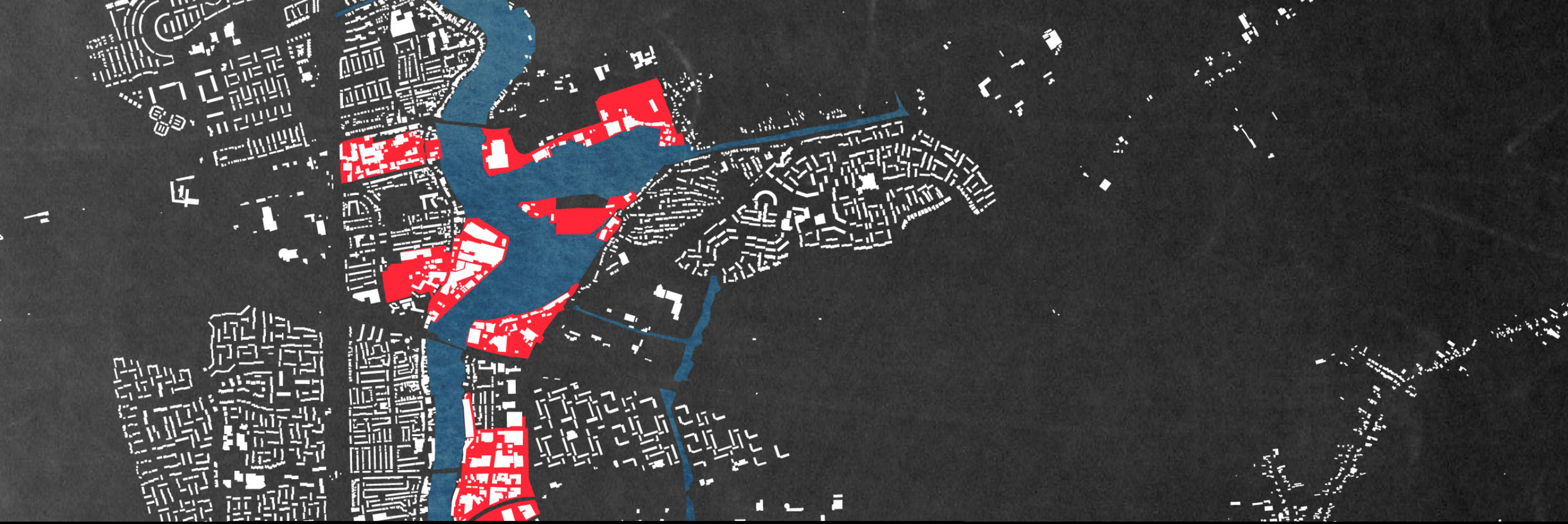
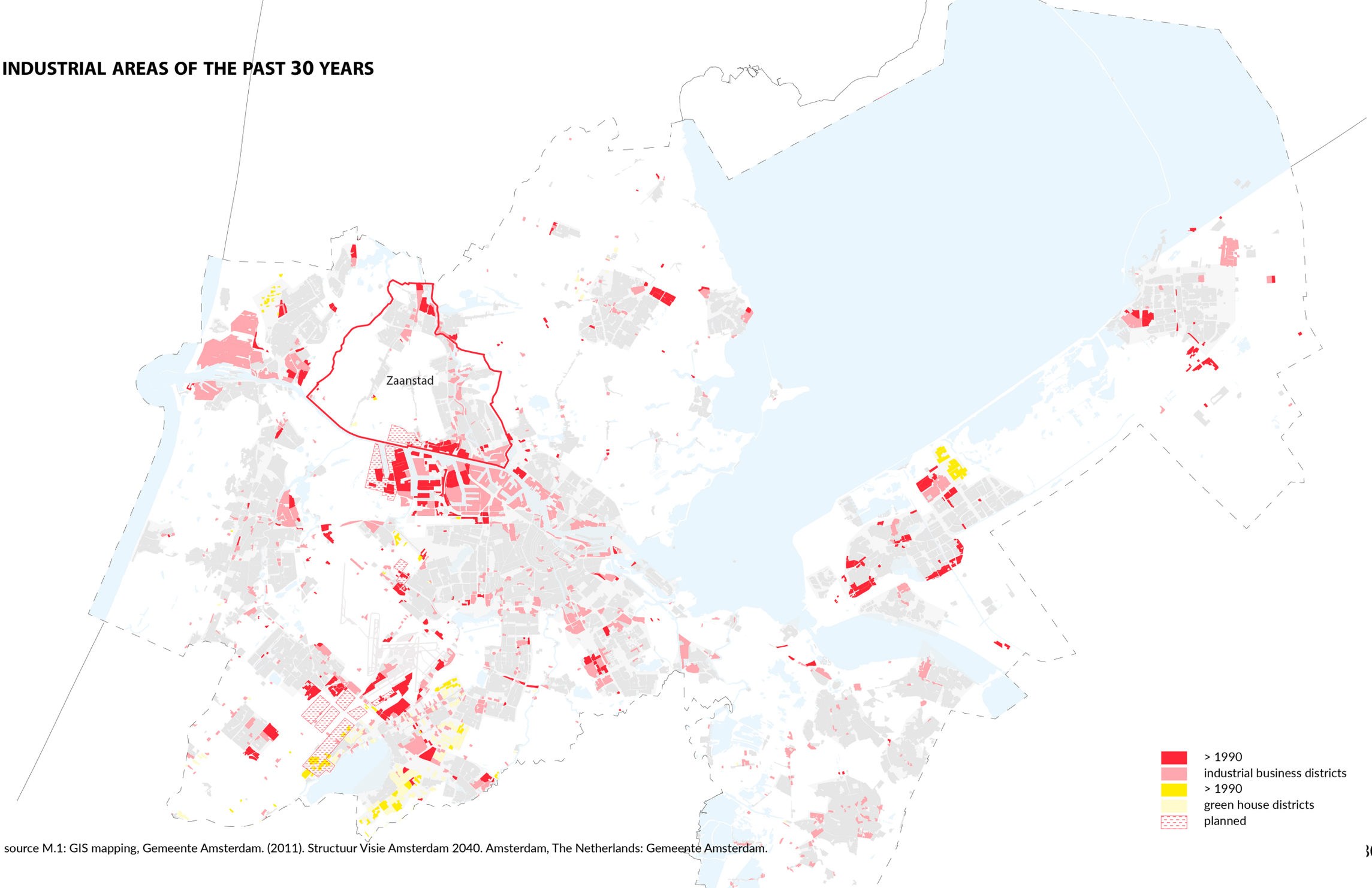


MAKE COMPACT WORK

Patterns of densification and intensification of functions in live work environments in Zaanstad, Metropolitan region of Amsterdam.

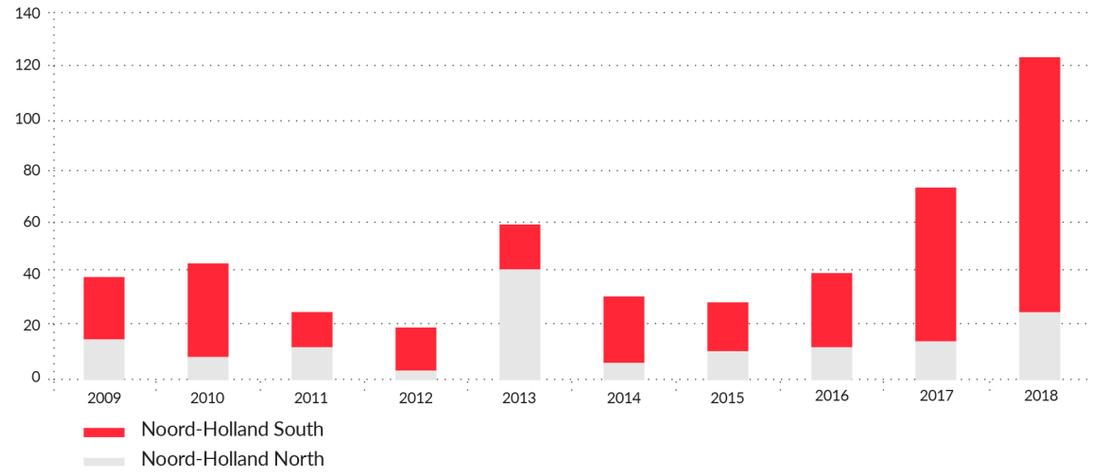
source: Port of Amsterdam. (2013). Het Noordzeekanaalgebied in 2040 [image]. Retrieved from: https://www.portofamsterdam.com/nl/nieuwsbericht/het-noordzeekanaalgebied-2040

INDUSTRIAL AREAS OF THE PAST 30 YEARS

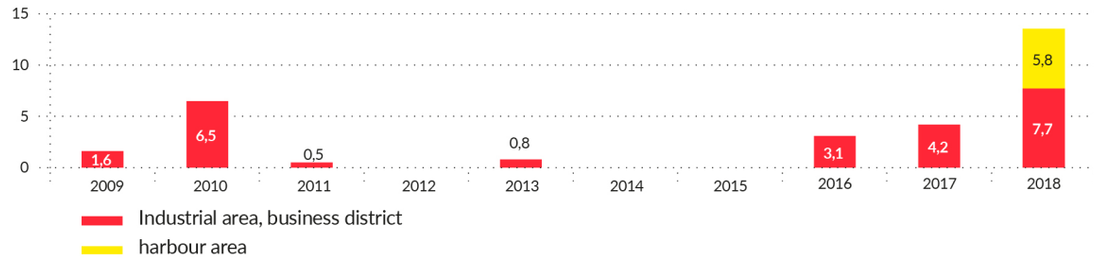


source M.1: GIS mapping, Gemeente Amsterdam. (2011). Structuur Visie Amsterdam 2040. Amsterdam, The Netherlands: Gemeente Amsterdam.

Issued business and harbour areas in North Holland 2009-2018 (net hectares)

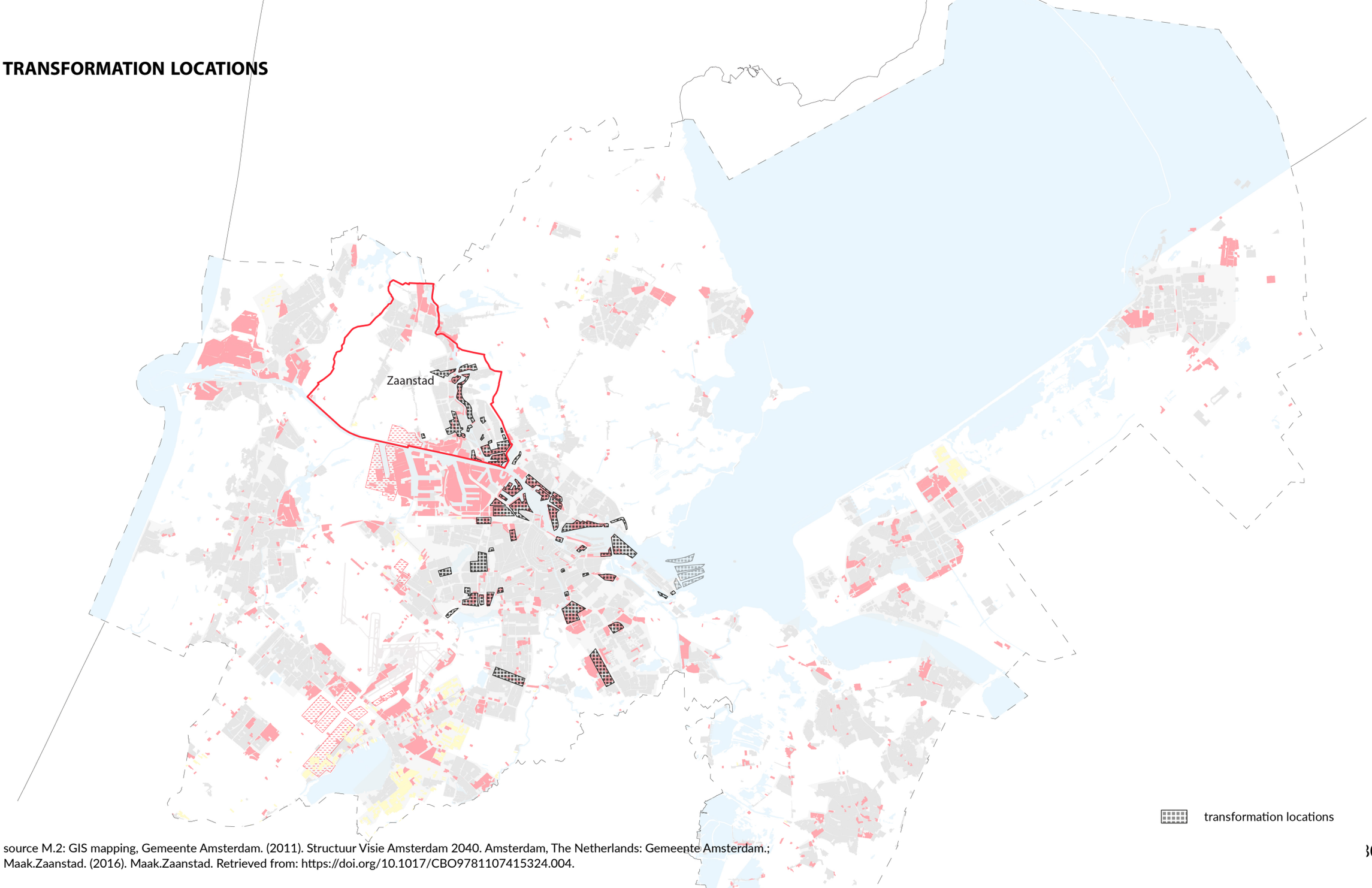


Issued business and harbour areas in Zaanstreek Waterland 2009-2018 (net hectares)



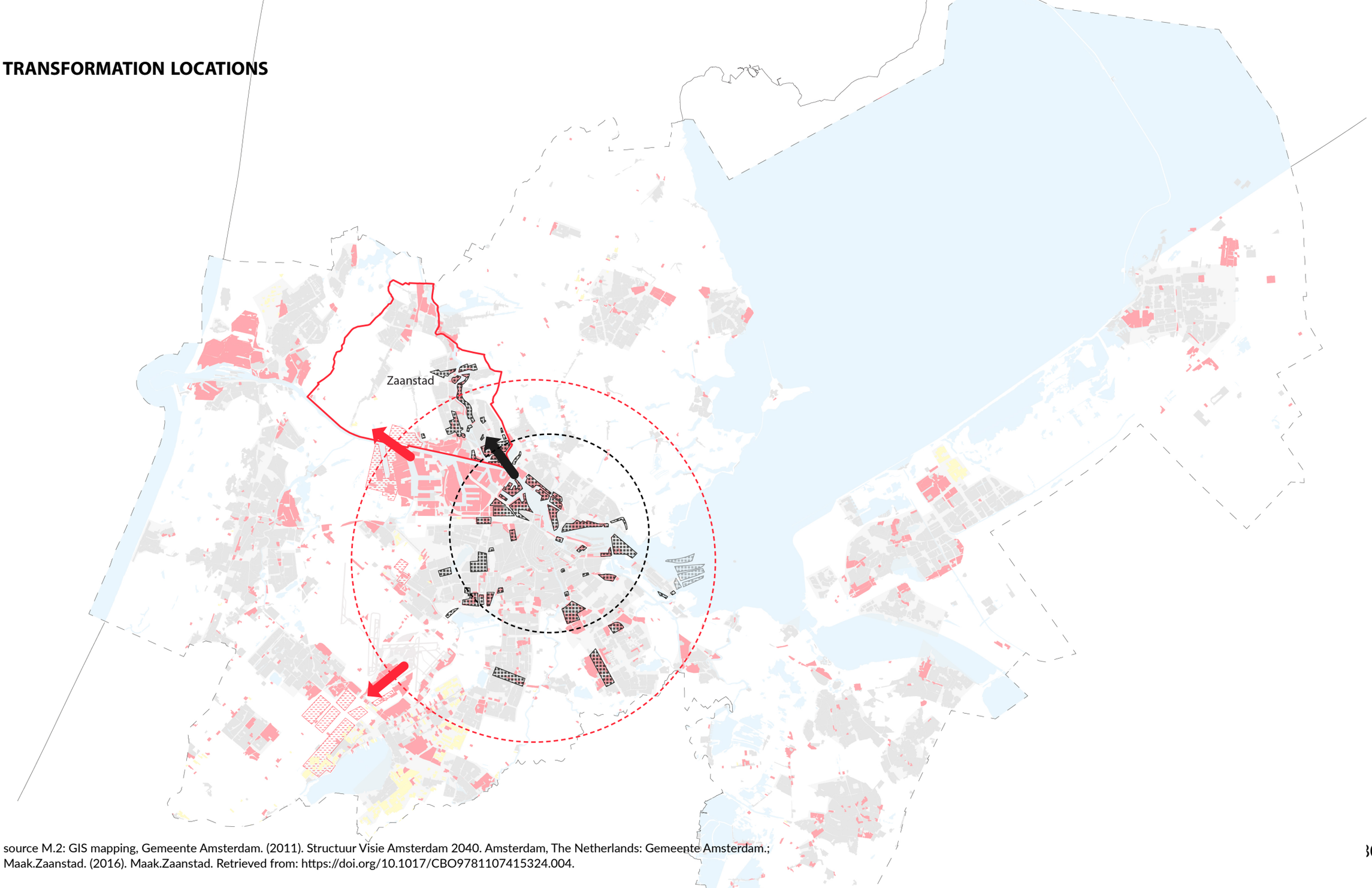
source: Provincie Noord-Holland. (2019). *Monitor Werklocaties Noord-Holland 2019*. Haarlem.; Versteegh, B., et al. (2019). *Monitor Plabeka: Ontwikkelingen werklocatie markt MRA 2018-2019*. Metropool Regio Amsterdam.

TRANSFORMATION LOCATIONS



source M.2: GIS mapping, Gemeente Amsterdam. (2011). Structuur Visie Amsterdam 2040. Amsterdam, The Netherlands: Gemeente Amsterdam.; Maak.Zaanstad. (2016). Maak.Zaanstad. Retrieved from: https://doi.org/10.1017/CBO9781107415324.004.

TRANSFORMATION LOCATIONS



source M.2: GIS mapping, Gemeente Amsterdam. (2011). Structuur Visie Amsterdam 2040. Amsterdam, The Netherlands: Gemeente Amsterdam.; Maak.Zaanstad. (2016). Maak.Zaanstad. Retrieved from: https://doi.org/10.1017/CBO9781107415324.004.

Het Parool

Nederland | Wereld | Kunst & Media | Sport | Columns & Opinie

Plus

Steeds minder plek voor bedrijventerreinen in Amsterdam

Over zes jaar is in Amsterdam geen plek meer voor nieuwe bedrijven. Op bedrijventerreinen die worden volgebouwd met woningen moet ruimte blijven voor werkplaatsen en bedrijfsverzamelgebouwen.

Bart van Zoelen 23 december 2019, 12:30

Het Parool

Nederland | Wereld | Kunst & Media | Sport | Columns & Opinie

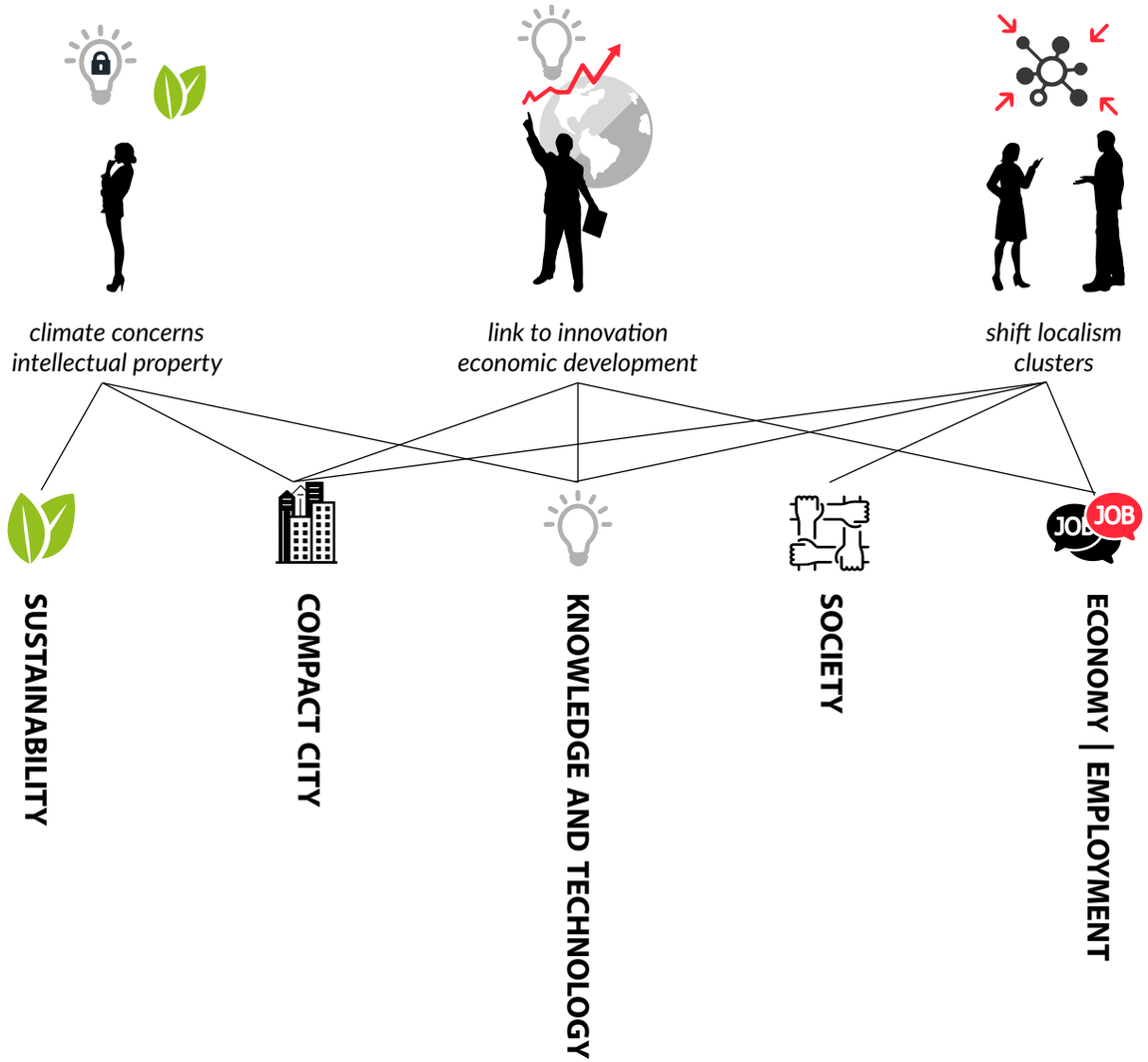
Plus **Achtergrond**

Is Buiksloterham straks echt zo groen en circulair?

