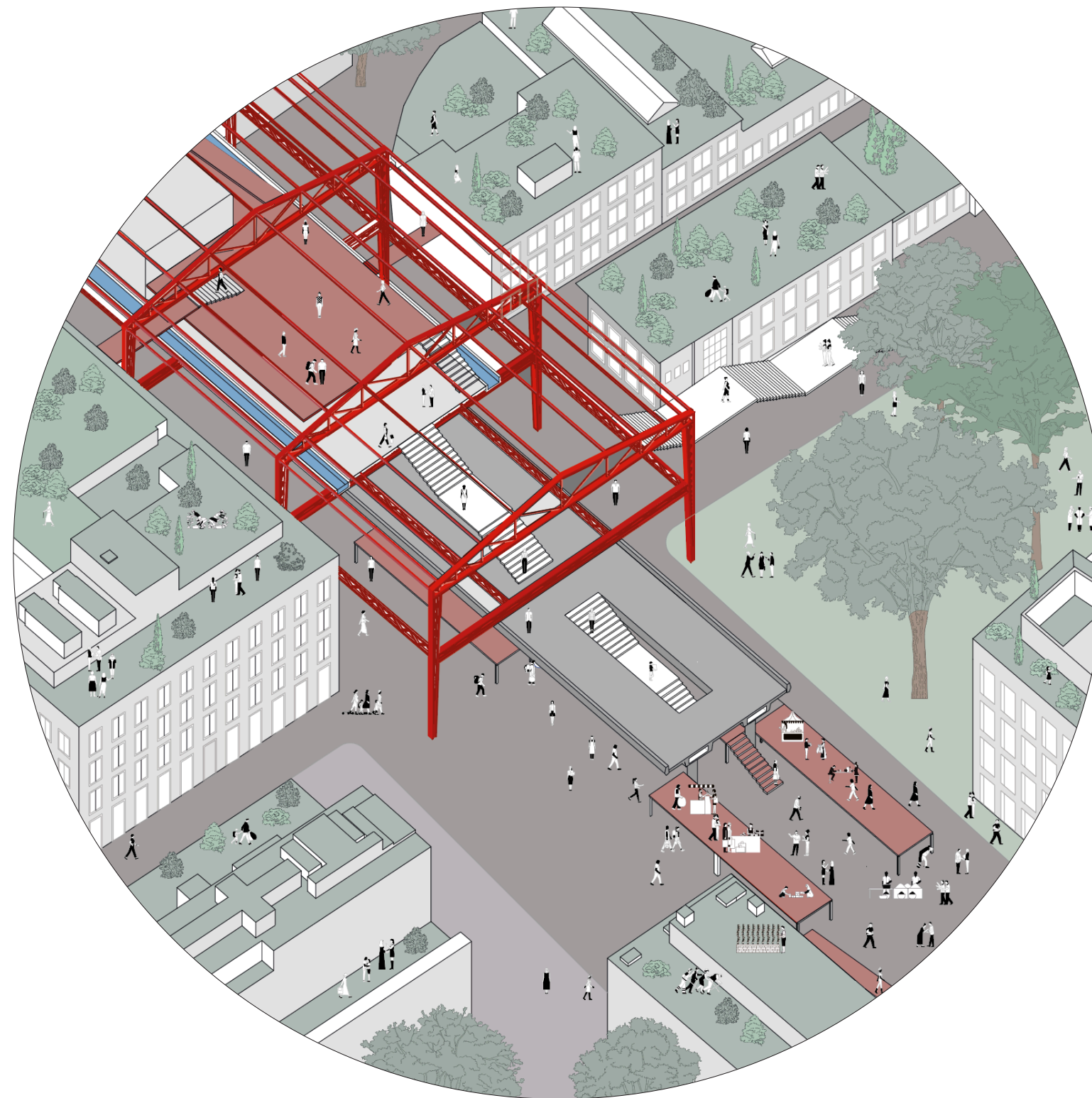


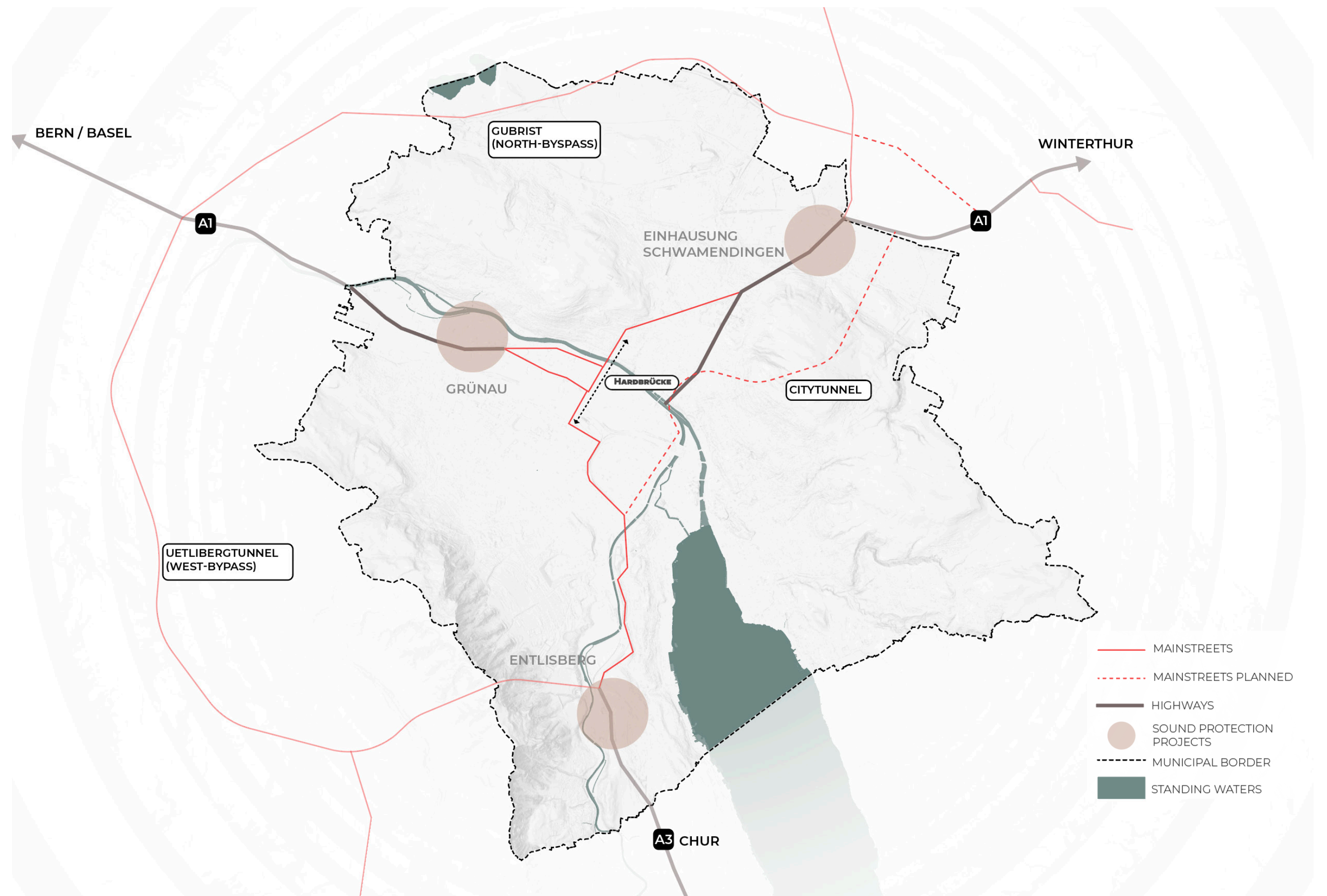
ROOFTOP DISTRIBUTOR FROM TRANSPORT PROVISORIUM TO SOCIAL & ECOLOGICAL PROVIDURIUM



Sogol Amuzegar
Master Thesis HS 2021

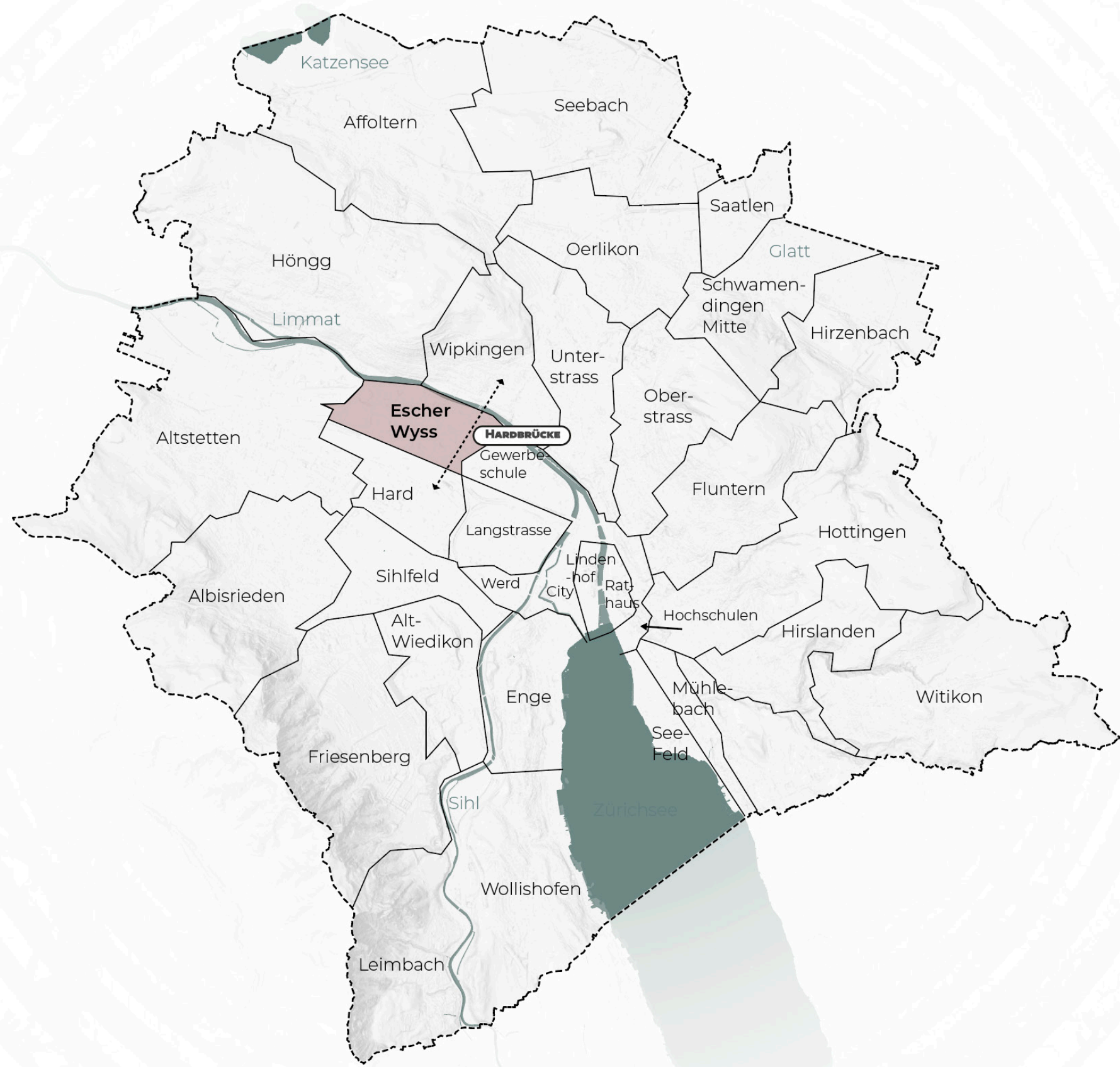
Cooperaton Partners:
Klumpner / Grêt-Regamey / Kaufmann

