

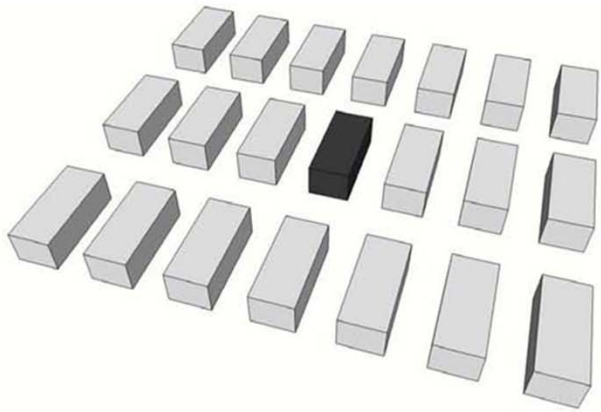
Mechanical Hive

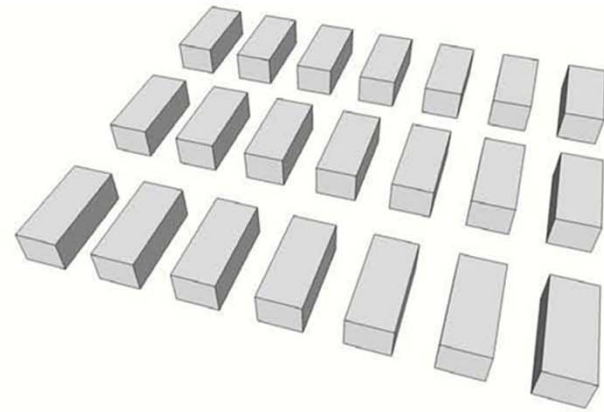
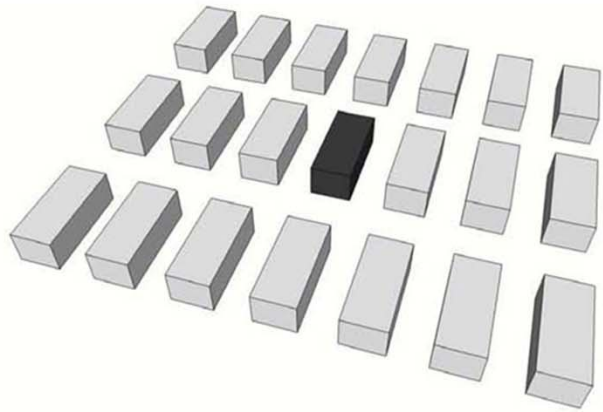
Artists Community

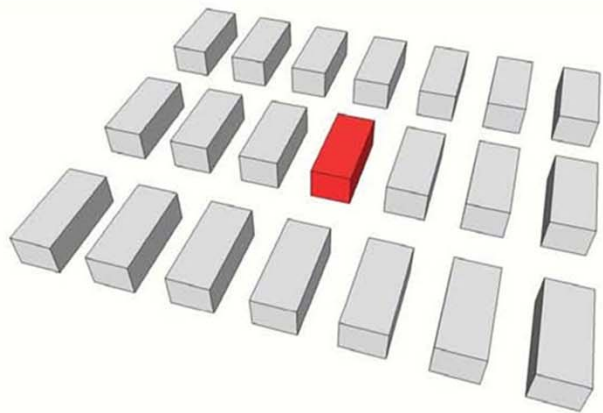
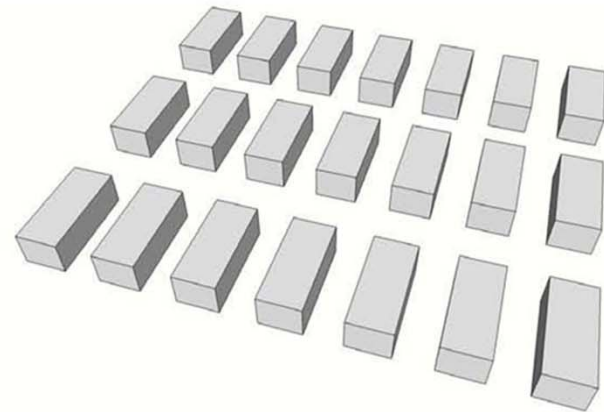
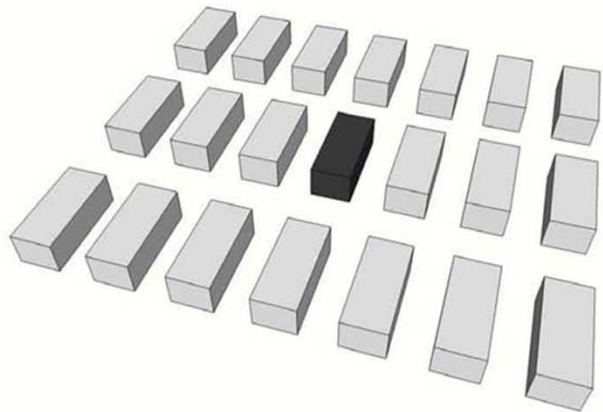
Utrecht South: From residual to generating

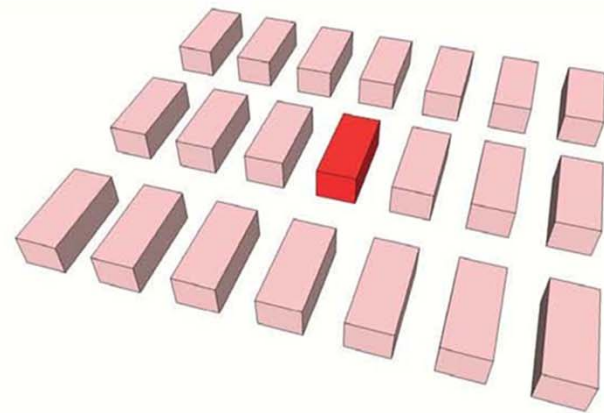
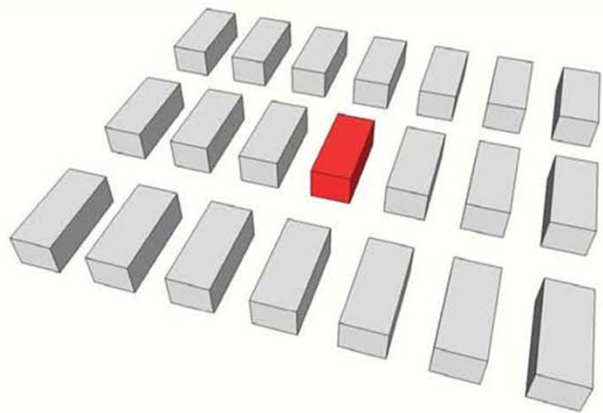
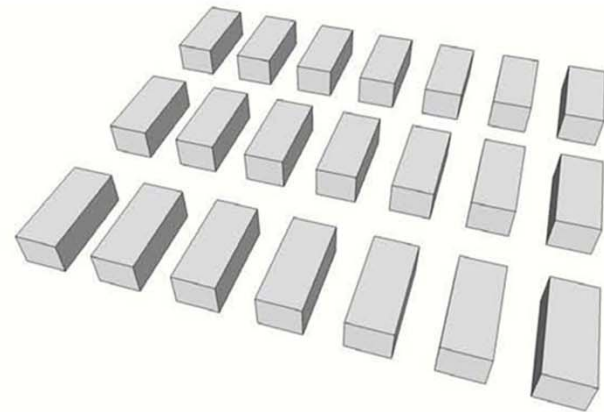
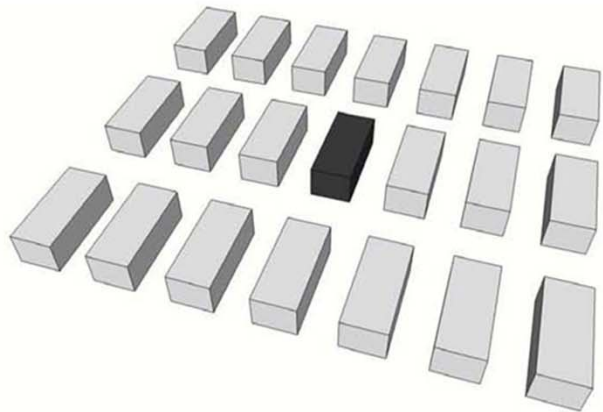
How to transform the industrial sites in Utrecht South from residual areas to generating areas?



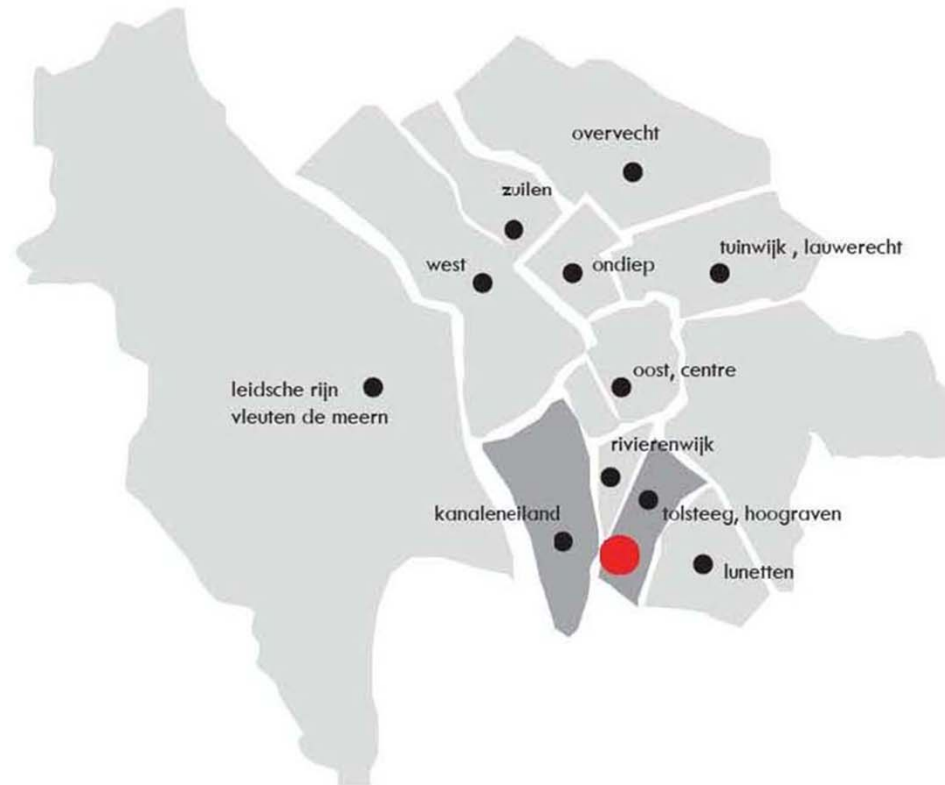


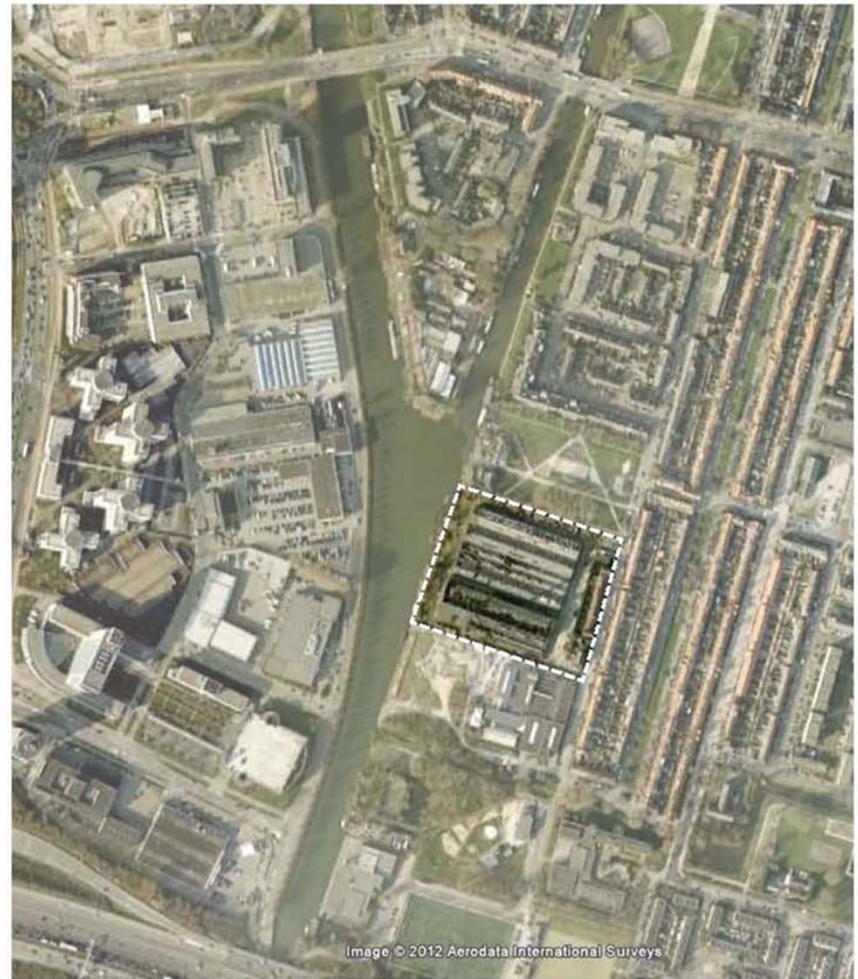
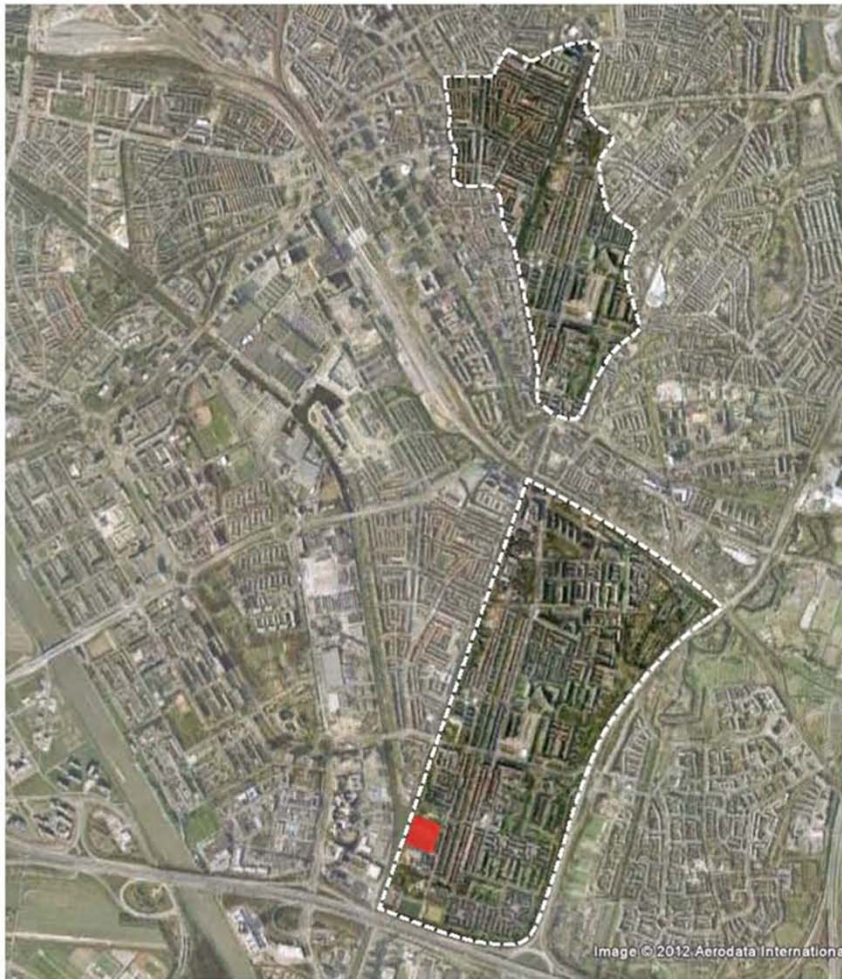


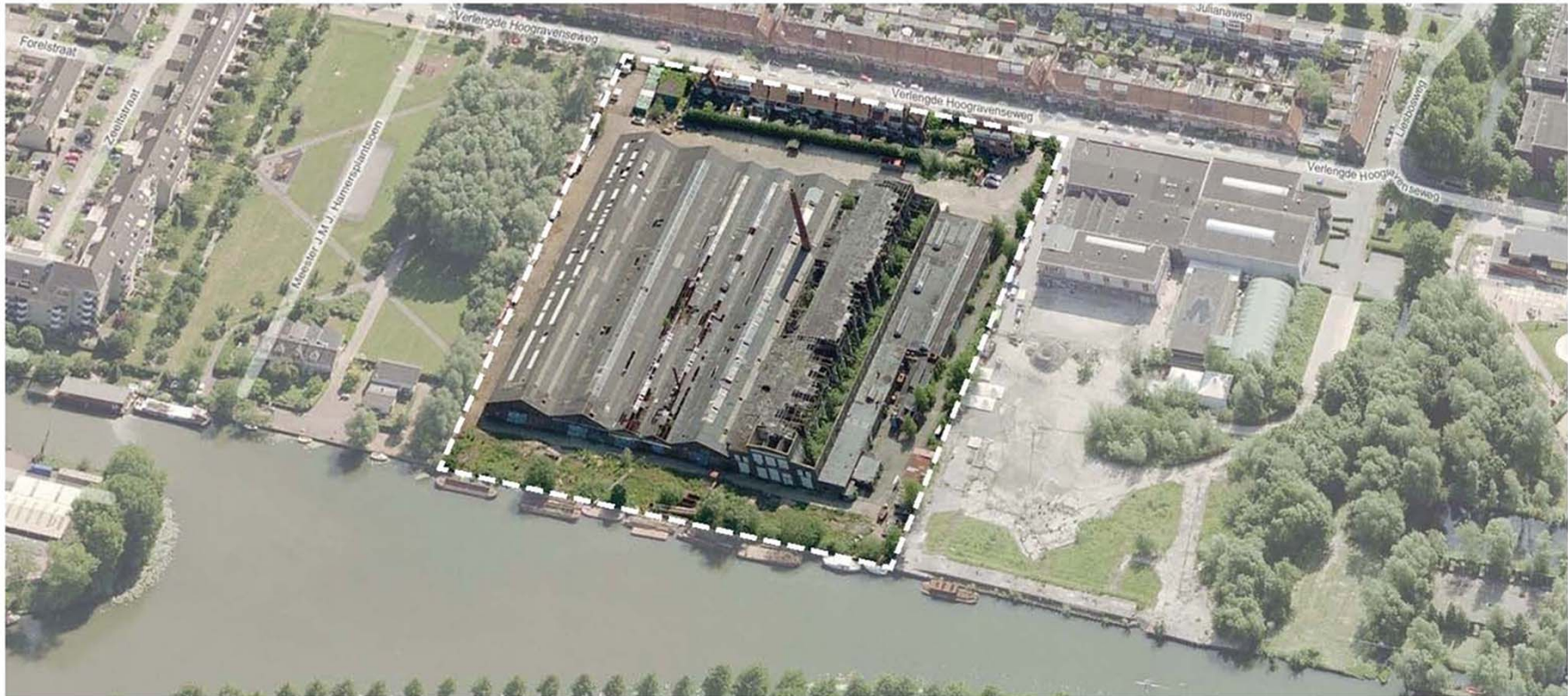














bank view S-W



bank view N-W

FEATURES OF THE ORIGINAL ACTIVITY

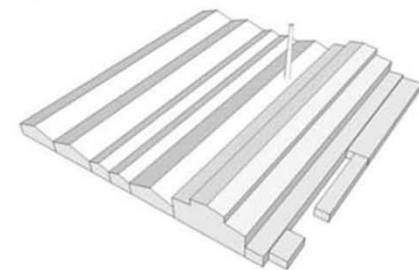
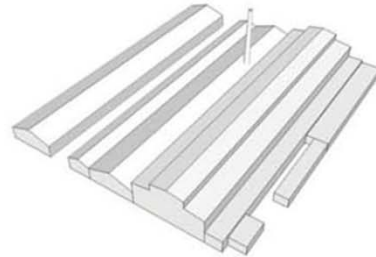