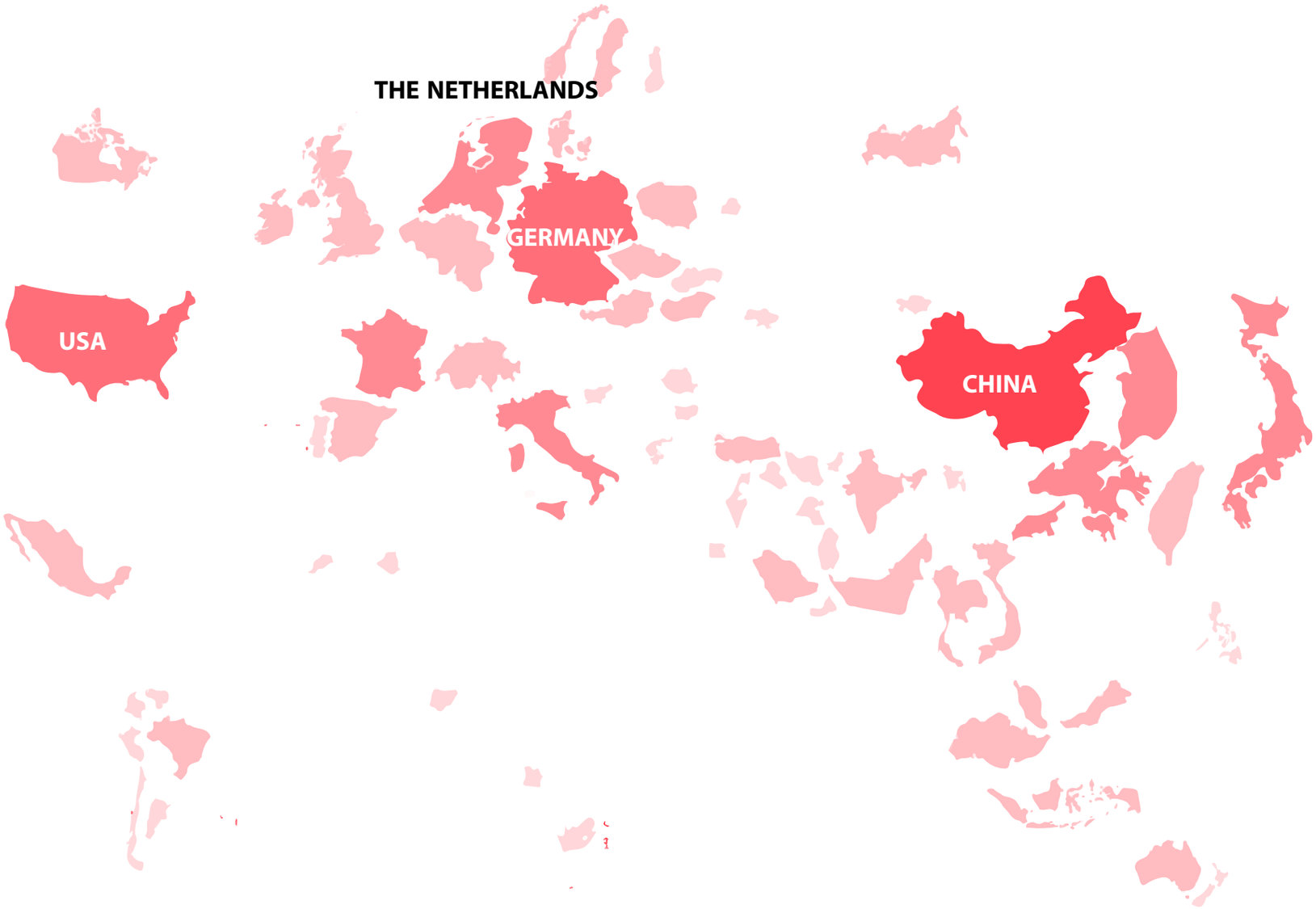
Buiksloterham krijgt bijna twee keer zo veel woningen als gedacht. De wijk dreigt daardoor een stuk minder vernieuwend te worden dan de pioniers hadden gehoopt.

Bart van Zoelen 6 januari 2020, 11:02

source: Zoelen, B. (2020). Is Buiksloterham straks echt zo groen en circulair? Het Parool. Retrieved from: https://www.parool.nl/amsterdam/is-buiksloterham-straks-echt-zo-groen-en-circulair; Steeds minder plek voor bedrijventerreinen in Amsterdam. Het Parool. Retrieved from: https://www.parool.nl/amsterdam/steeds-minder-plek-voor-bedrijventerreinen-in-amsterdam


climate concerns
intellectual property
link to innovation
economic development
shift localism
clusters
JOB
JOB
SUSTAINABILITY
COMPACT CITY
KNOWLEDGE AND TECHNOLOGY
SOCIETY
ECONOMY | EMPLOYMENT

THE WORLDS TOP EXPORTERS IN 2018



source: Amores, R. (2019). Mapping Exports by Country Around the World. [image]. Retrieved from: https://howmuch.net/articles/the-worlds-biggest-exporters-2018

Tony Garnier, Une Cité Industrielle 1917

source: No author: Tony Garnier from An Industrial City [image] (2016). Retrieved from: https://senacatal.wordpress.com/category/arch-222/

TECHNOLOGICAL CHANGE ALTERING THE SPATIAL MANIFESTATION OF INDUSTRIES

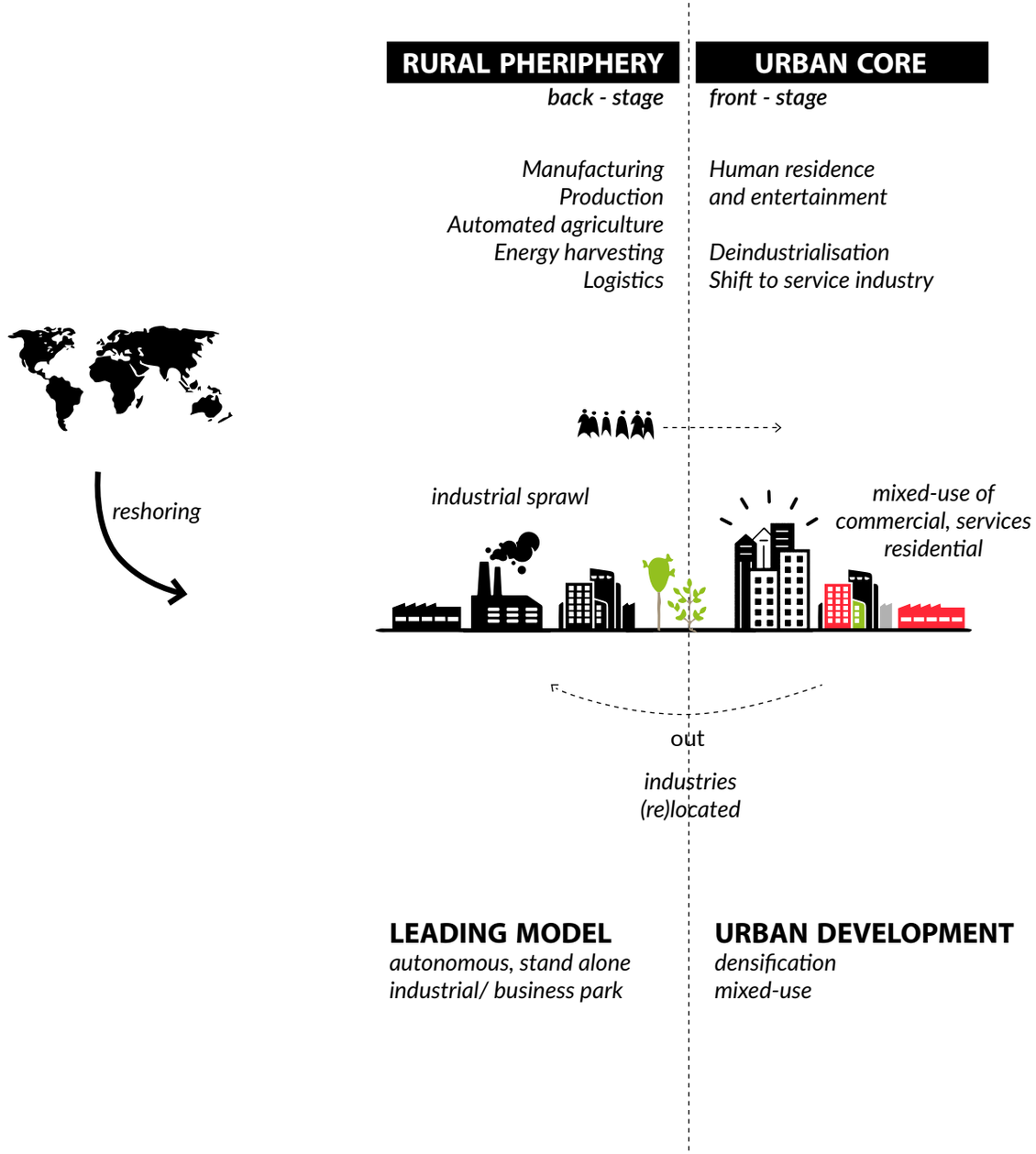
industry 1.0
mechanisation
steam power
weaving loom

industry 2.0
mass production
assembly line
electrical energy

industry 3.0
automation
computer
electronics

industry 4.0
cyber physical systems
internet of things
networks

PROBLEM STATEMENT



VISION OF A VIBRANT COMPACT LIVE AND WORK CITY

RURAL PHERIPHERY
environmental remediation

Eco Industrial park

URBAN CORE
compact city

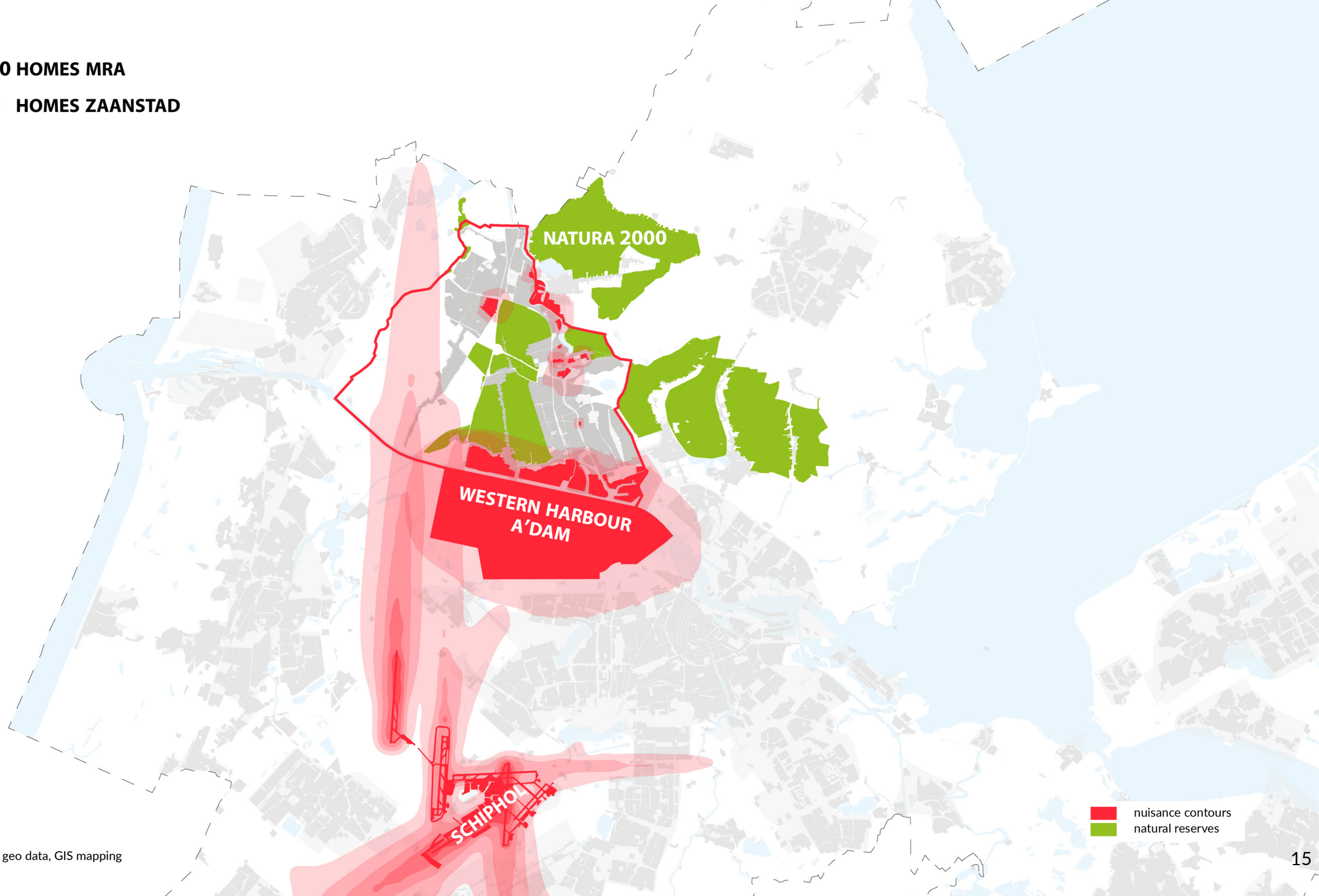
Connecting means of production with the city's creative and constructive spirit

conflict:
densification
industrial integration
liveability

source: Left: Zoom.nl. (2015). De Zaanstreek in volle glorie - water houten huizen, molens en industrie [image]. Retrieved from: https://zoom.nl/foto/overig/de-zaanstreek-in-volle-glorie---water-houten-huizen--molens-en-industrie.2503725.html; right: IFIZK. (n.d.) Festival Zaanse Industriecultuur [image]. Retrieved from: https://www.ifikz.nl/

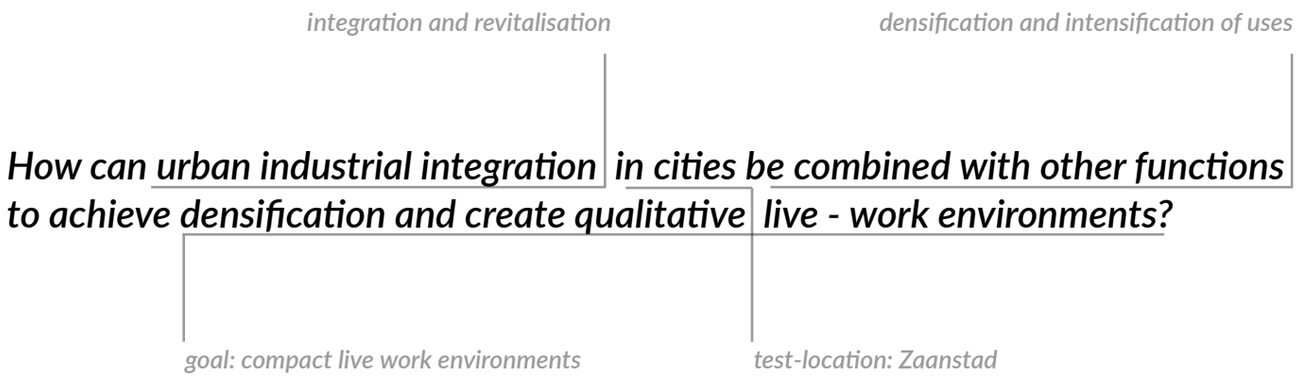
+300.000 HOMES MRA

+20.000 HOMES ZAANSTAD



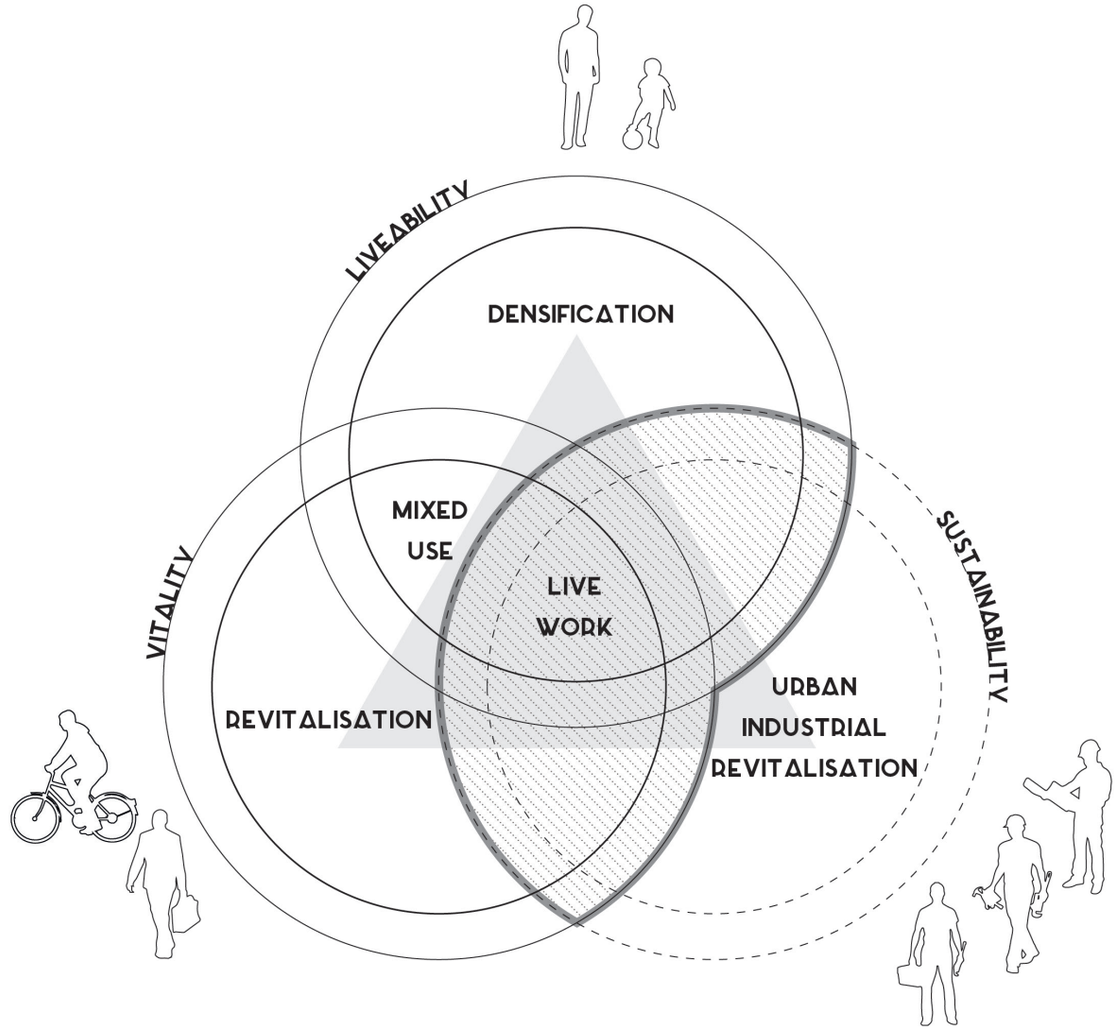
source: PDOK geo data, GIS mapping

RESEARCH QUESTION

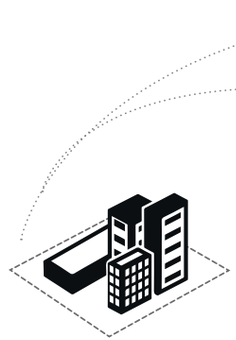


Subquestions:

- *How can urban design patterns be used to mediate conflicts between industry and other functions, in particular housing?*
- *To what extent can industry be integrated in the city with regard to liveability? What are the spatial limits?*
- *What is the adaptive capacity of the proposed design?*
- *What criteria should guide contemporary compact and mixed-use spatial development and transformation?*


