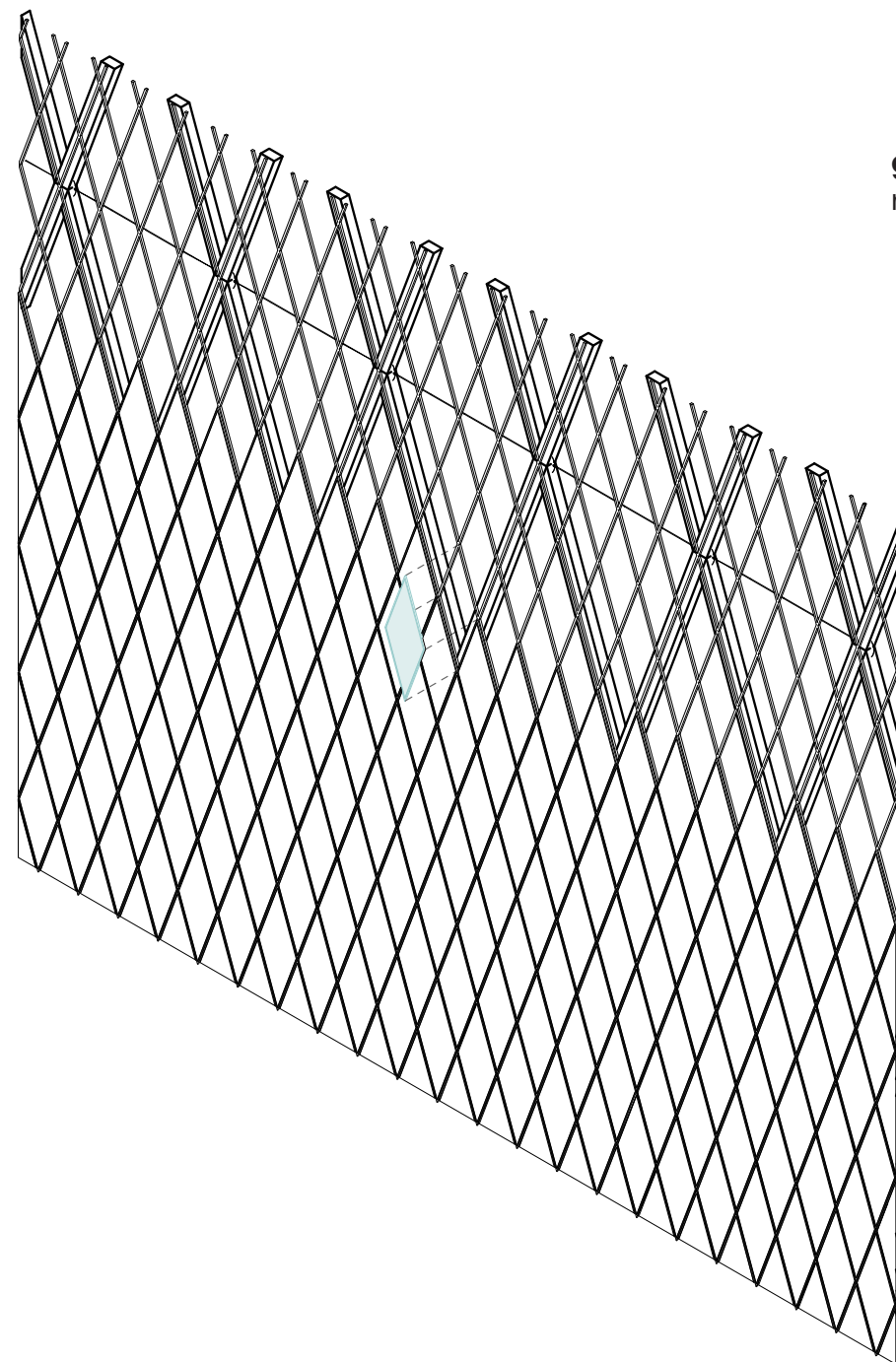
EXTERIOR TOWER FACADE ASSEMBLY



facade mullions
same diagrid pattern



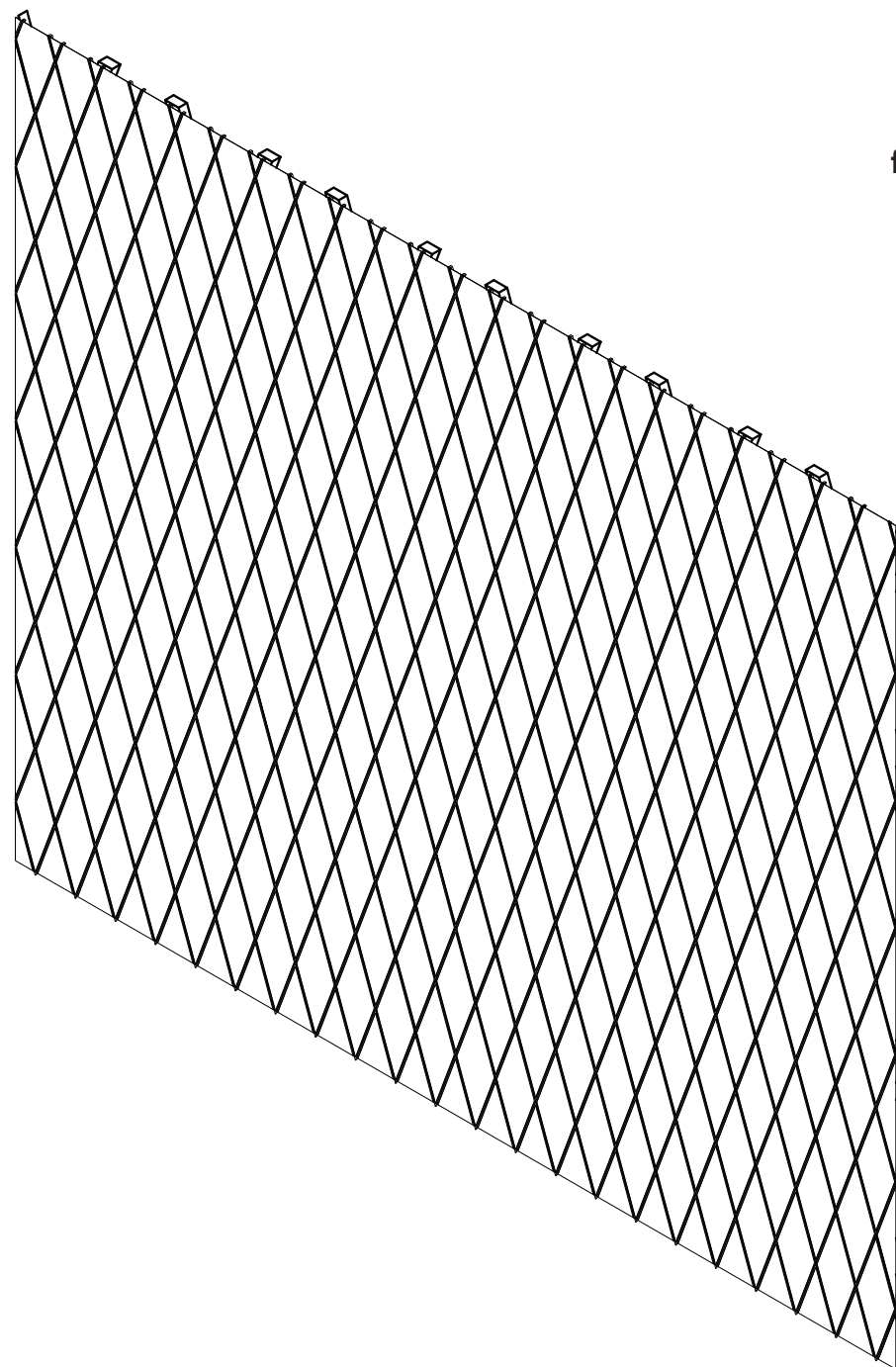
EXTERIOR TOWER FACADE ASSEMBLY