TRAFFIC SYSTEM

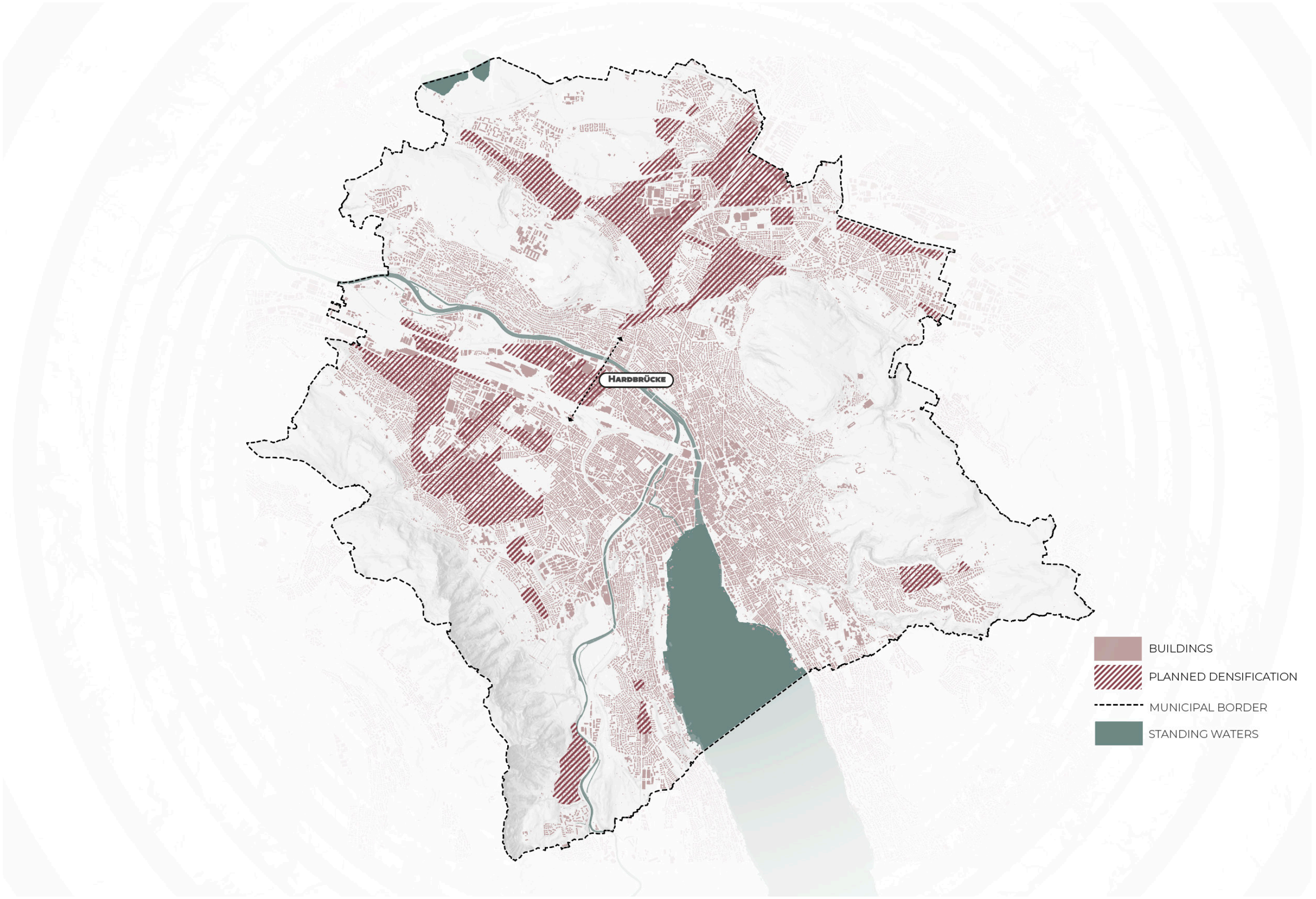


0 0.5 1 km

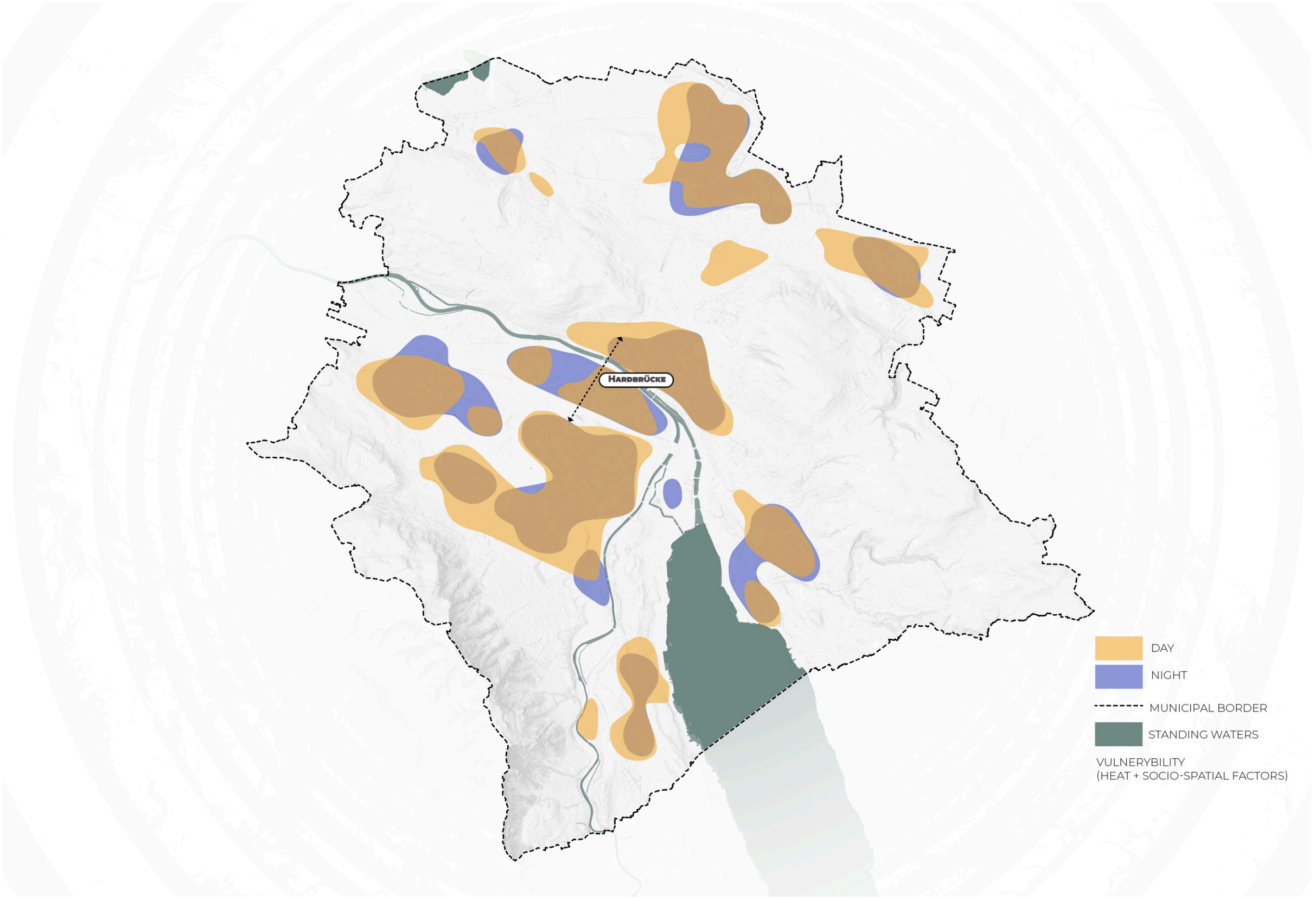
DISTRICTS



DENSIFICATION



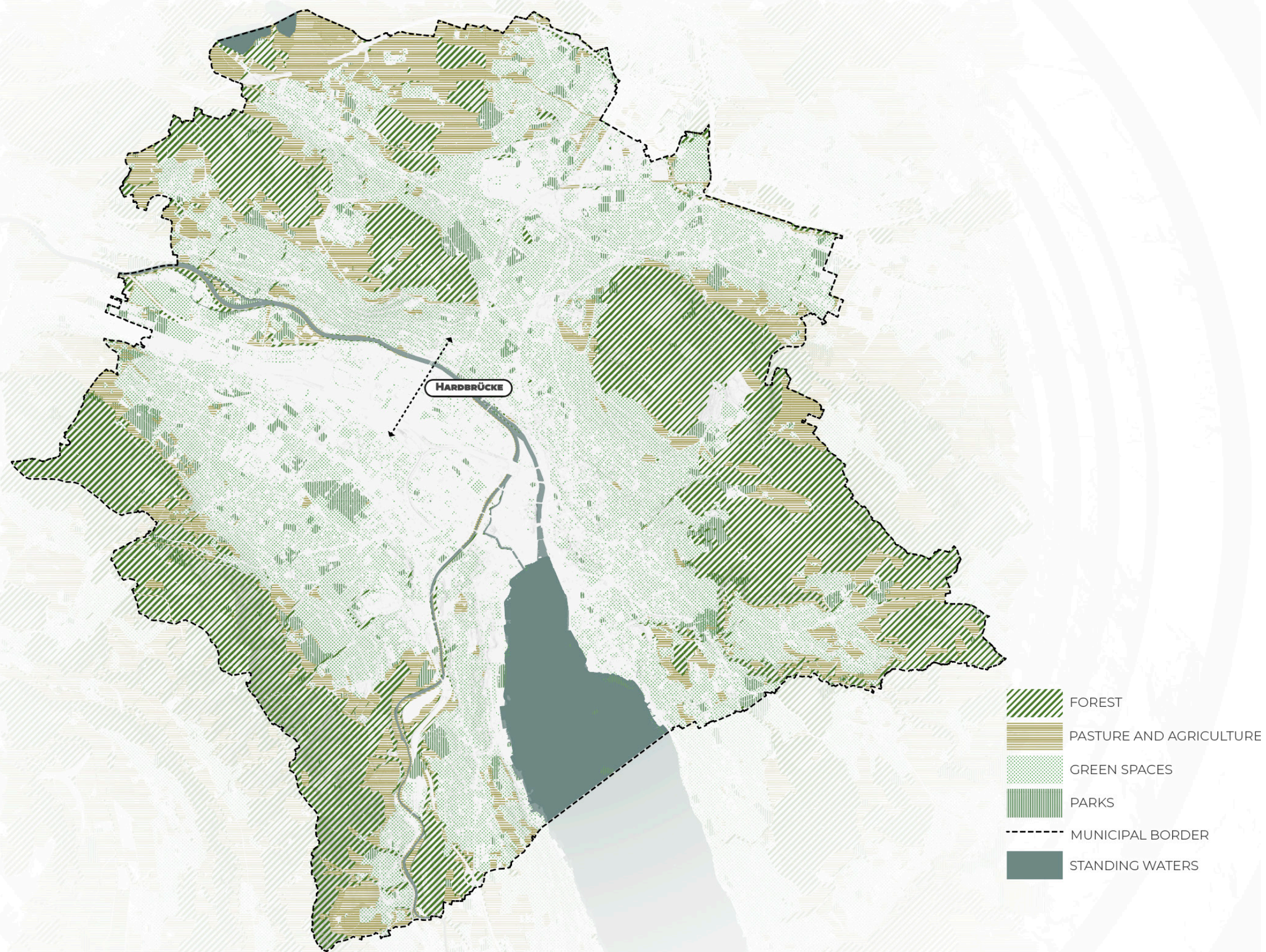
HEAT VULNERABILITY



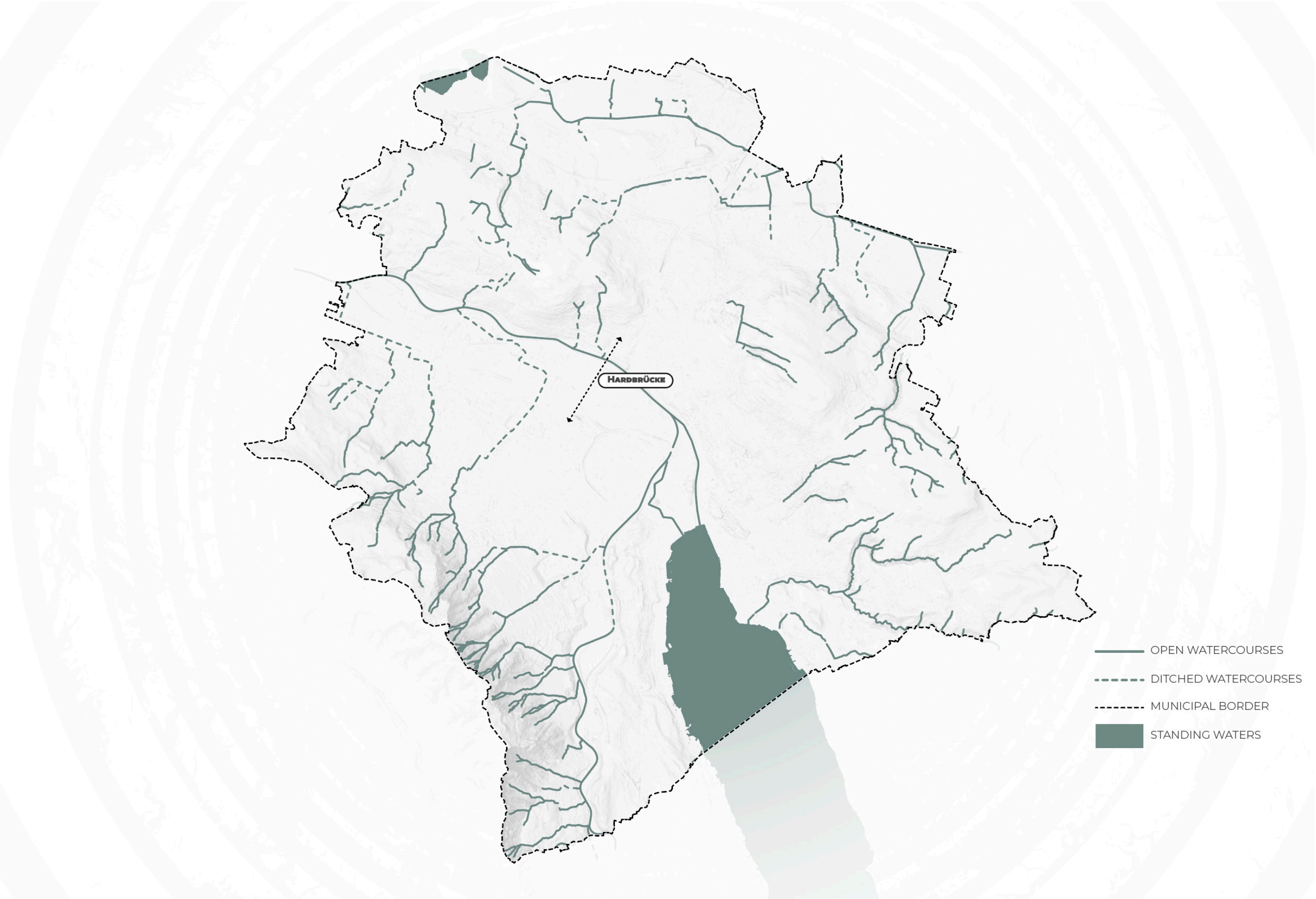
- DAY
- NIGHT
- MUNICIPAL BORDER
- STANDING WATERS
- VULNERABILITY (HEAT + SOCIO-SPATIAL FACTORS)