LIVEABILITY
DENSIFICATION
VITALITY
SUSTAINABILITY
MIXED
USE
LIVE
WORK
REVITALISATION
URBAN
INDUSTRIAL
REVITALISATION

INTENDED OUTCOMES



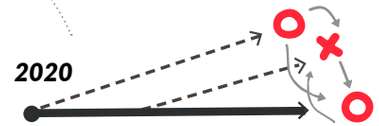
SPATIAL MODEL RESEARCH BY DESIGN

spatial model: liveable, vital mixed-use dev. that includes tech-innovations and addresses environmental concerns and re-establishes the connection between cities and industry

PATTERN LANGUAGE

spatial planning guidelines & instruments supporting incorporation of industries in cities, preventing industrial sprawl

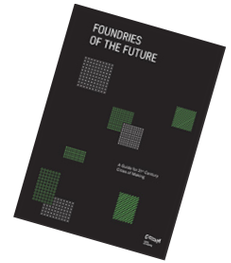
** Grand Urban Rules*
** City of Making*



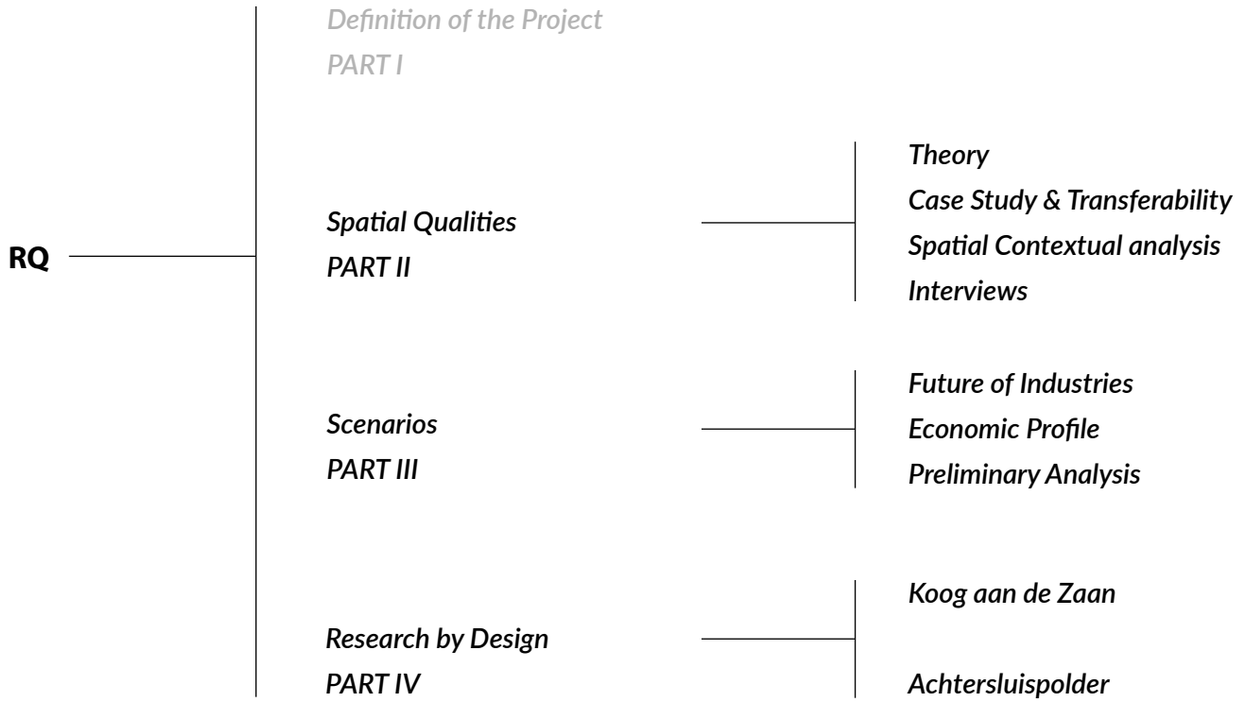
SCENARIOS

speculate on the future plausibility of integrating industries in cities

responding to global trends, technological developments, political decesions



ROADMAP


RQ
Definition of the Project
PART I
Spatial Qualities
PART II
Theory
Case Study & Transferability
Spatial Contextual analysis
Interviews
Scenarios
PART III
Future of Industries
Economic Profile
Preliminary Analysis
Research by Design
PART IV
Koog aan de Zaan
Achtersluispolder

PART II

Spatial Qualities

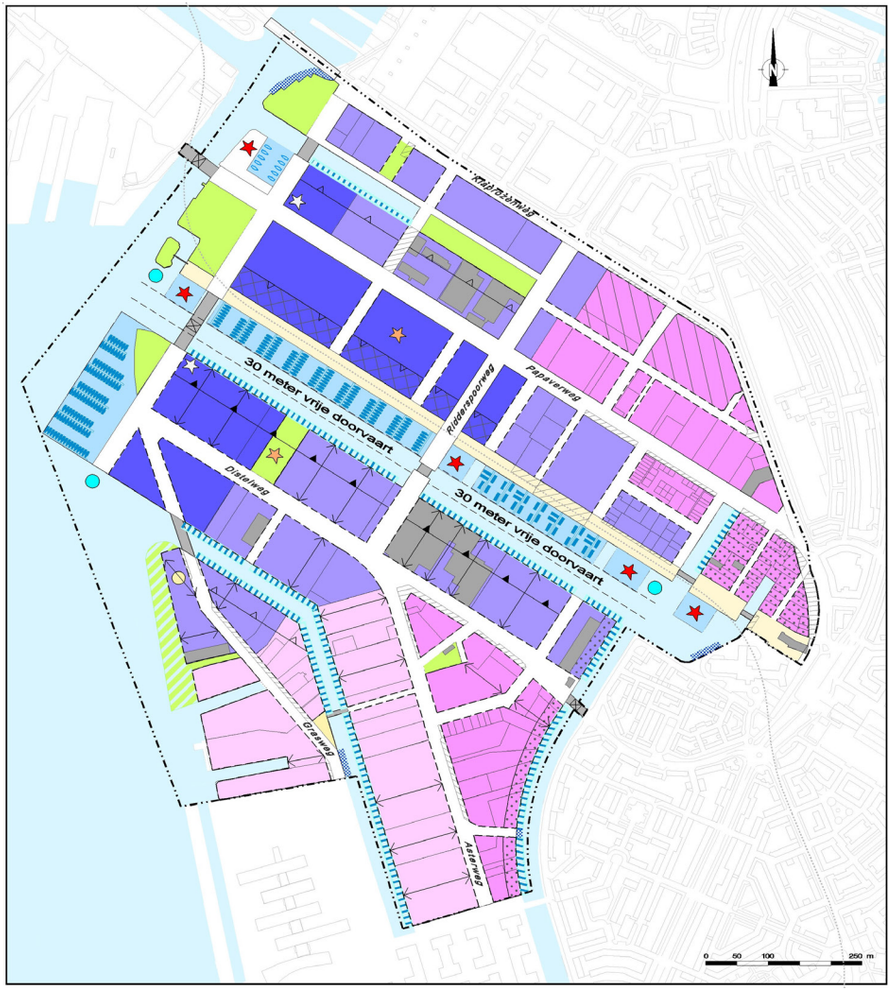
- *Theory*
- *Case Study & Transferability*
- *Spatial Contextual analysis*
- *Interviews*

Investeringsbesluit Buiksloterham

Plankaart en spelregels

januari 2007

Plankaart Investeringsbesluit Buiksloterham, november 2006



- Bedrijventerrein
- Transformatiegebied werken - wonen
- Transformatiegebied wonen - werken
- Kerngebied wonen
- Waterkavels
- Openbaar groen
- Reservering groene oever
- Openbare kade
- Reservering openbare ruimte
- Cultuurhistorisch waardevolle bebouwing
- Jachthaven
- Drijvend wonen
- Bijzonder programma op het water
- Werkhaven DWR
- Huidige woonbootligplaatsen
- Oevergebruik eigen kavel mogelijk
- Reservering scholen / bijzonder programma
- Stedelijke plint
- Perifiere detailhandel mogelijk
- Verplichte rooilijn
- Uiterste rooilijn
- Kaveldoorsteek
- Inpassing plein
- Beperking bouwhoogte tot 20 meter
- Zone waarbinnen accenten tot 45 meter mogelijk
- Zone waarbinnen accenten tot 60 meter mogelijk
- Accent tot 100 meter
- Brug
- Beweegbare brug
- Reservering aanlanding pont / watertaxi
- Reservering tracé metro
- Plangrens

NOVEMBER 2006

Spelregels algemeen

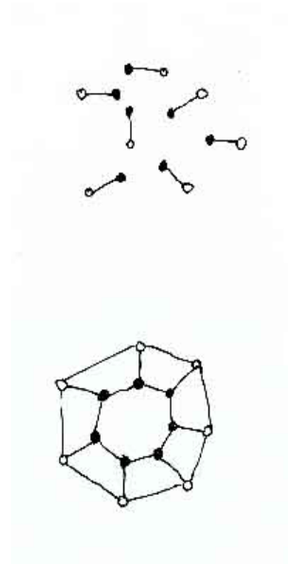
- De maximale bebouwingshoogte is 30 meter, tenzij anders aangegeven
- Parkeervoorziening dient volledig op eigen terrein gerealiseerd te worden. Normen: werken 1:125 m2 bvo, voorzieningen 1:100 m2 bvo, sociale huur 0,5 en vrije sector 1,5 parkeerplaats per woning
- Bezoekersparkeren van 0,25 parkeerplaats per woning kan in de openbare ruimte opgenomen worden
- Per kavel in principe 1 auto-entree aan het raamwerk hoofdstraten
- De aangegeven percentages wonen/werken gelden per ontwikkelingseenheid (kavel of samengesteld uit meerdere kavels) en zijn onderling niet uitwisselbaar
- Bij ontwikkelingen met meer dan 150 wooneenheden dient een kinderspeelplaats per 150 woningen gerealiseerd te worden

source: Gemeente Amsterdam. (2007). Investeringsbesluit Buiksloterham. Amsterdam, The Netherlands: Gemeente Amsterdam.

PATTERNS CAN BE USED TO STEER URBAN DESIGN

"A set of connected patterns provides a framework upon which any design can be anchored. The patterns do not determine the design. By imposing constraints, they eliminate a large number of possibilities while still allowing an infinite number of possible designs."

Salingaros, 2000

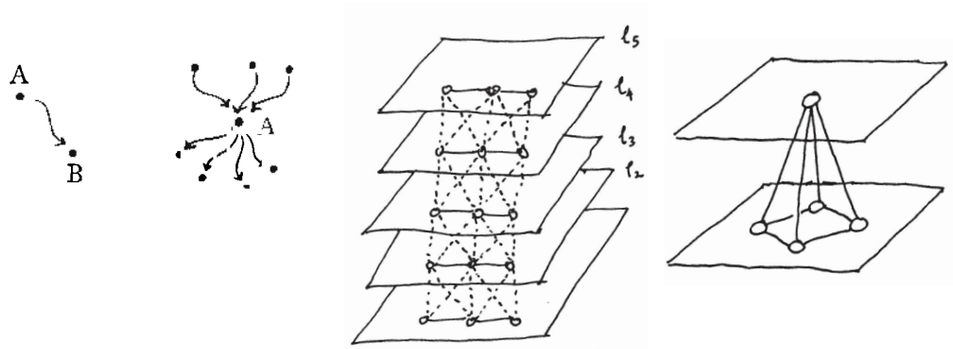


source: Salingaros, N. (2000). The structure of pattern languages. Architectural Research Quarterly, 4 (2), 149-162.

PATTERNS ARE INTERRELATED ON MULTIPLE SCALE LEVELS

Christopher Alexander - Pattern Language

"the idea of a diagram, or pattern is very simple. It is an abstract pattern of physical relationships which resolves a small system of interacting and conflicting forces, and is independent of all other forces, and of all other possible diagrams. The idea that it is possible to create such abstract relationships one at a time, and to create designs which are whole by fusing these relationships – this amazingly simple idea is, for me, the most important discovery …

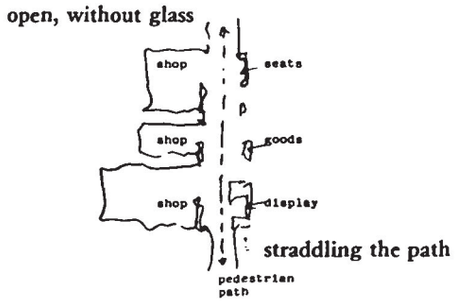


source: Alexander, C. (1979). A timeless way of building. New York, The United States of America: Oxford University Press.; Salingaros, N. (2000). The structure of pattern languages. Architectural Research Quarterly, 4 (2), 149-162.

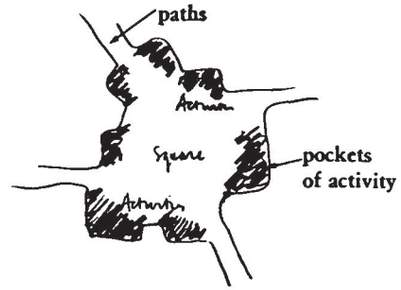
PATTERNS CONNECT SPACE AND ACTIVITIES

"... what demonstrates the patterns' inevitability is their connection to fundamental patterns of human behaviour and movement. Many human functions and interactions are facilitated by the proposed urban geometry, and we could graphically link behavioural patterns to these architectural patterns directly."

Salingaros, 2000



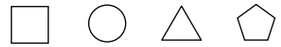
OPENINGS TO THE STREET



ACTIVITY POCKETS

source: Salingaros, N. (2000). The structure of pattern languages. Architectural Research Quarterly, 4 (2), 149-162.

ILLUSTRATION



Z ***X . 0 Title***

Description summarising the principle

Explanation that supports the pattern

Proposed practical application

F. Form and urban integration
P. Plan and Programme
N. Network and Connectivity
E. Environmental Quality
z. addition from Zaanstad

Only in Zaanstad

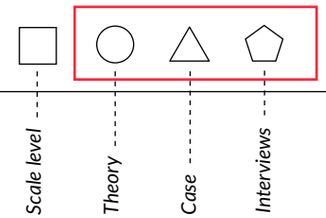
Theme

Z

X . 0 Title

Description summarising the principle

ILLUSTRATION



Explanation that supports the pattern

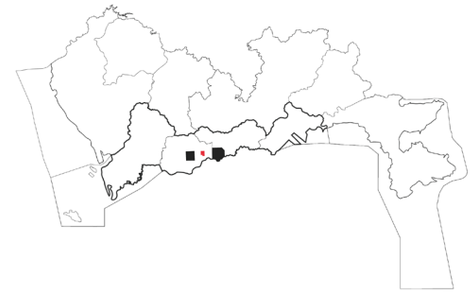
Proposed practical application

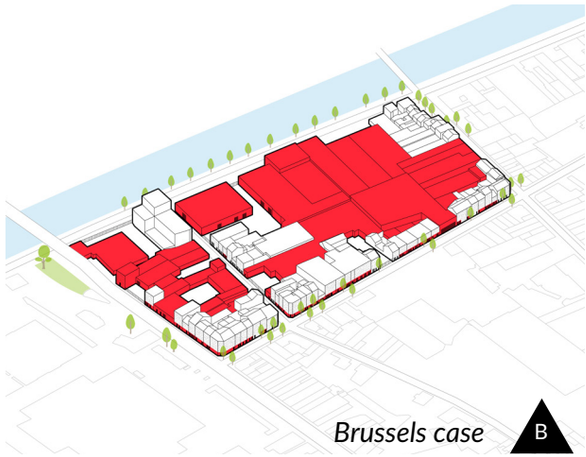
QUALITATIVE FRAMEWORK

*Sources of relevant theories **

- M *Manufacturing : Cities of Making (COM), Productive BXL (PBXL), Oram (O), Design of Urban Manufacturing (DUM), Working Cities (WC)*
- I *Industrial Intensification: London Industrial Intensification (LII)*
- C *Compact City: Grand Urban Rules (GUR), Metromix (Mx), Hoppenbrouwer (H)*
- V *Vitality: Jane Jacobs (J), Montgomery(M), Kevin Lynch (K)*
- L *Liveability: Dorst, Kotulla et al., Howley et al.,*

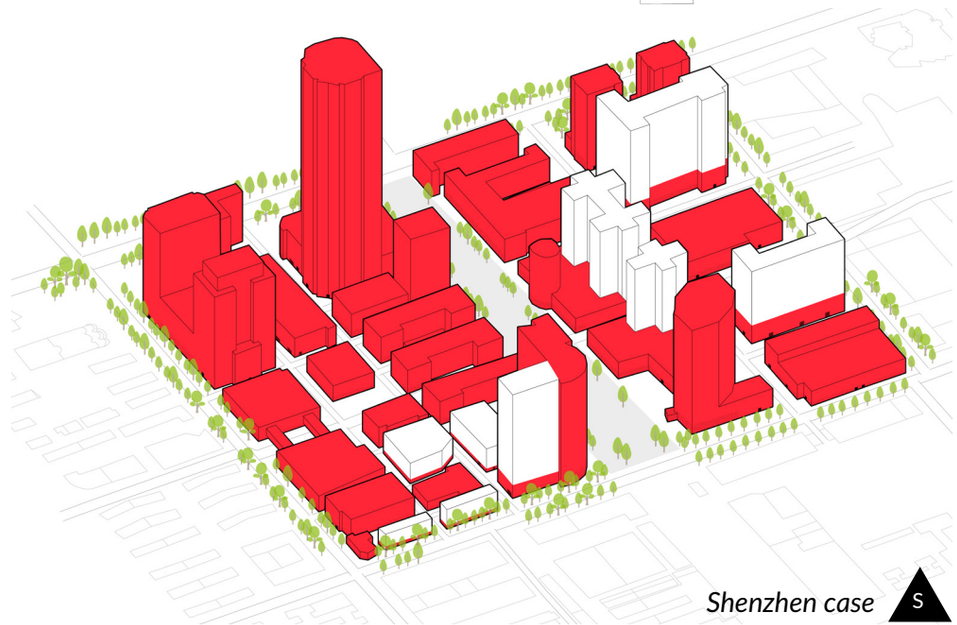
QUALITATIVE FRAMEWORK	THEORIES (*Manufacturing* / *Industrial intensification* / *Compact city* / *Vitality* / *Liveability*)	QUALITY	SCALE (*Building level* / *Block or street level* / *District level* / *City level*)
1. FORM URBAN INTEGRATION	M I C V L	Density	B BS D C
	M C V L	Diversity	B BS D C
	M L	Adaptability	B BS D C
	C V L	Identity	B BS D C
2. PLAN PROGRAMME	M C V L	Density & Diversity of functions	B BS D C
	M I C V L	Level of mixed-use/ Zoning/ Separation	B BS D C
	M I V L	Access and Avaiable (public) spaces amenities	B BS D C
	M I V	Sharing	B BS D C
3. NETWORK CONNECTIVITY	C V L	Permeability	B BS D C
	M I C V L	Multimodality (availability & accesibility)	B BS D C
	M I	Hierarchy	B BS D C
4. ENVIRONMENTAL QUALITY	M L	Building Quality	B BS D C
	M I	Views/ Visibility	B BS D C





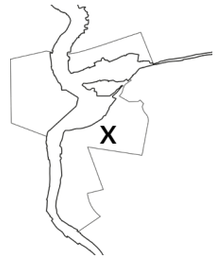
Brussels case B

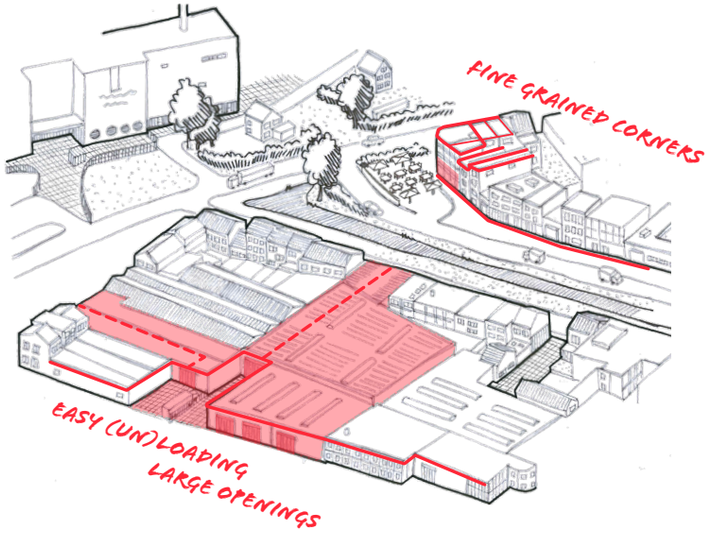
London case L



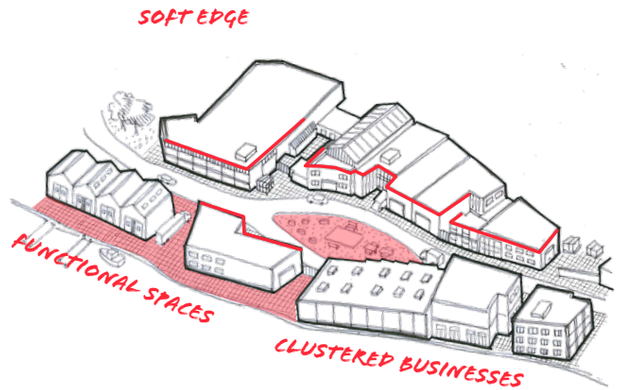
Shenzhen case S

TRANSFERABILITY OF PATTERNS TO ZAANSTAD

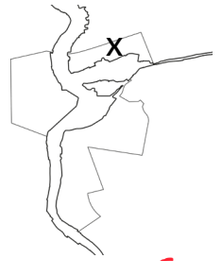


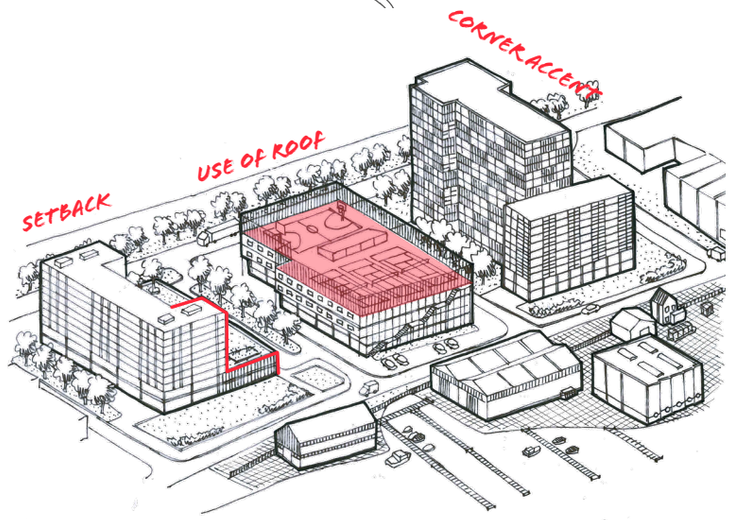


Brussels version



London version





Shenzhen version

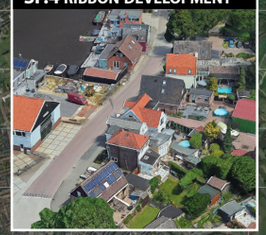
SPATIAL PROFILES

SP.1 CITY CENTRE COMPACT

SP.2 URBAN RIBBON DEV

SP.3 VILLAGE

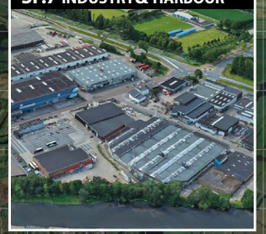
SP.4 RIBBON DEVELOPMENT



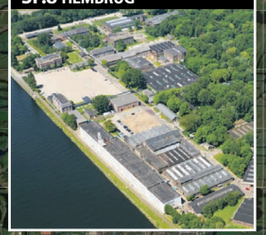
SP.5 INNER CITY INDUSTRY

SP.6 MIXEDWORKINGDISTRICT

SP.7 INDUSTRY& HARBOUR



SP.8 HEMBRUG



KROMMENIE

WORMER VEER

WORMER

ASSENDELFT

ZAANDIJK

3.