glazing modules
row for row, left to right



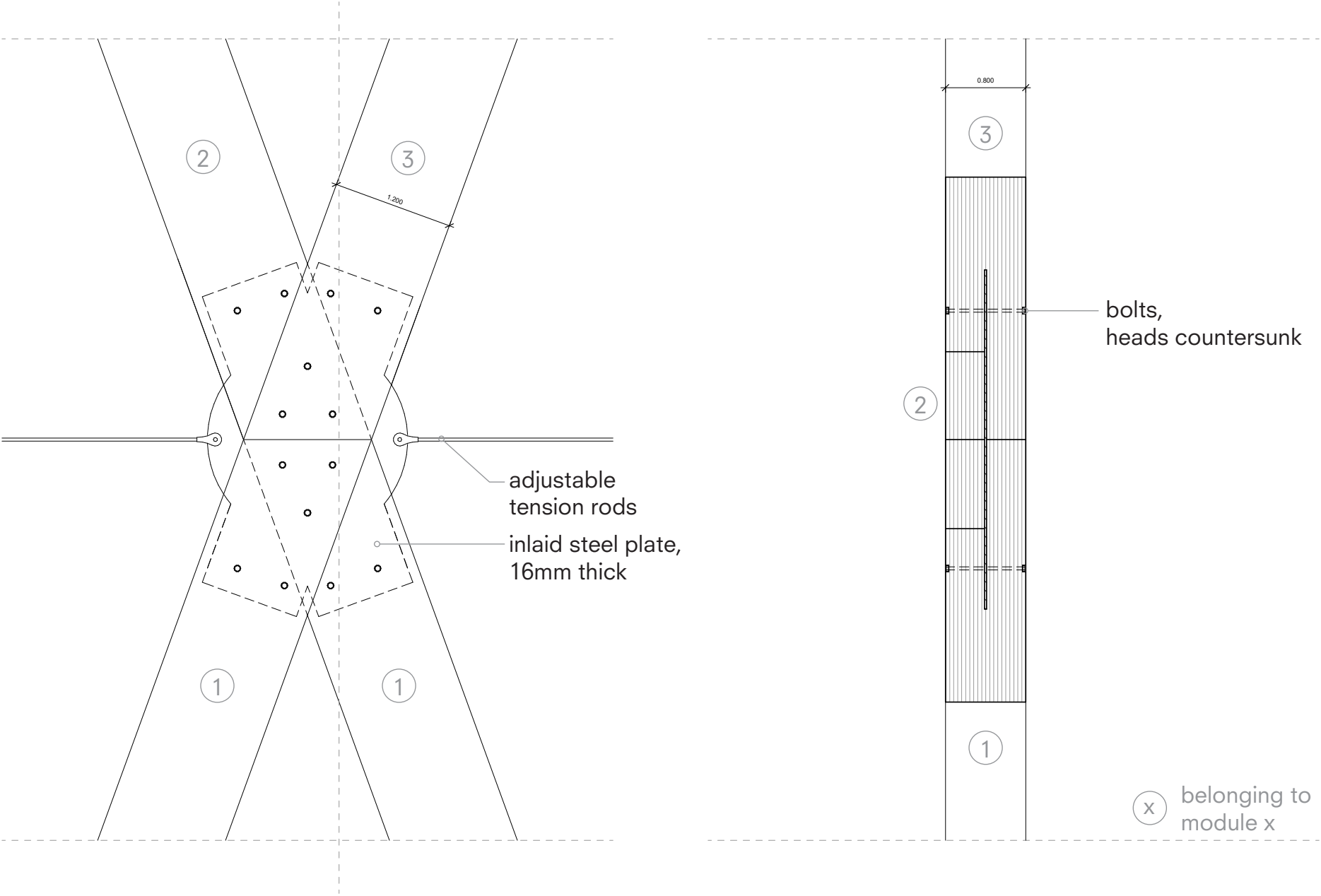
EXTERIOR TOWER FACADE ASSEMBLY



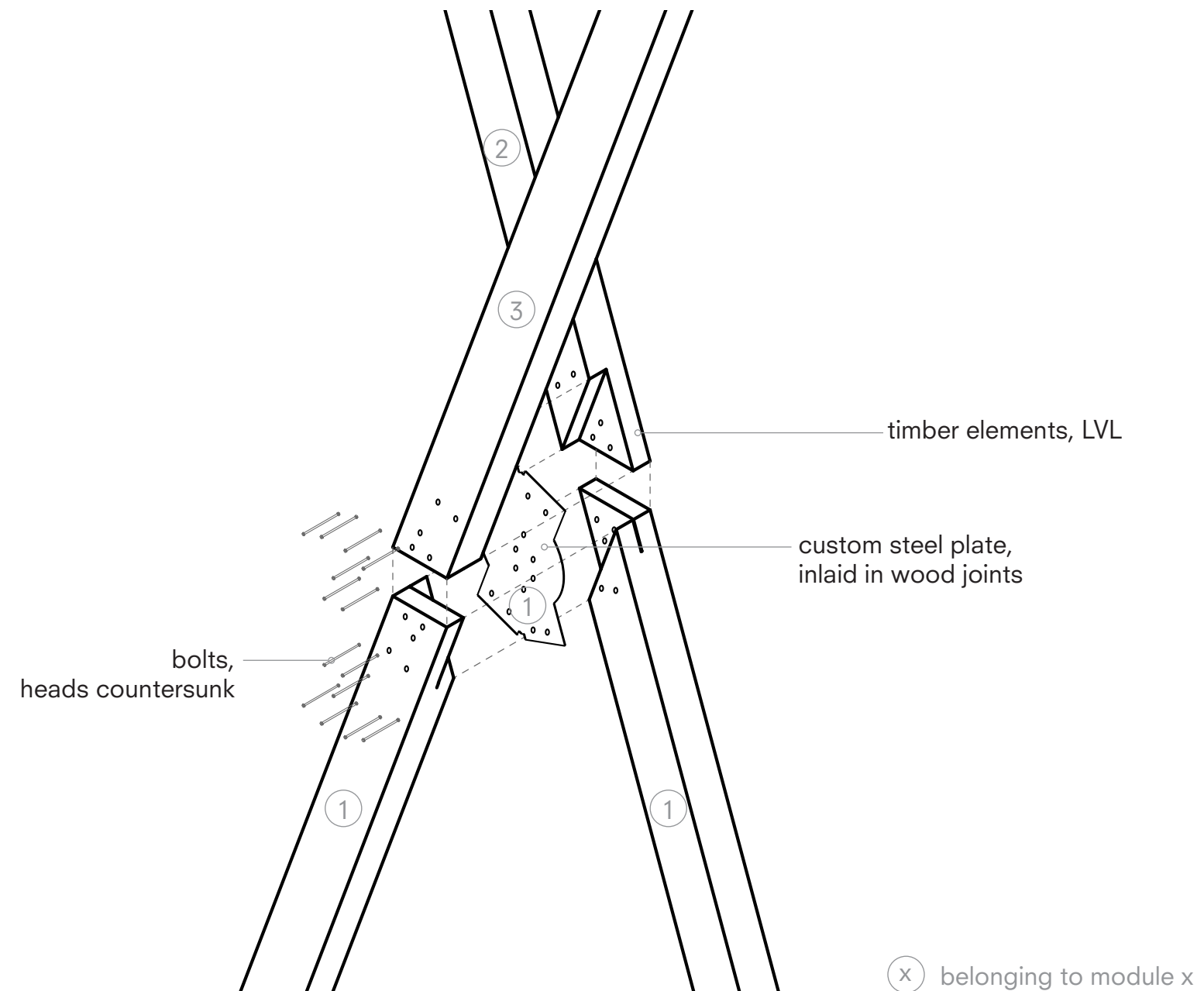
final facade



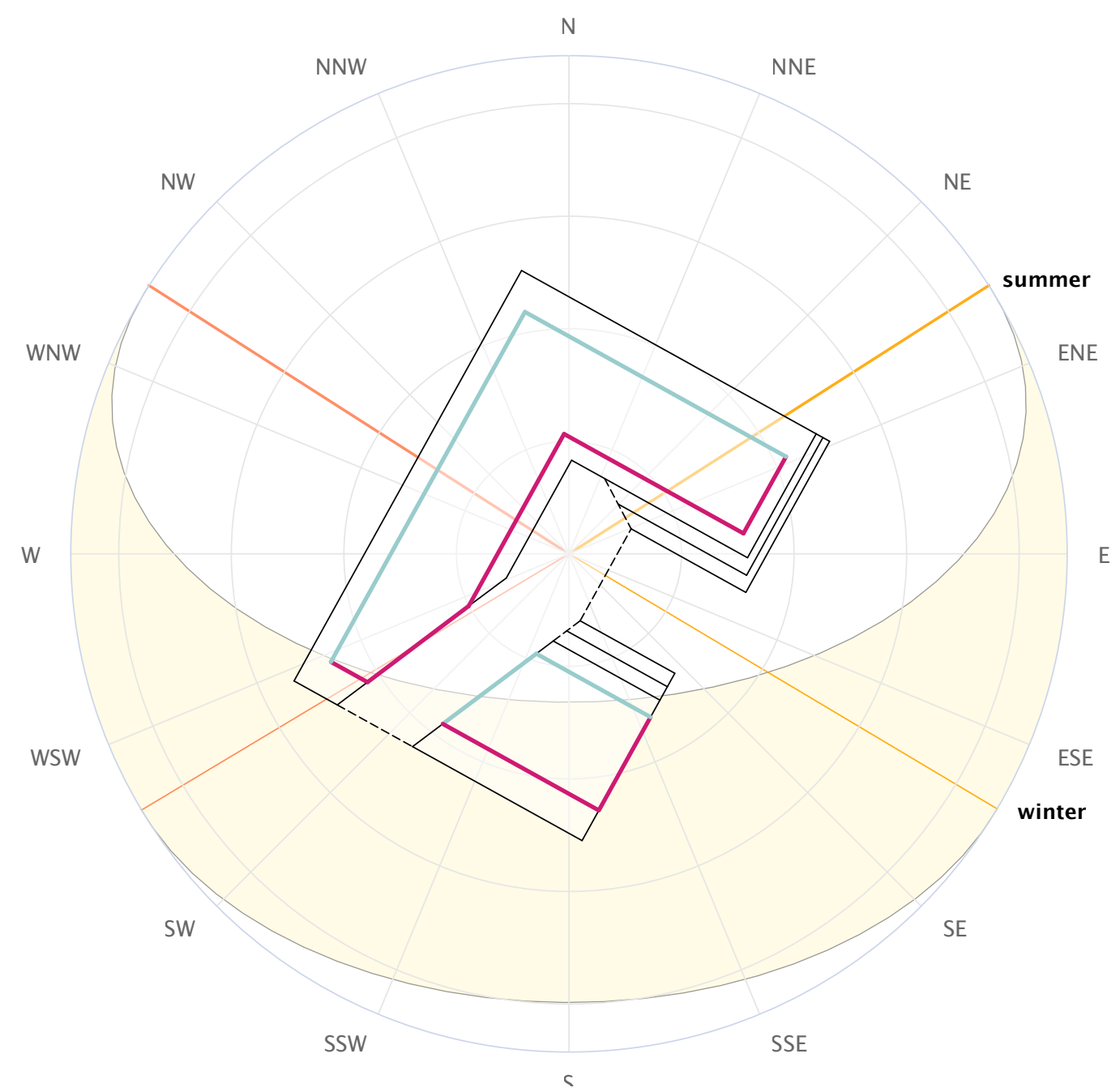