0 0.5 1 km

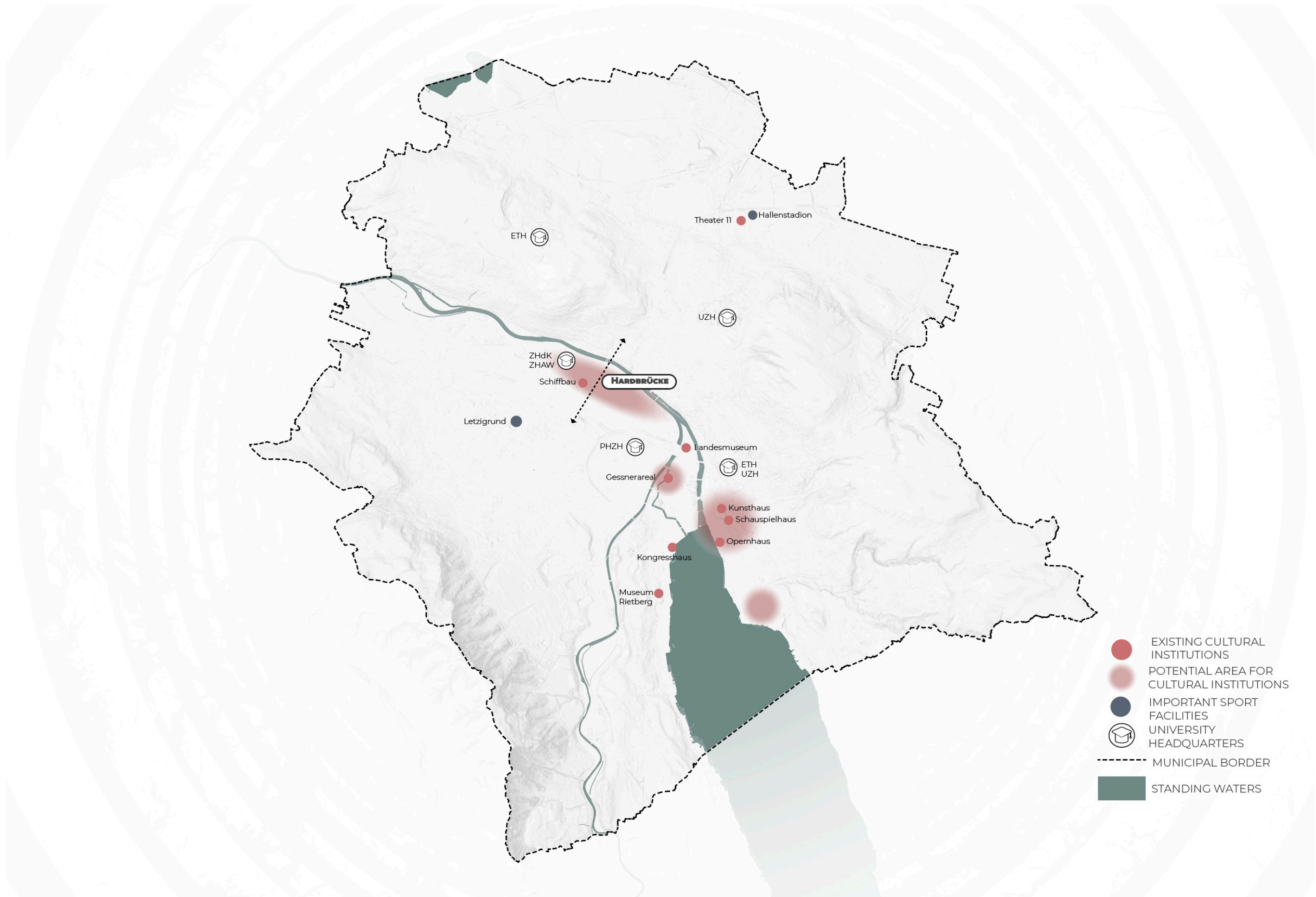
OPEN SPACES



LAKES & STREAMS



CULTURAL INSTITUTIONS

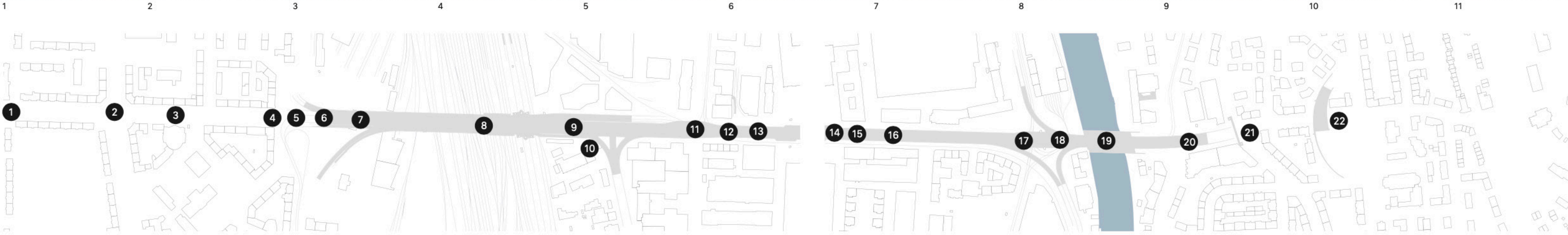


PERIMETER



0 0.5 1km

SITE VISIT



SITE VISIT



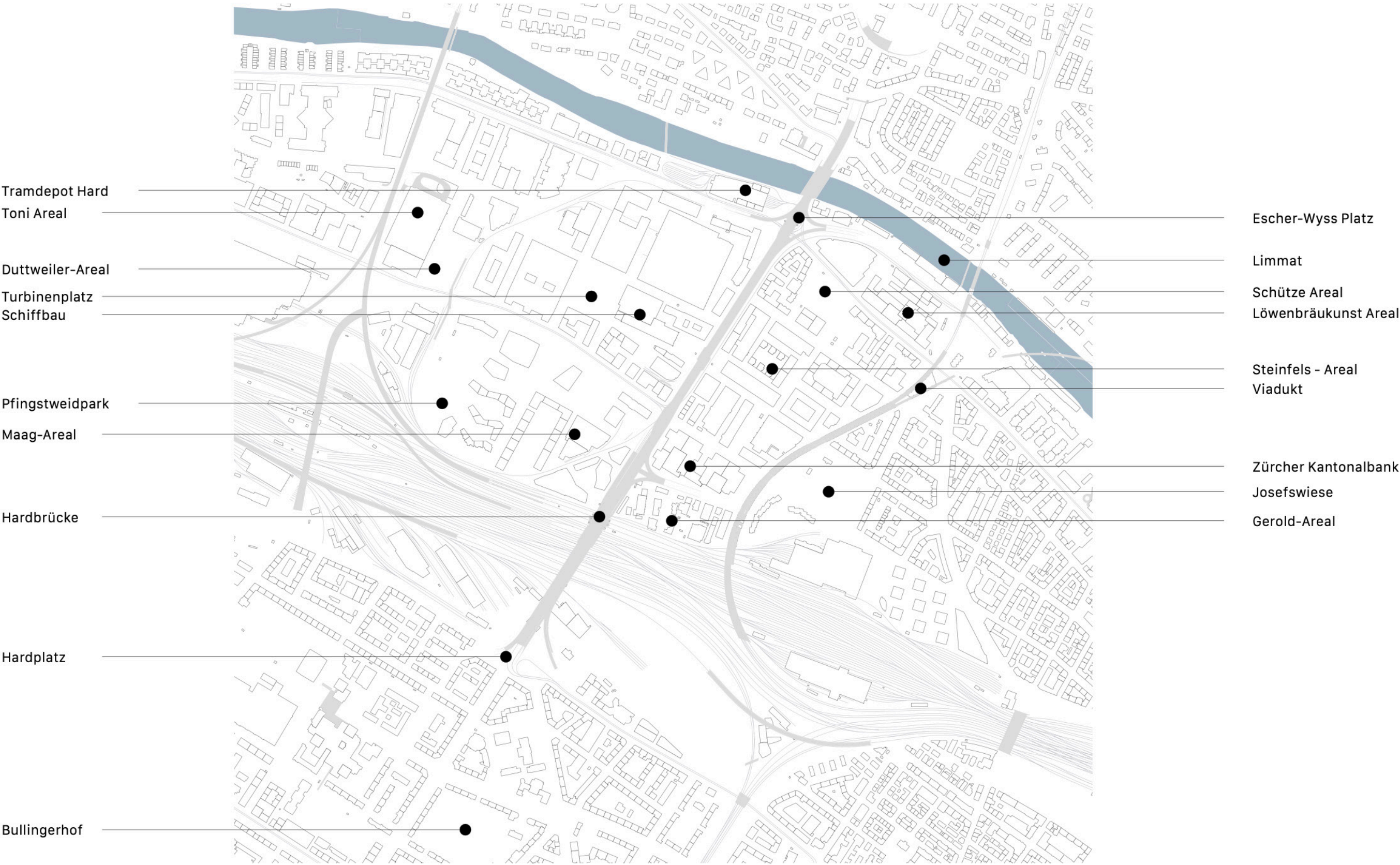
SITE VISIT



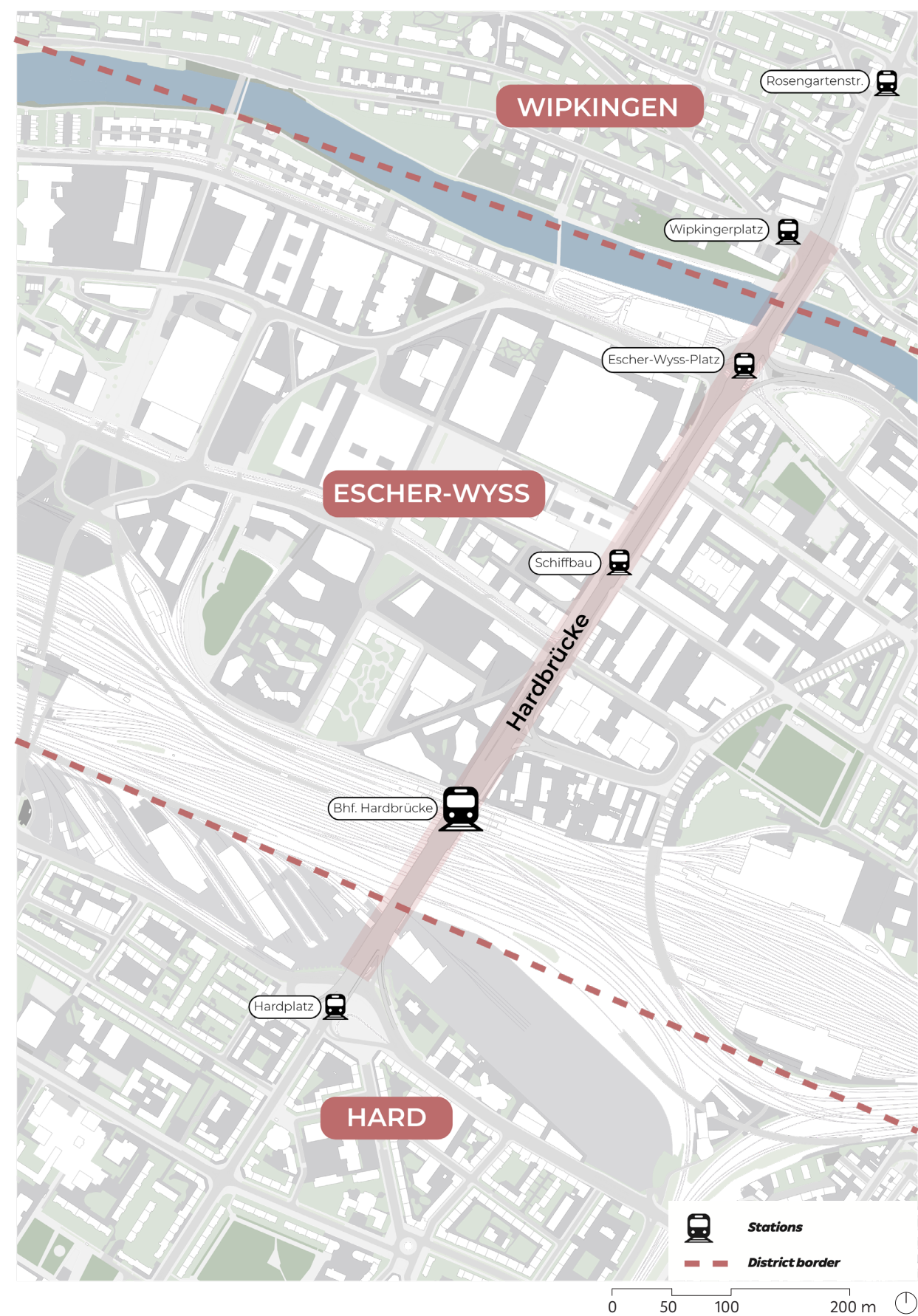
SITE VISIT



USES



ESCHER-WYSS-DISTRICT



90'000

PASSENGERS ARE EXPECTED
IN THE FUTURE AT
BAHNHOF HARDBRÜCKE



600

TRAINS ARE PASSING THE
STATION EACH DAY



119.1%

POPULATION GROWTH
BETWEEN 2004 AND 2020



20-30%

OF THE AREA HAS TO BE
USED FOR HOUSING



30'000

EMPLOYEES WORKING IN
ESCHER-WYSS



2370 CHF

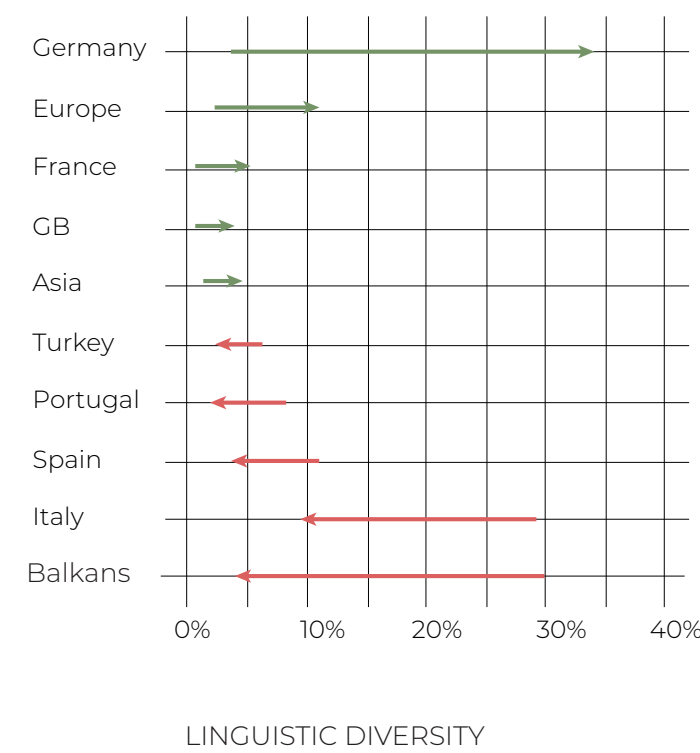
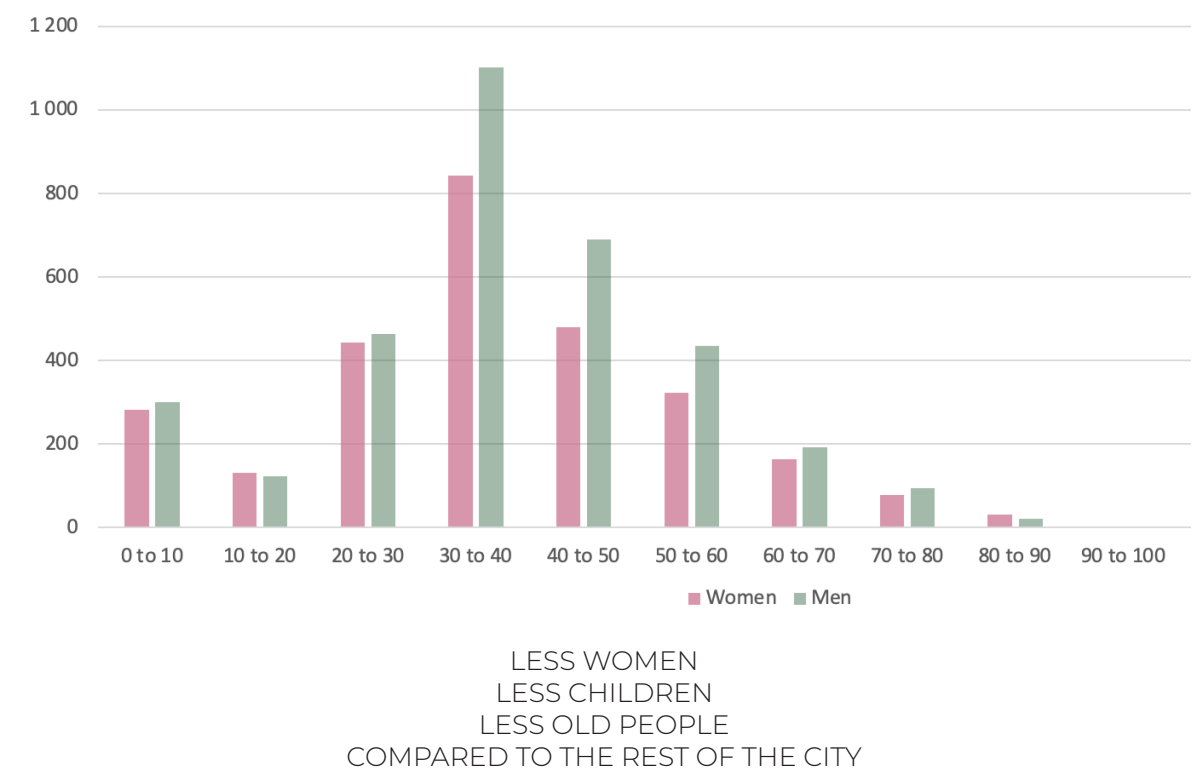
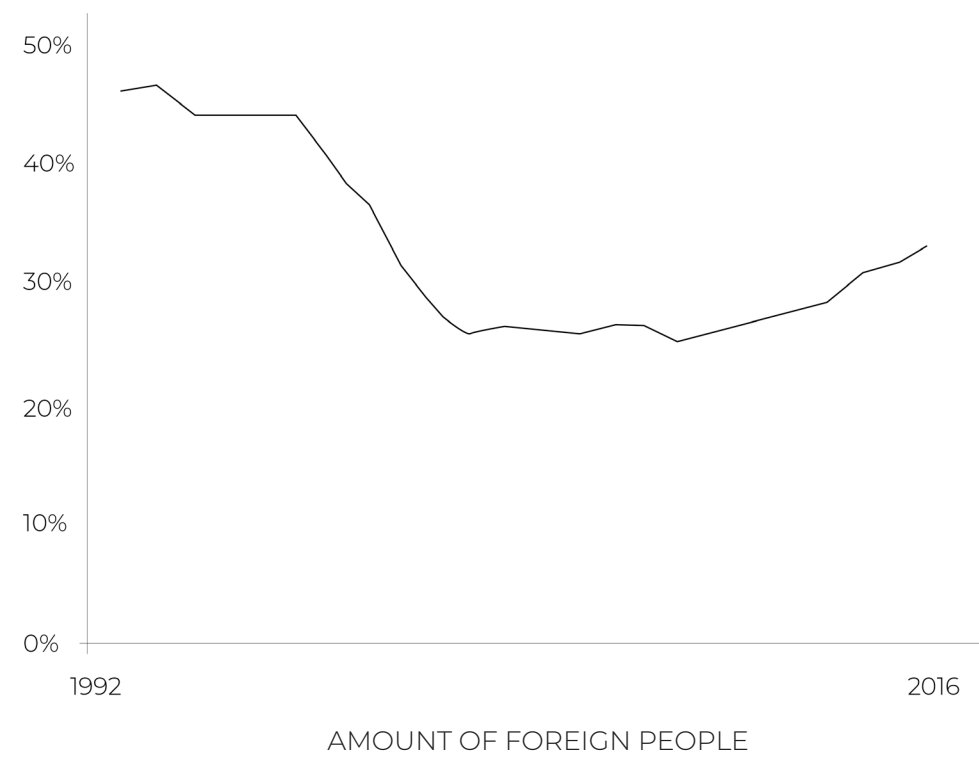
ESCHER-WYSS: AVERAGE
RENT FOR A 3.5 ROOM FLAT
/ MONTH



1590 CHF

ZURICH: AVERAGE RENT FOR
A 3.5 ROOM FLAT / MONTH

ESCHER-WYSS-DISTRICT



ESCHER-WYSS - A PLACE FOR SINGLE, RICH AND GERMAN SPEAKING MEN BETWEEN 30-50?