Zaanse Schans

4.

Hemmes

Kalf

Oud Koog

Zaan

6.

A8

5.

Kogerveld

A7

A7

2.

WESTZAAN

1.

Zaan

ZAANDAM

Centre

A8

OOSTZAAN

Westzanerpolder

Westerspoor

Zuiderhout

Hembrug

Achtersluispolder

Noordzeekanaal

8.

7.

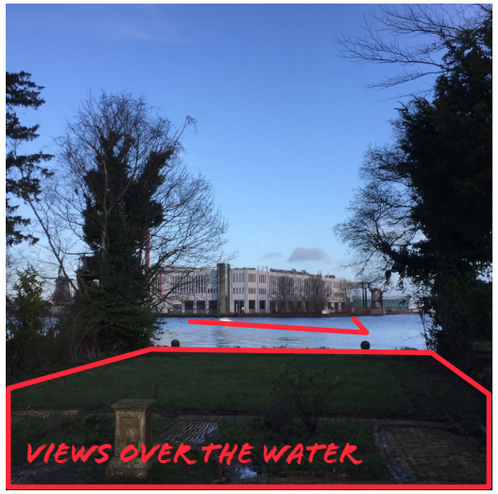
0

1km

5km

IN RELATION TO CONNECTIVITY

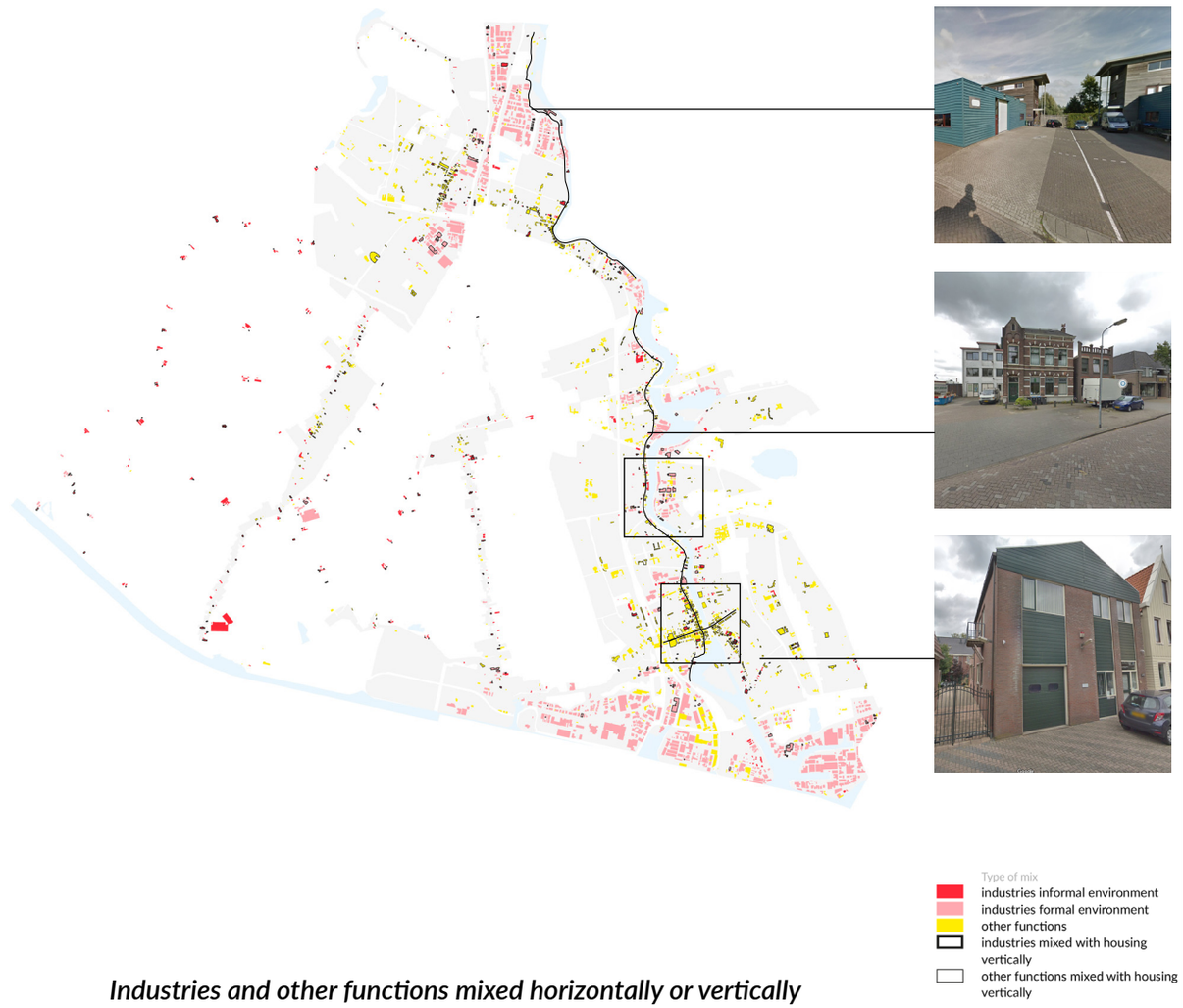
ZAANSE PATTERNS - LIVE WORK - SITE VISIT



Spatial profiles

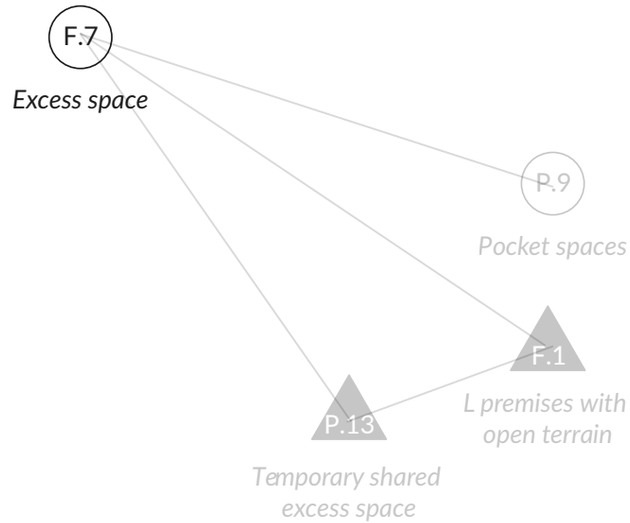
source: photos made by author; map: adapted version from Gemeente Zaanstad. (2012). Ruimtelijke Structuurvisie 2020. Zaandam, The Netherlands: Gemeente Zaanstad.

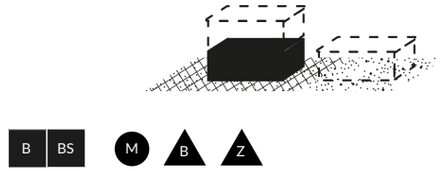
ZAANSE PATTERNS - WORK - GIS ANALYSIS



Industries and other functions mixed horizontally or vertically

source: left: photos made by author; map: PDOK data bagverblijfsobjecten; right: google earth

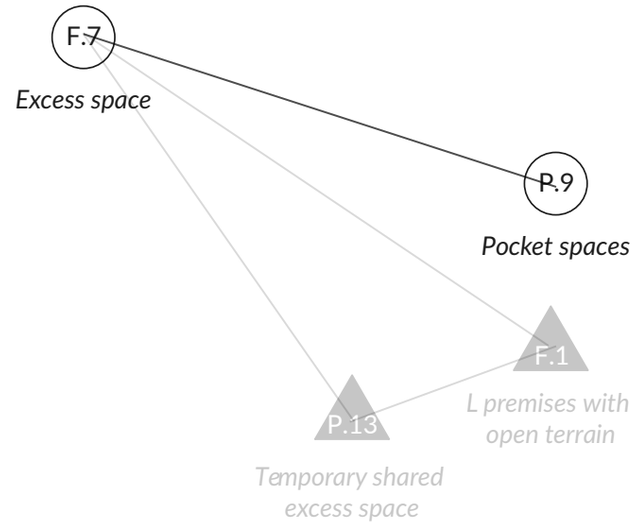


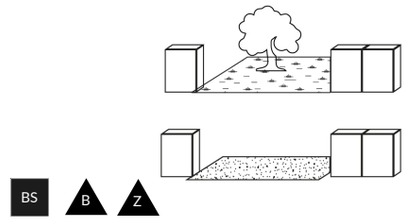


F.7 Excess space

Provide excess space and flexibility space for growth and shrinkage (O, COM). For businesses to stay viable they need space surrounding the premises to expand as well as spaces for work activities. It can be leftover spaces or not building on the whole plot. This can be realised by creating unfinished or flexible buildings or blocks that allow for expansion, adjustable to future need.

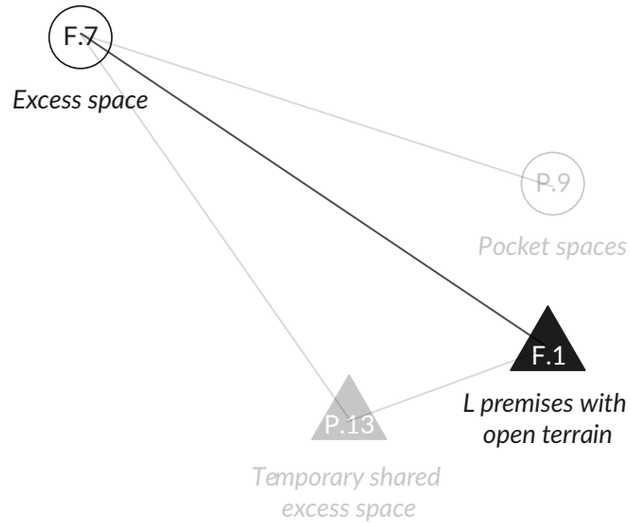
source: Croxford, B., Domenech, T., Hausleitner, B., Hill, A. V., Meyer, H., Orban, A., … Vanin, F. (2020). Foundries of the Future: a Guide to 21st Century Cities of Making. (A. V. Hill, Ed.). https://doi.org/https://doi.org/10.7480/ISBN_9789463662475
ORAM, MUST stedenbouw. (2019). Werken aan een nieuw Amsterdam. Amsterdam, the Netherlands: ORAM.





P.9 Pocket spaces

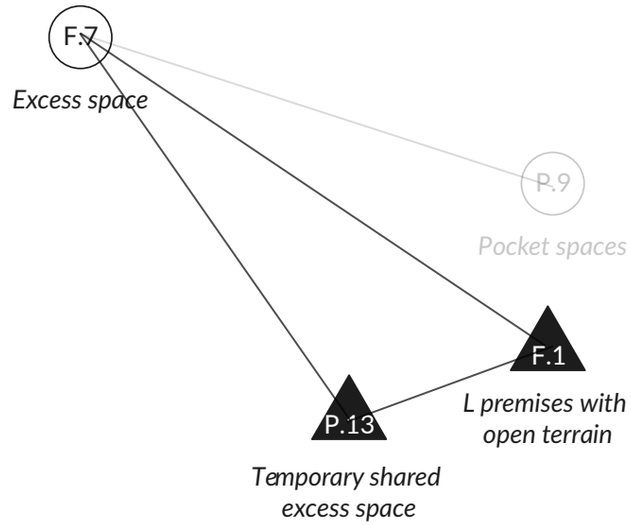
Pocket parks, public space or terrain provide spaces to rest, meet or play for the people living there or people passing by. These spaces can also be used as private terrain for work activities if the pocket is placed next to functions. These pockets can be integrated within the block, on leftover spaces or between blocks.

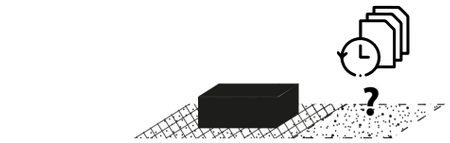


B BS

ZF.1 Large premises with open terrain

Large businesses need a premises with enough open terrain encompassing the building. This may be for work activities, parking, loading and unloading. But also for expansion possibilities or adaptation to new or adjusted activities. With limited space, buildings can be higher. Small and medium sized businesses do not need a lot of open terrain. Ensure large parcels for large businesses.

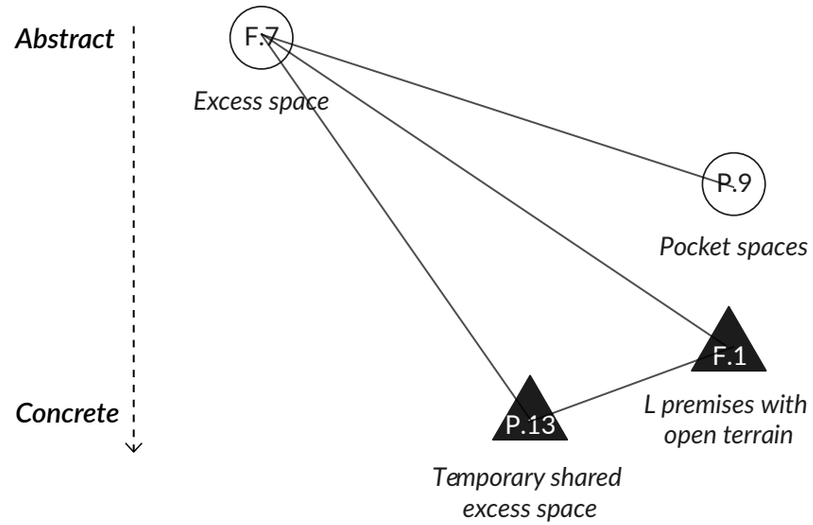




B BS W

ZP.13 Temporary shared excess space

Excess spaces around large estates often remain unused for many years, to guarantee expansion options for the industry in the future. With the right contract or agreements andmediation the excess space can be used temporarily for events, even used for parking for the neighbourhood or green spacefor the inhabitants as a sort of extension of their garden.


Abstract
Concrete
F.7
Excess space
P.9
Pocket spaces
F.1
L premises with open terrain
P.13
Temporary shared excess space

PART III

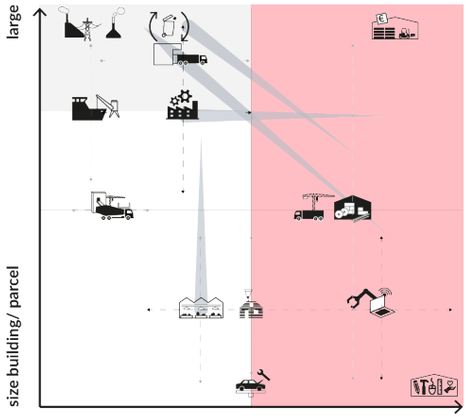
Scenarios

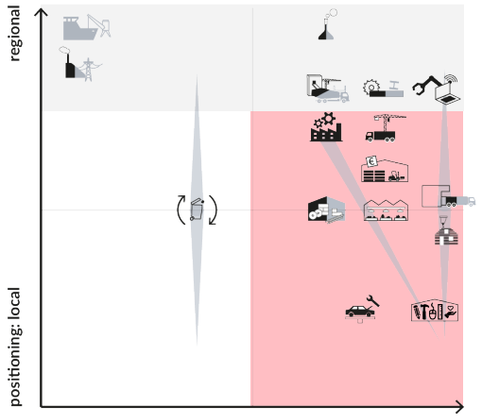
Future of Industries

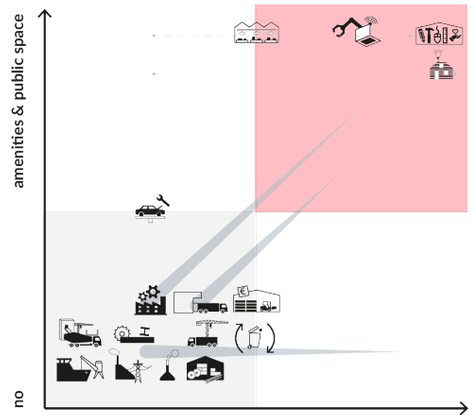
Economic Profile

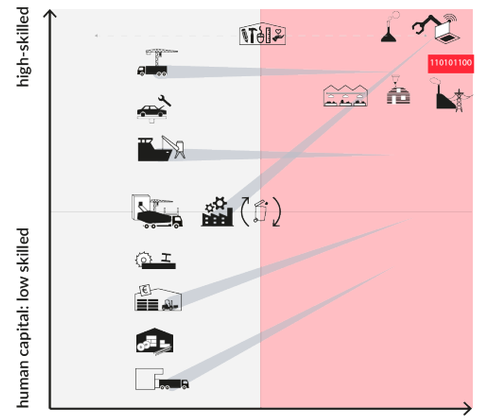
Preliminary Analysis

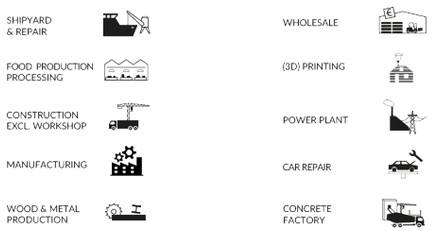
FUTURE SPATIAL MANIFESTATION OF ACTIVITIES