DETAILING



THREE MODULE JOINT

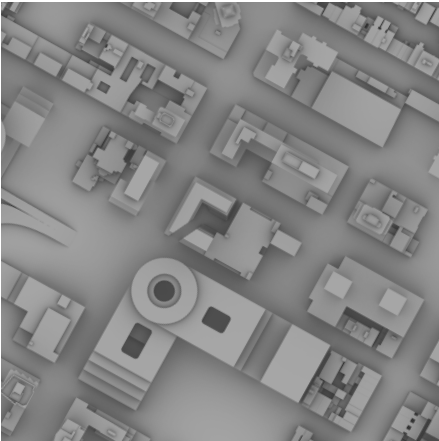


SUN PATH DIAGRAM



SHADOW STUDY

summer
6AM



9AM



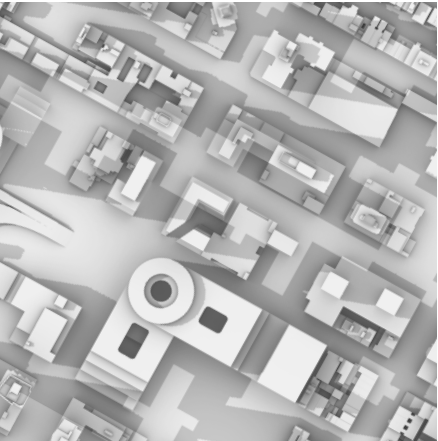
12PM