ESCHER-WYSS-DISTRICT

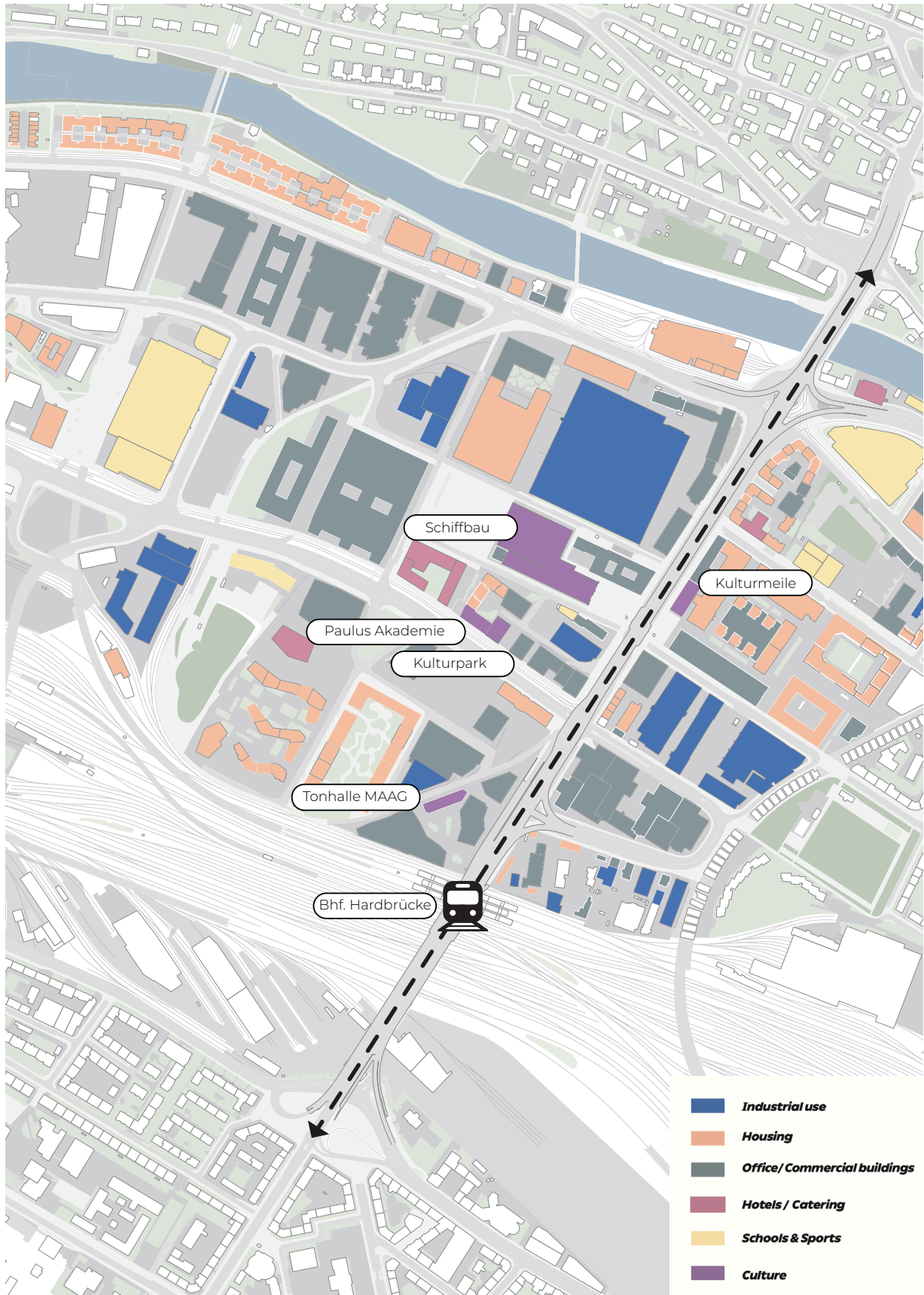


*„Hier konzentrierten sich rauchende Industrie,
Zentralfriedhof, Kehrlichtverbrennung, Mietskaser-
nen, Arme, Ausländer, Kleinkriminelle“*

(Hans Peter Bärtschi, 2007)

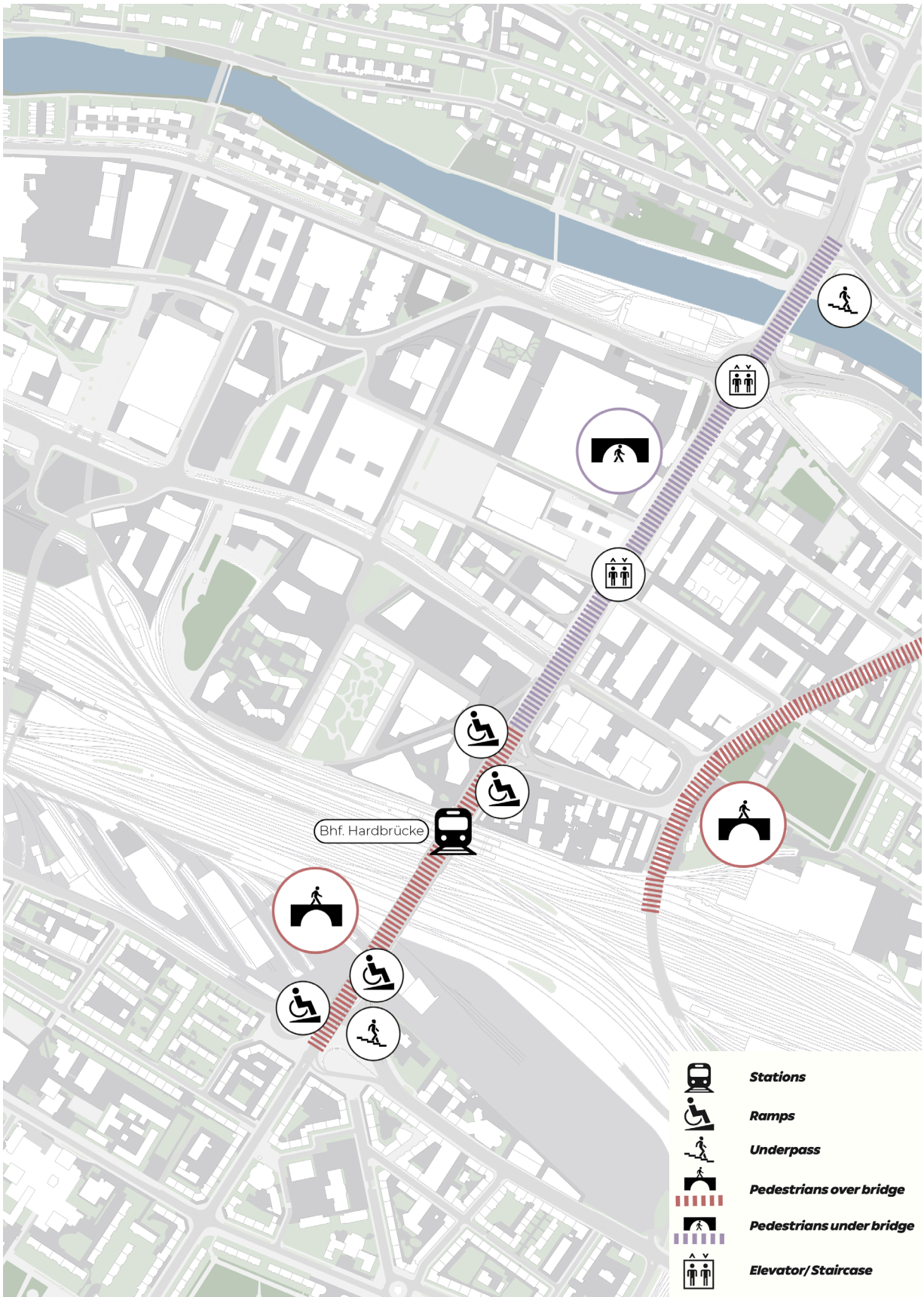
THE SMOKING INDUSTRY, CENTRAL CEMETERY, WASTE INCINERATION, TENEMENTS,
POOR, FOREIGNERS, PETTY CRIMINALS USED TO BE CONCENTRATED HERE.

ESCHER-WYSS-DISTRICT



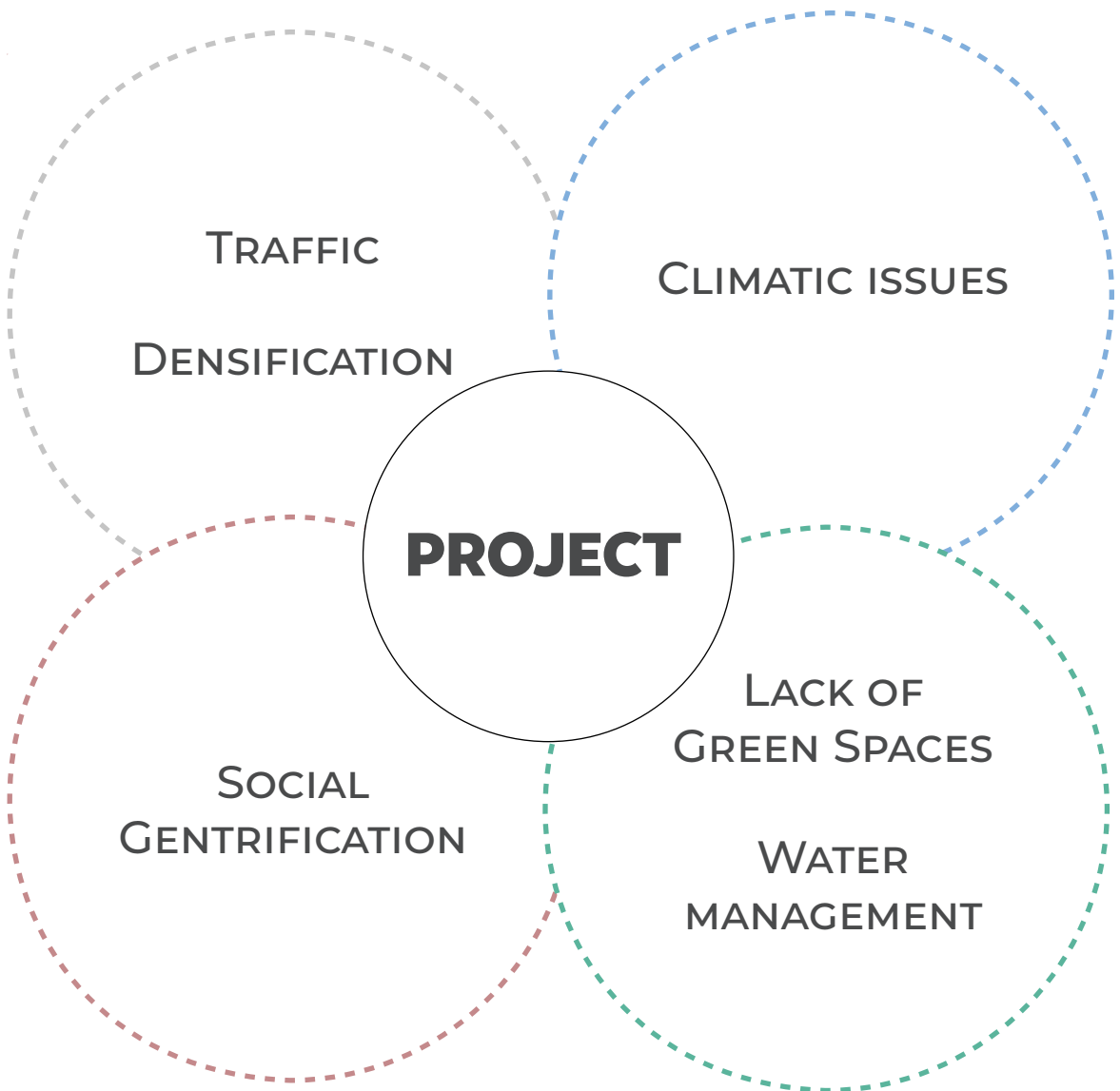
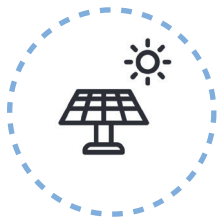
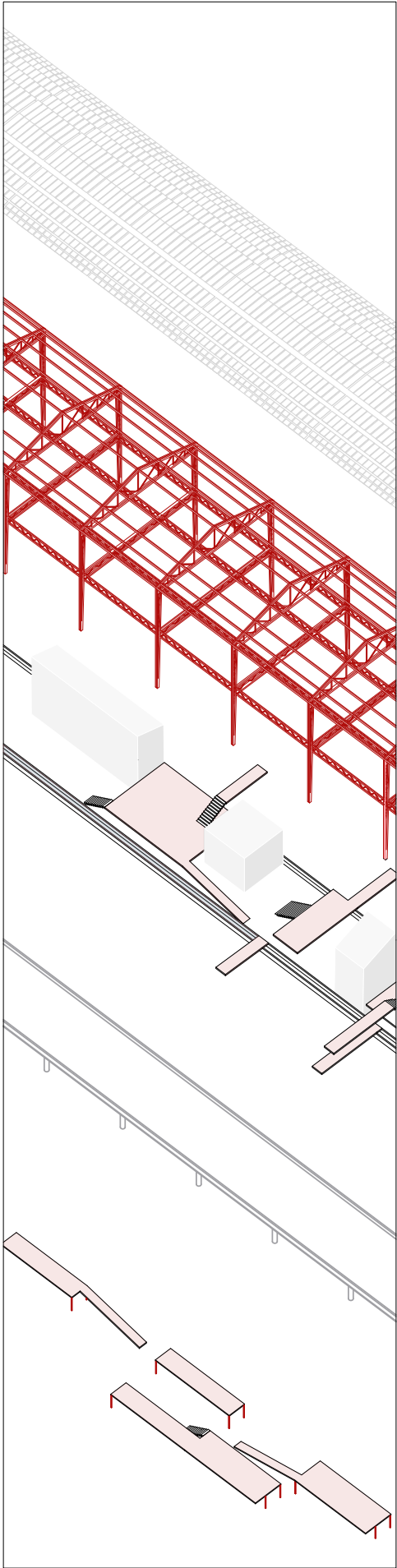
0 50 100 200 m