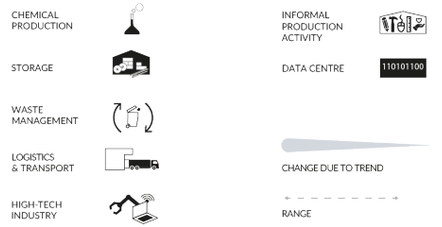




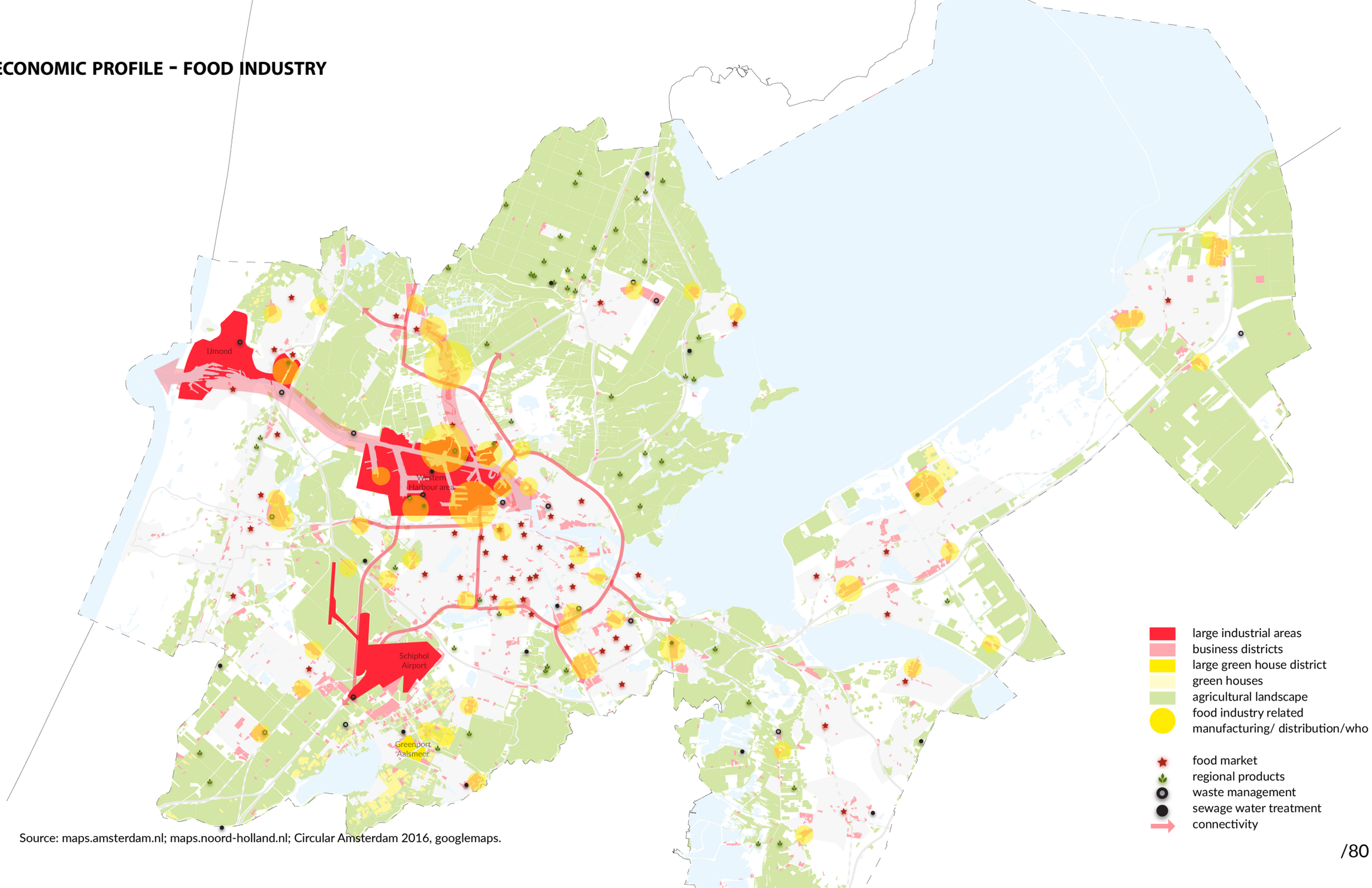






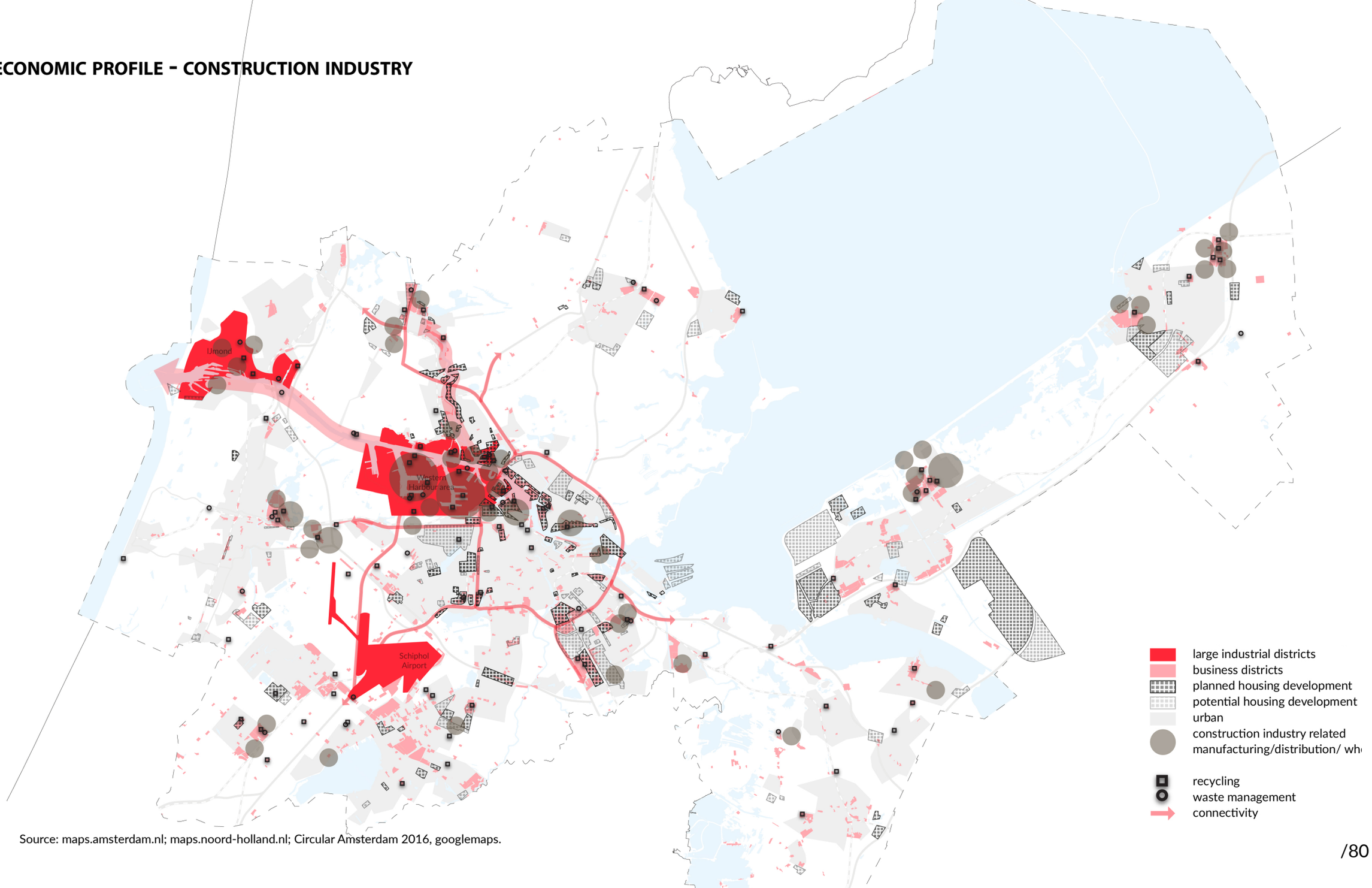


ECONOMIC PROFILE - FOOD INDUSTRY



Source: maps.amsterdam.nl; maps.noord-holland.nl; Circular Amsterdam 2016, googlemaps.

ECONOMIC PROFILE - CONSTRUCTION INDUSTRY



Source: maps.amsterdam.nl; maps.noord-holland.nl; Circular Amsterdam 2016, googlemaps.

INTENTIONS - HOUSING DEVELOPMENT

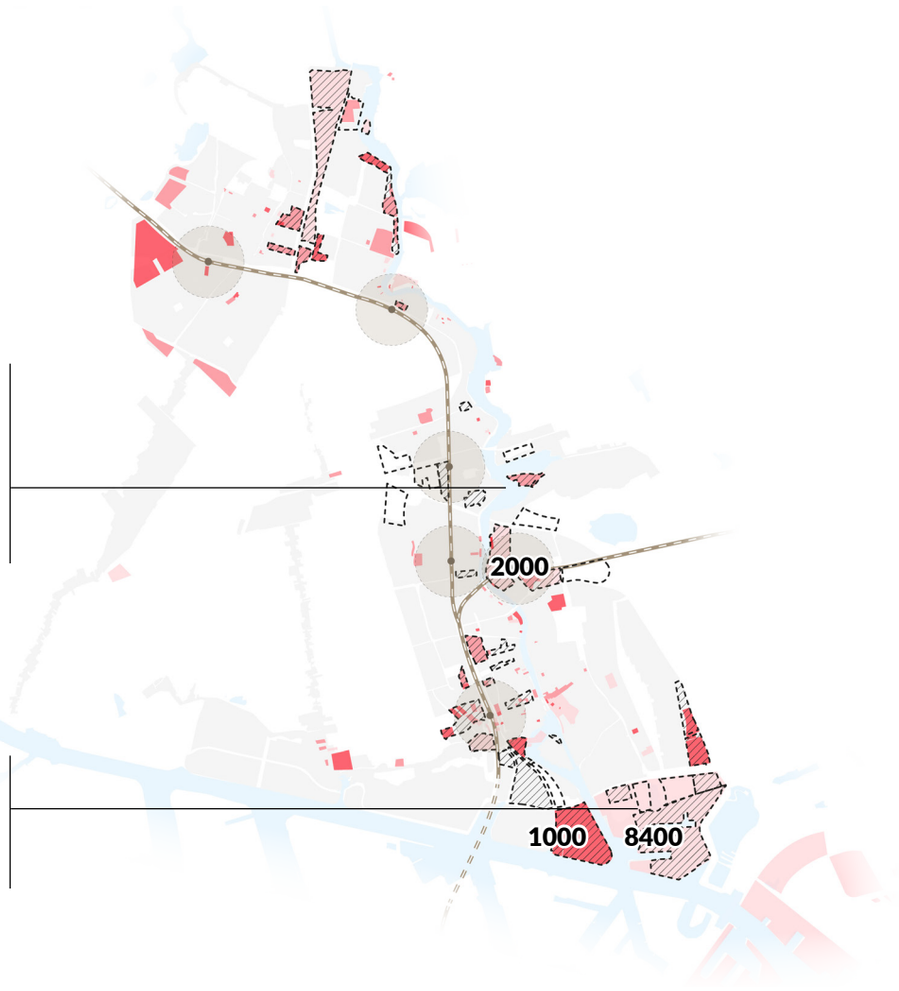
no housing or densification/transformation plans for northern part yet

potential areas selected by municipality

2000 homes planned around train station

Transformation of business districts into live-work environments

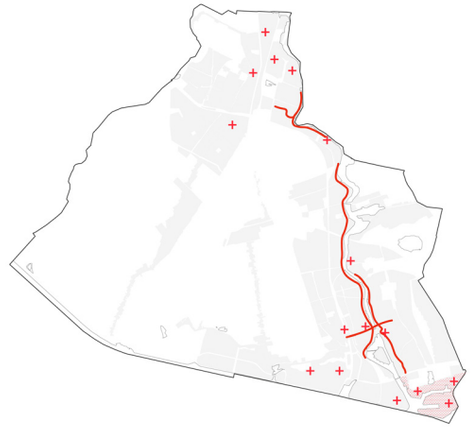
In total 8400 homes planned for area



transformation
housing
confirmed building site
preparation of building site
potential building site

CONCLUSIONS DESIRABLE SPATIAL INTERVENTIONS

Density and Diversity



Dispersion of Functions

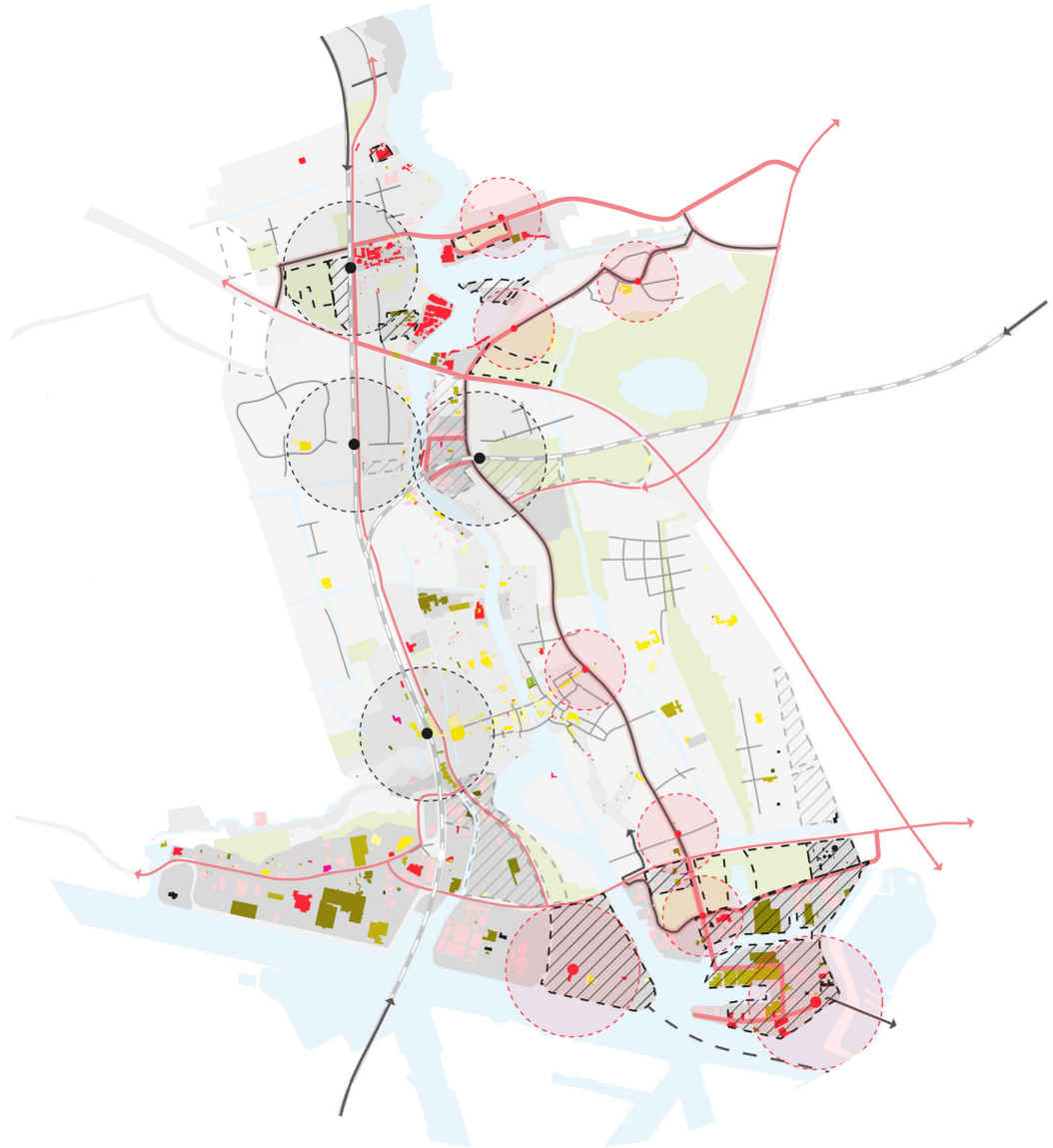
Networks

Environmental Quality

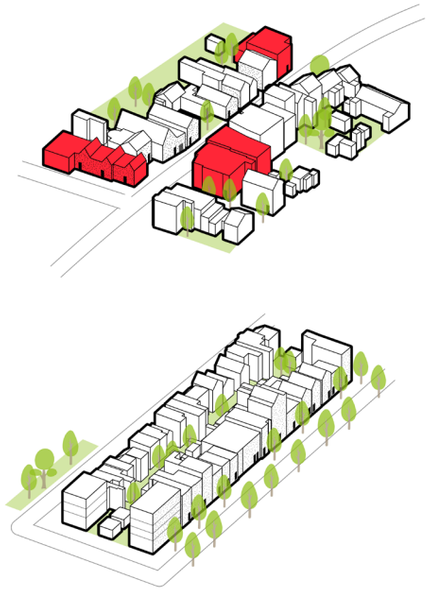
- work clusters
- highstreet
- lack of amenities
- mixed-use
- FSI > 1
- GSI > 0.4
- local centrality
- main network
- public transport stations
- green blue edge
- cultural & historic elements
- complaints nuisances
- noise and smell
- schiphol airport & harbour
- nuisance contour
- outside of dike
- built-up areas

TWO SCENARIOS

TRADITIONAL SCENARIO

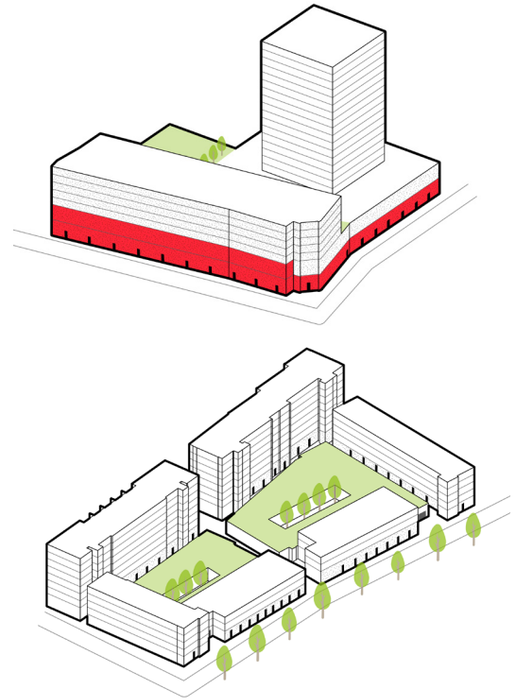


DIGITAL SCENARIO



Traditional scenario

- *low rise residential development*
- *densification along local centralities*
- *horizontal mix*
- *private green*
- *local connections neighbourhoods*



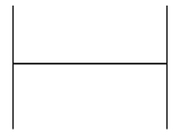
Digital scenario

- *“high” rise residential development*
- *densification around public transportation and local centralities*
- *vertical and horizontal mix*
- *collective spaces and greenery*

PART IV

Scenarios

Patterns



Koog aan de Zaan

Achtersluispolder

DESIGN LOCATION: KOOG AAN DE ZAAN [OK]

source: Amsterdam Economic board. (2016). Hemmes-MIR20100519-7408 [image]. Retrieved from: https://amsterdameconomicboard.com/hemmes-mir20100519-7408

De Zaan, the Netherlands

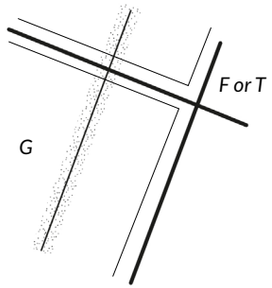
CONCLUSIONS EXPLORATIONS

Traditional

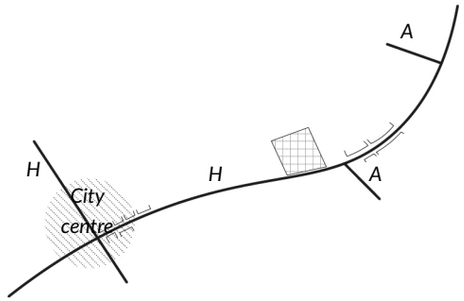
Digital

Street types
- highway
- transit streets
- highstreet
- functional street
- amenities street
- green corridor
- business cluster area