GUIDELINES FOR (RE)DESIGN

Stoop | chemical factory

Neerlandia | wire industry

Prozee | scrap metal trade



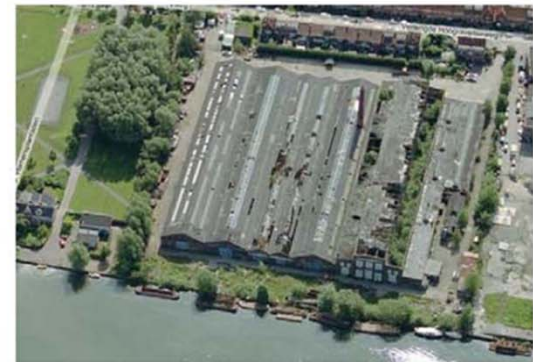
1925



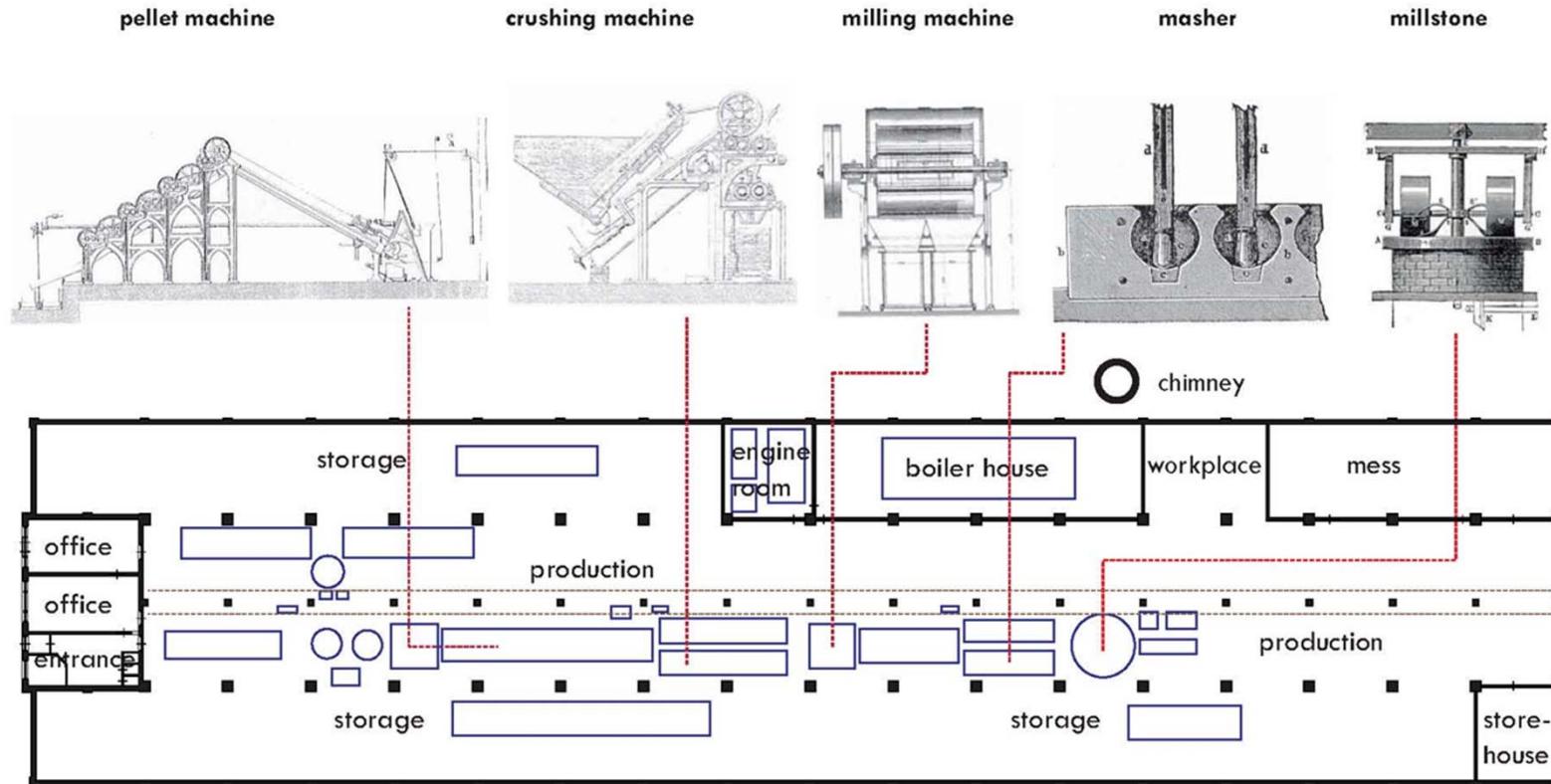
1938



2012

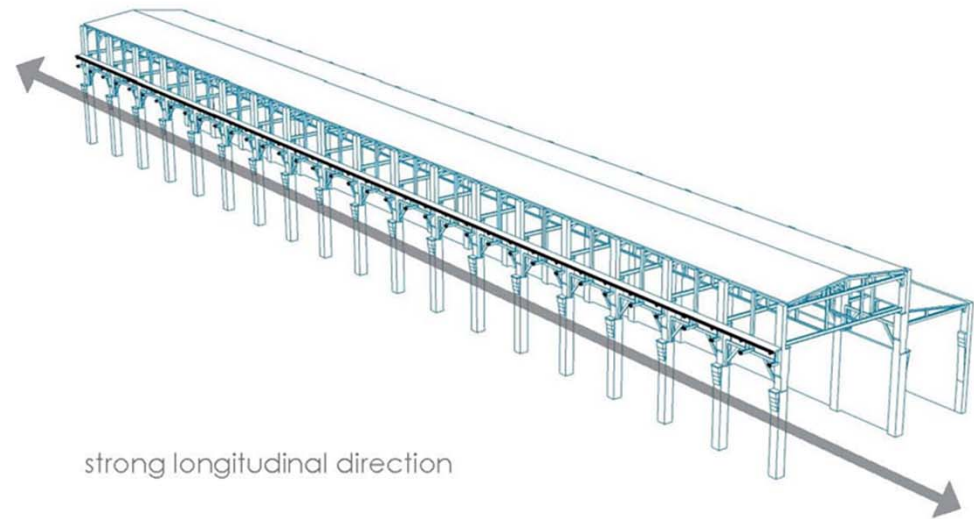


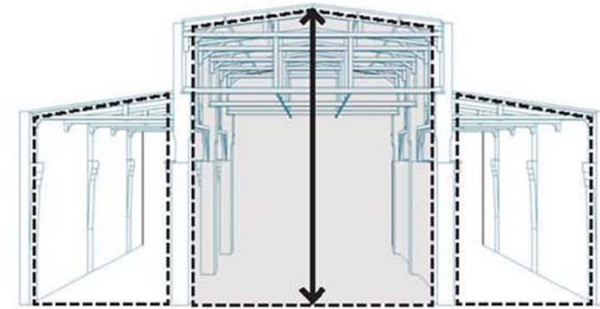
STOOP FACTORY



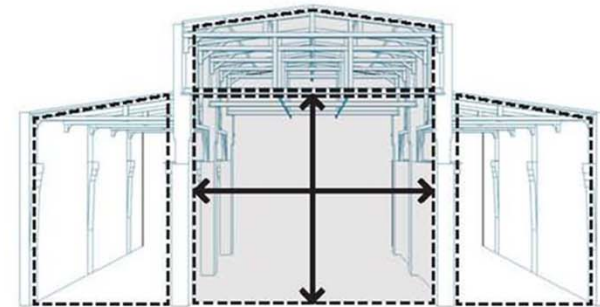
NEERLANDIA FACTORY



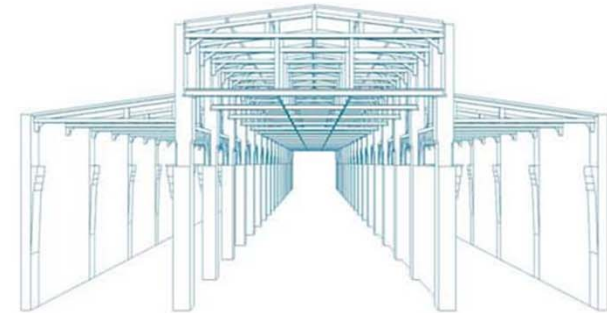




dominant central volume

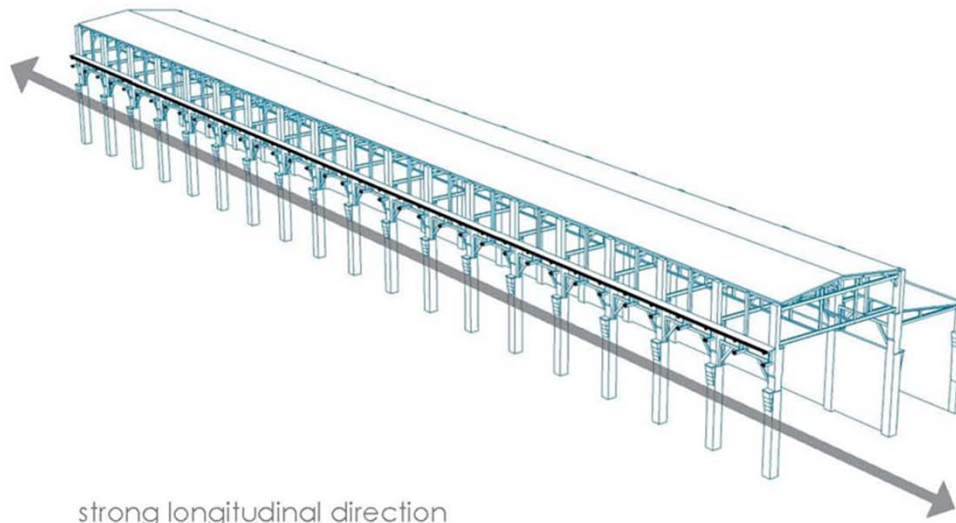


dominant central volume

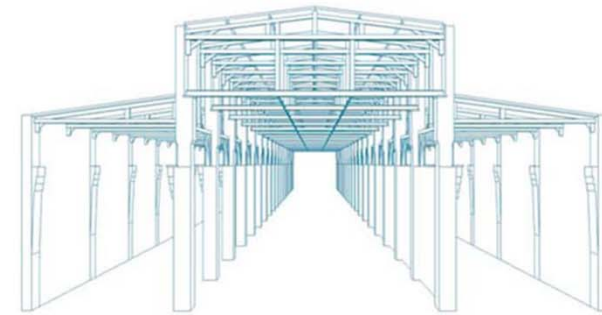


rythm given by vertical and horizontal repetition of the structural elements

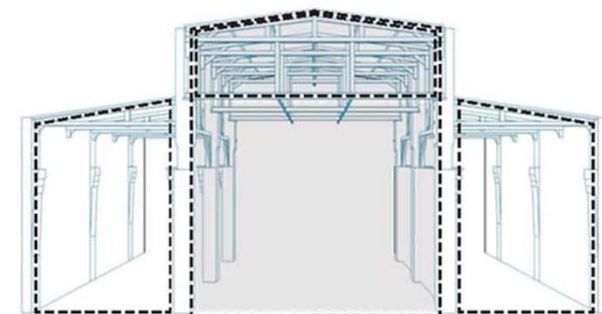
GUIDELINES FOR (RE)DESIGN
CHARACTERISTIC MORPHOLOGICAL FEATURES



strong longitudinal direction

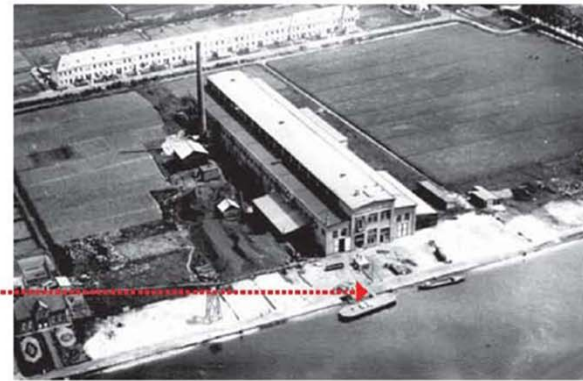
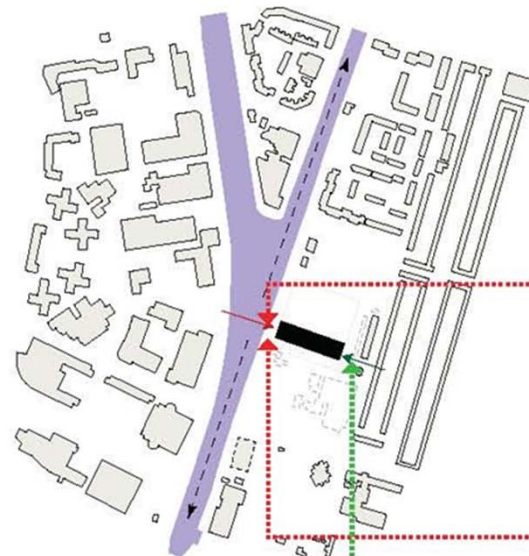


rhythm given by vertical and horizontal repetition of the structural elements



dominant central volume





Use of the bank during Stoop (photo:1925)



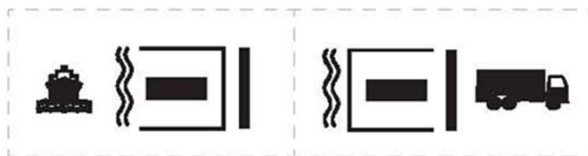
Use of the bank during Neerlandia (photo:1937)



Outside activity moved after 1971 to the yard on the East side (photo: 2006)

1917 - 1971

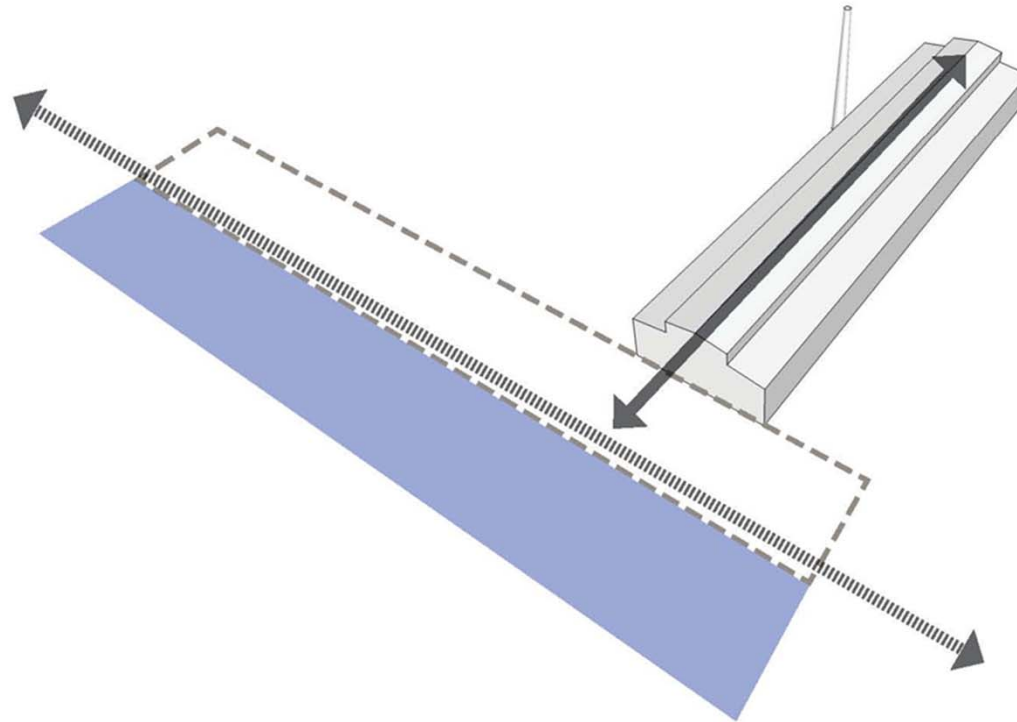
1973 - 2011



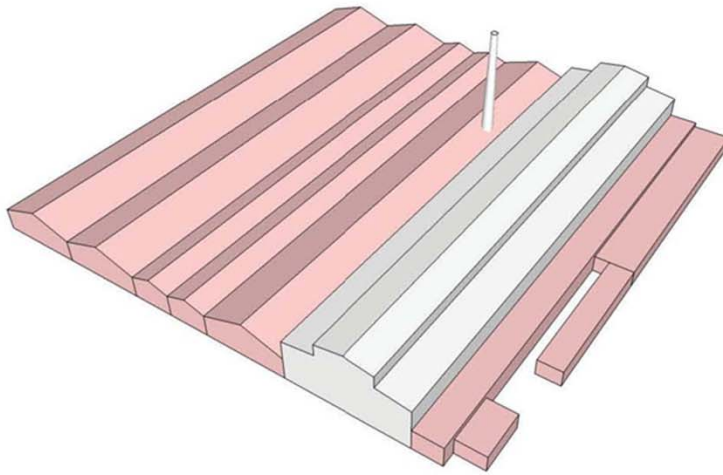
after 1973 the water connection was no longer used. Instead the land access became important - the loading and unloading that used to be done on the bank moved to the yard on the East side of the building.