HARDBRÜCKE



0 50 100 200 m

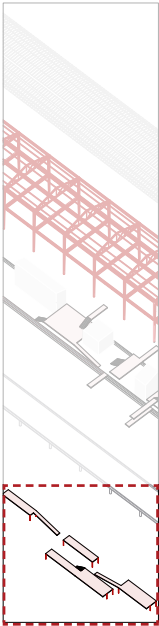
CONCEPT



GROUND FLOOR

FUNCTIONS

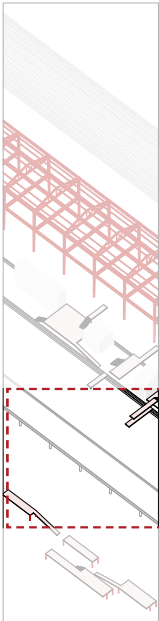
- TEMPORARY EVENTS
- TEMPORARY MARKETS
- WEEKLY MARKET
- NIGHT MARKET
- FESTIVALS
- PARKING SPACES FOR EVENT PEOPLE
(FAHRENDE)
- FOOD TRUCKS
- TEMPORARY DISCO
-



HARDBRÜCKE

FUNCTIONS

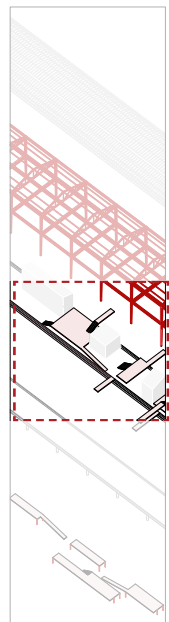
- PUBLIC TRANSPORT
- STATIONS
- CAR TRAFFIC



1. FLOOR

FUNCTIONS

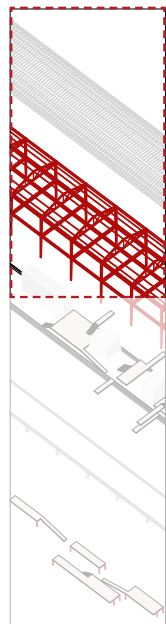
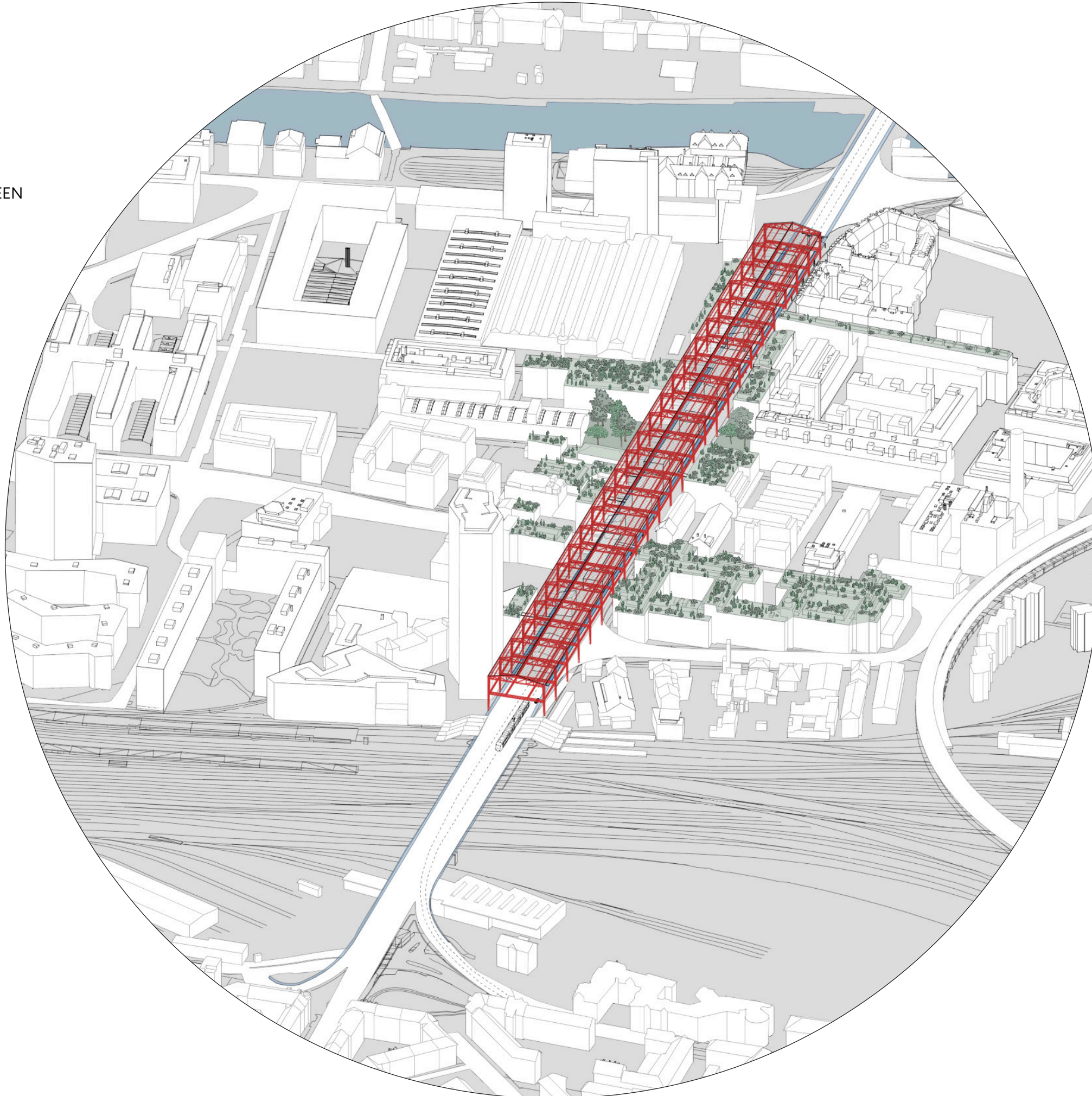
- BIKE STATIONS
- TOILETS
- ATM
- COOLING SPOTS
- GREEN HOUSES
- PUBLIC SITTING SPACES
- COMMUNITY CENTRE
- CULTURAL FACILITIES
- GREEN AREAS
- GATHERING PLACES
- SOCIAL FACILITIES
- PLAYGROUNDS
- WORKSHOP SPACES
- ...