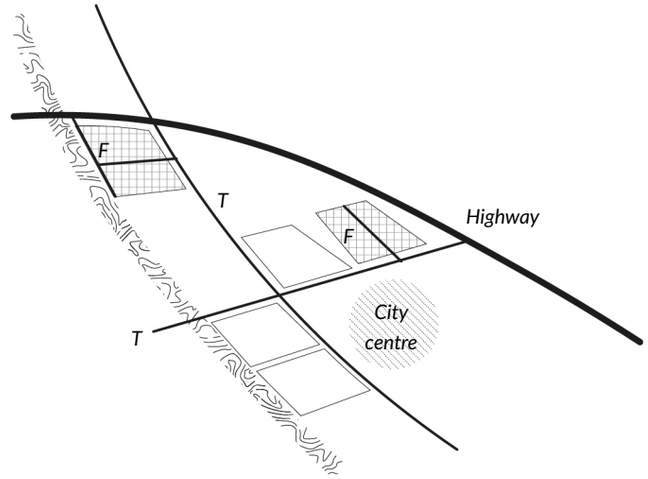
STREET TYPES



Neighbourhood



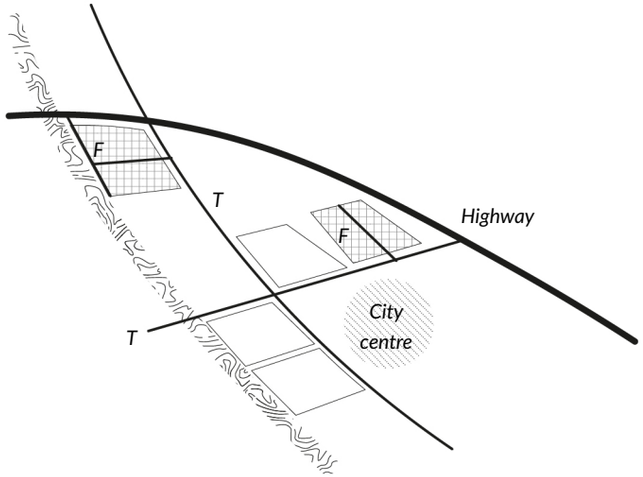
District - City

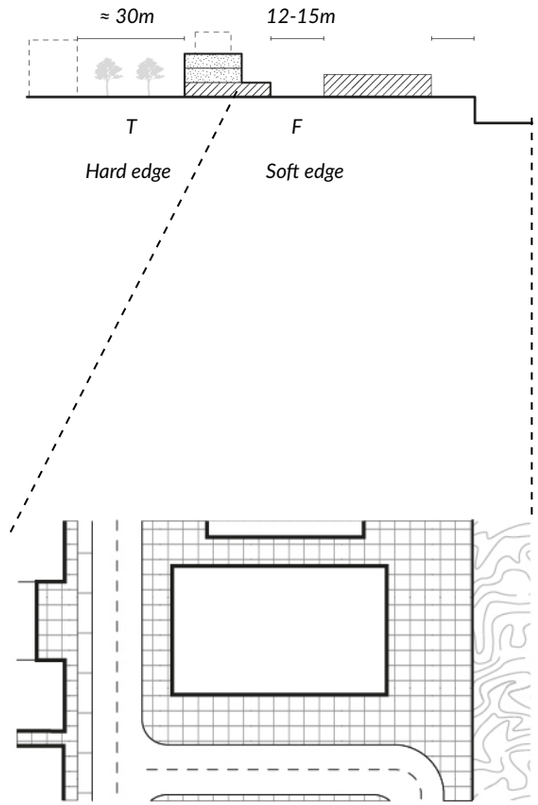


District - City

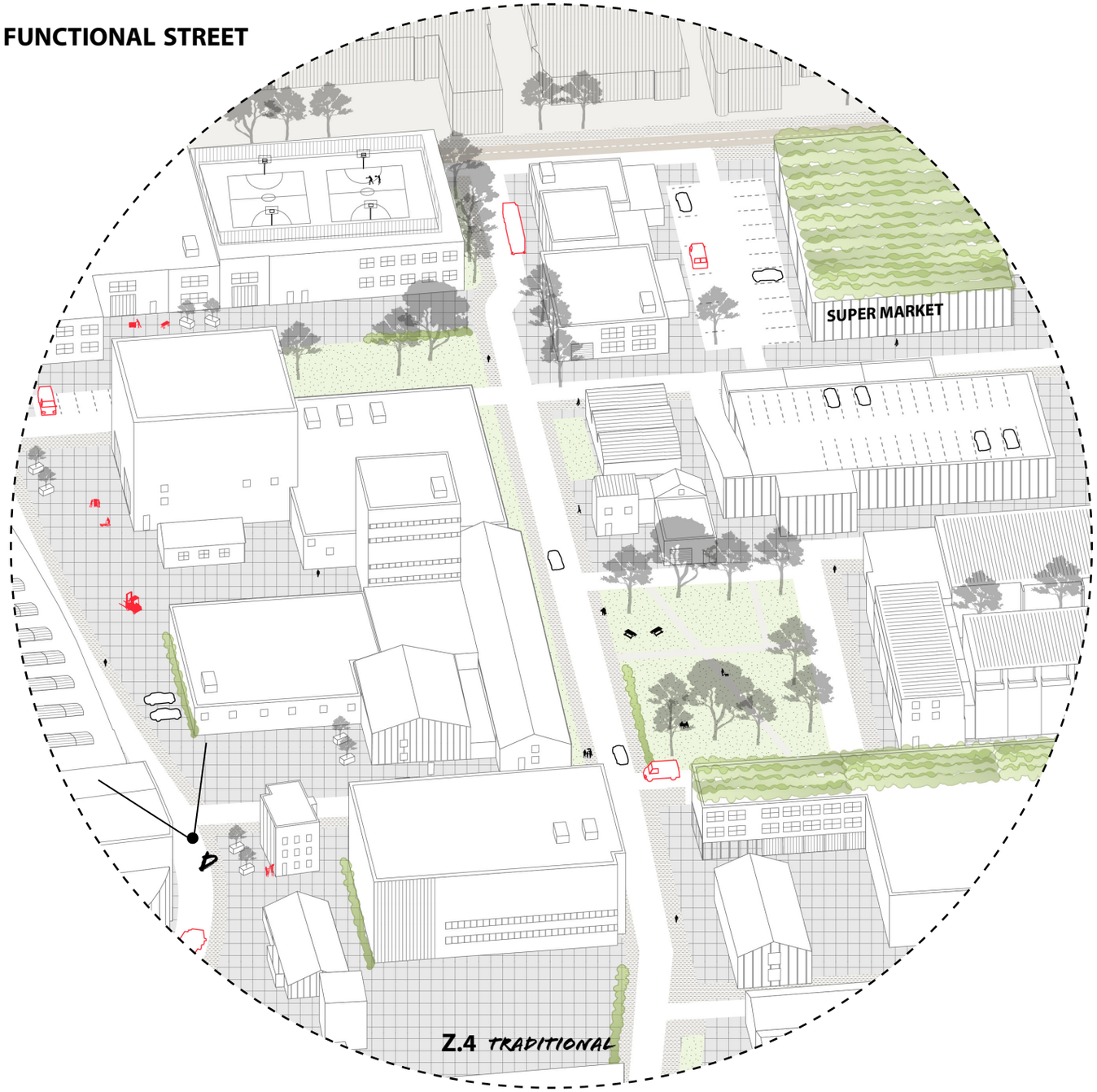
Highstreet - H
Amenities street - A
Transit - T
Functional - F
Green corridor - G
Residential - R

FUNCTIONAL STREET



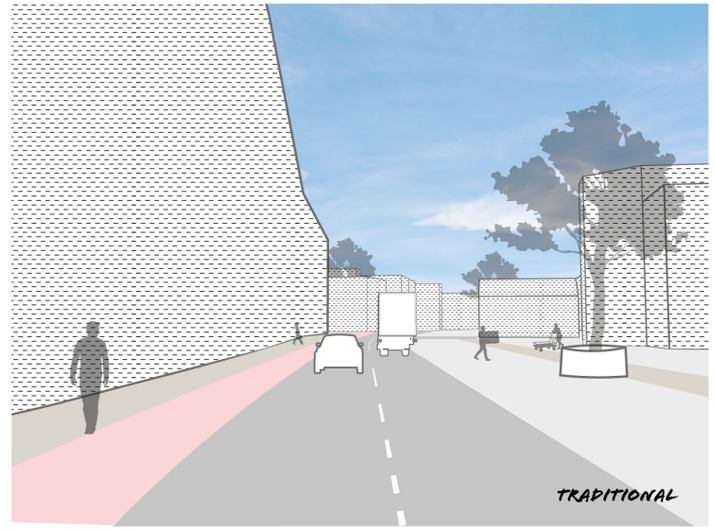


FUNCTIONAL STREET



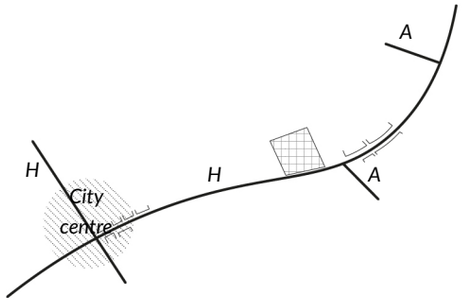
View D.

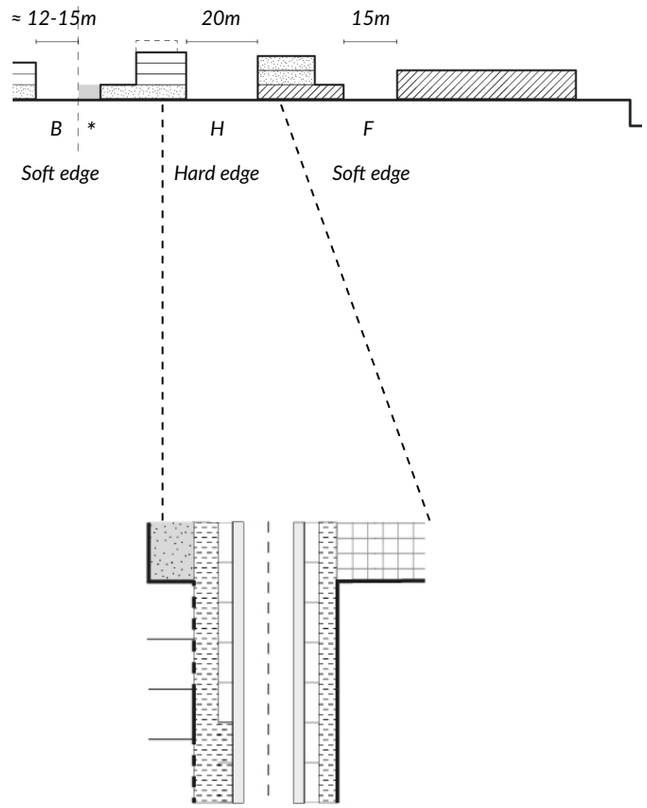
Oostzijde



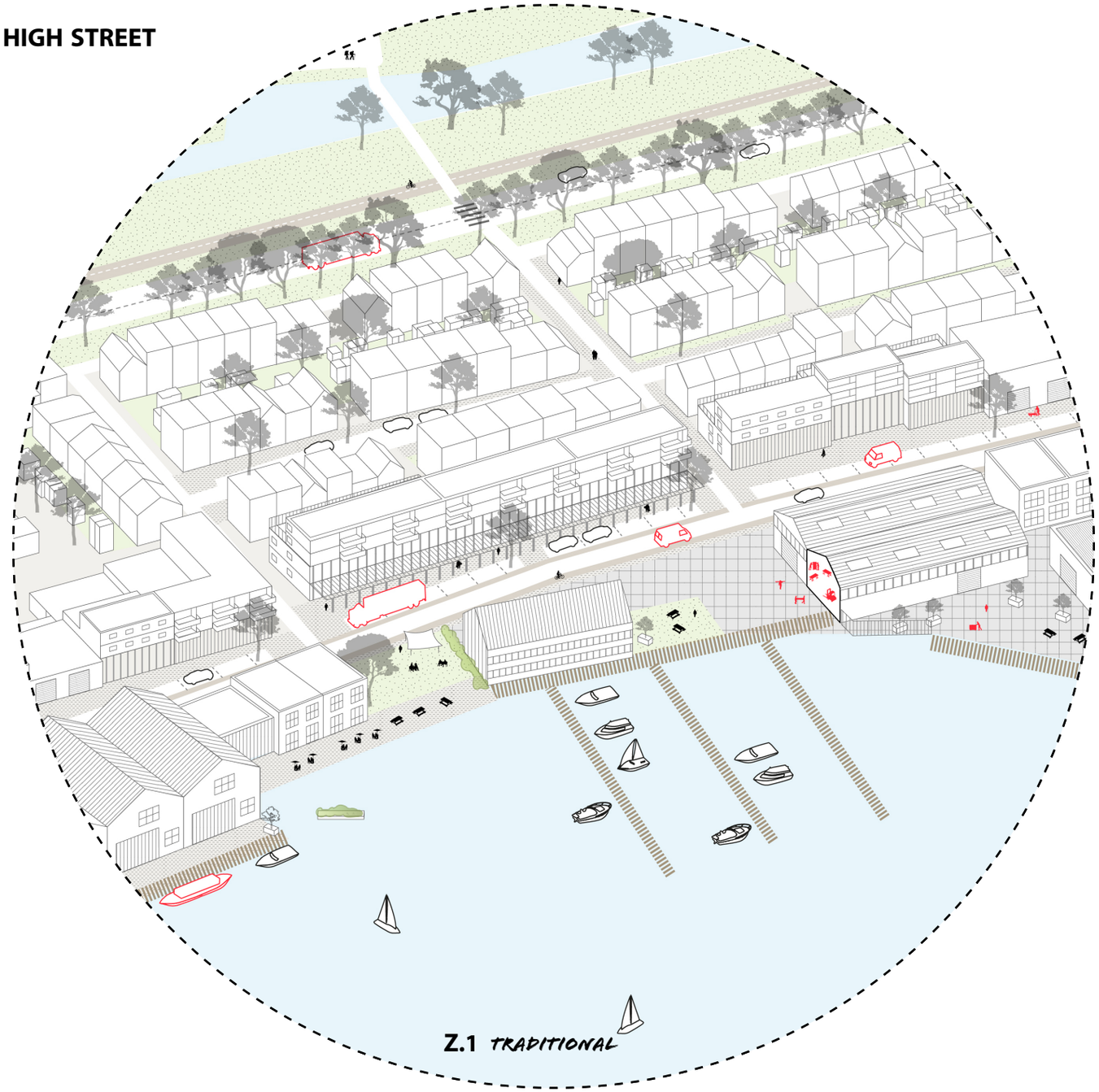
Functional street

HIGHSTREET


A
H
City
centre
H
A


≈ 12-15m
20m
15m
B
*
H
F
Soft edge
Hard edge
Soft edge

HIGH STREET

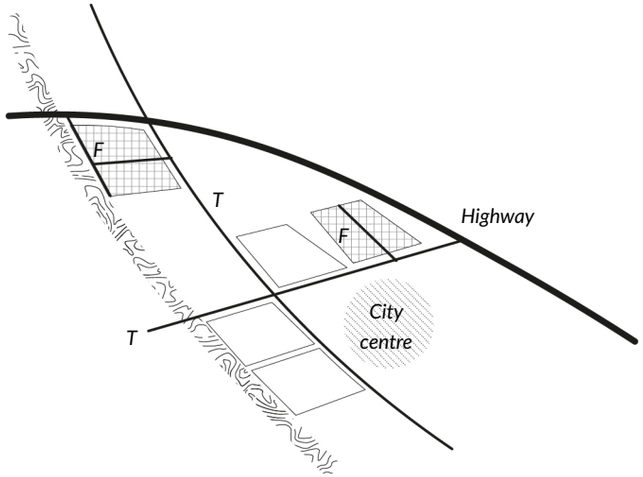


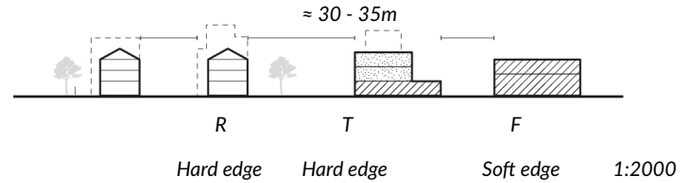
View C.

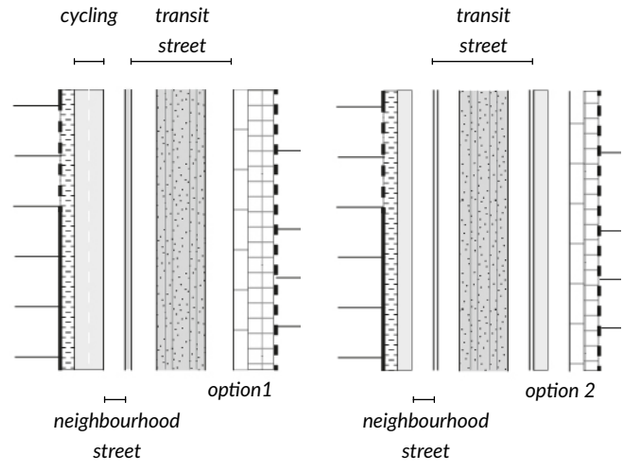
Diederik Sonoy weg

Highstreet

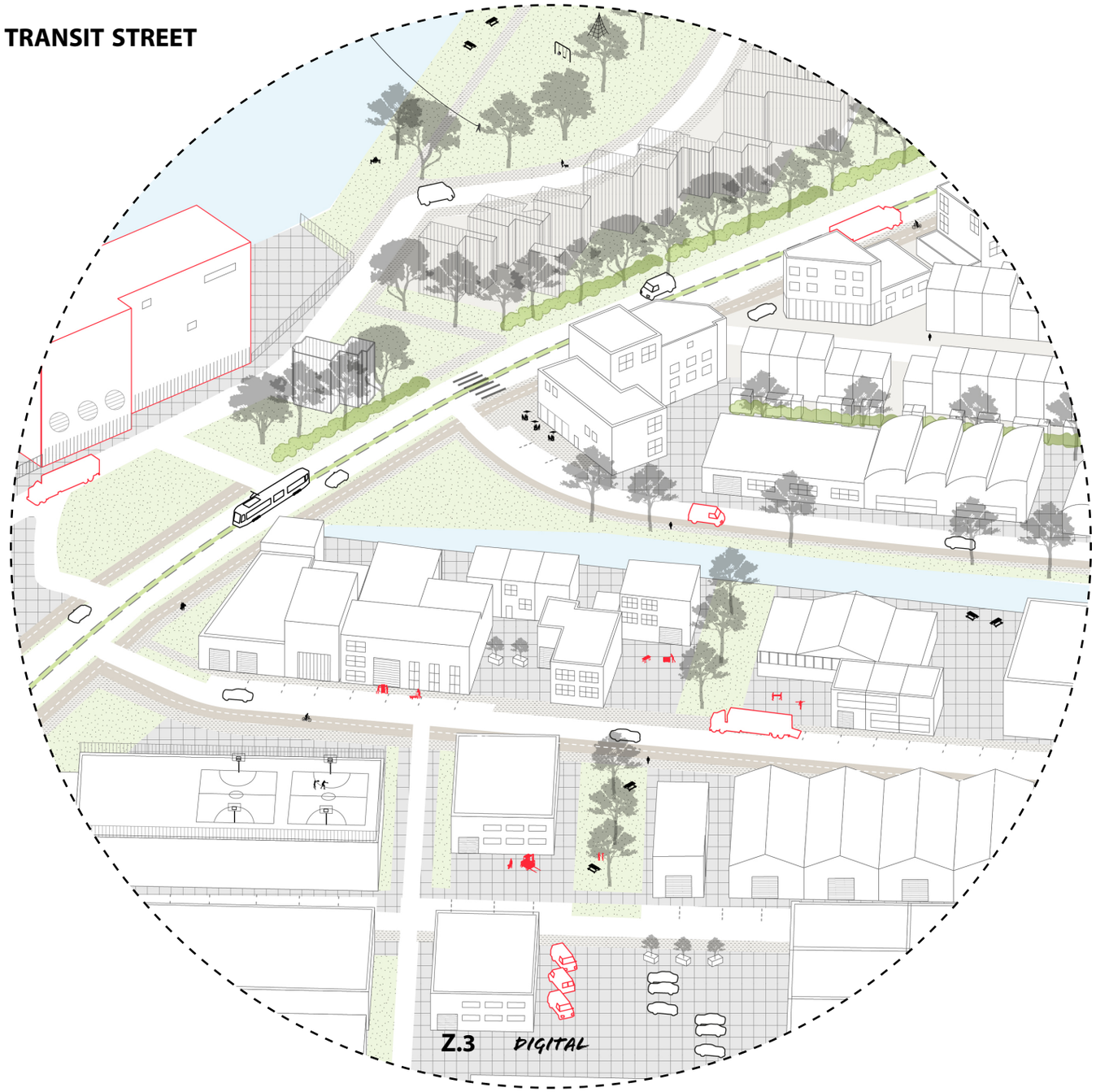
TRANSIT STREET







TRANSIT STREET



Doctor H.G. Scholtenstraat

Fast transit

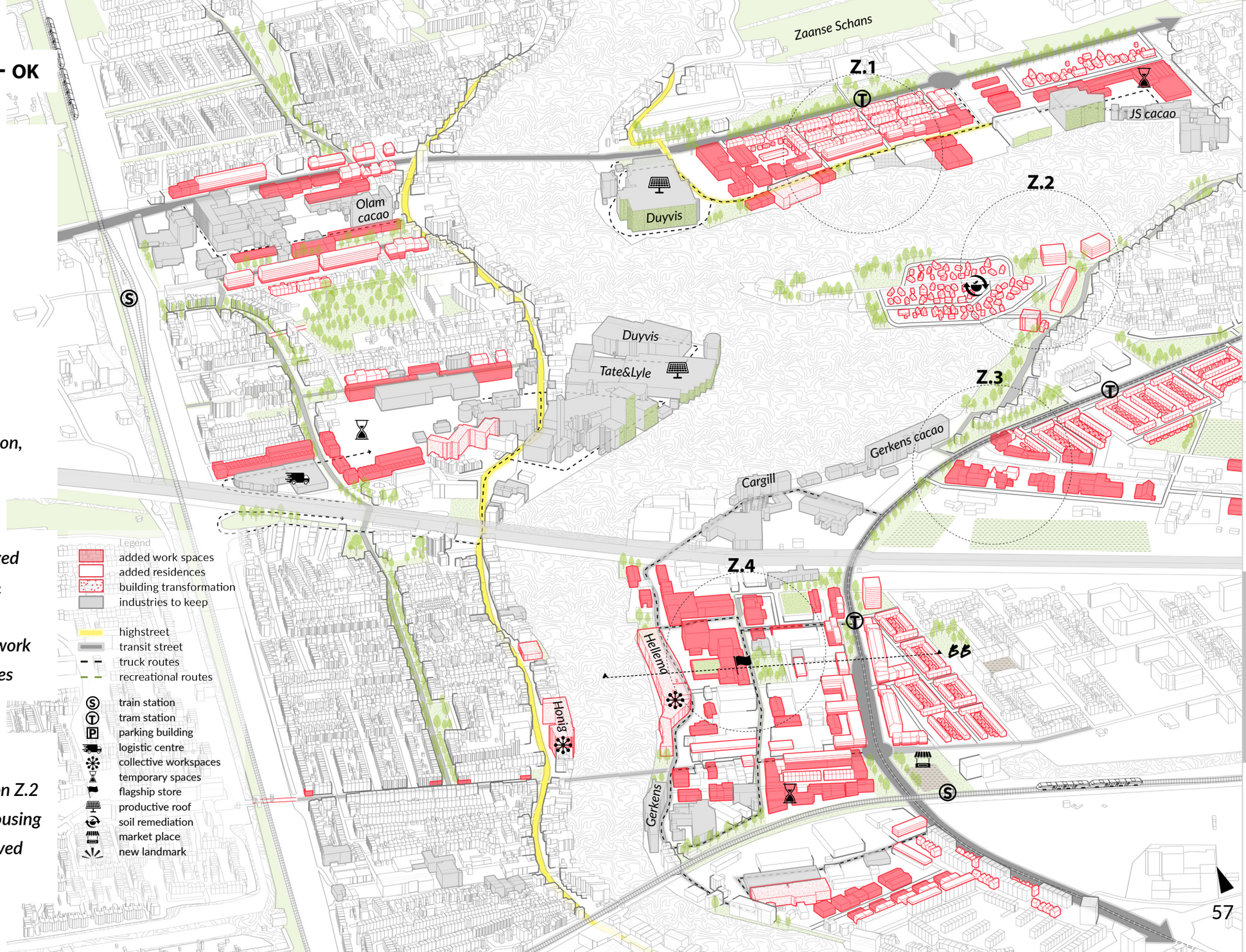
TRADITIONAL - OK

- *Removal of directly exposed housing*
- *Linear densification*

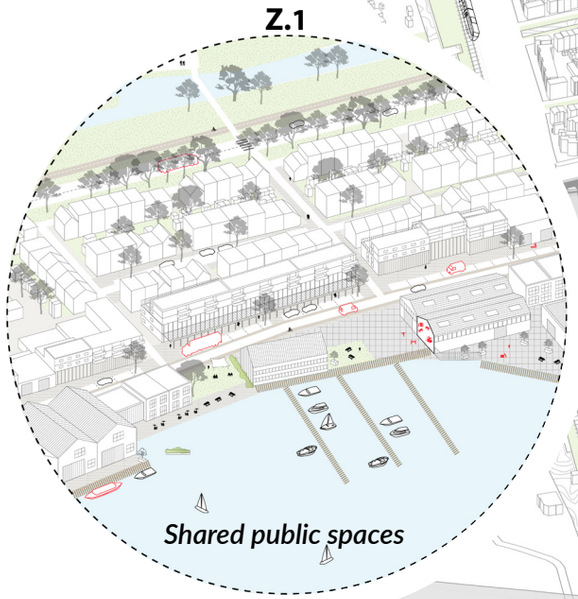
- *Parts of waterfront made accessible to the public*
- *Facade of industries along waterfront, soft materialisation, irregular form.*