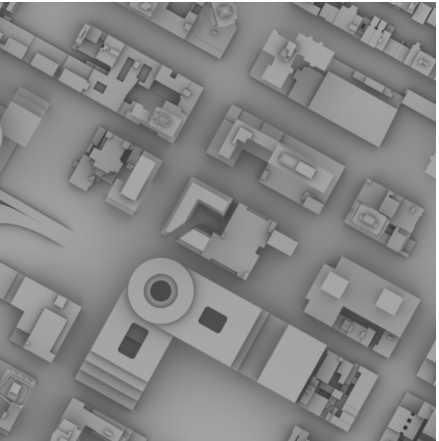
3PM



6PM



9PM



winter
6AM



9AM



12PM



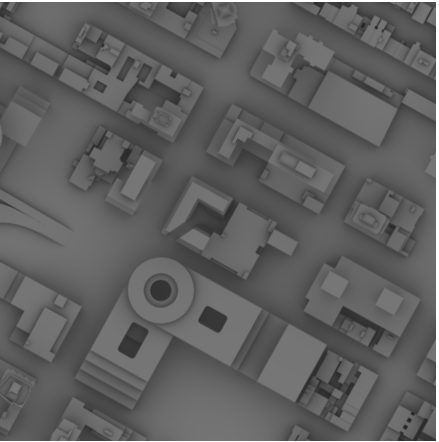
3PM

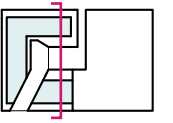


6PM