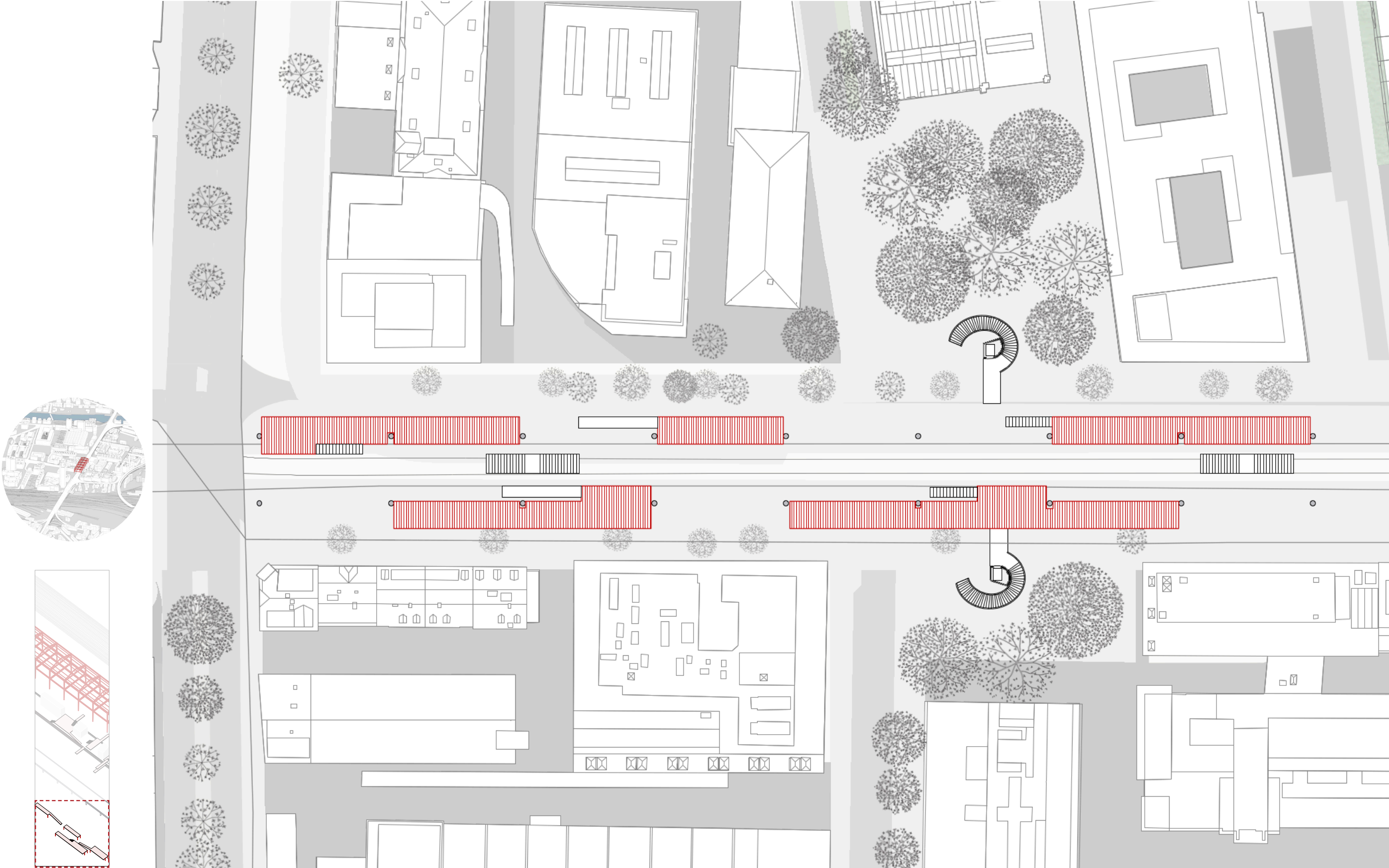
ROOF

FUNCTIONS

- SOLAR ENERGY PRODUCTION
- SUPPORTING STRUCTURE
- CONNECTION TO PUBLIC GREEN ROOFS



ZOOM-IN GROUND FLOOR



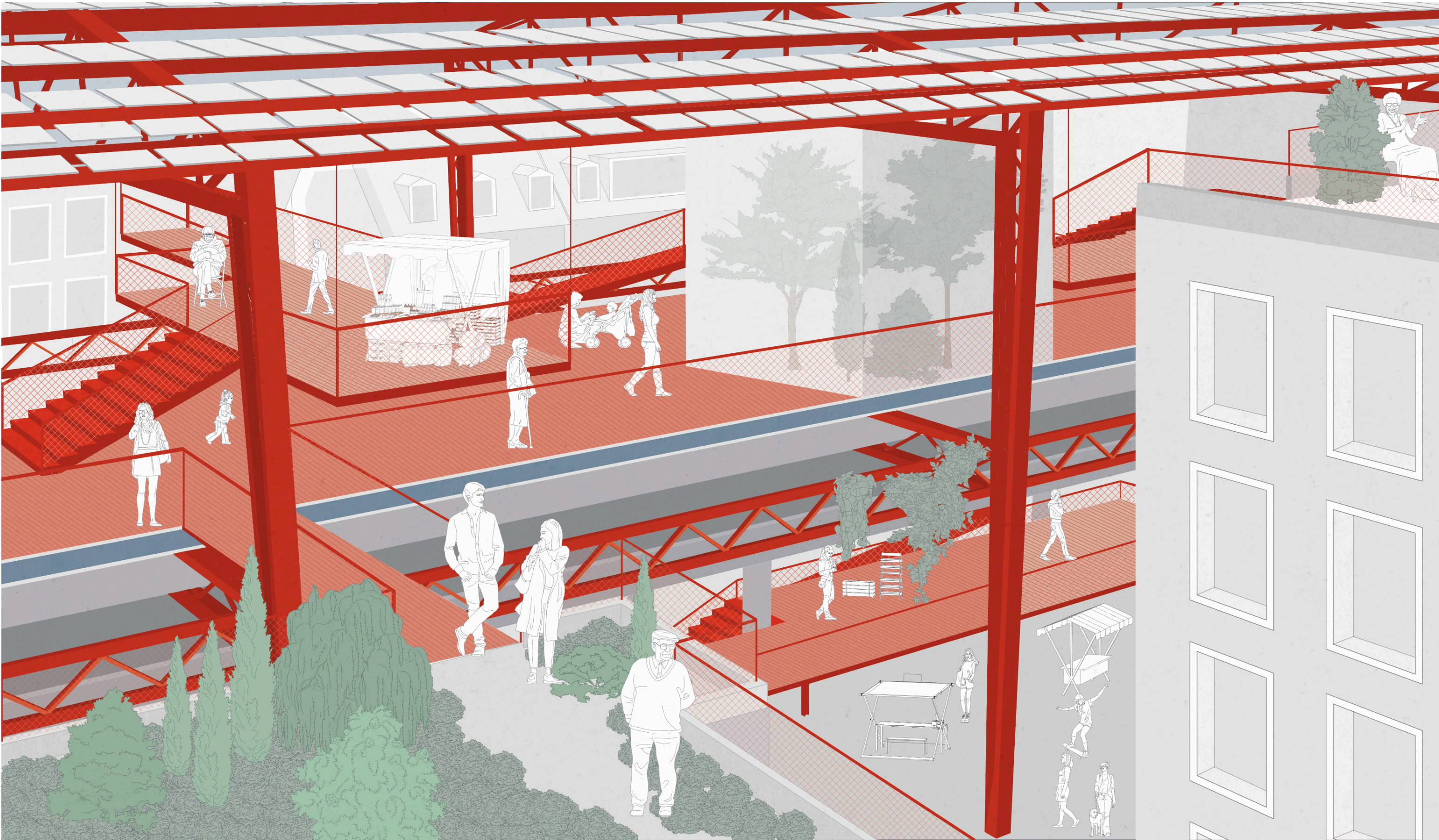
VISUALIZATION GROUND FLOOR



ZOOM IN 1. FLOOR



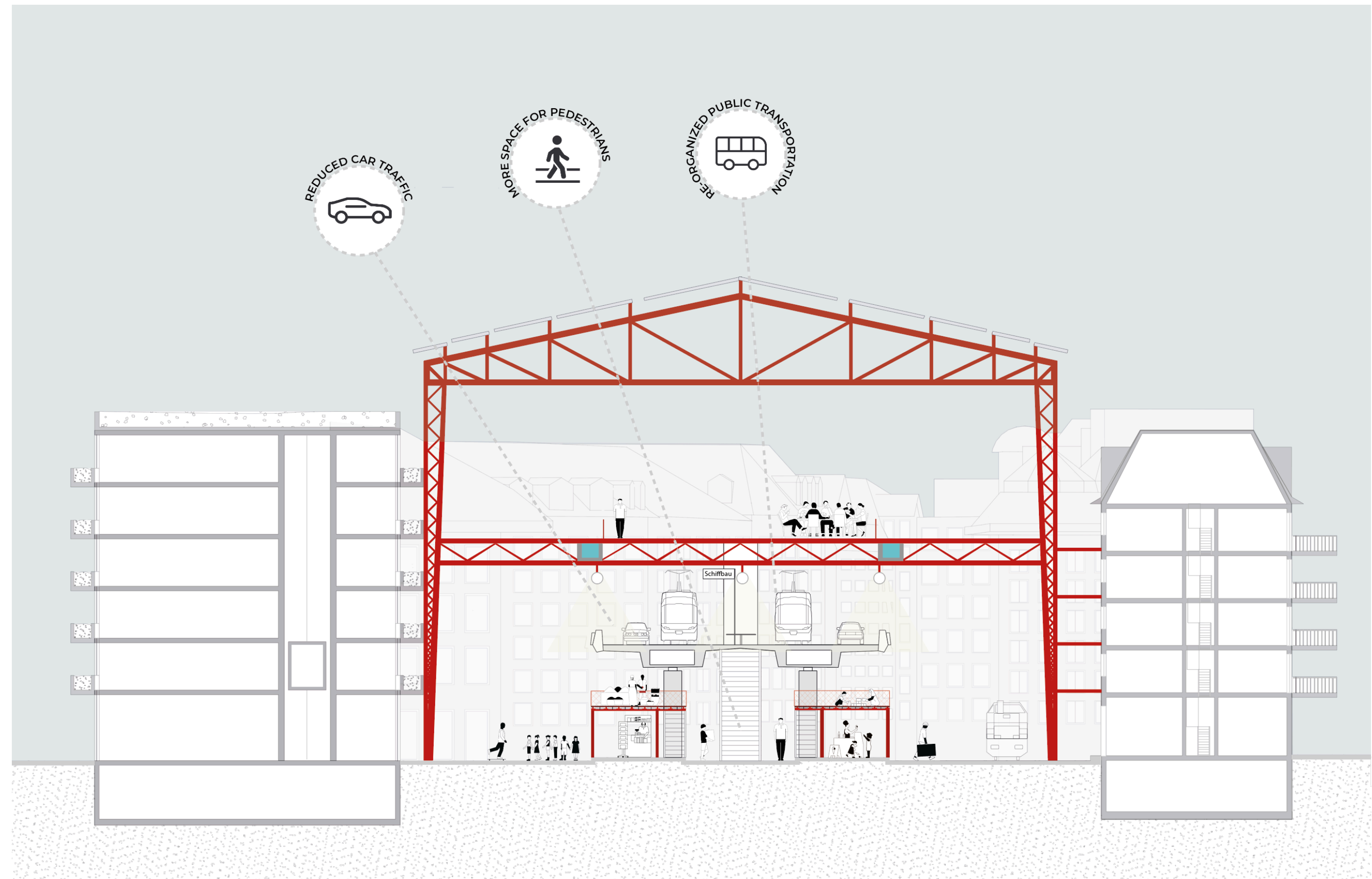
VISUALIZATION 1. FLOOR



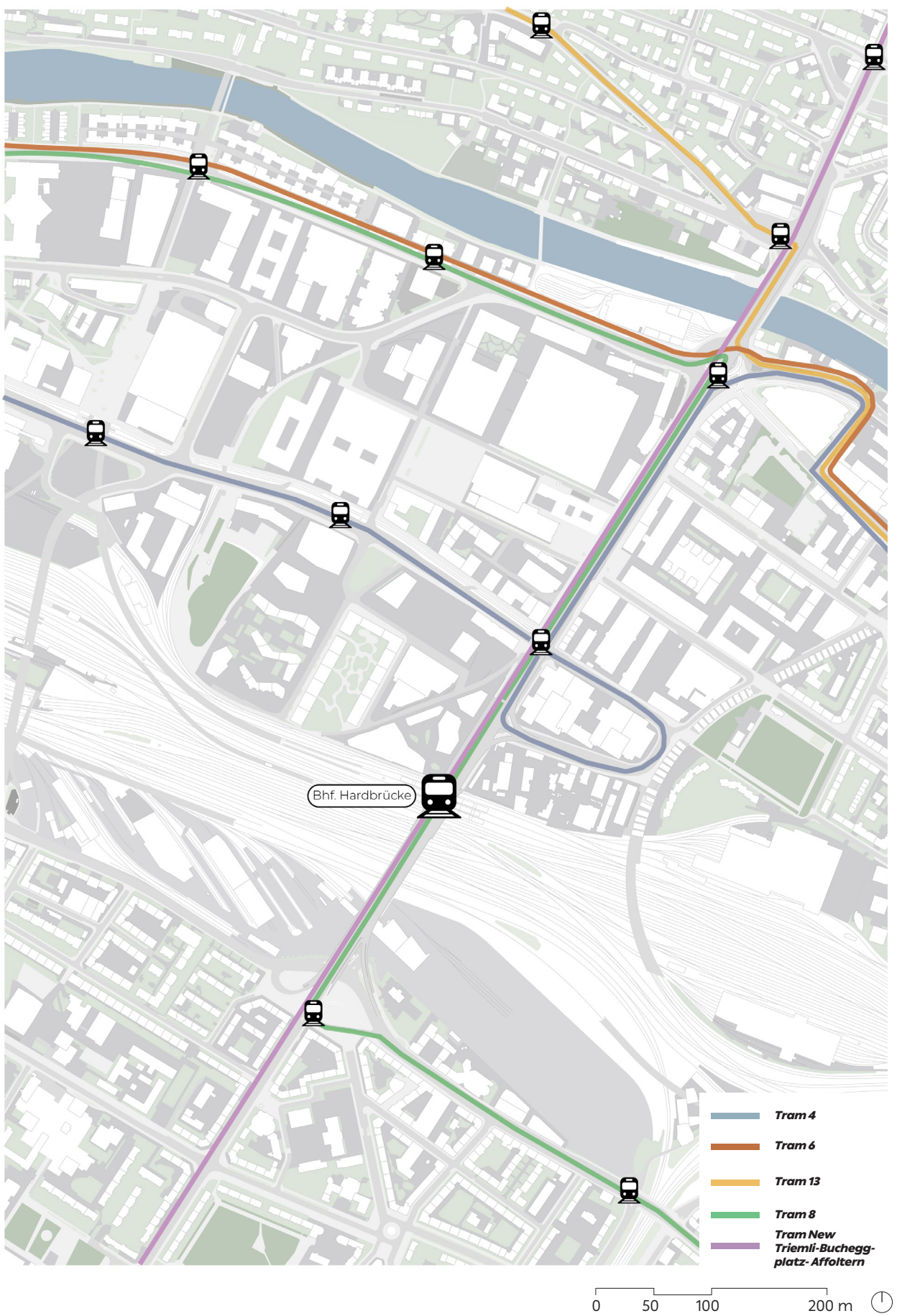
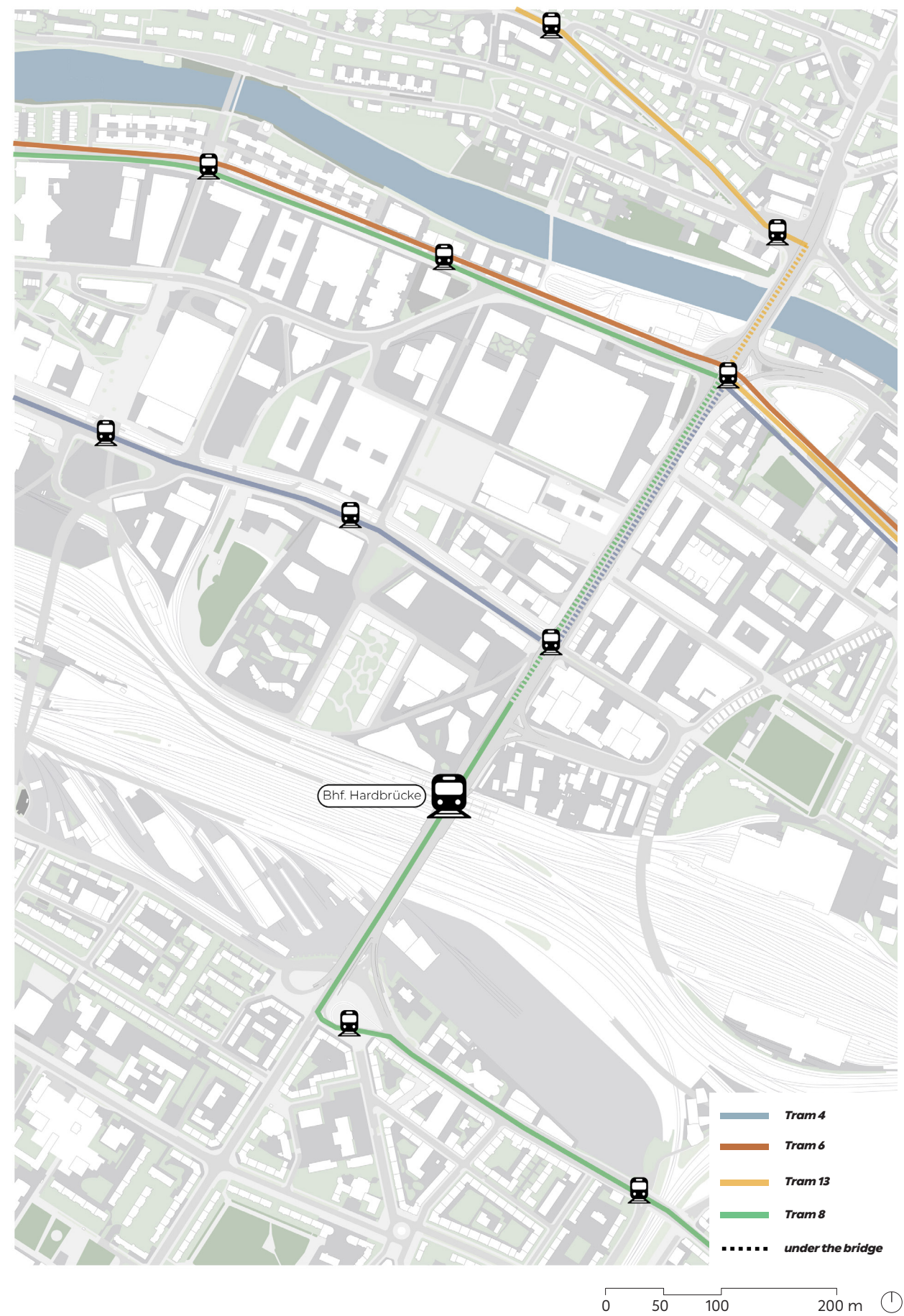
TRAFFIC CONCEPT BEFORE