GUIDELINES FOR (RE)DESIGN

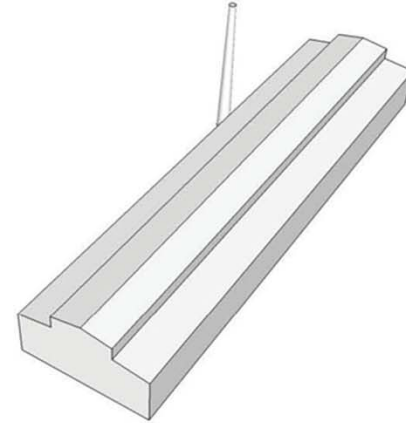
RELATIONSHIP BANK - BUILDING | REACTIVATION OF THE BANK



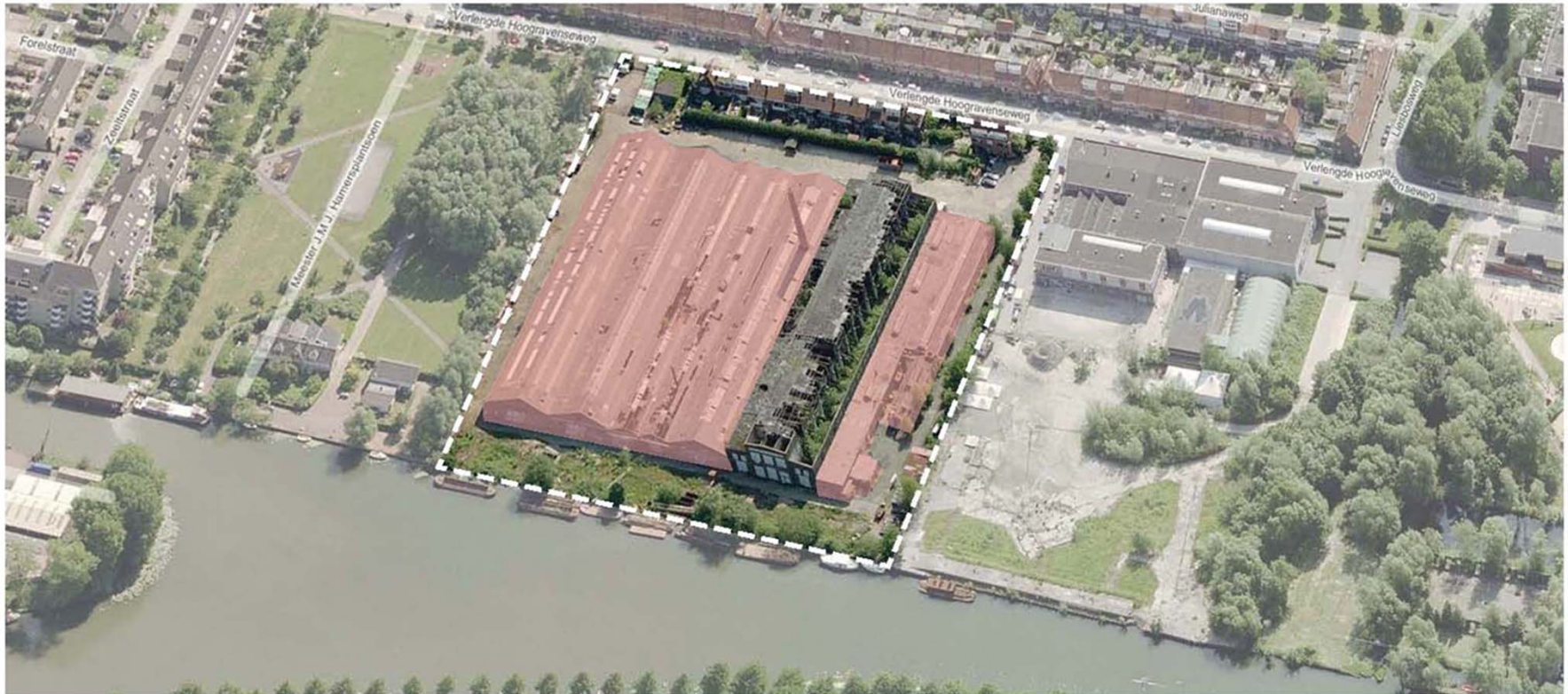


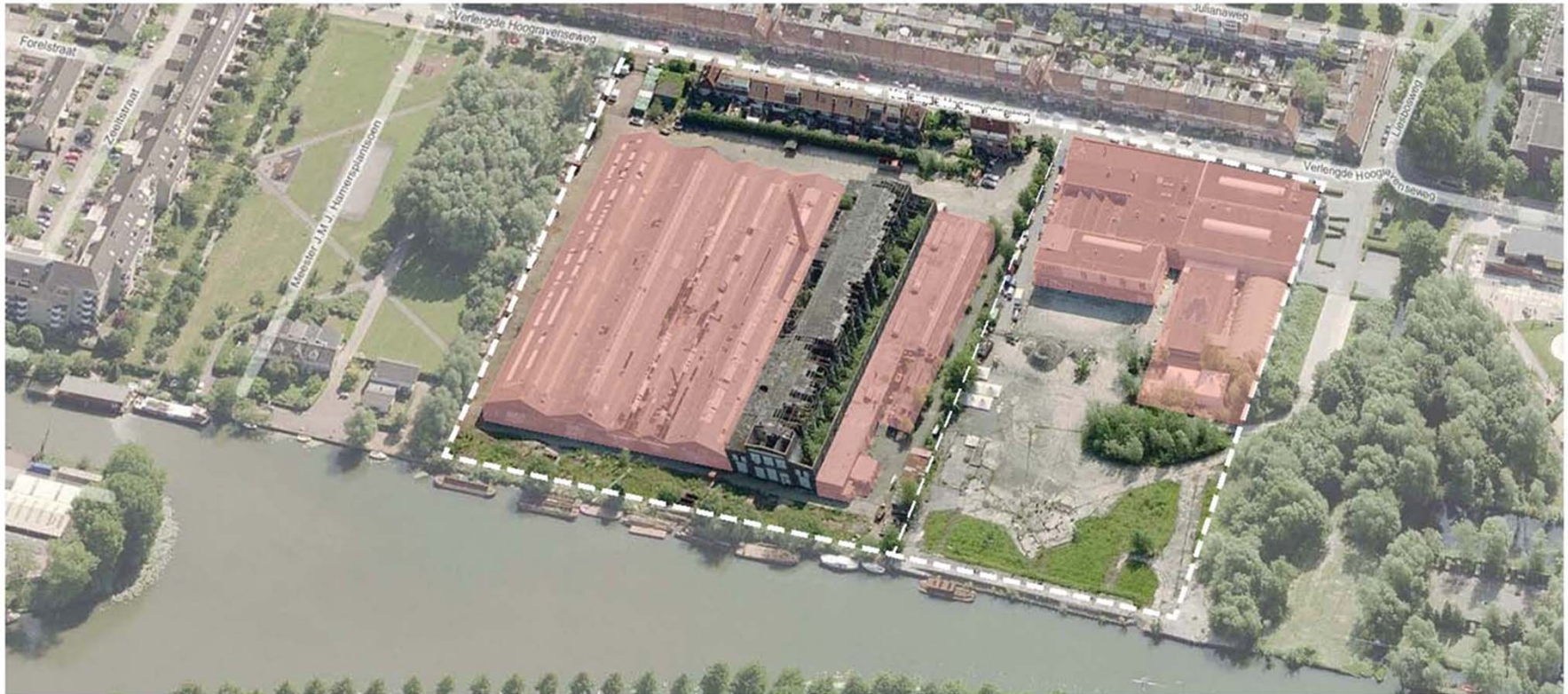


keep the industrial building cluster ?



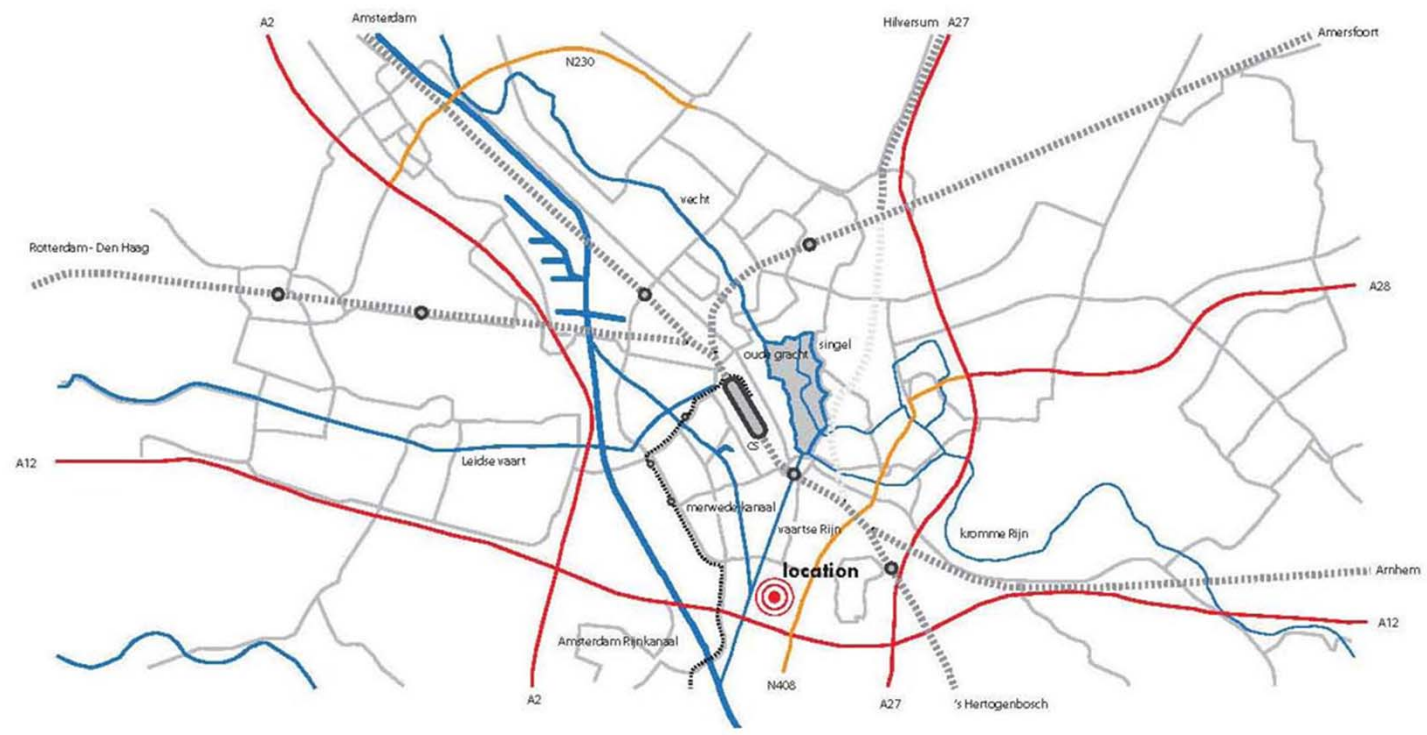
keep only the main hall ?





What program is best suited for Neerlandia?

GOOD CONNECTIONS



CLOSE TO CITY CENTER

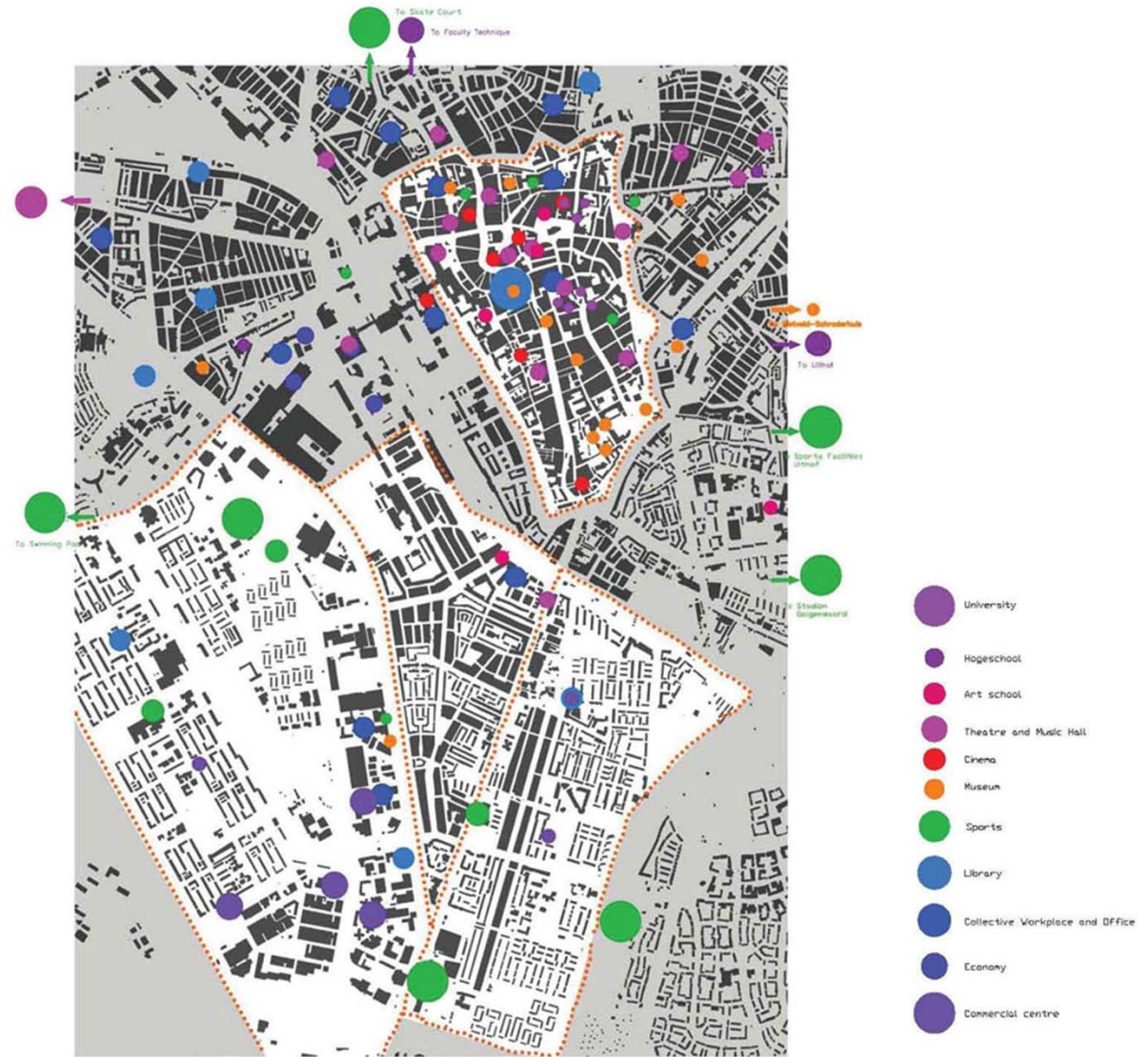


MAINLY RESIDENTIAL



- residential
- industrial
- commercial and retail
- institutional

LACK OF CULTURAL FACILITIES







INSPIRING
OUTSIDE CONENCTIONS

NEW

SOCIALLY INFLUENT

STIMULATE PUBLIC ACTIVITY

DEVELOP AN IDENTITY

CONTINUOUS DIVERSITY

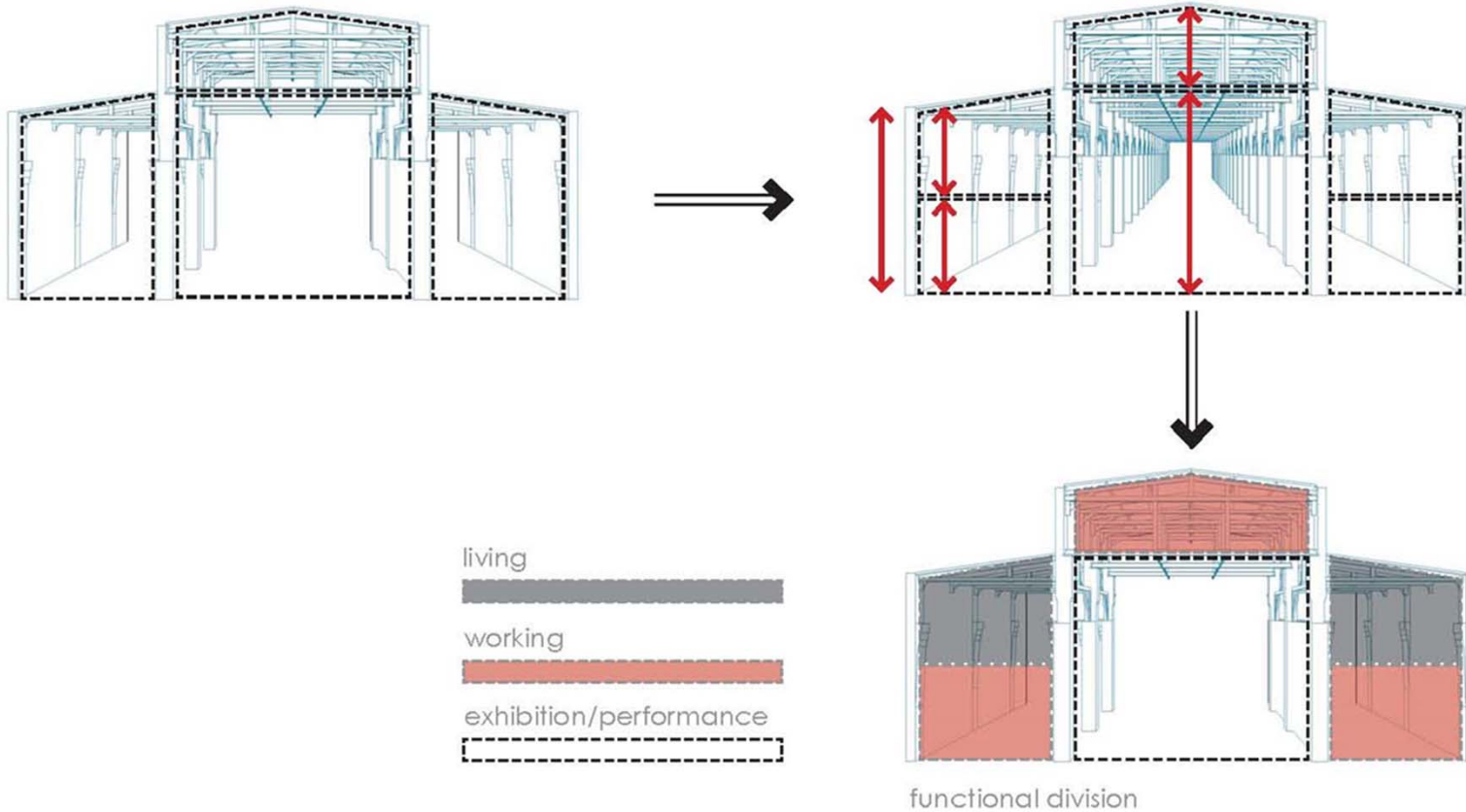
TAKE AND GIVE BACK



INSPIRING
OUTSIDE CONENCTIONS
NEW
SOCIALLY INFLUENT
STIMULATE PUBLIC ACTIVITY
DEVELOP AN IDENTITY
CONTINUOUS DIVERSITY
TAKE AND GIVE BACK

ARTISTS COMMUNITY

FITTING THE PROGRAM INTO THE BUILDING



HOW DO WE BUILD

BUILD THE AREA



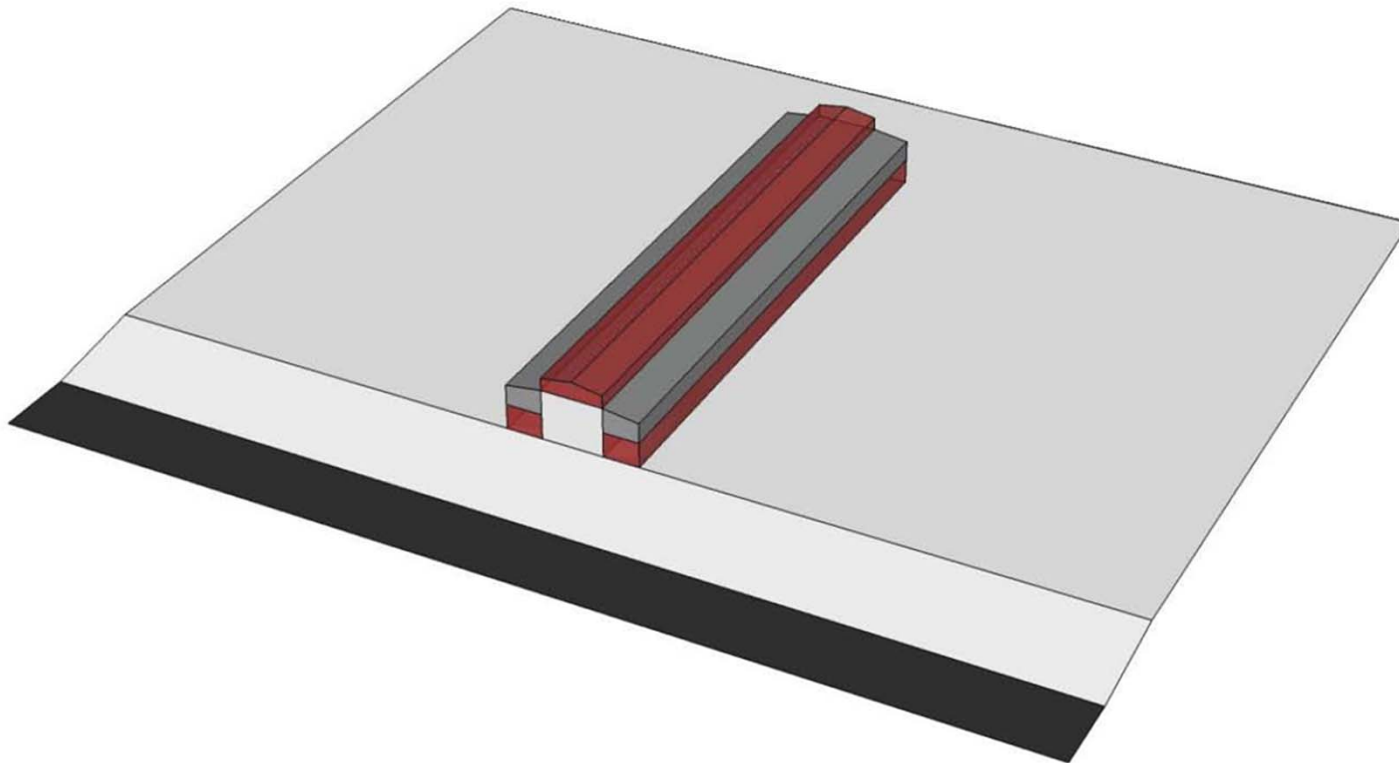
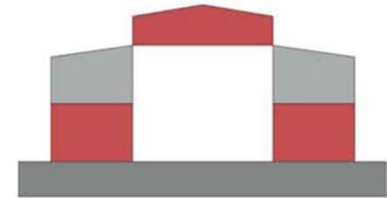
LEAVE THE AREA OPEN