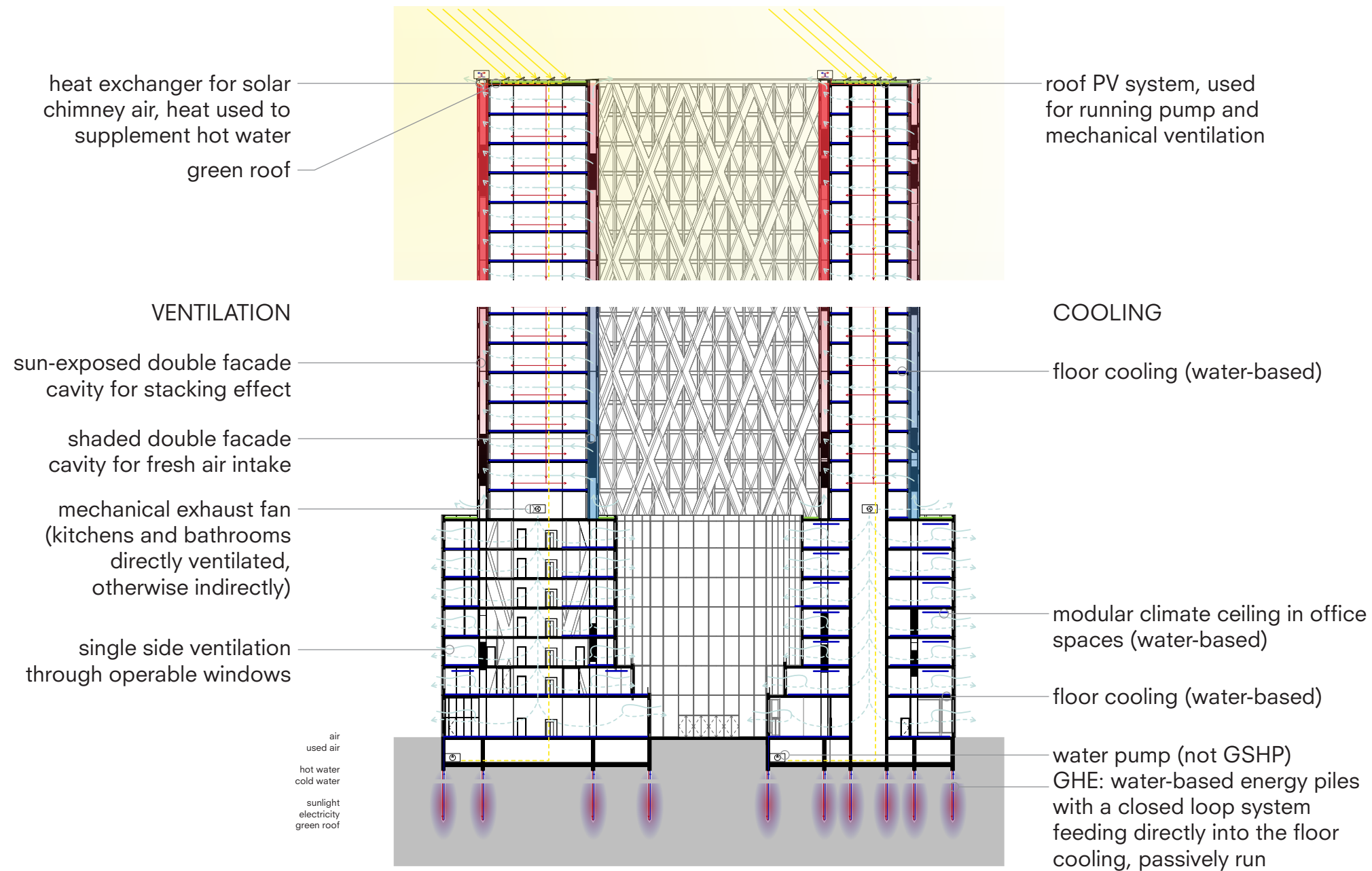


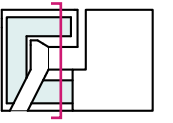
9PM



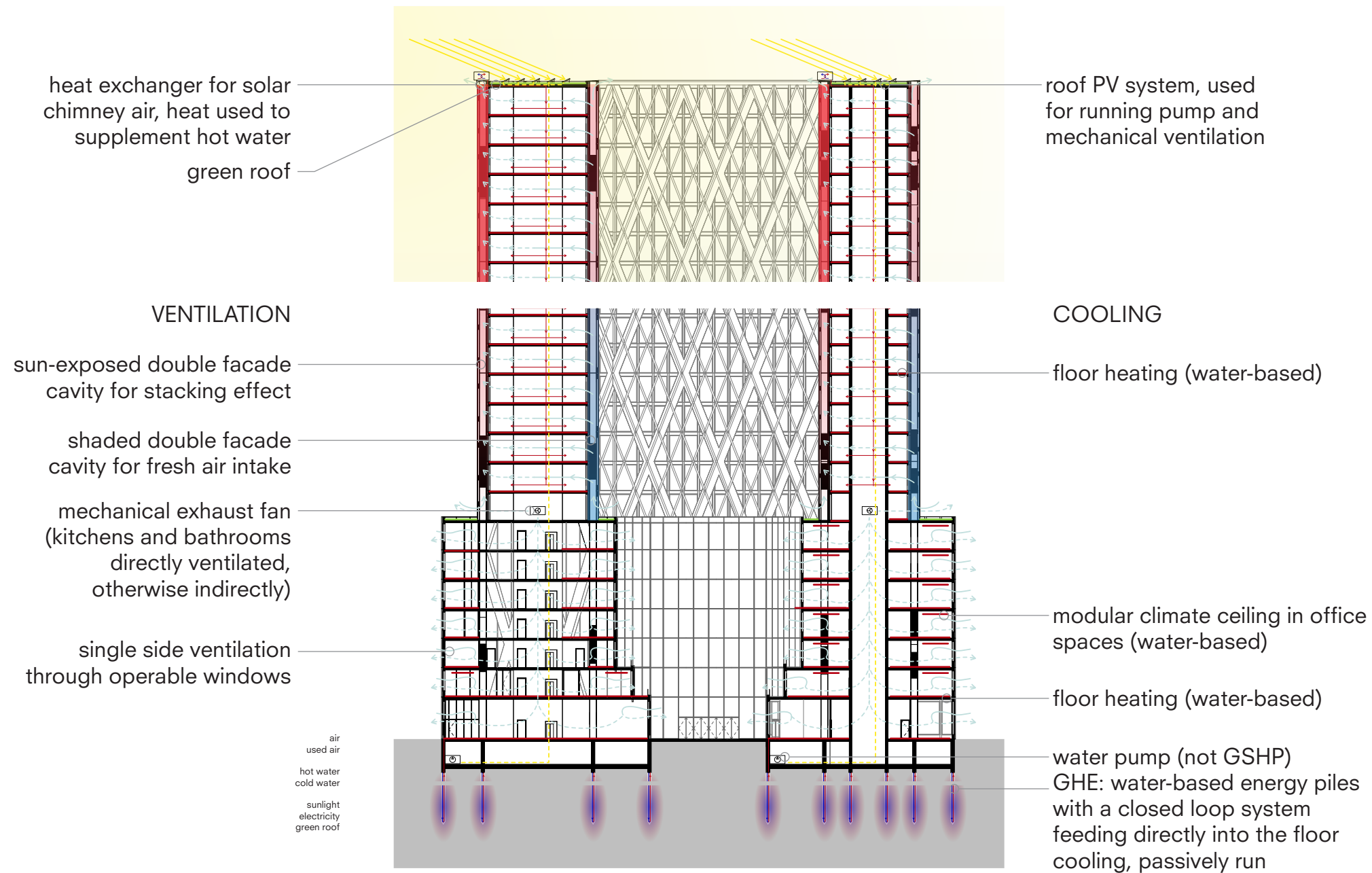


FULL BUILDING CLIMATE SUMMER





FULL BUILDING CLIMATE WINTER