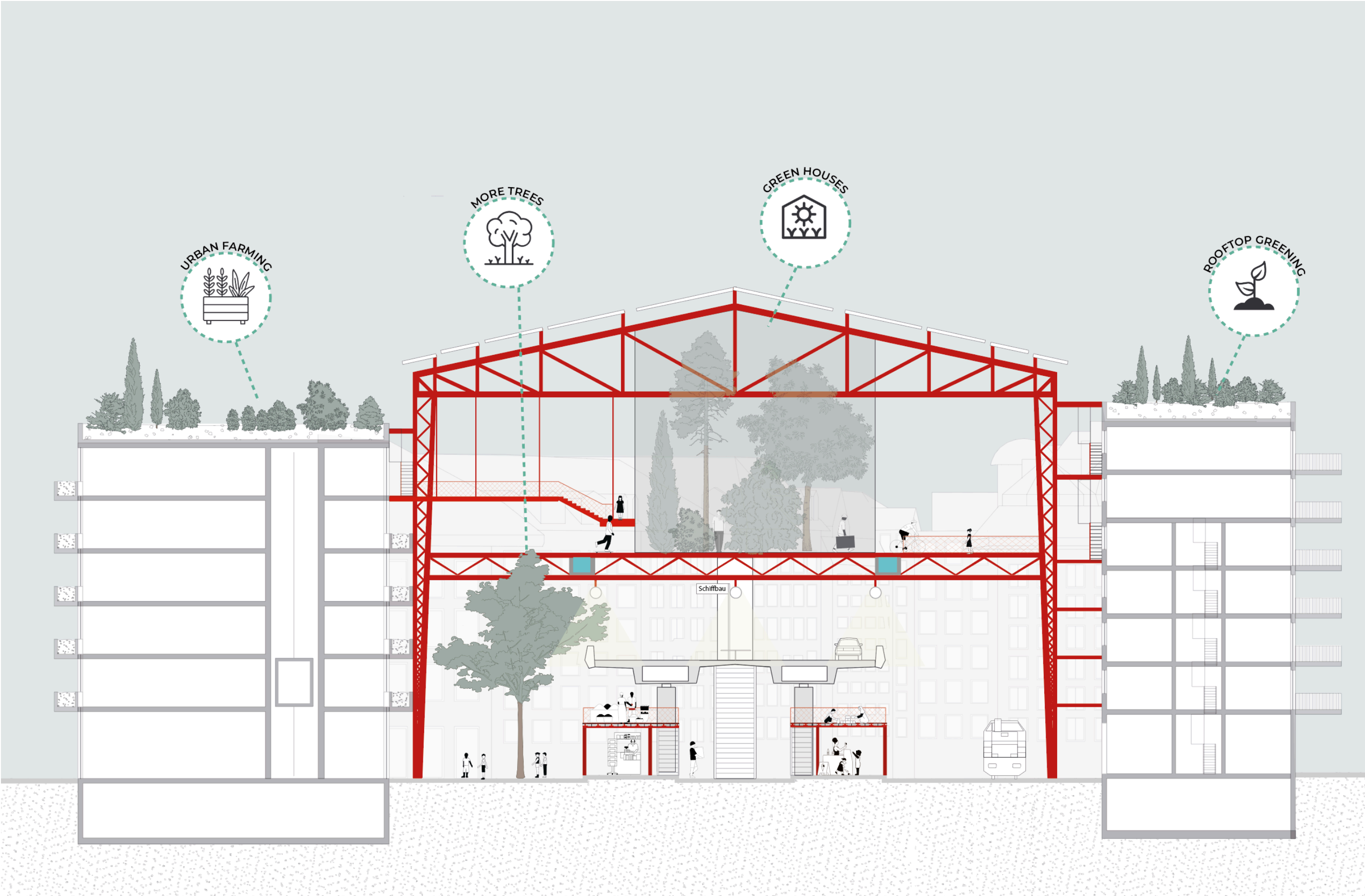
TRAFFIC CONCEPT AFTER



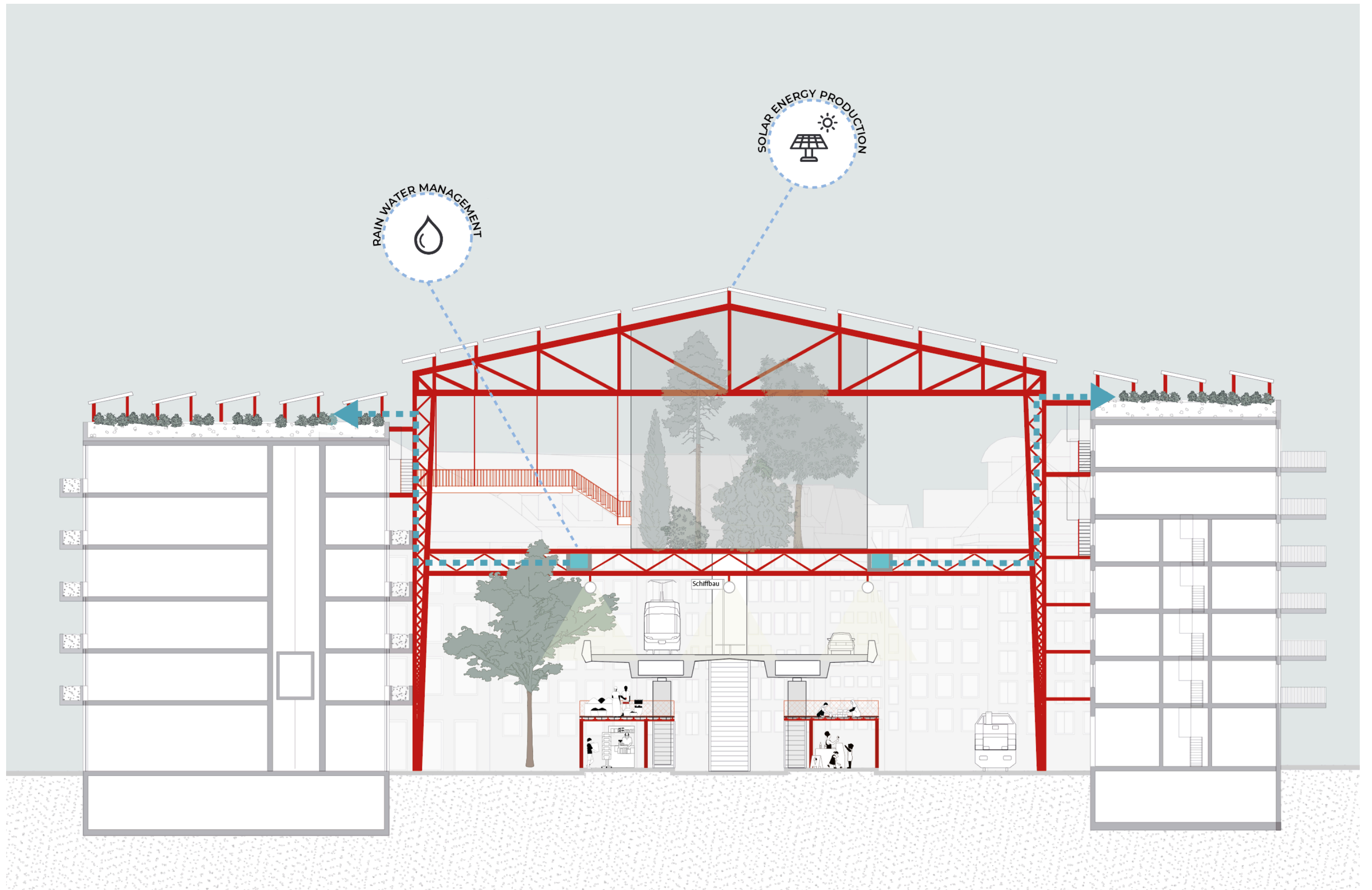
PUBLIC TRANSPORTATION



GREENING CONCEPT

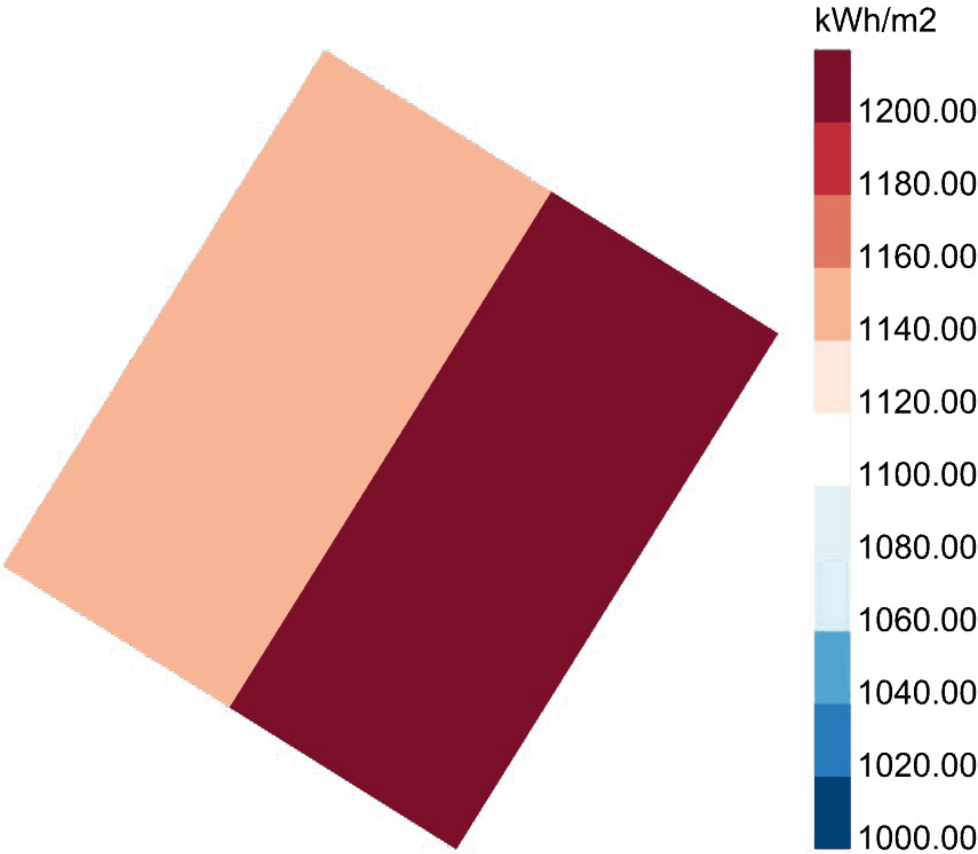


ENERGY CONCEPT & WATER MANAGEMENT



SOLAR ENERGY PRODUCTION

ROOF ORIENTATION

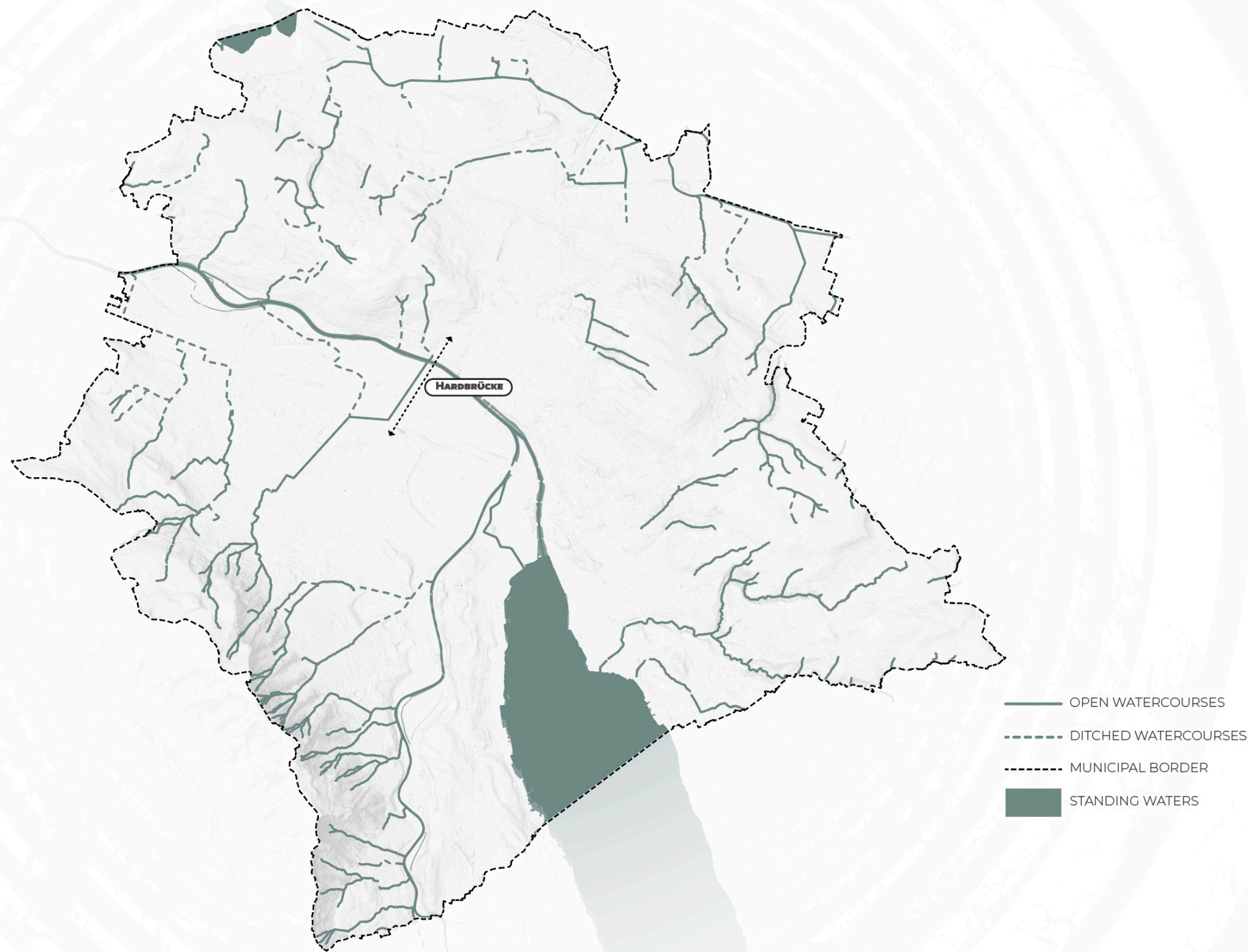


$$E = G \cdot F_F \cdot A \cdot \eta_{PV} \cdot PR$$

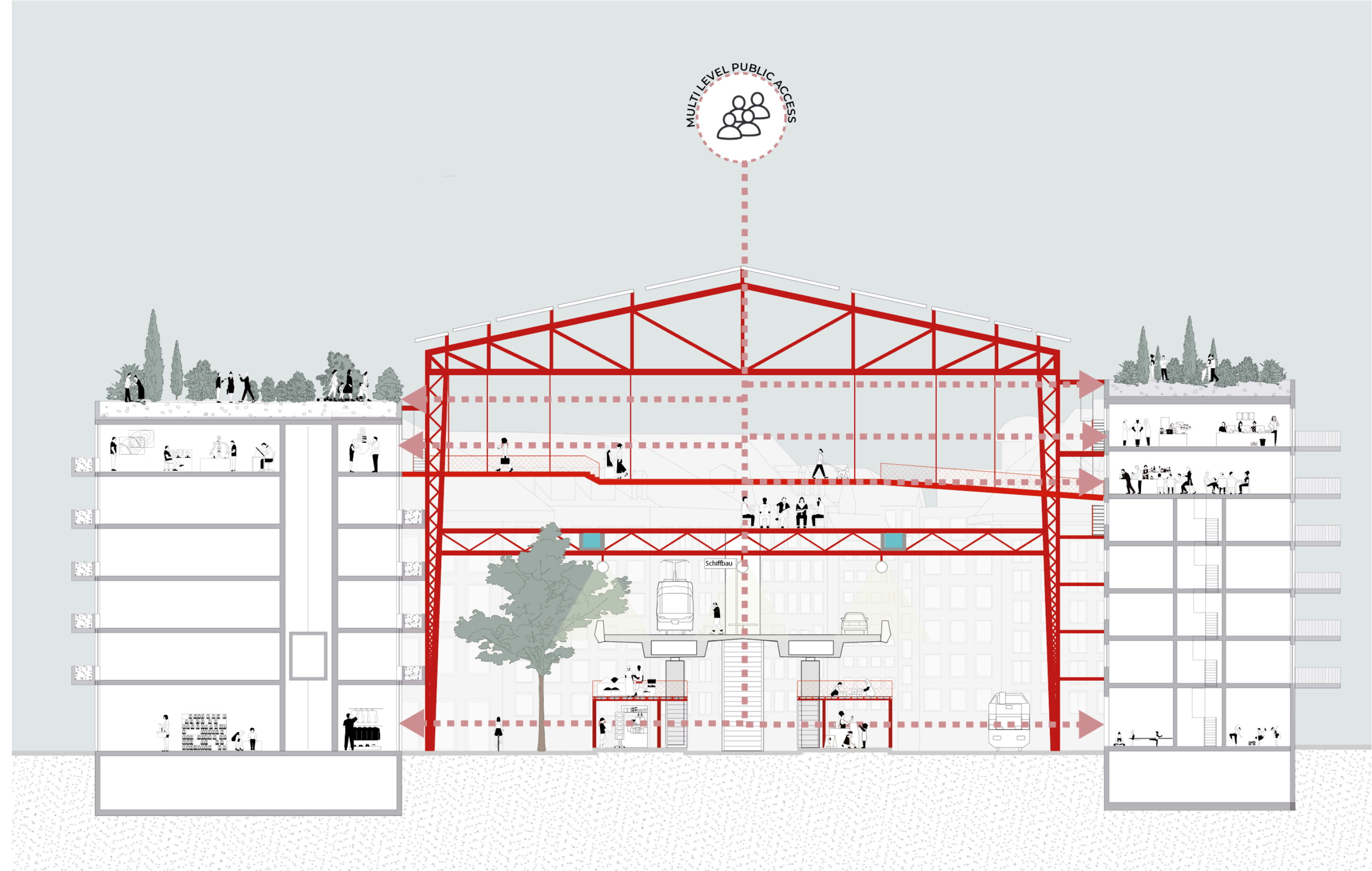
Orientation east: 2'346'000 kWh/a
Orientation west: 2'248'000 kWh/a
Total: 4'594'000 kWh/a

- ENERGY PRODUCTION FOR 1'312 FOUR-PERSON-HOUSEHOLDS
- ENERGY PRODUCTION FOR 5'000 PEOPLE
- ENERGY PRODUCTION COVERS 80% OF THE HOUSING ENERGY DEMAND IN ESCHER-WYSS DISTRICT