MASS



OPEN

OR



HOW DO WE BUILD

BUILD THE AREA



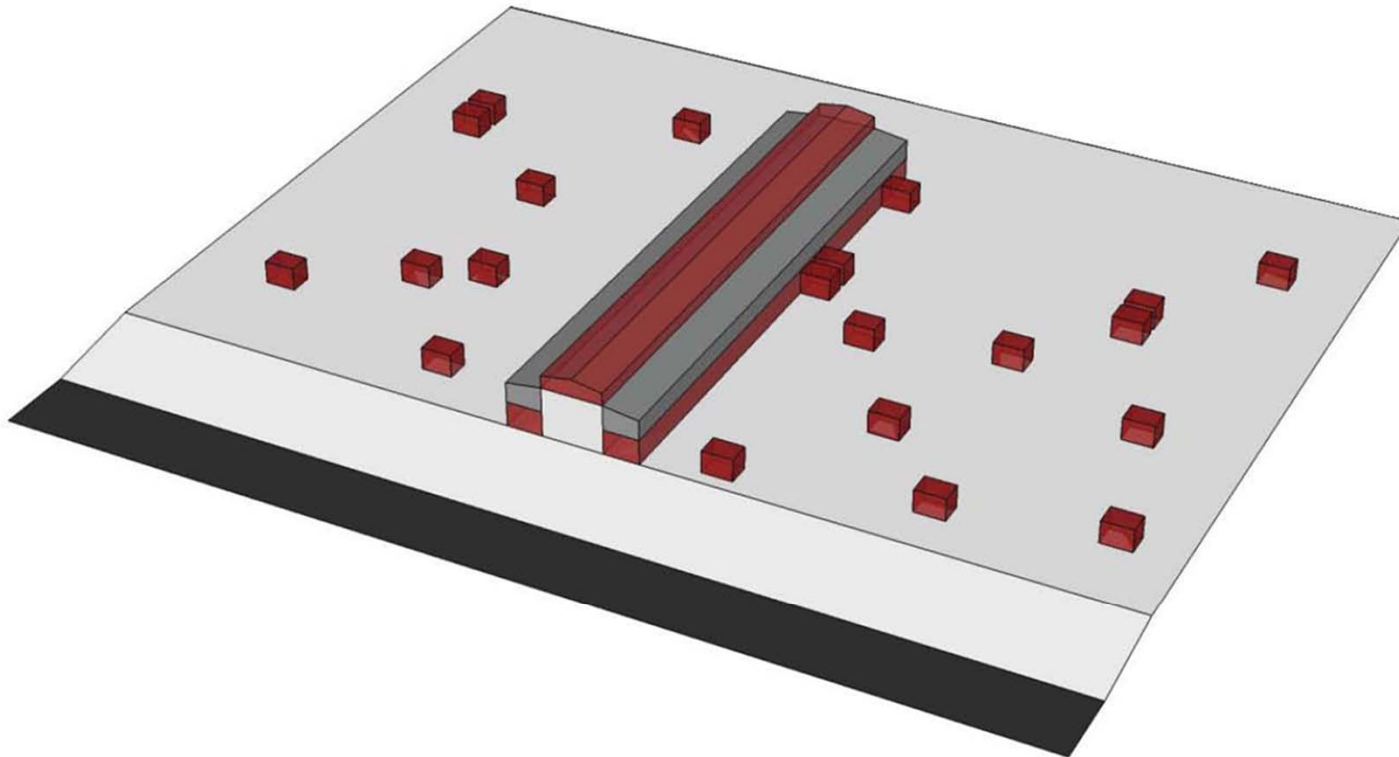
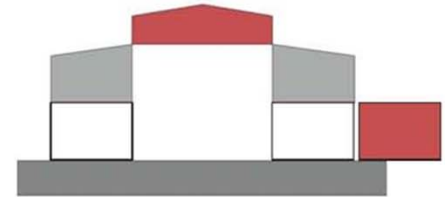
LEAVE THE AREA OPEN