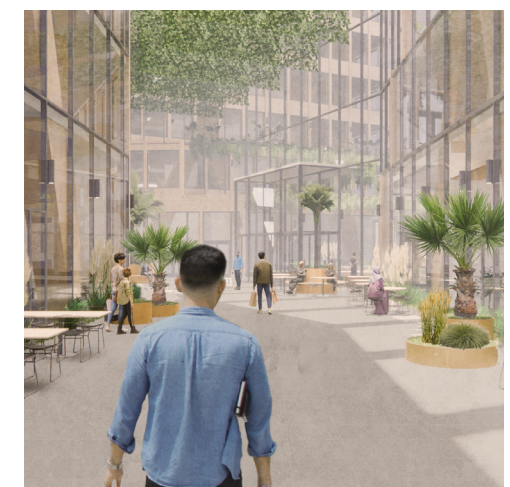


CONCLUSION

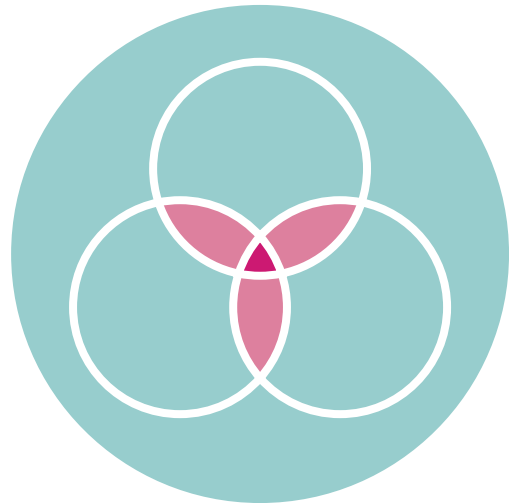
#1



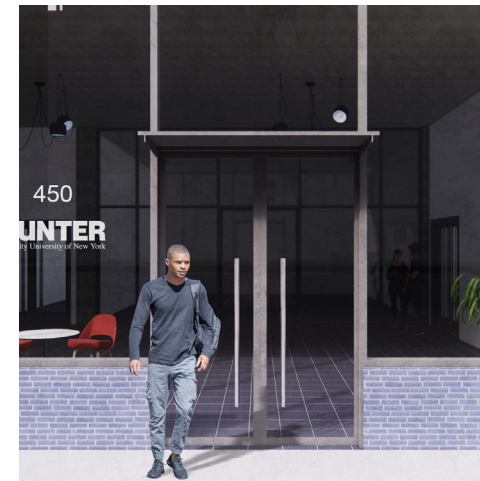
attain the *democratic* goal of
an *inclusive city* within in a