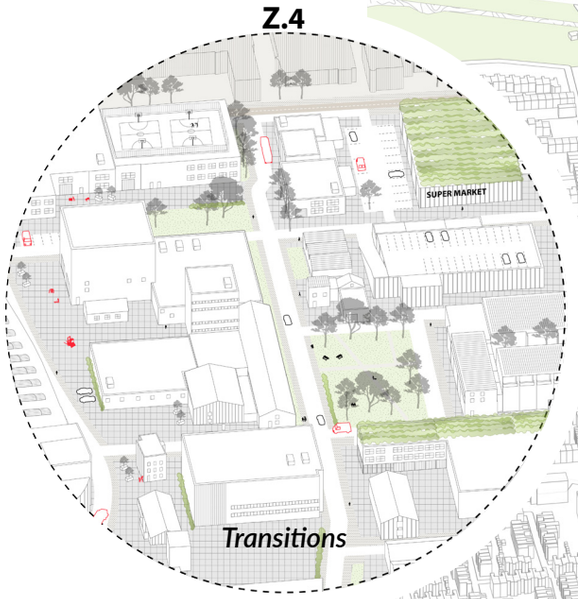
- *Addition of small-medium sized activities, local commercial & amenities, some workspaces*
- *Clustering of small-medium work activities Z.4, vertical factories*

- *Most sports fields remain*
- *Tiny houses + soil remediation Z.2*
- *60% other functions, 40% housing*
- *1500 new homes, 500 removed*



TRADITIONAL - OK





Zaanse Schans
Z.1
JS cacao
Duyvis
Z.2
Olam cacao
Duyvis
Tate&Lyle
Z.3
Gerkens cacao
Cargill
Z.4
Hellema
BB
Honig
Gerkens

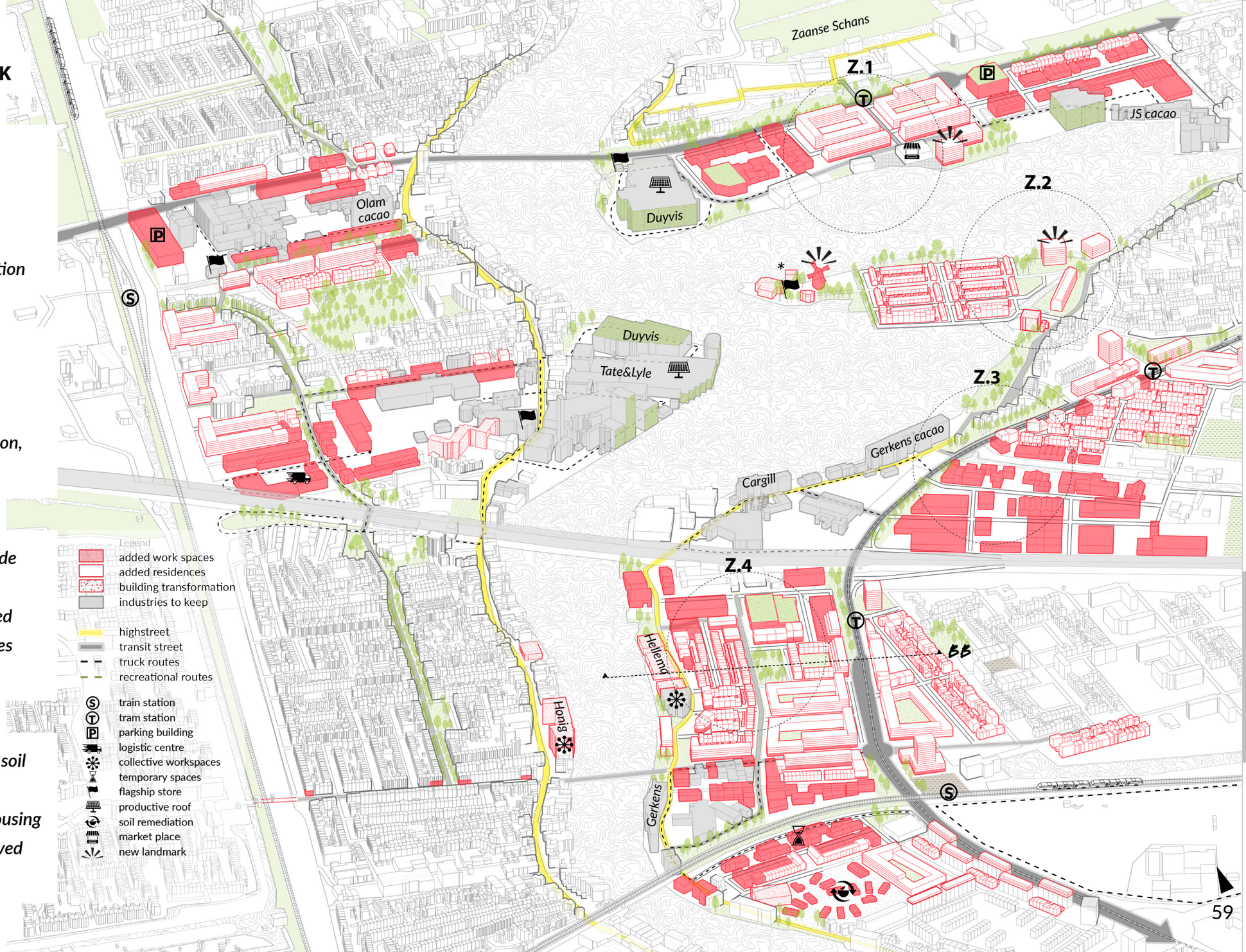
DIGITAL - OK

- *Removal of directly exposed housing*
- *Diversification of housing typologies*
- *Public transit node densification*

- *Parts of waterfront made accessible to the public*
- *Facade of industries along waterfront, soft materialisation, irregular form*

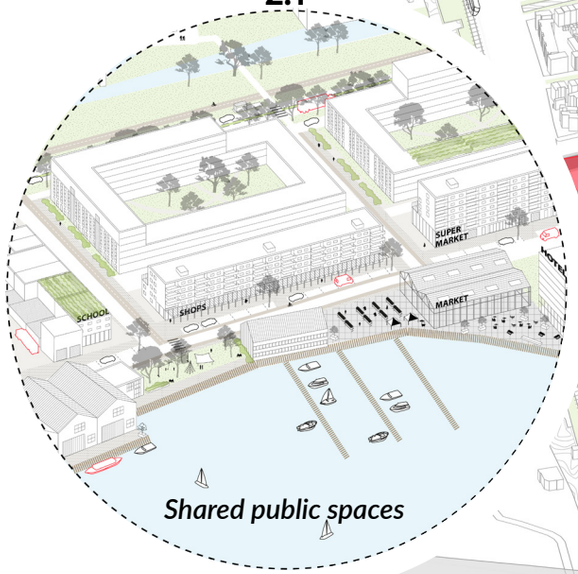
- *Large productive roofs or made accessible/ + sports*
- *Clustering small-medium sized activities around Large estates*

- *Temporary working spaces + soil remediation*
- *35% other functions, 65% housing*
- *3500 new homes, 700 removed*



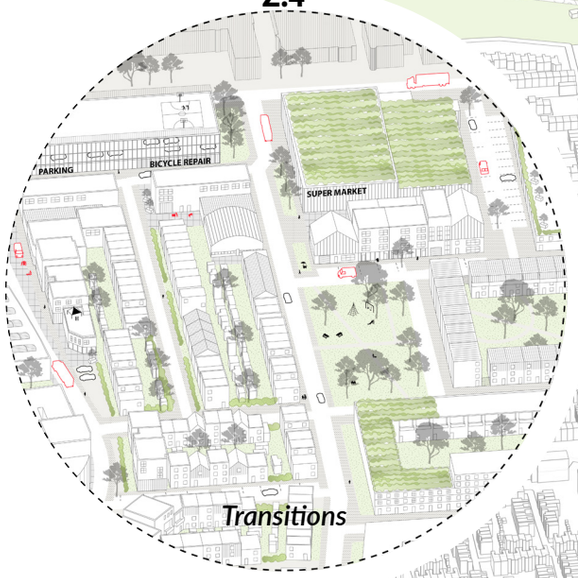
DIGITAL - OK

Z.1



Shared public spaces

Z.4



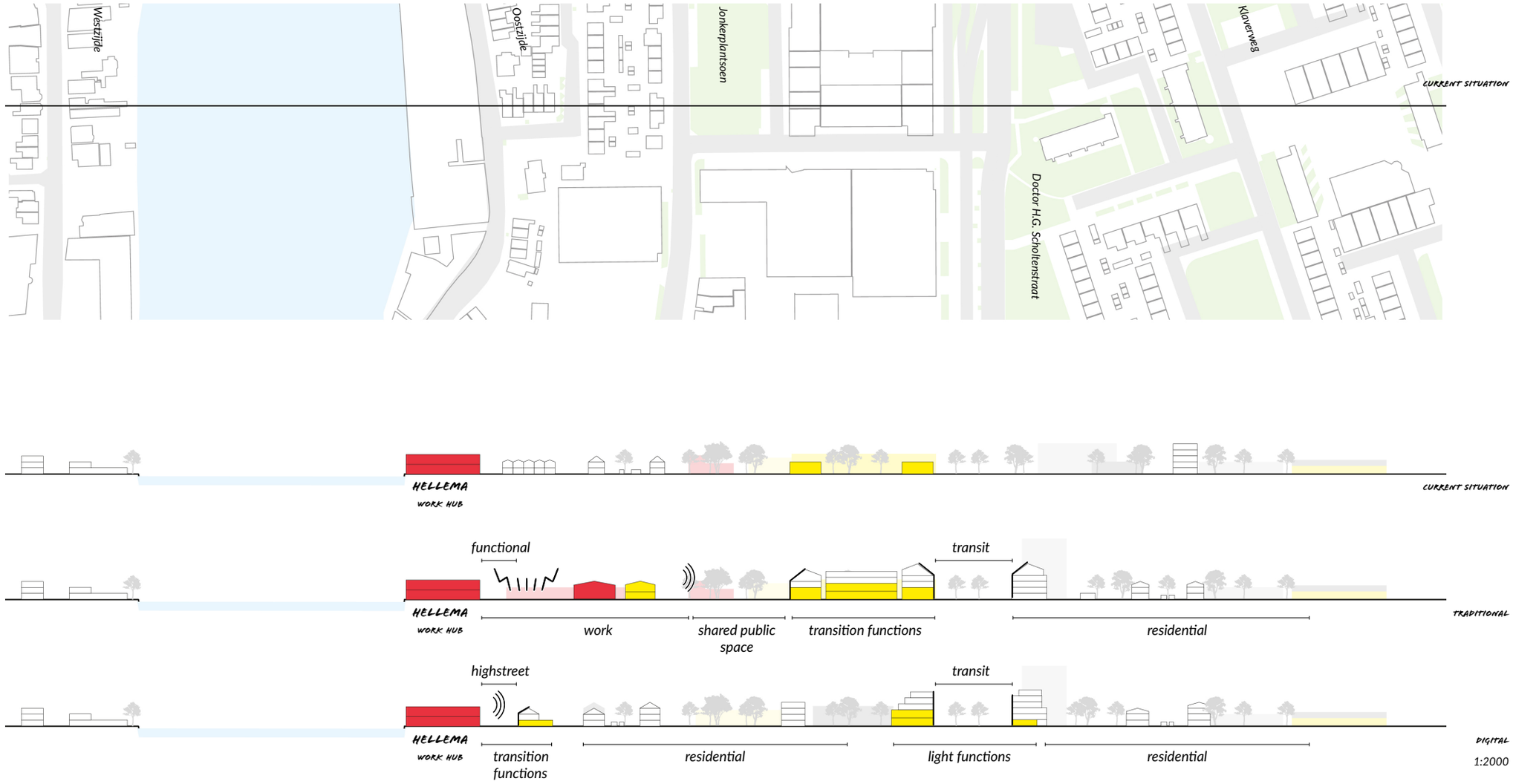
Transitions

Zaanse Schans
Z.1
JS cacao
Olam cacao
Duyvis
Z.2
Duyvis
Tate&Lyle
Z.3
Gerkens cacao
Cargill
Z.4
Hellema
Honig
Gerkens
BB
60

PART I
PART II
PART III
PART IV
CONCLUSIONS

LIVE WORK TRANSITIONS

CROSS SECTION.2 BB –



CONCLUSIONS

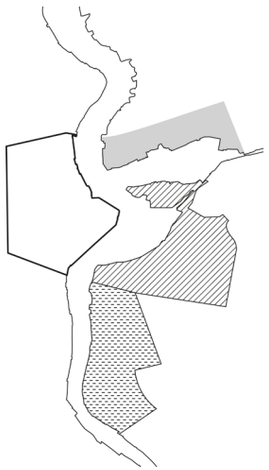
RESEARCH QUESTION

How can urban industrial integration in cities be combined with other functions to achieve densification and create qualitative live - work environments?

Subquestions:

- *How can urban design patterns be used to mediate conflicts between industry and other functions, in particular housing?*
- *To what extent can industry be integrated in the city with regard to liveability? What are the spatial limits?*
- *What is the adaptive capacity of the proposed design?*
- *What criteria should guide contemporary compact and mixed-use spatial development and transformation?*

EVALUATION OF THE DESIGN - LIVE WORK QUALITY



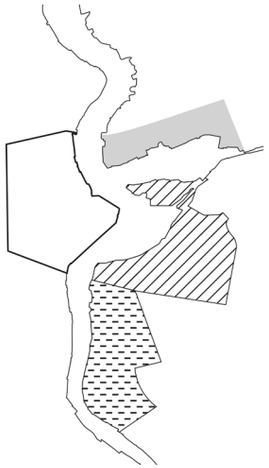
LIVE

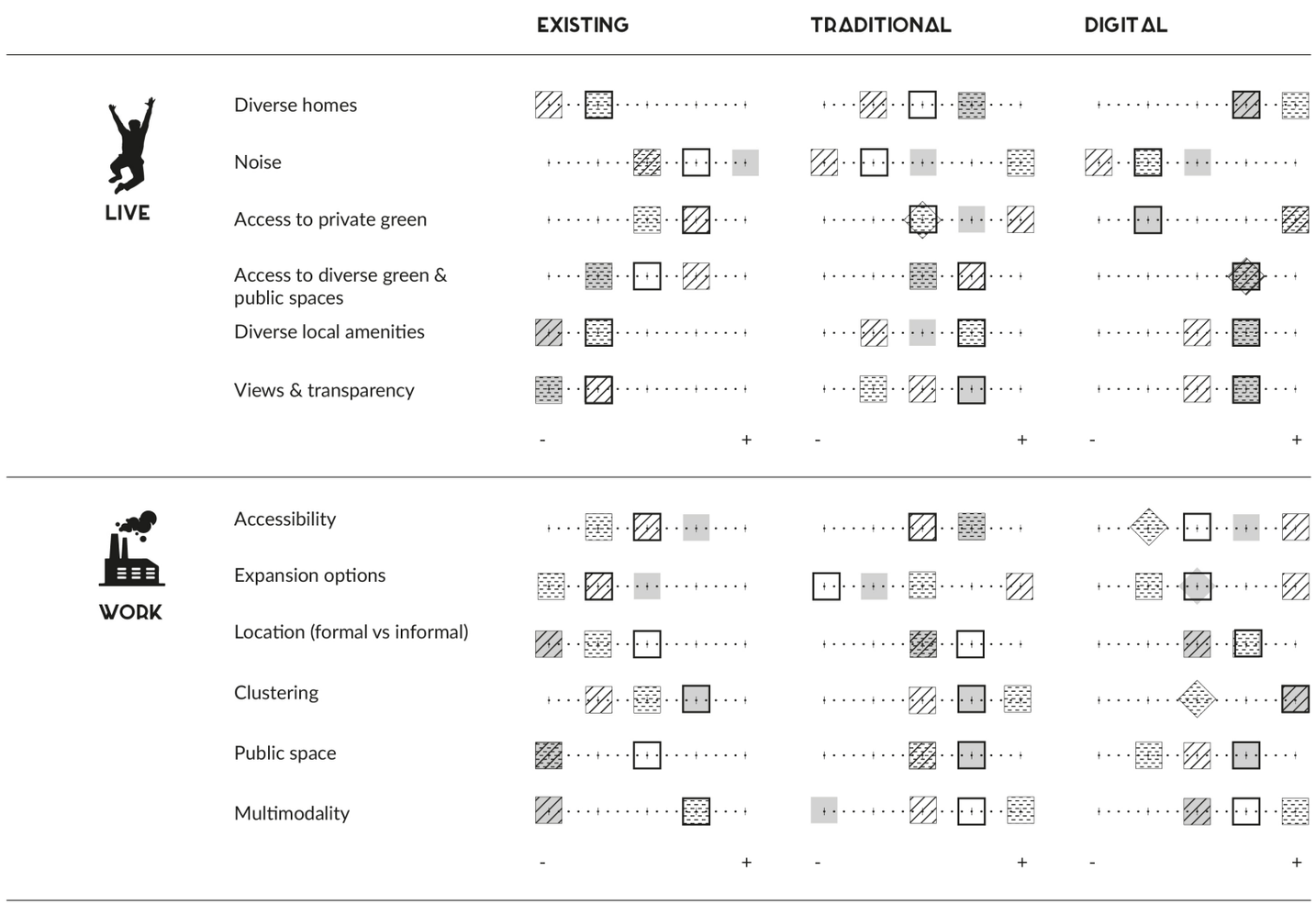
- Diverse homes
- Noise
- Access to private green
- Access to diverse green & public spaces
- Diverse local amenities
- Views & transparency

WORK

- Accessibility
- Expansion options
- Location (formal vs informal)
- Clustering
- Public space
- Multimodality

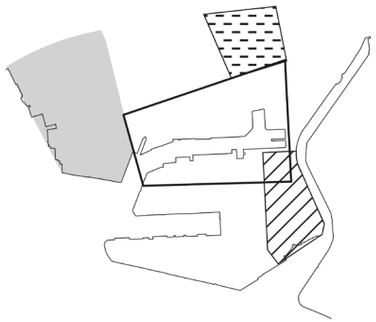
EVALUATION OF DESIGN - LIVE WORK QUALITY