MASS



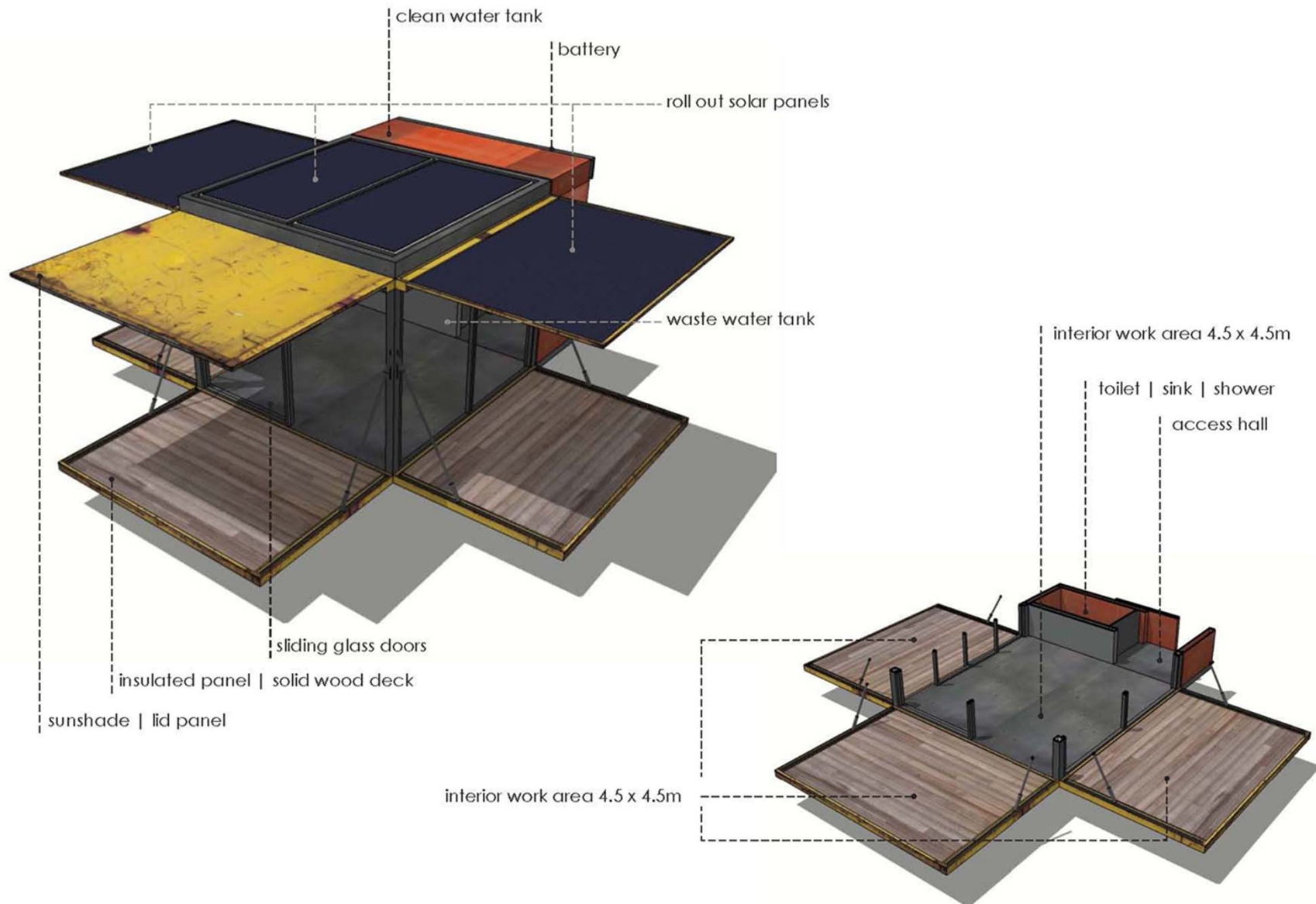
OPEN

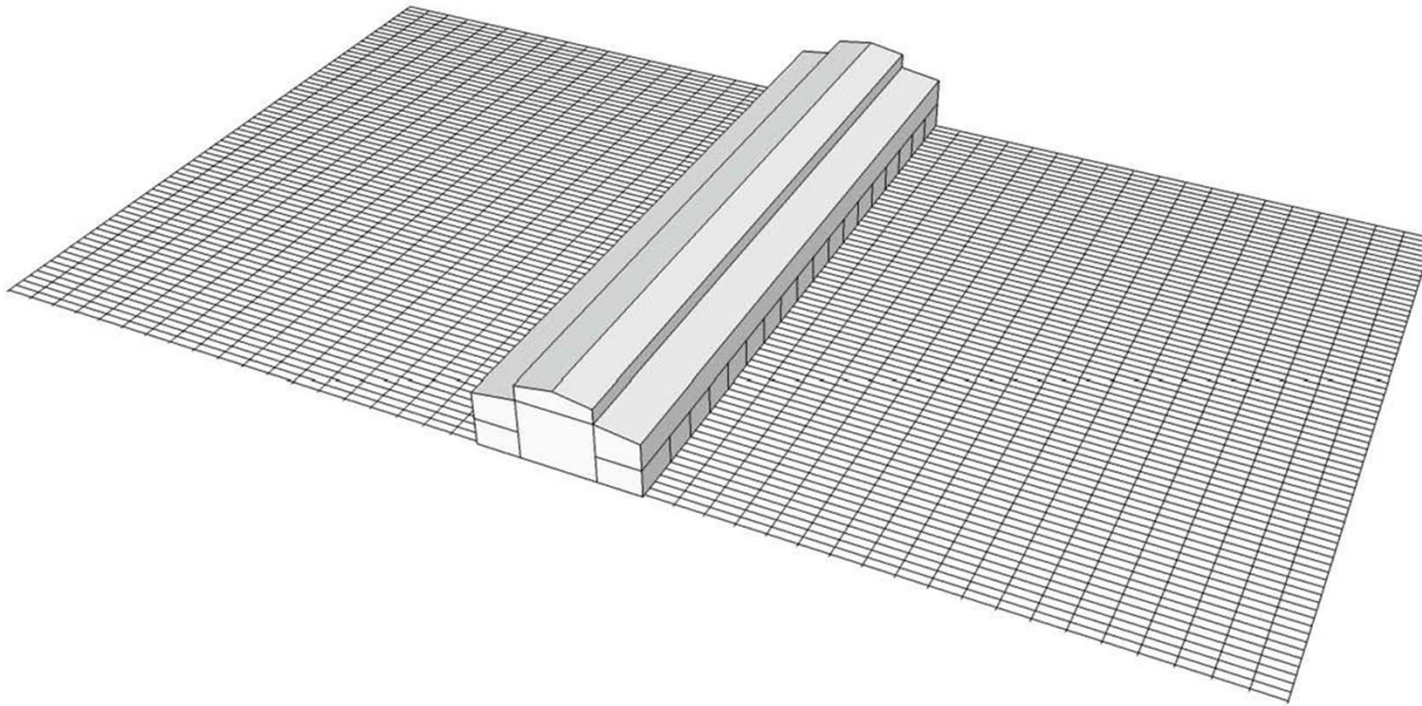
BOTH

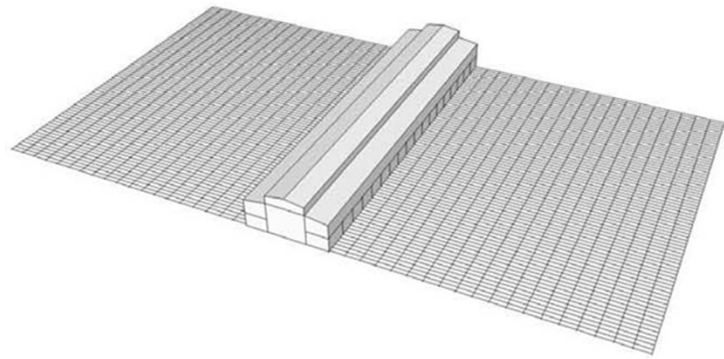




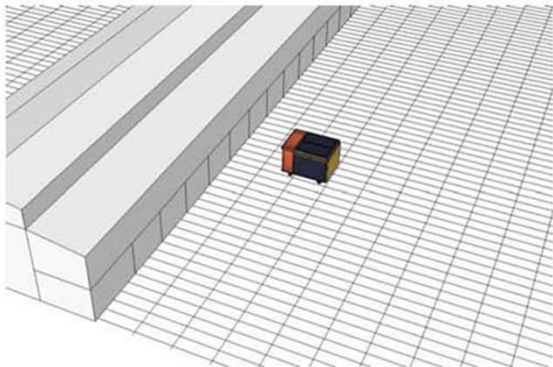




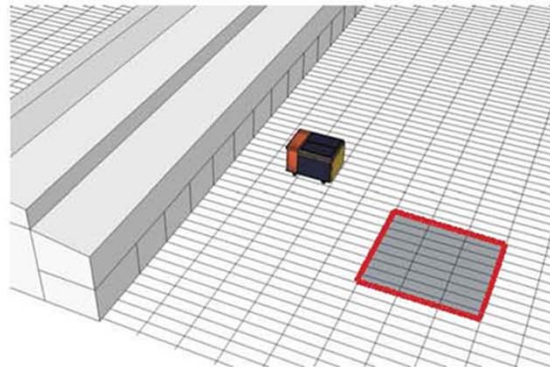




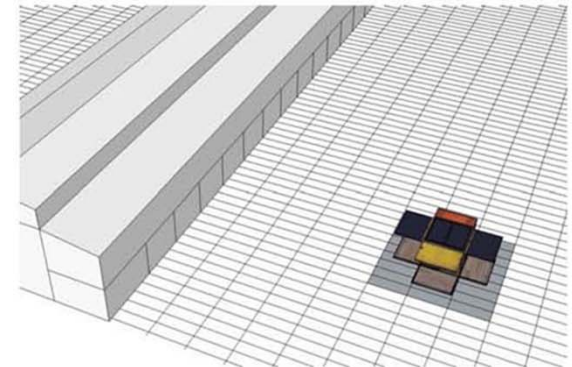
SET UP A GRID



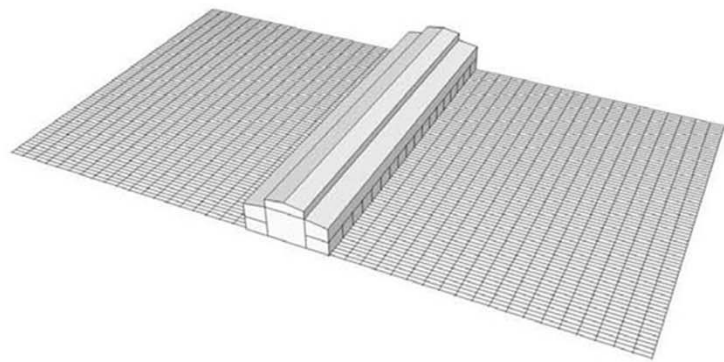
MOBILE STUDIO EXITS THE HIVE



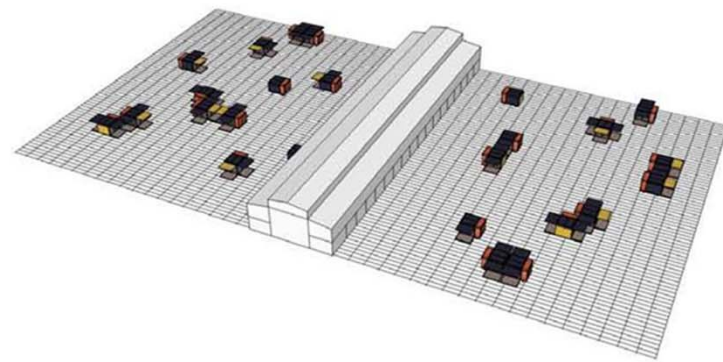
LOCATE AVAILABLE SPOT



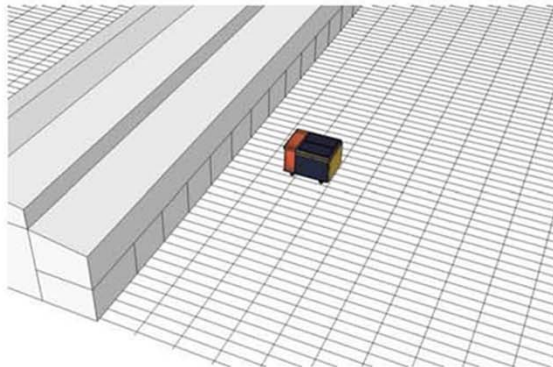
DEPLOY AND UNFOLD



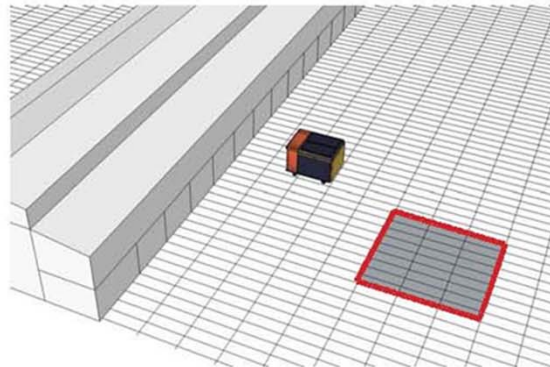
SET UP A GRID



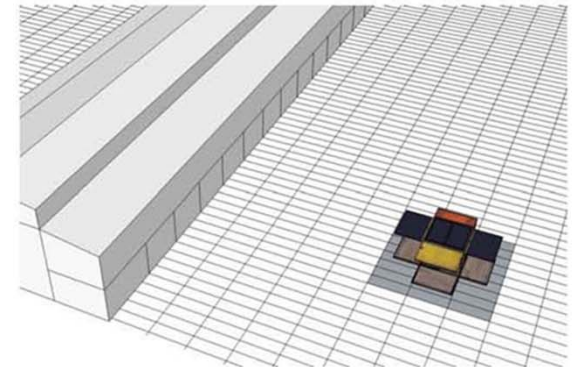
POPULATE



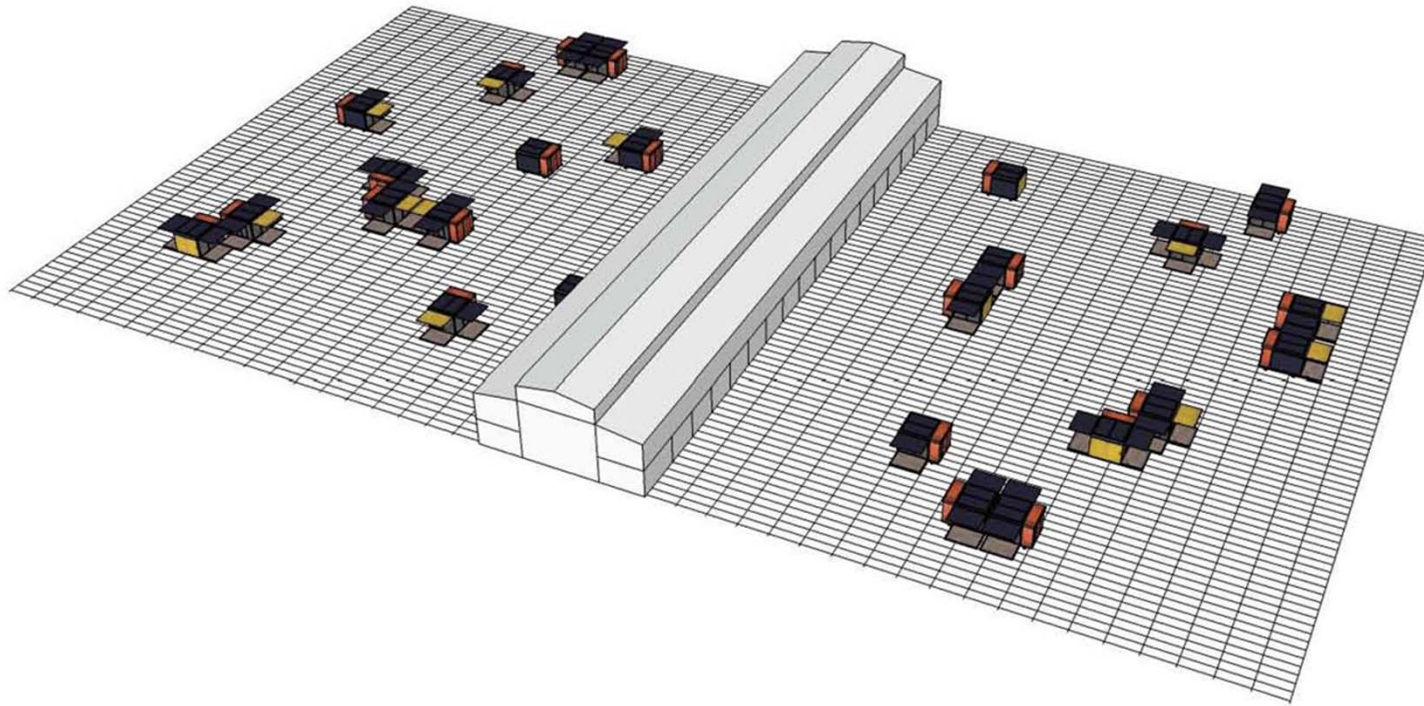
MOBILE STUDIO EXITS THE HIVE

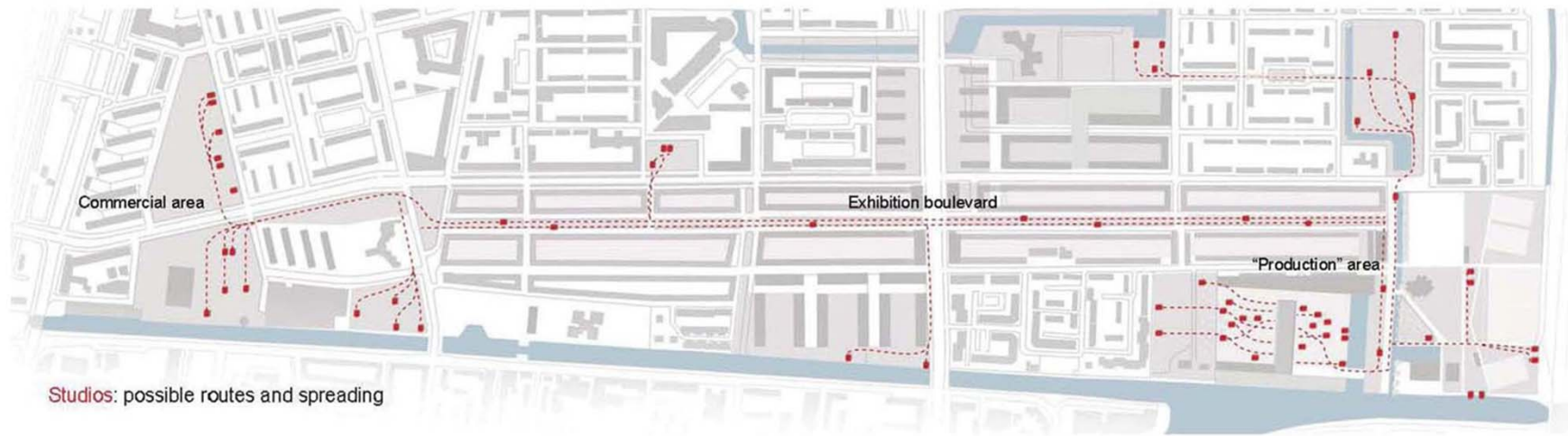


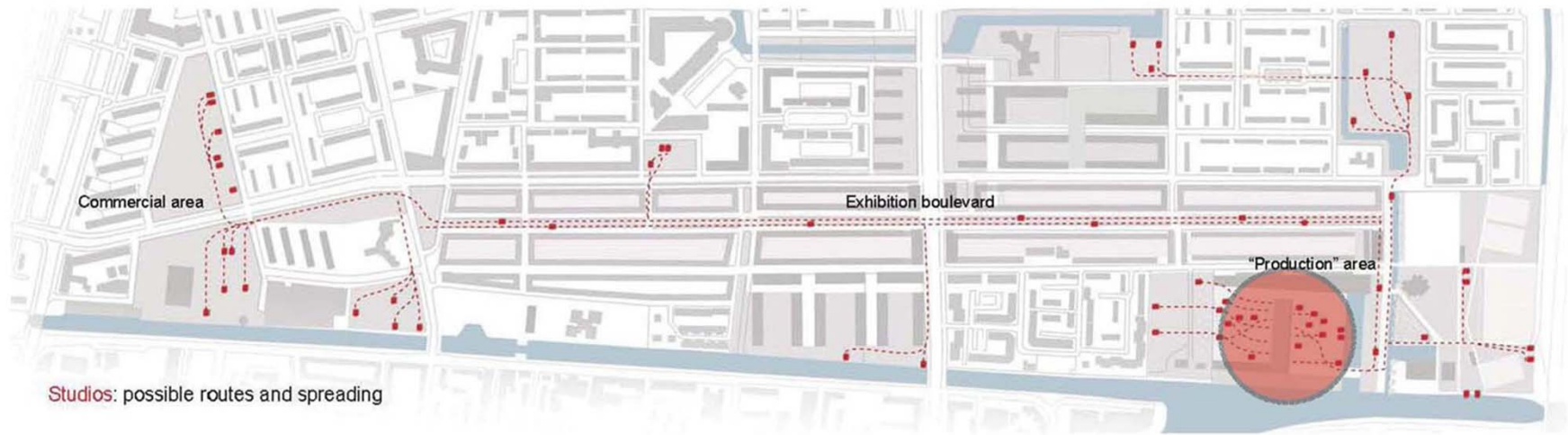
LOCATE AVAILABLE SPOT

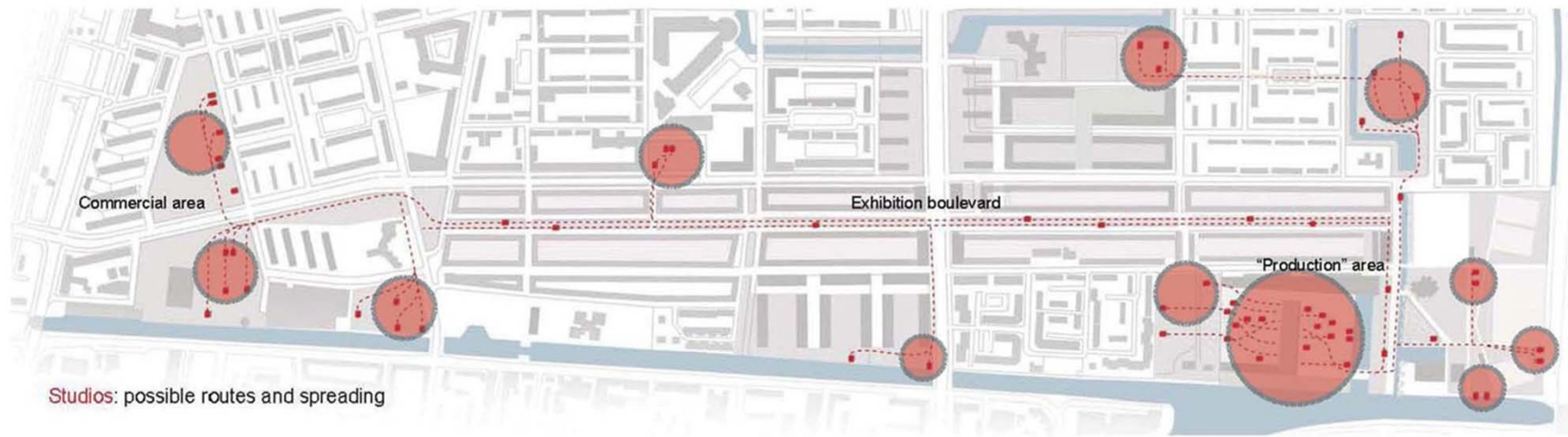


DEPLOY AND UNFOLD









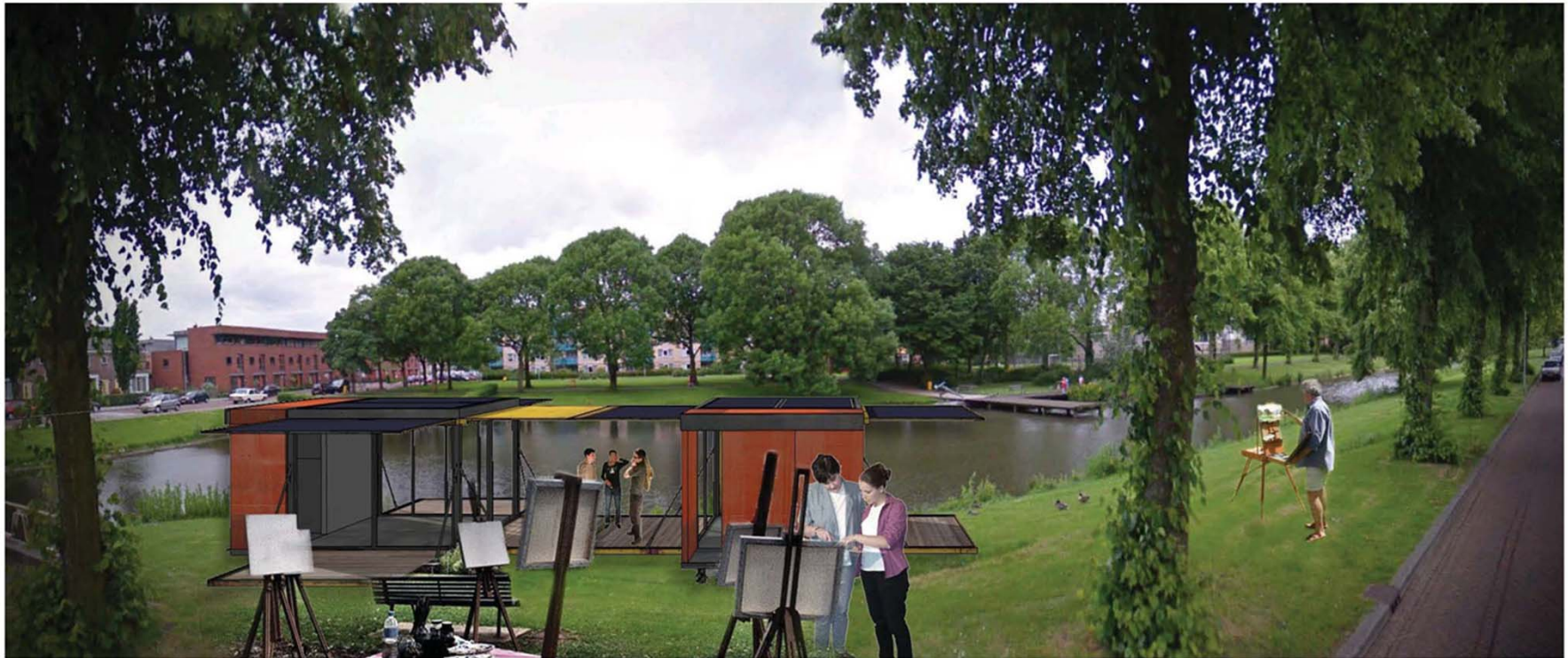
IDENTITY

ACTIVATE DIFFERENT AREAS

CONNECTION TO CENTER

SOCIAL INTERACTION

DIVERSITY

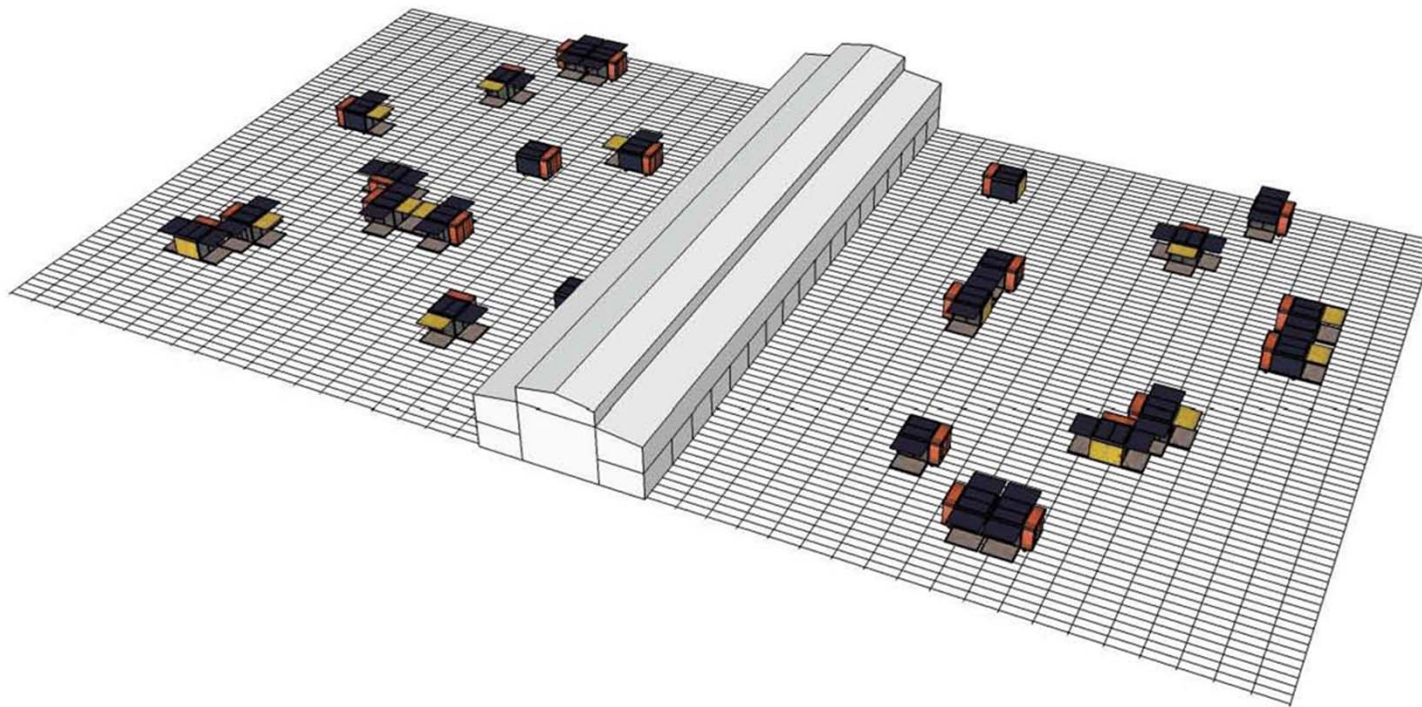


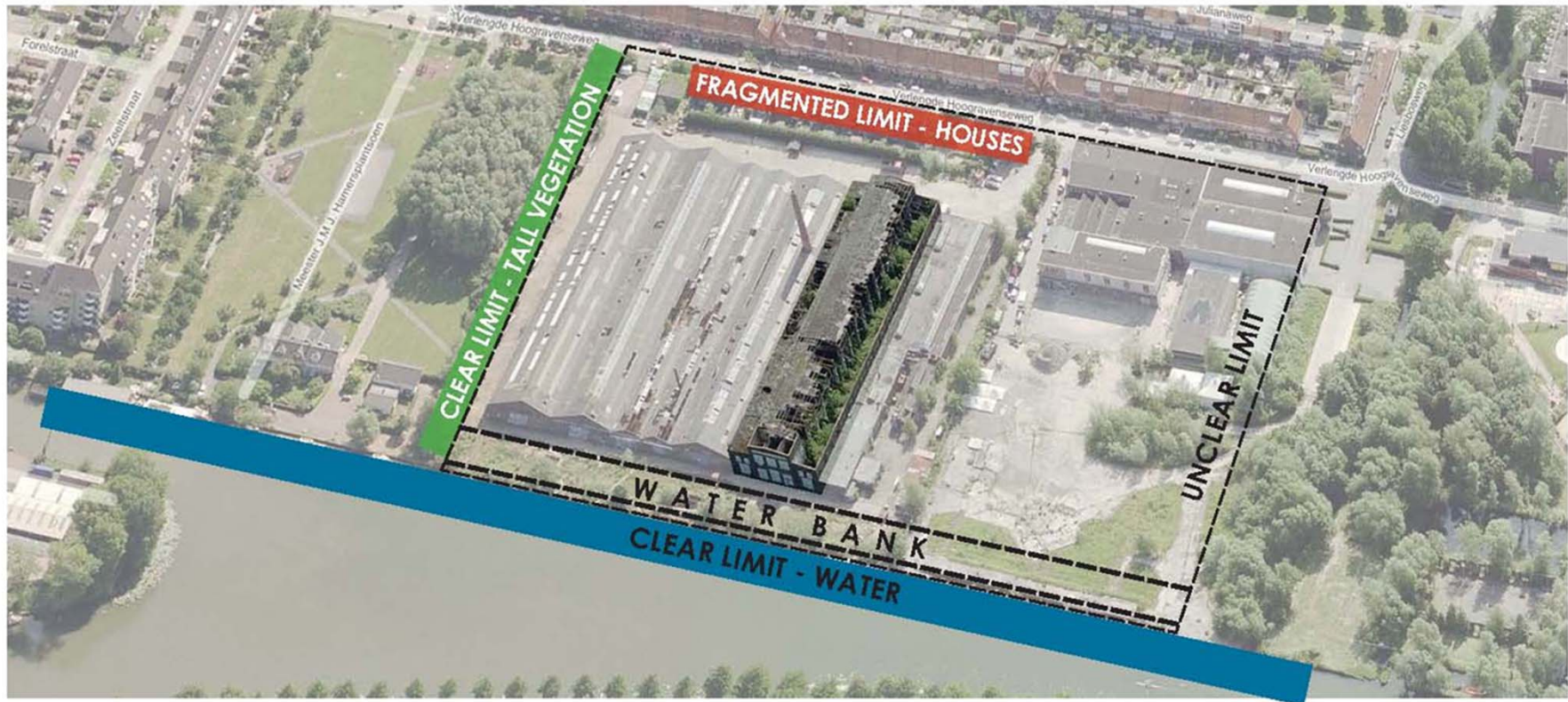




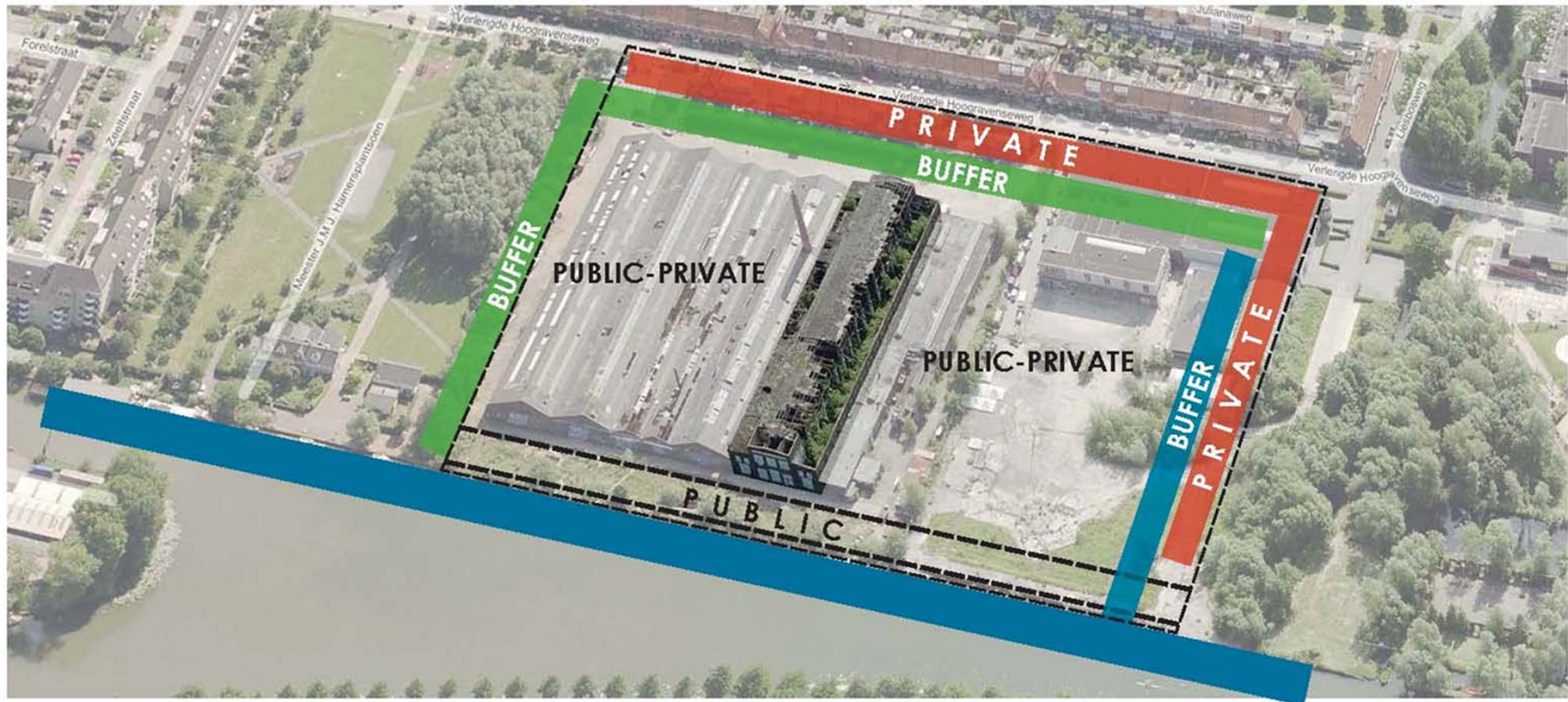
How to control the site?