neoliberal framework



#2



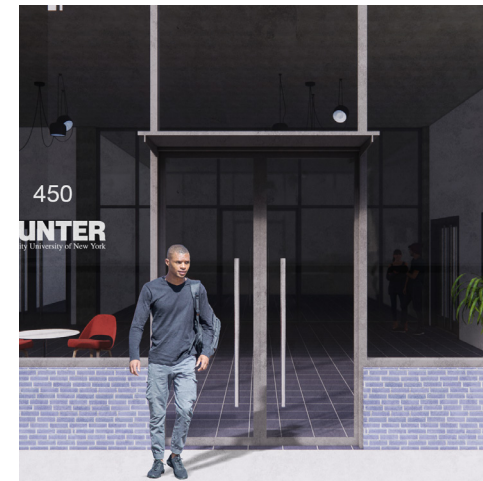
use the research results in a
constructive way that aims to
benefit *all parties involved*

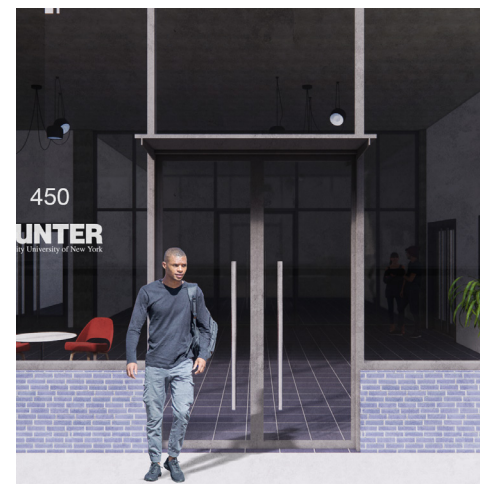
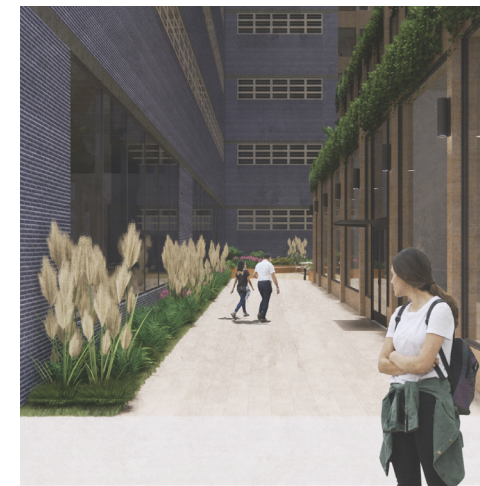


#3



lean into the *potential of architectural solutions* to make a *tangible impact*









THANK YOU!

P5 Laura
Annika
Sander
2020.07.10