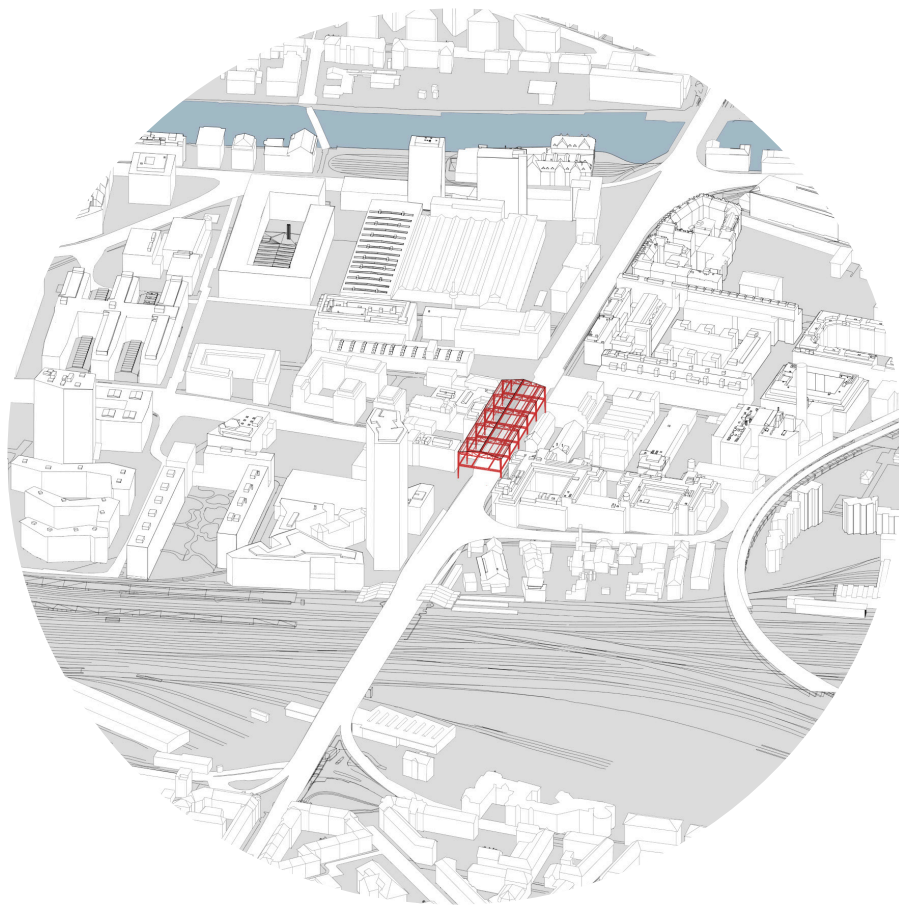
WATER MANAGEMENT



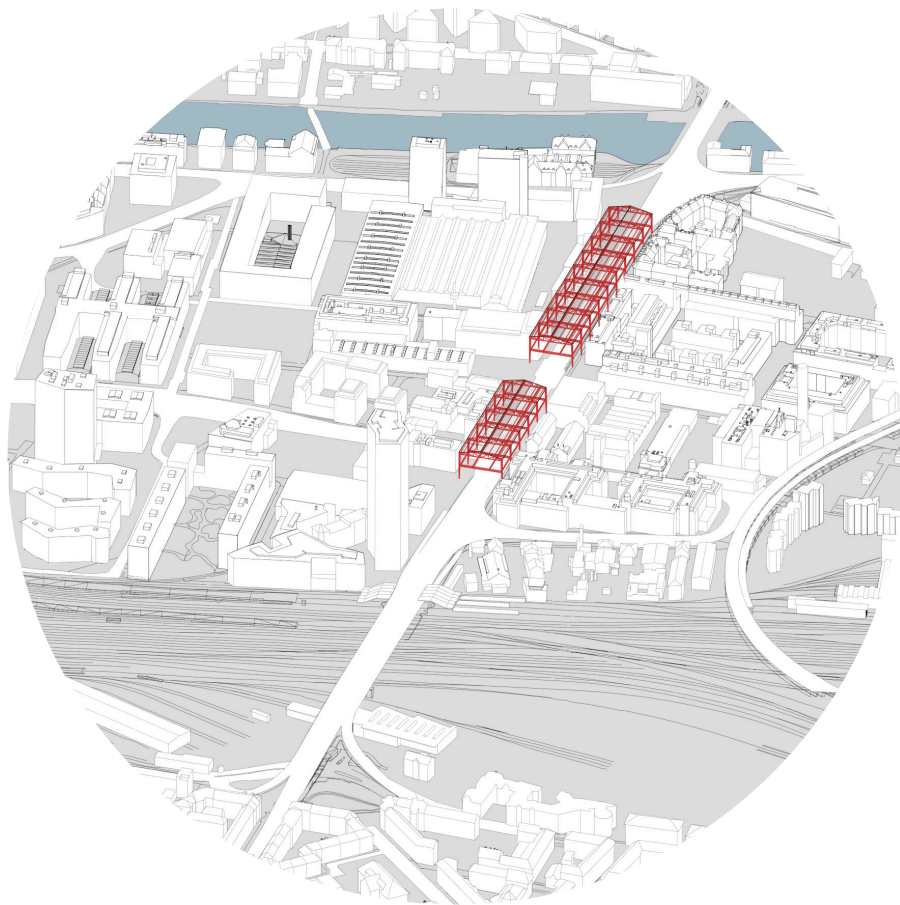
PUBLIC CONCEPT



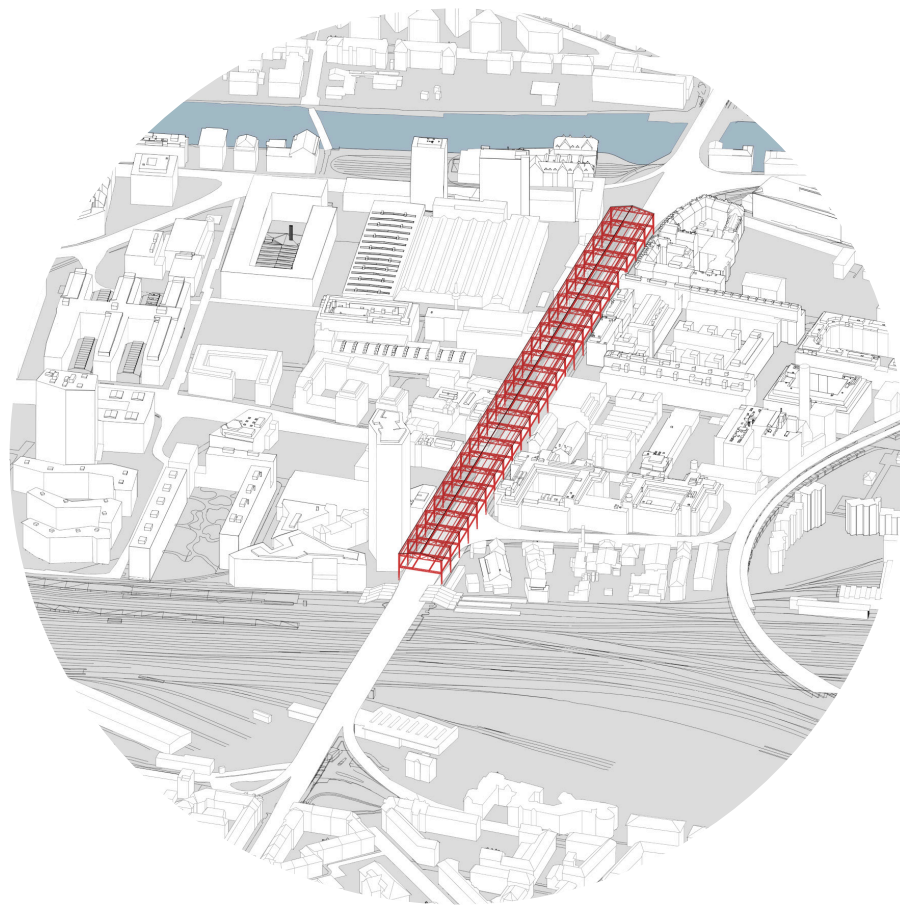
PROCESS



2025-2030

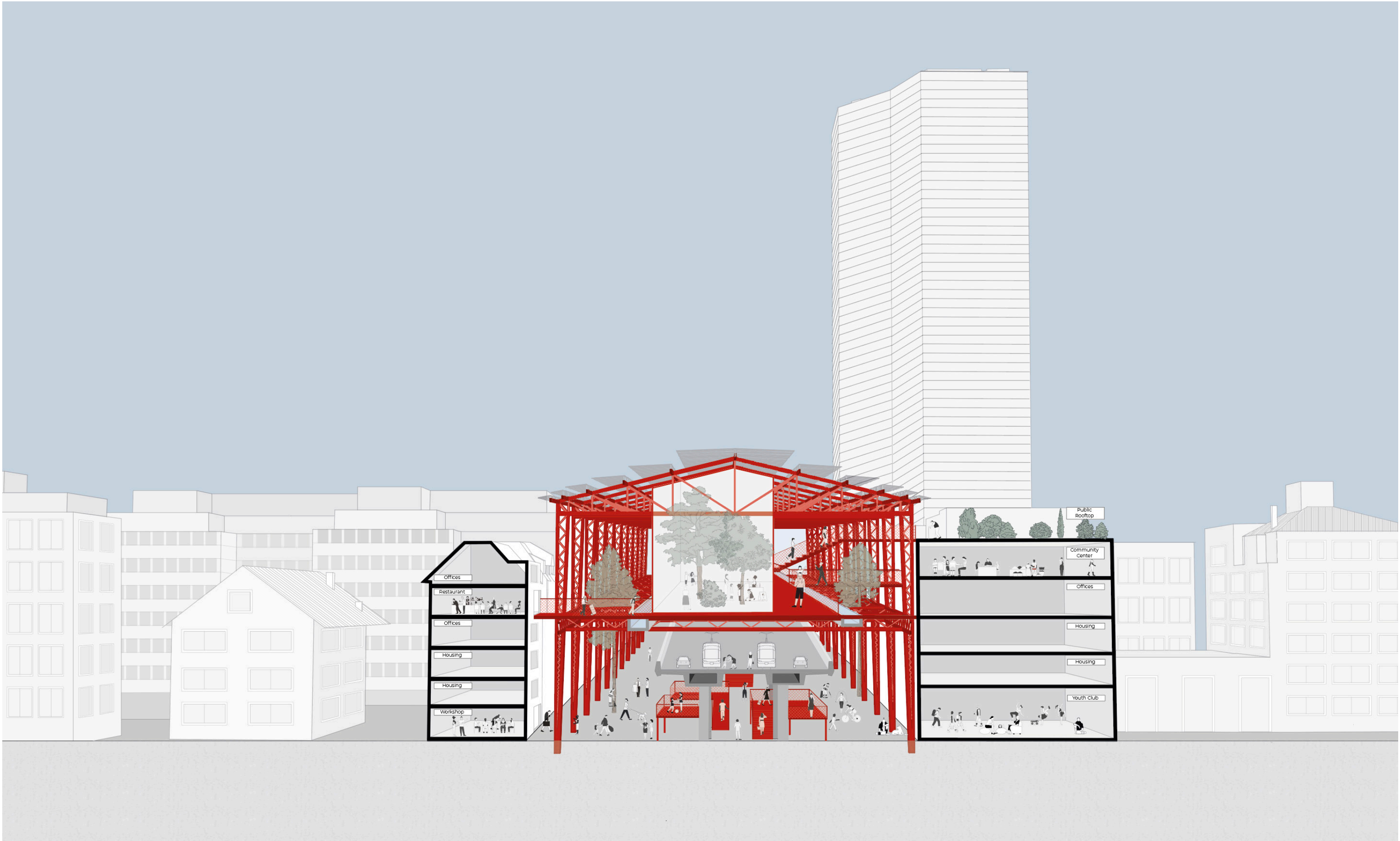


2030-2035

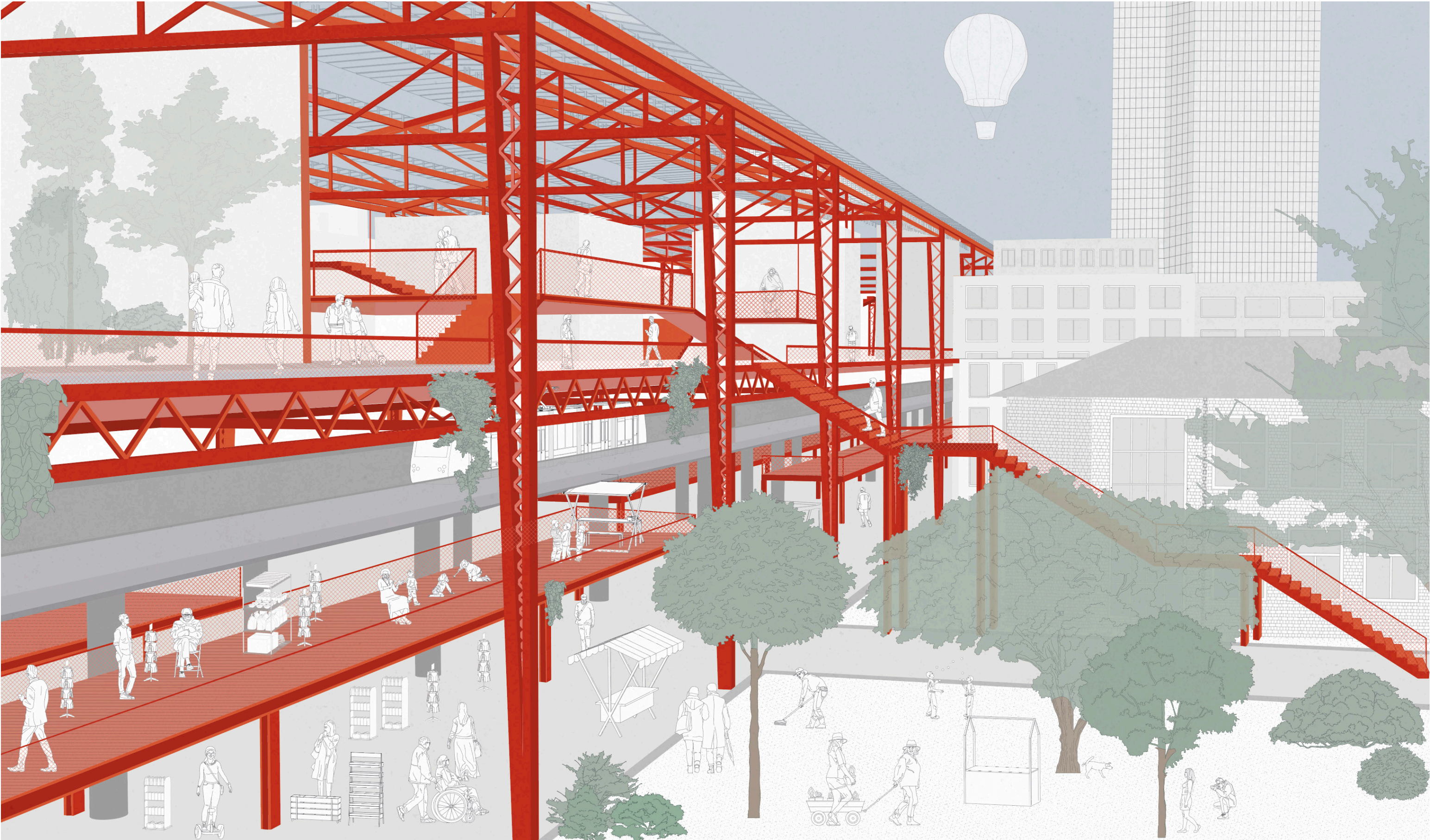


2035-2040

SECTION PERSPECTIVE



VISUALIZATION ALL FLOORS



AXONOMETRIC DRAWING