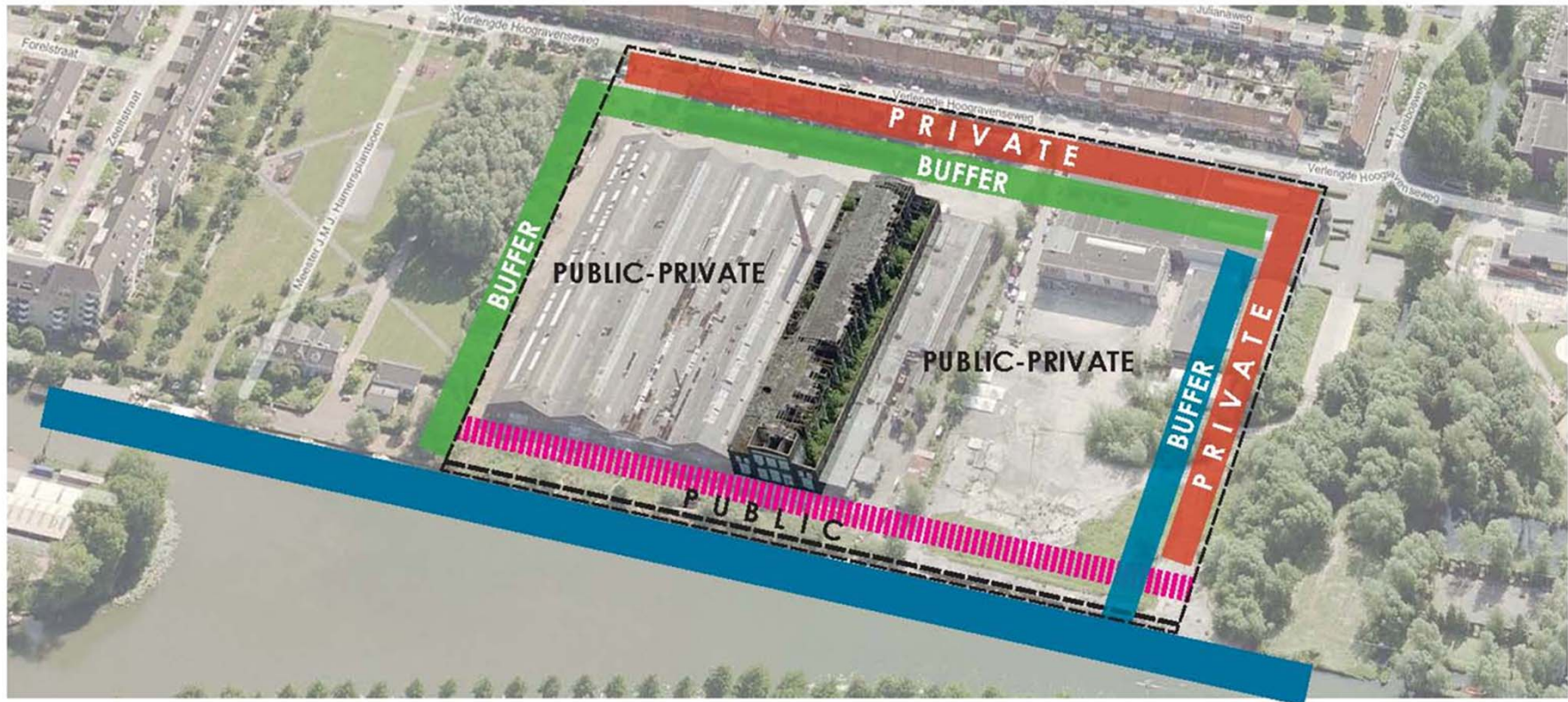
setting up the limits

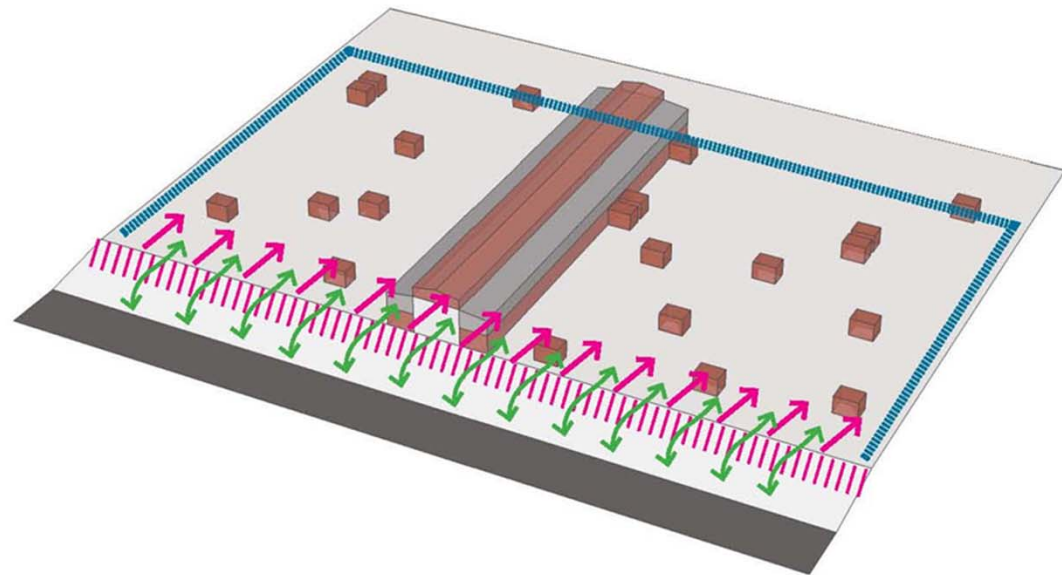






















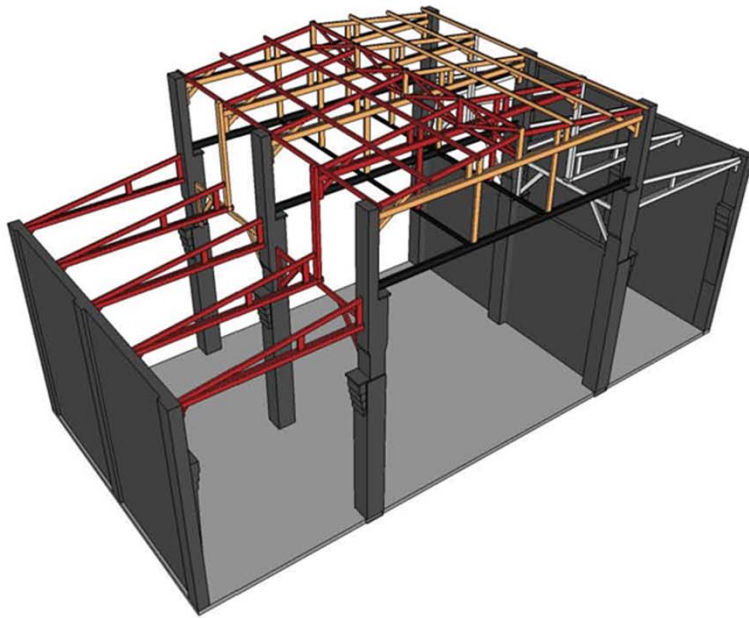












completely damaged

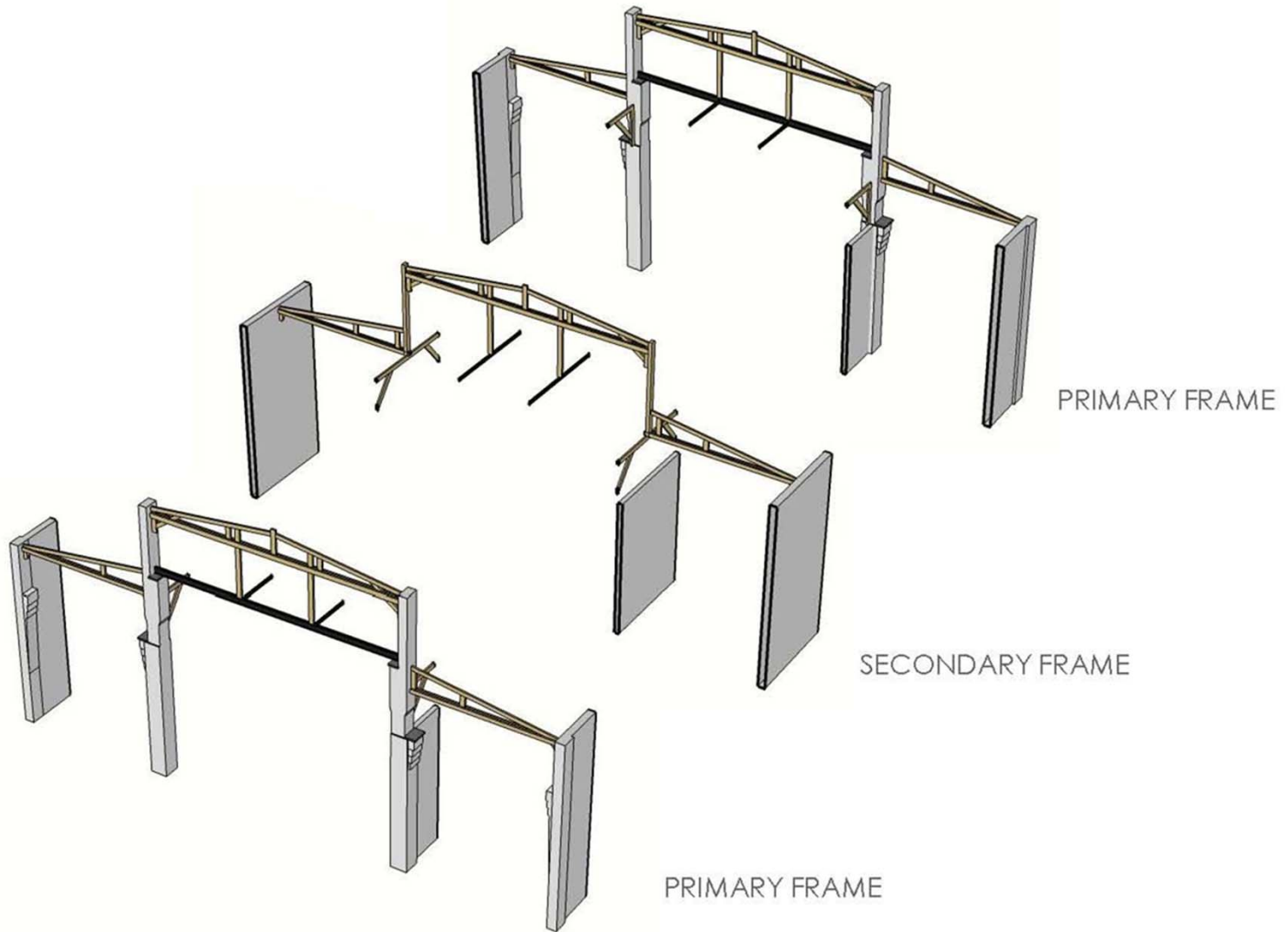


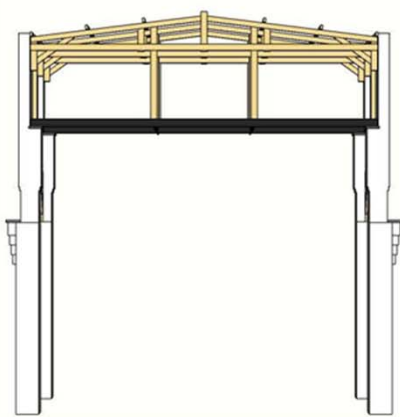
poor condition



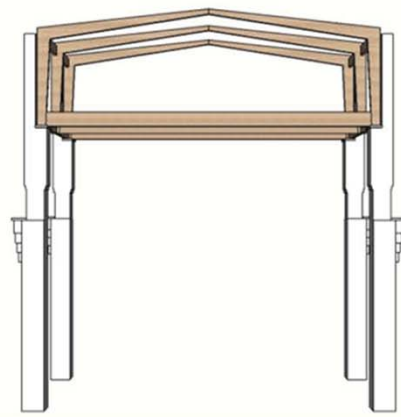
moderate condition



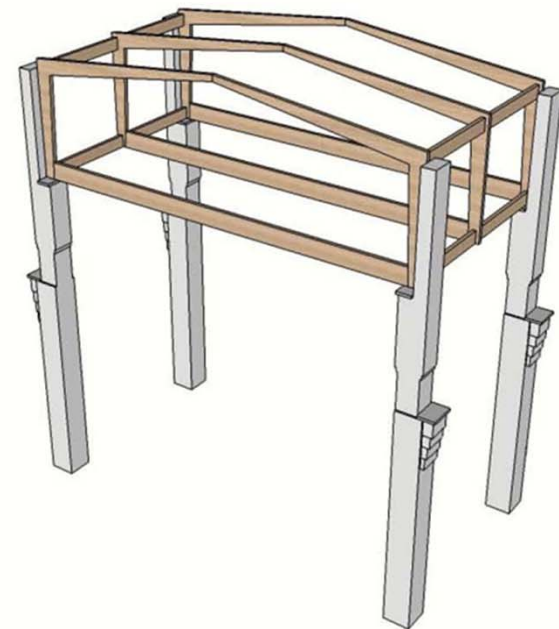


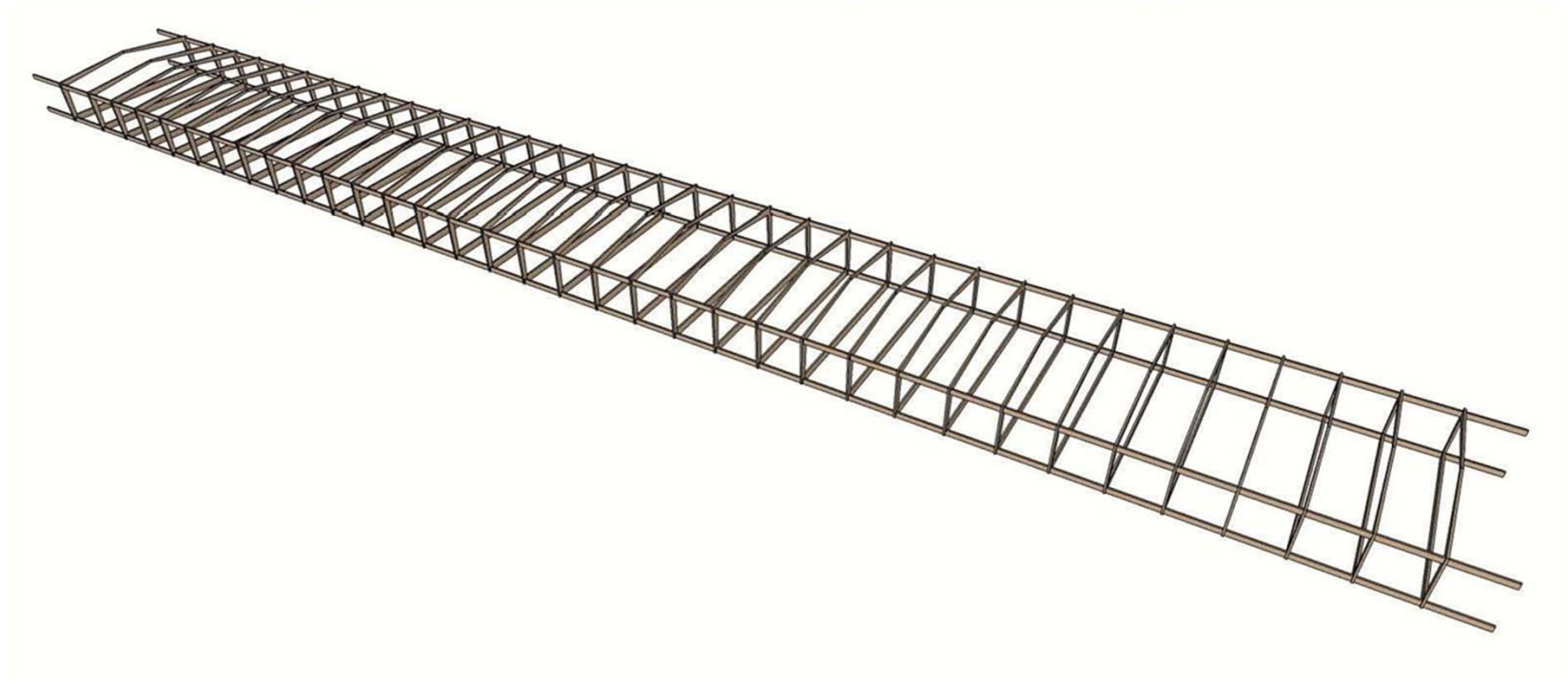


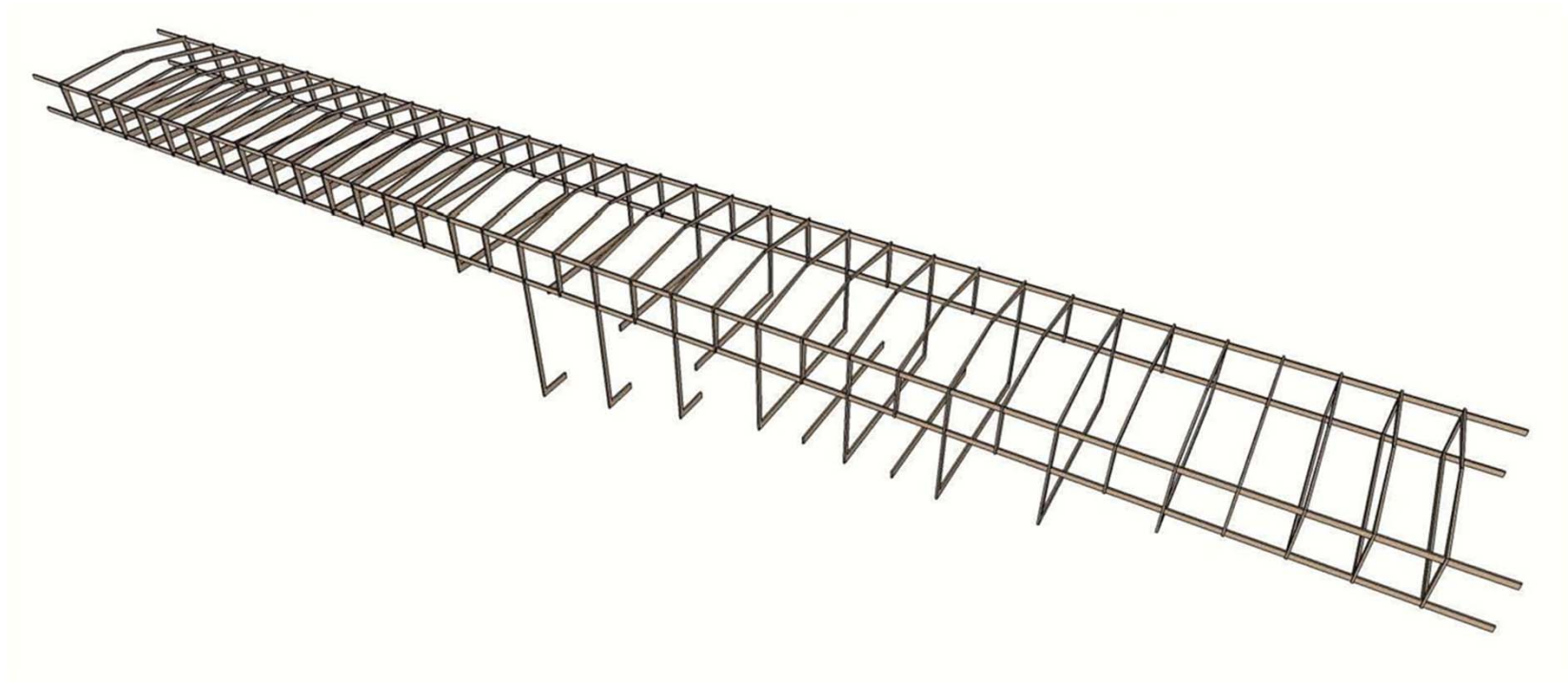
ORIGINAL FRAME

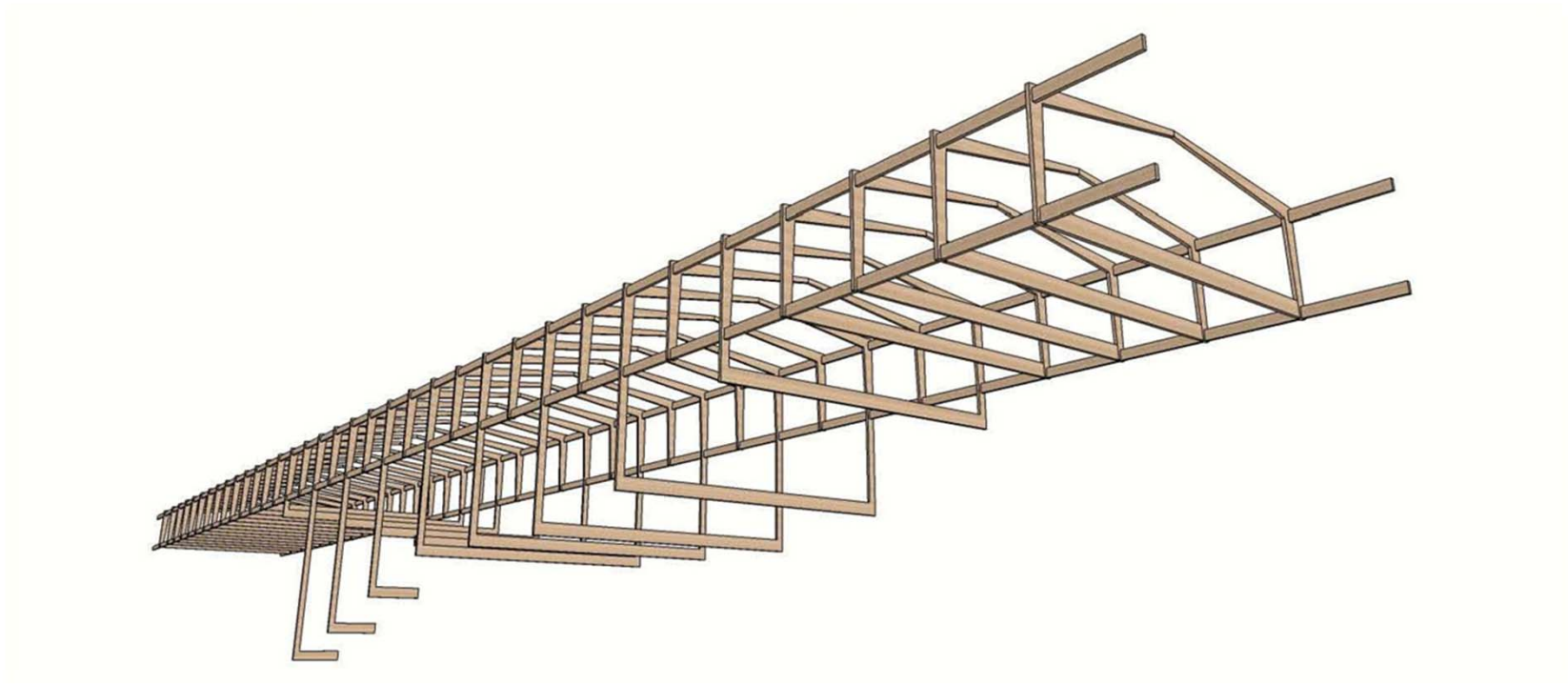


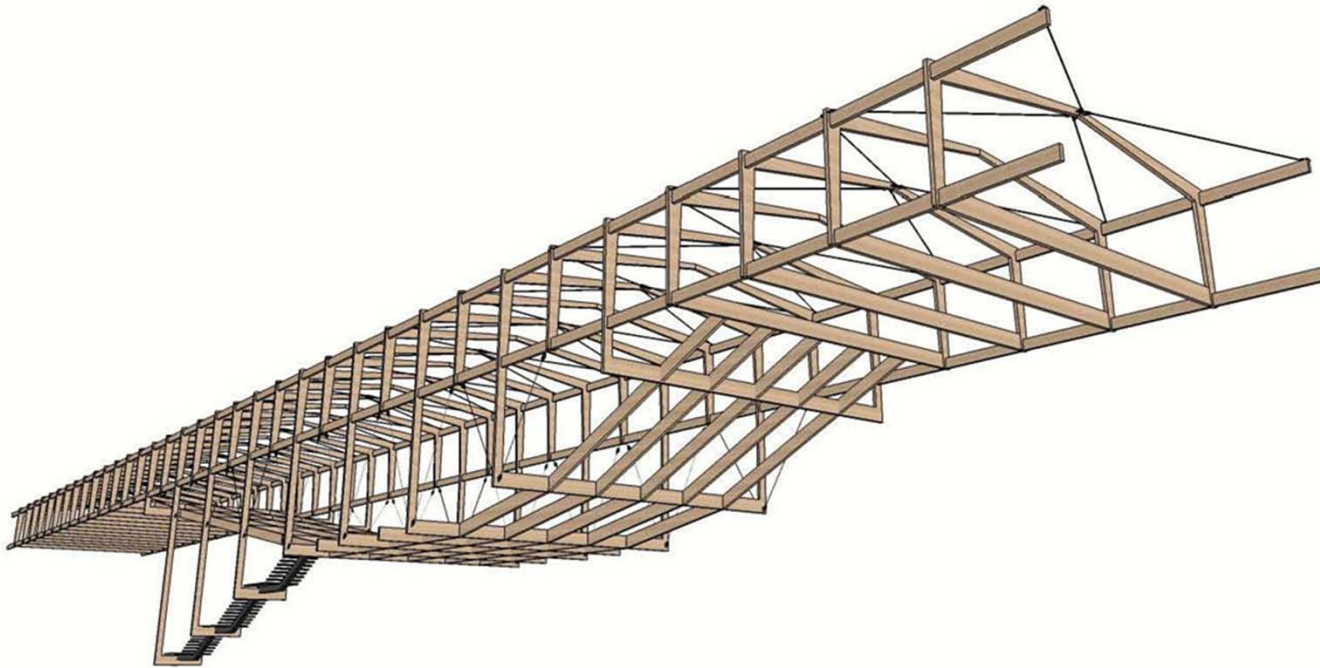
NEW FRAME

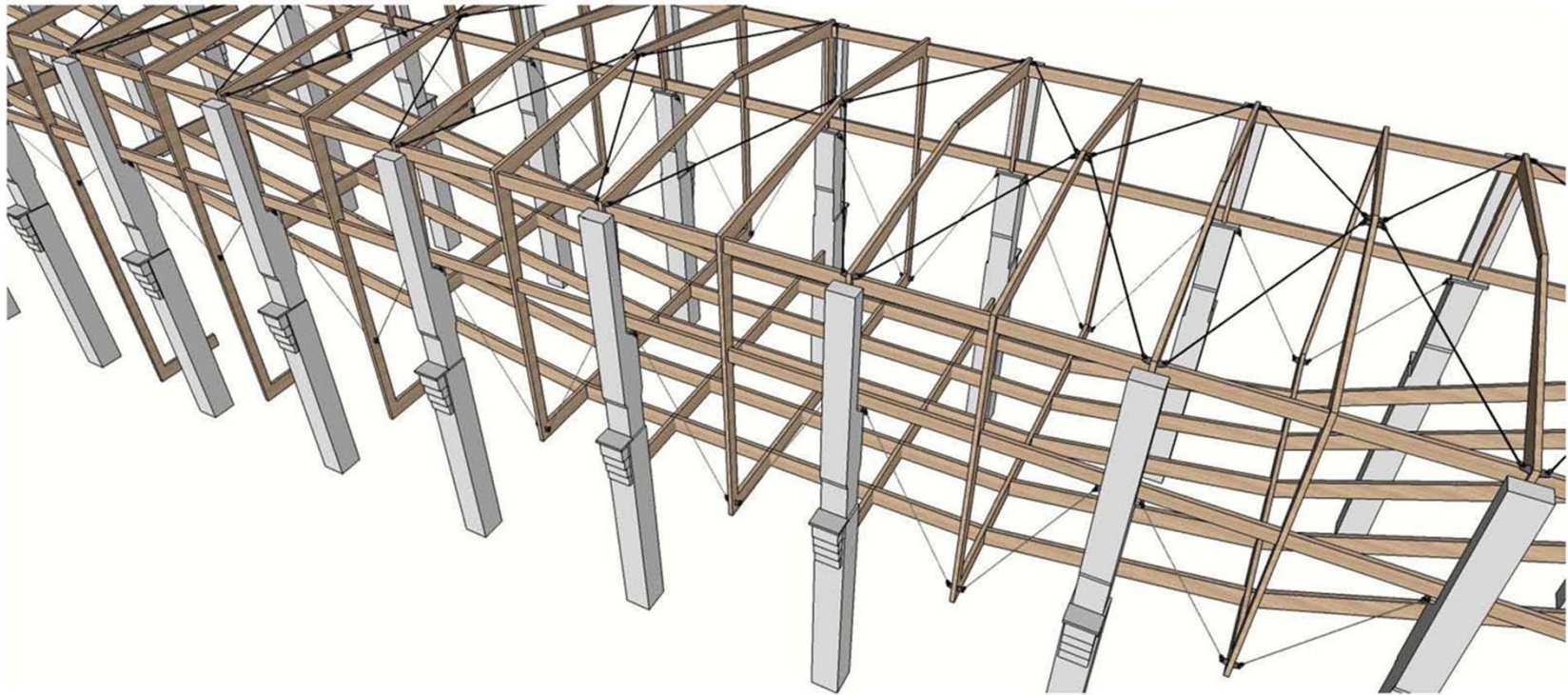


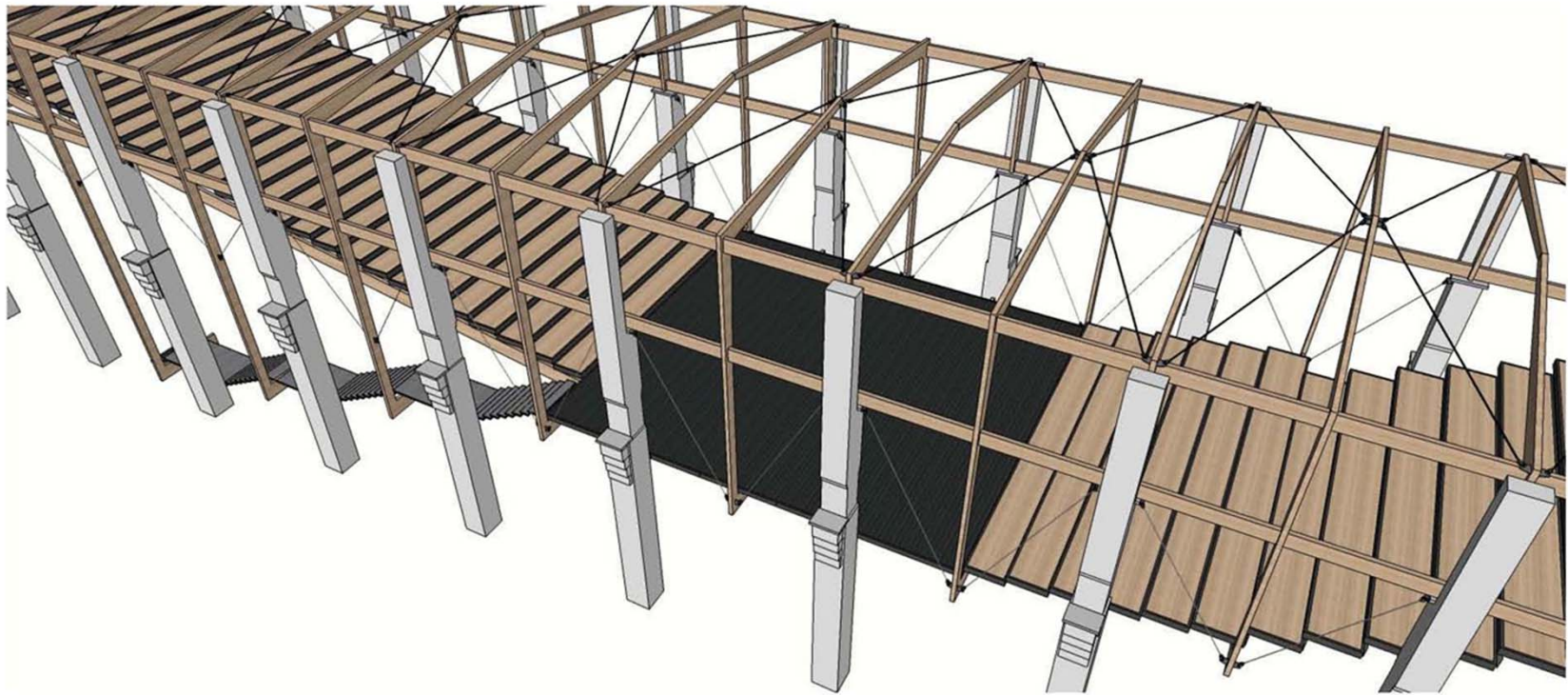


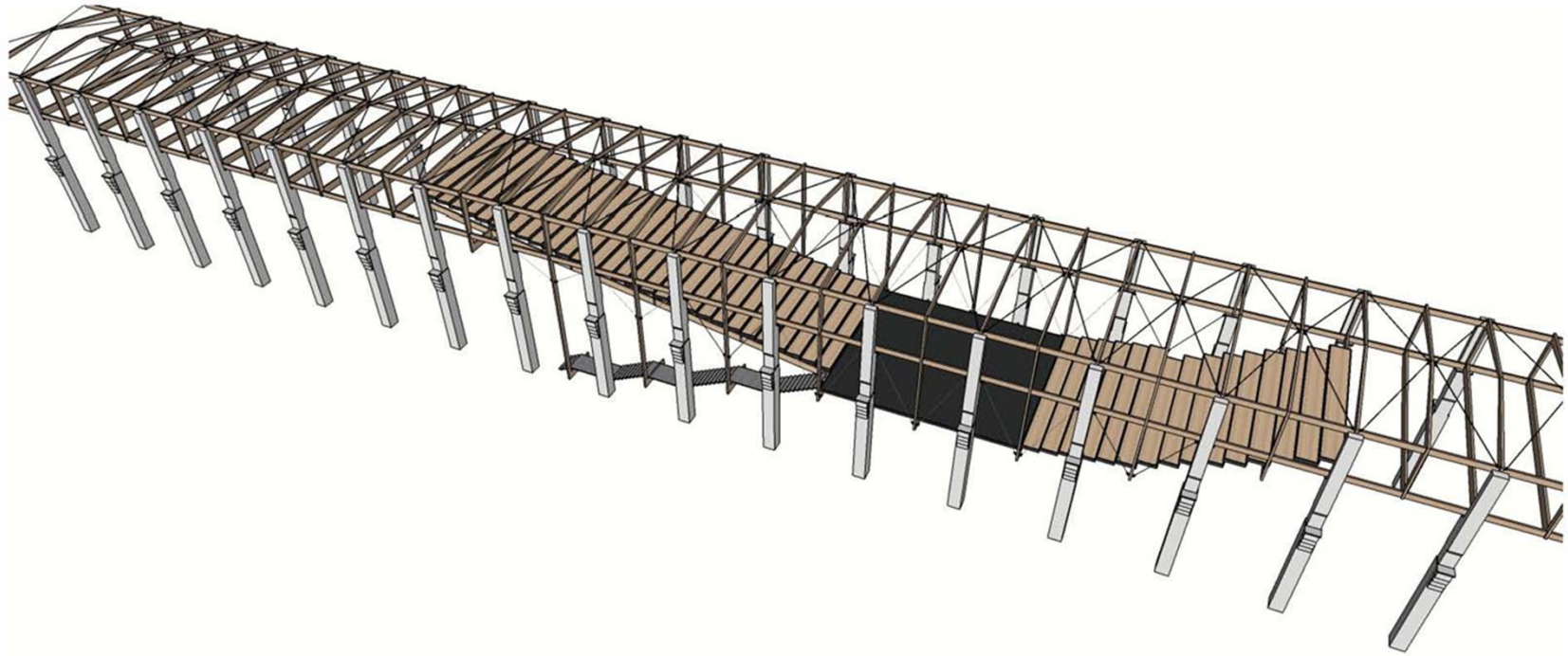






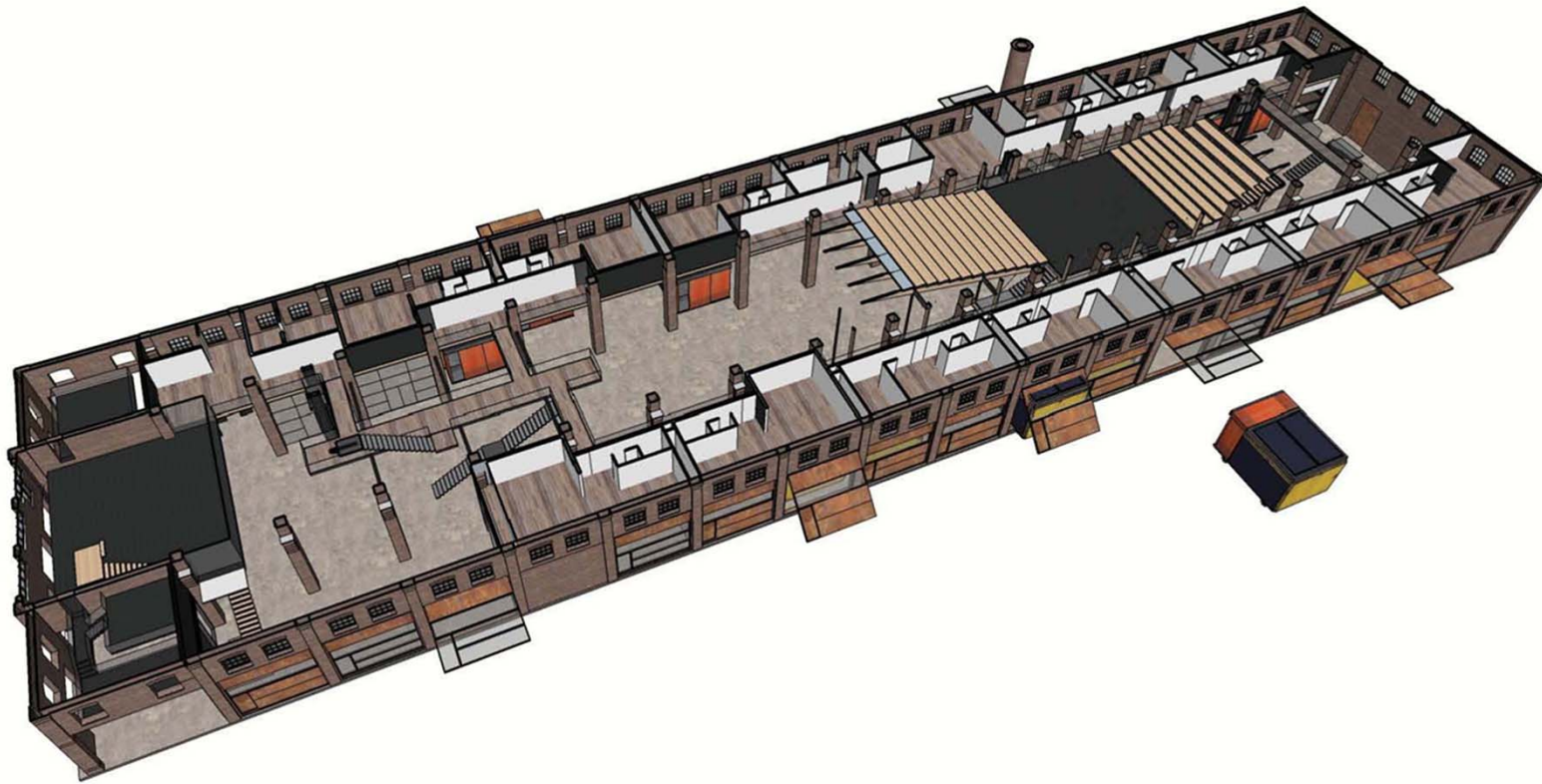




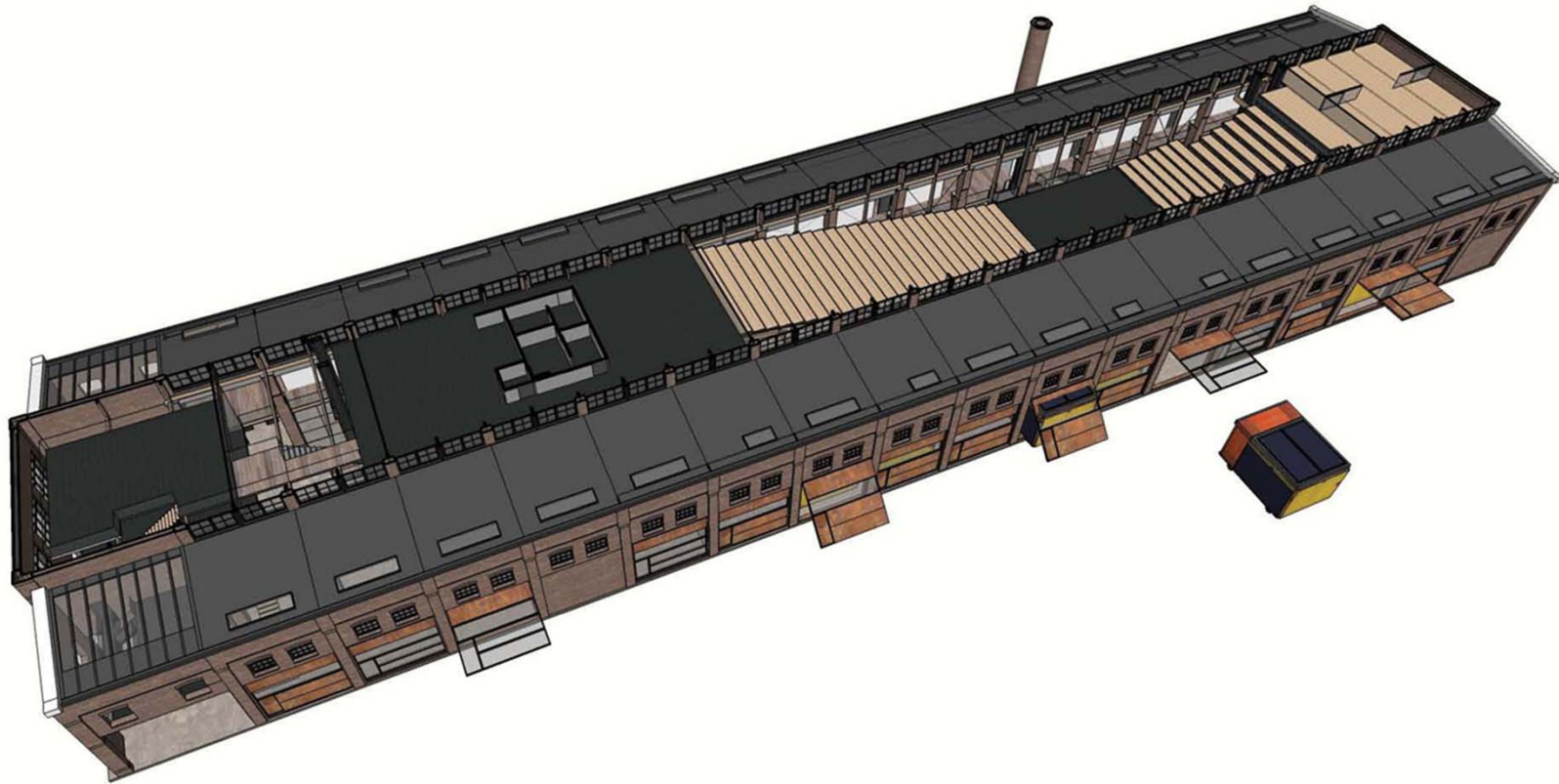




GROUND FLOOR: MOBILE STUDIOS, FLEXIBLE WORK AREAS, CAFE, SHOP, TOILETS, OFFICES



FIRST FLOOR: AMPHITHEATRE, LOUNGE, APARTMENTS, CAFE, TOILETS

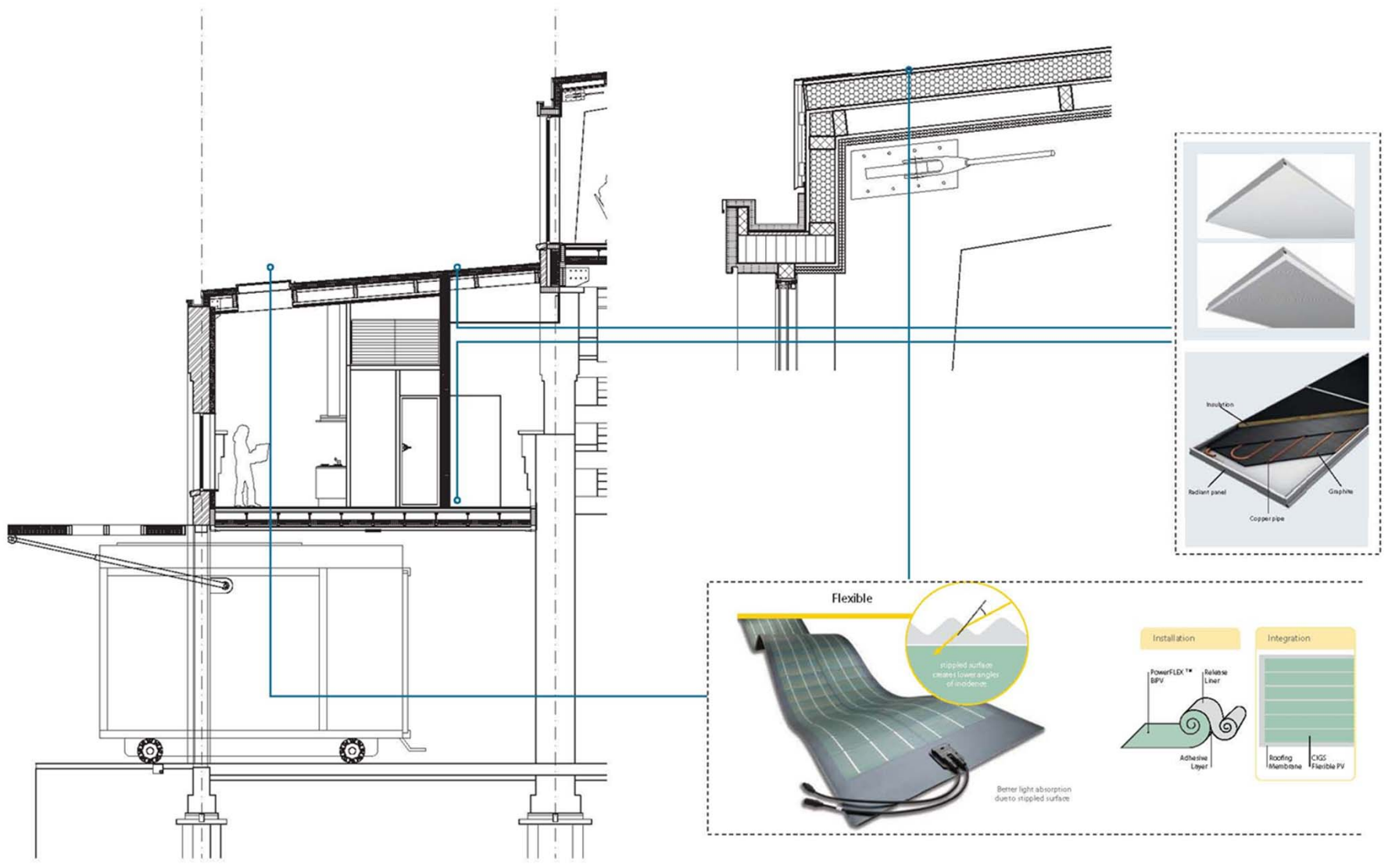


SECOND FLOOR FLOOR: WORKSHOP (MULTIFUNCTIONAL) ROOM, LIBRARY, CAFE



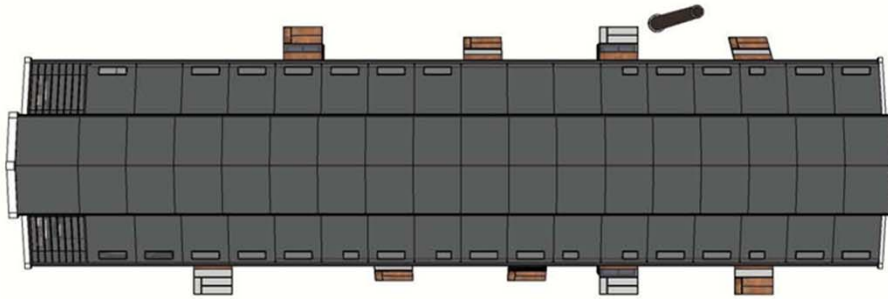
LONGITUDINAL SECTION





MECHANICAL HIVE

artists community



PRODUCTION/YEAR:
 1000 M² | APROX. 60.000 kWh
 3850 M² | APROX. 231.000 kWh

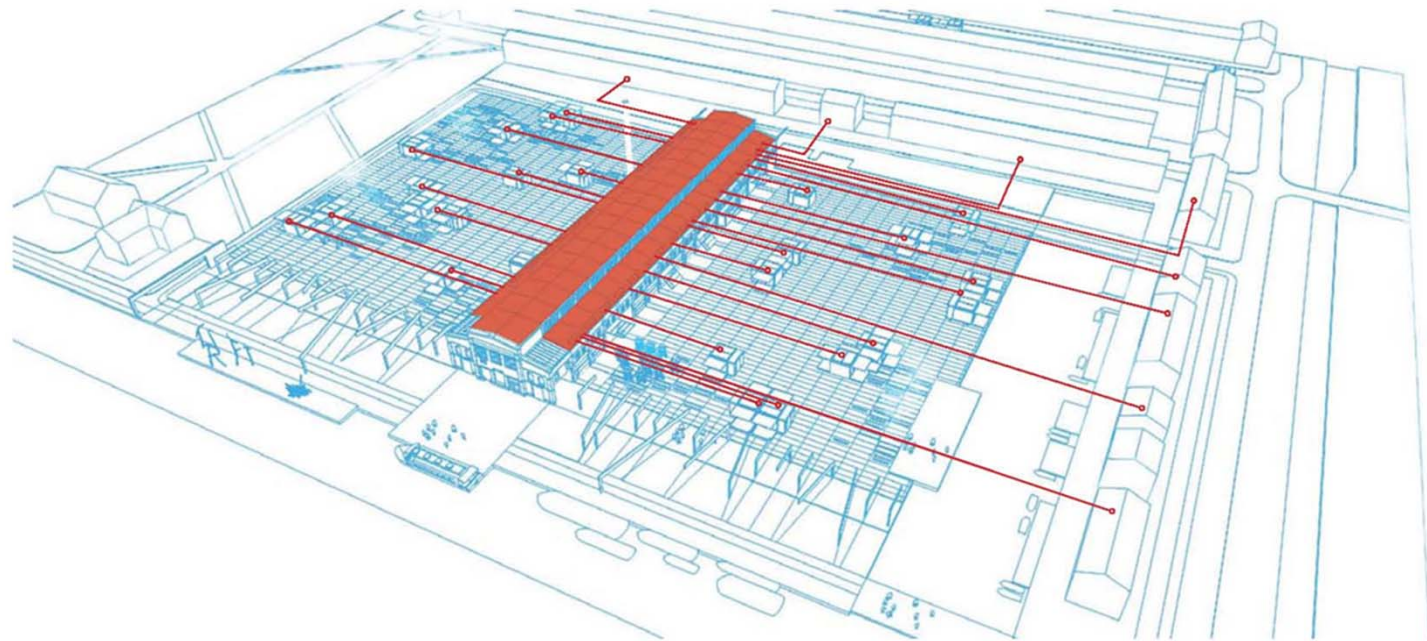
CONSUMPTION/YEAR:
 3 BEDROOM HOUSE - 4000 kWh

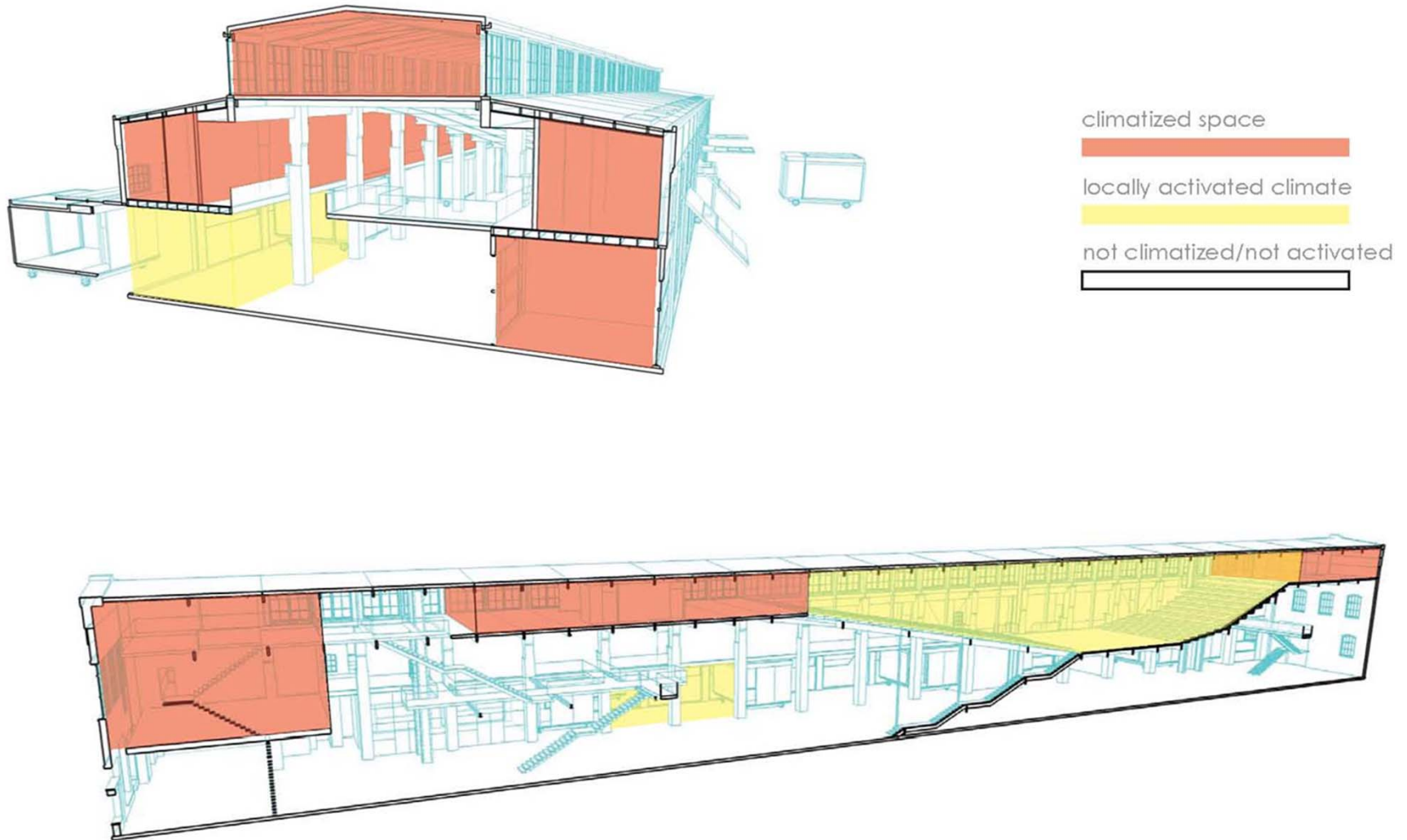
ENERGY SUPPLY FOR APROX. 60 HOUSES

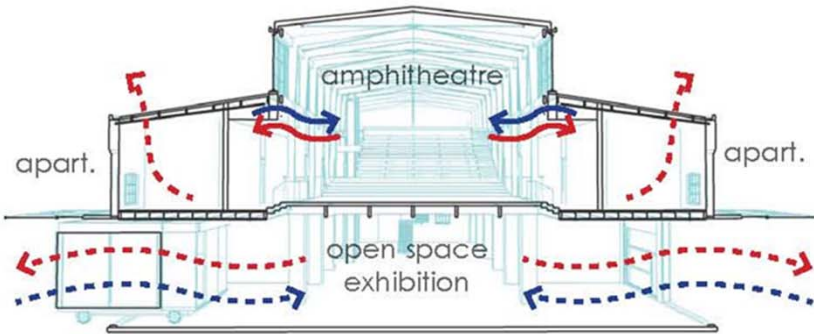
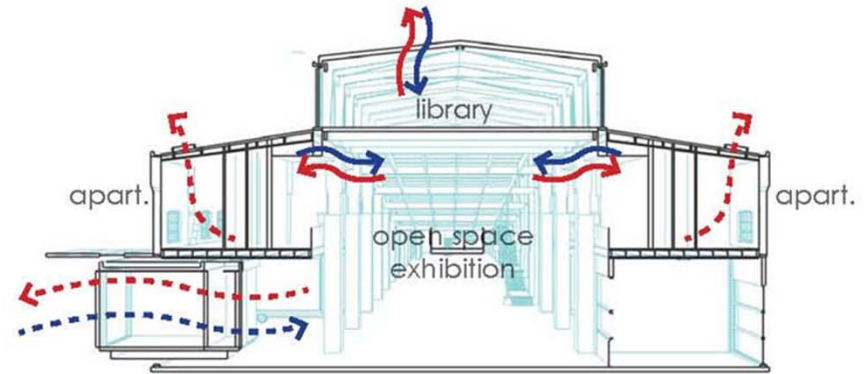
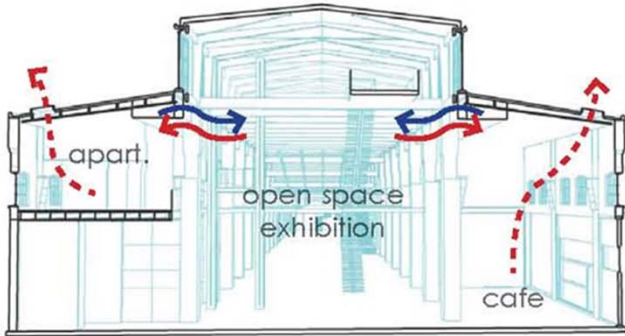
Performance Examples

1000m² Fixed Area, 10,264 sq feet, 01 SWW

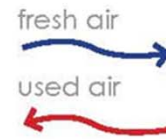
Location	Annual Production kWh	Annual Production kWh per sq. ft.	Yield kWh / kW
Munich	67,761	6.30	831
Newark, NJ	84,991	7.90	1043
Rome	91,993	8.55	1129
San Francisco	111,748	10.38	1371
Sydney	103,564	9.62	1271
Tokyo	82,925	7.70	1017
Tucson	128,307	11.92	1574
Valencia	101,324	9.41	1243







MECANIZED VENTILATION



NATURAL VENTILATION