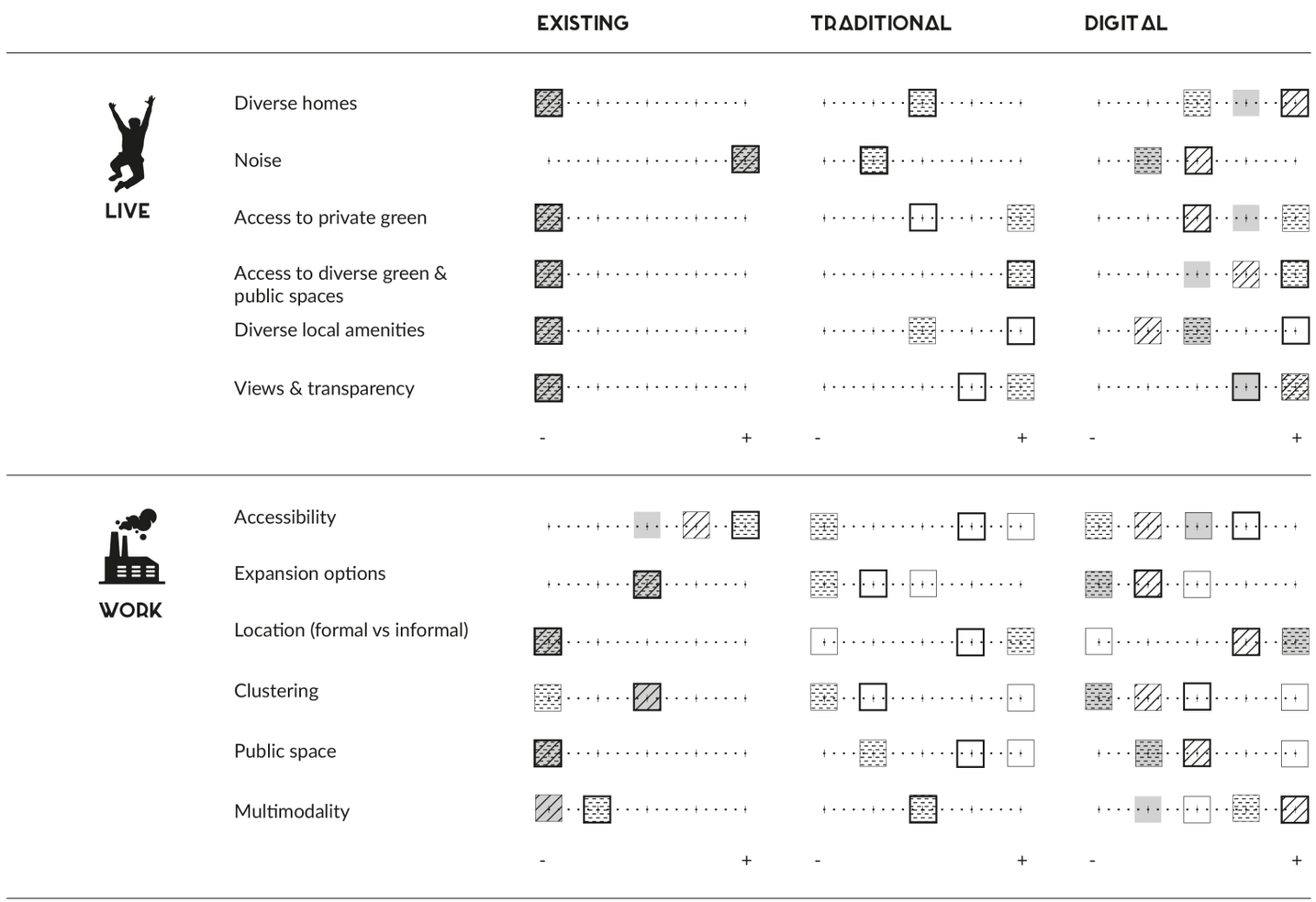




DIGITAL - ACHTERSLUISPOLDER

EVALUATION OF DESIGN - ACHTERSLUISPOLDER





SQ *How can urban design patterns be used to mediate conflicts between industry and other functions, in particular housing?*

LIVE WORK TRANSITIONS

Public space

- *Shared Public spaces*
- *Open up the waterfront*
- *Green corridor*

Noise

- *Reorganisation of functions, enabling transitions*
- *Orientation of residences, exposed vs quiet side*
- *Soft materialisation and irregular form*

Expansion options

- *Clustering of small-medium sized activities around larger estates*
- *Soft edges*

Accessibility

- *Logistic activities with two way access to main road network to minimise traffic through neighbourhoods*
- *separated cycling lanes and destination residential traffic lanes in busy streets used by all*

SQ *To what extent can industry be integrated in the city with regard to liveability? What are the spatial limits?*

LIVE WORK TRANSITIONS

Limitations

expansion opportunities not possible everywhere, need to select certain (cluster) locations

gradual transitions in existing urban fabric are difficult (opportunity in transformation locations)

separation of the highstreet and functional use/street by large industries not always possible

Relocation

(Large) logistic, wholesale and storage businesses clustered together in an accessible location. (+ productive rooftops, sports etc.)

Stimulate businesses with inefficient site lay-outs to relocate and build new premises more efficiently on one site and vertically

SQ *What is the adaptive capacity of the proposed design?*

ADAPTIVE CAPACITY

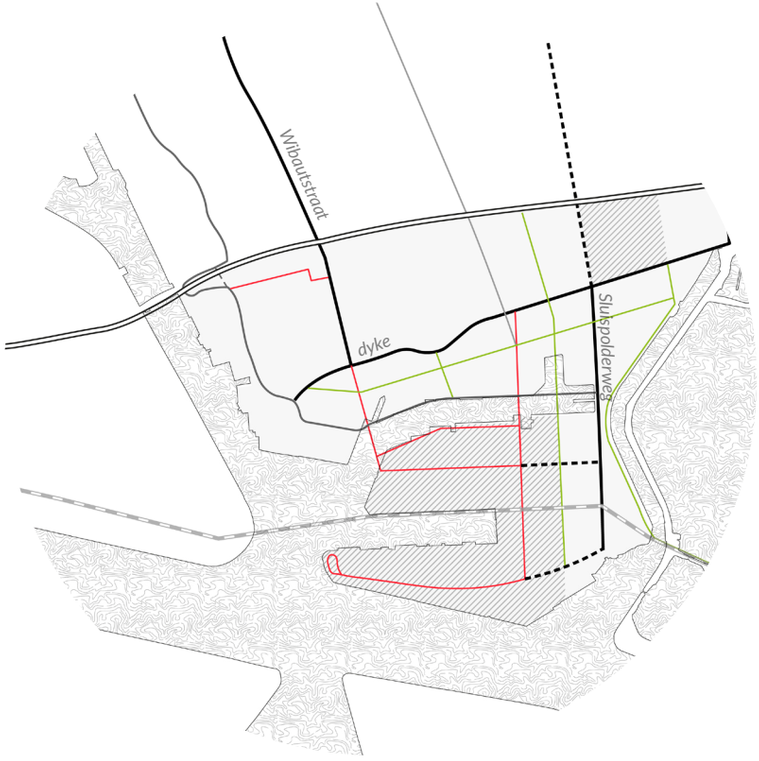
Traditional

Digital

SQ *What is the adaptive capacity of the proposed design?*

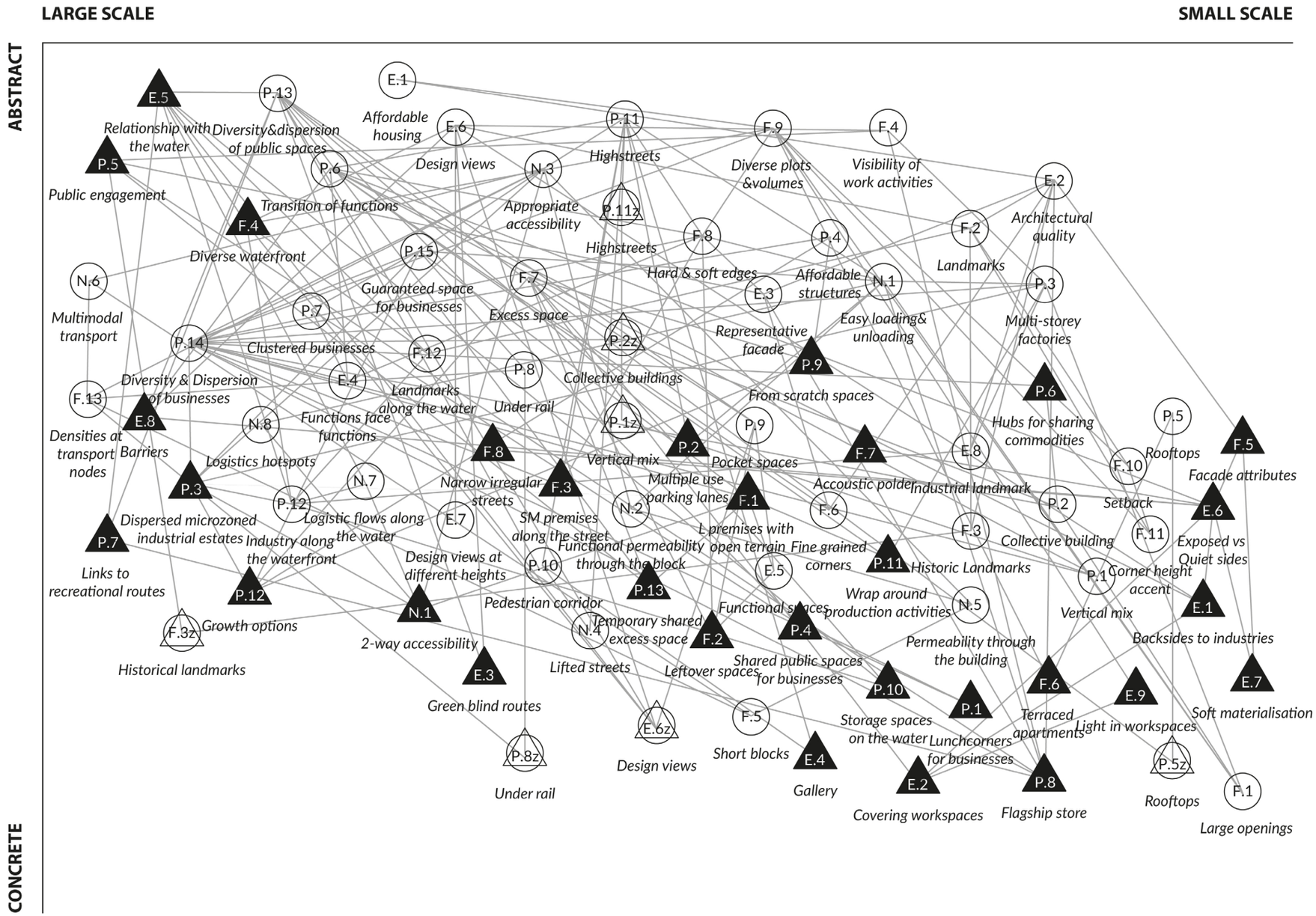
ADAPTIVE CAPACITY

Traditional

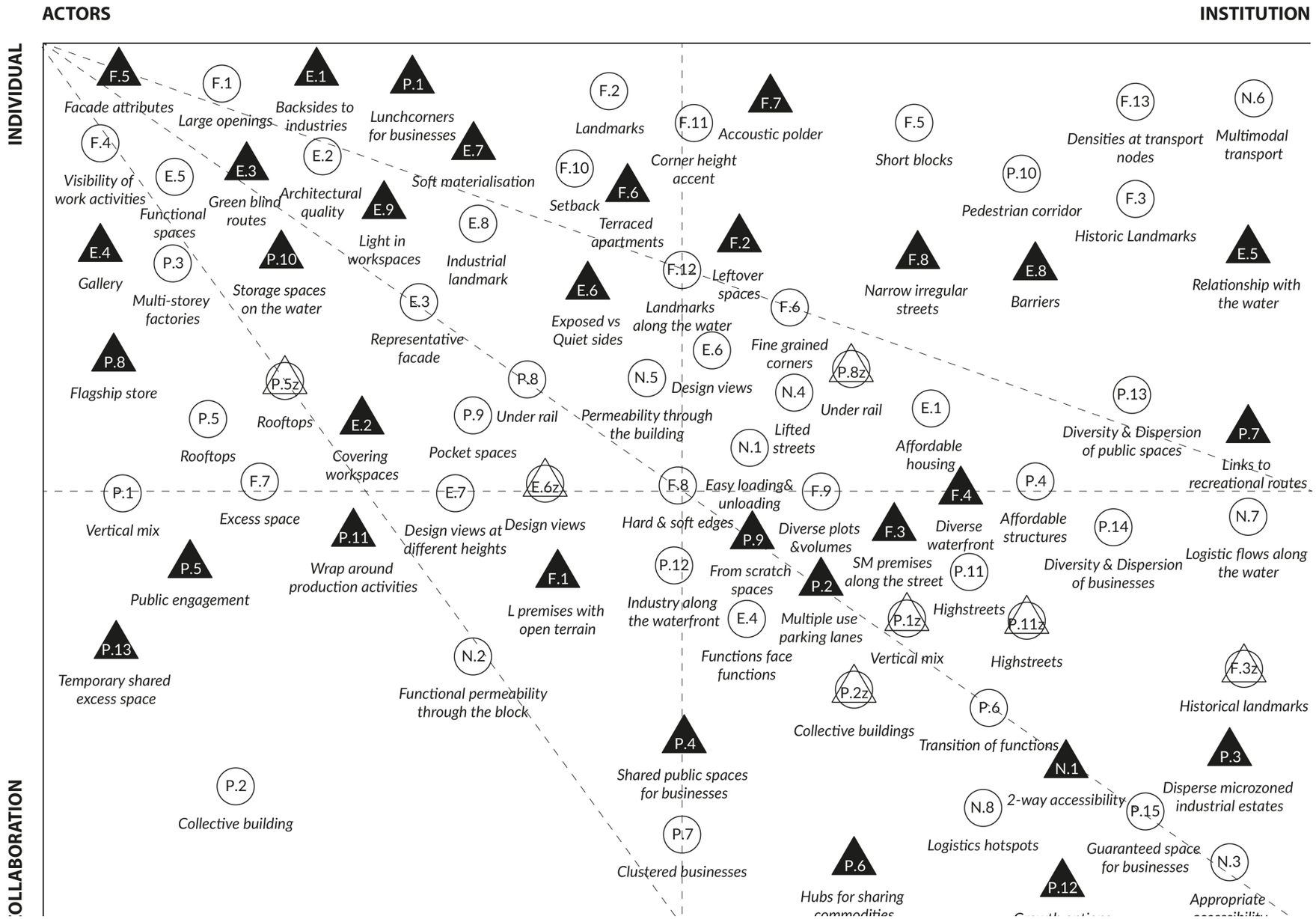


Digital

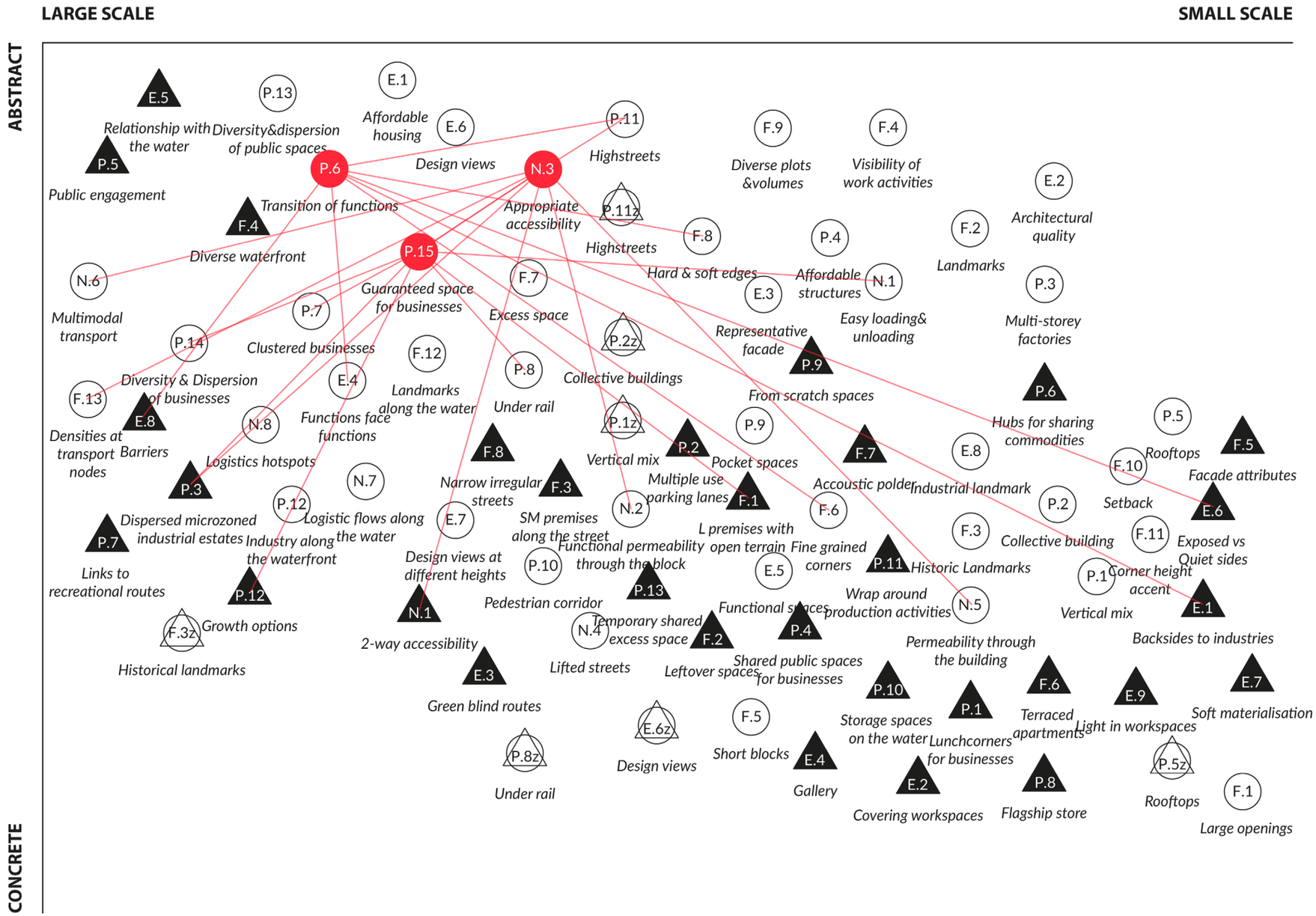
PATTERNFIELD - INTERRELATIONS



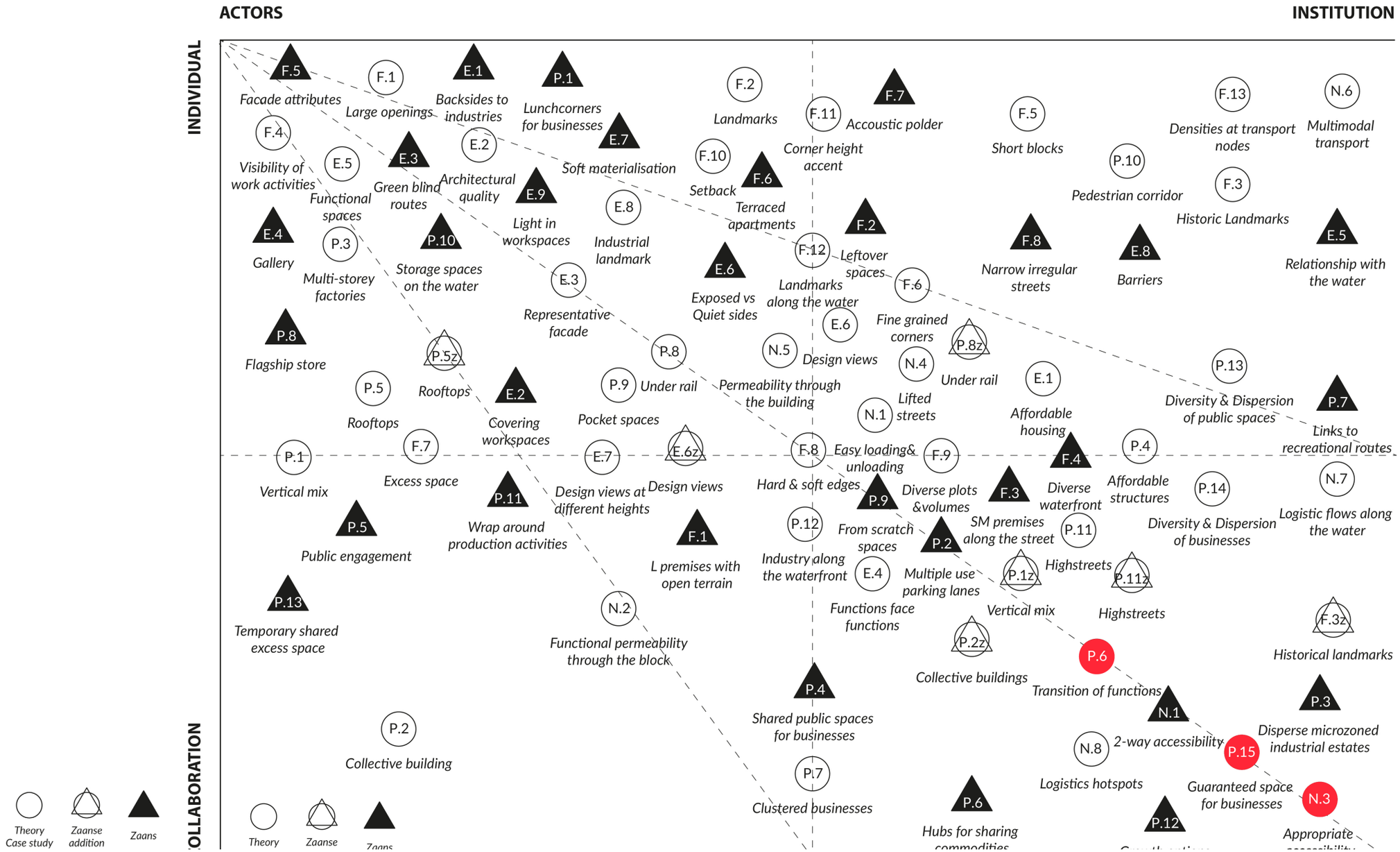
PATTERNFIELD - ACTORS IN CONTROL



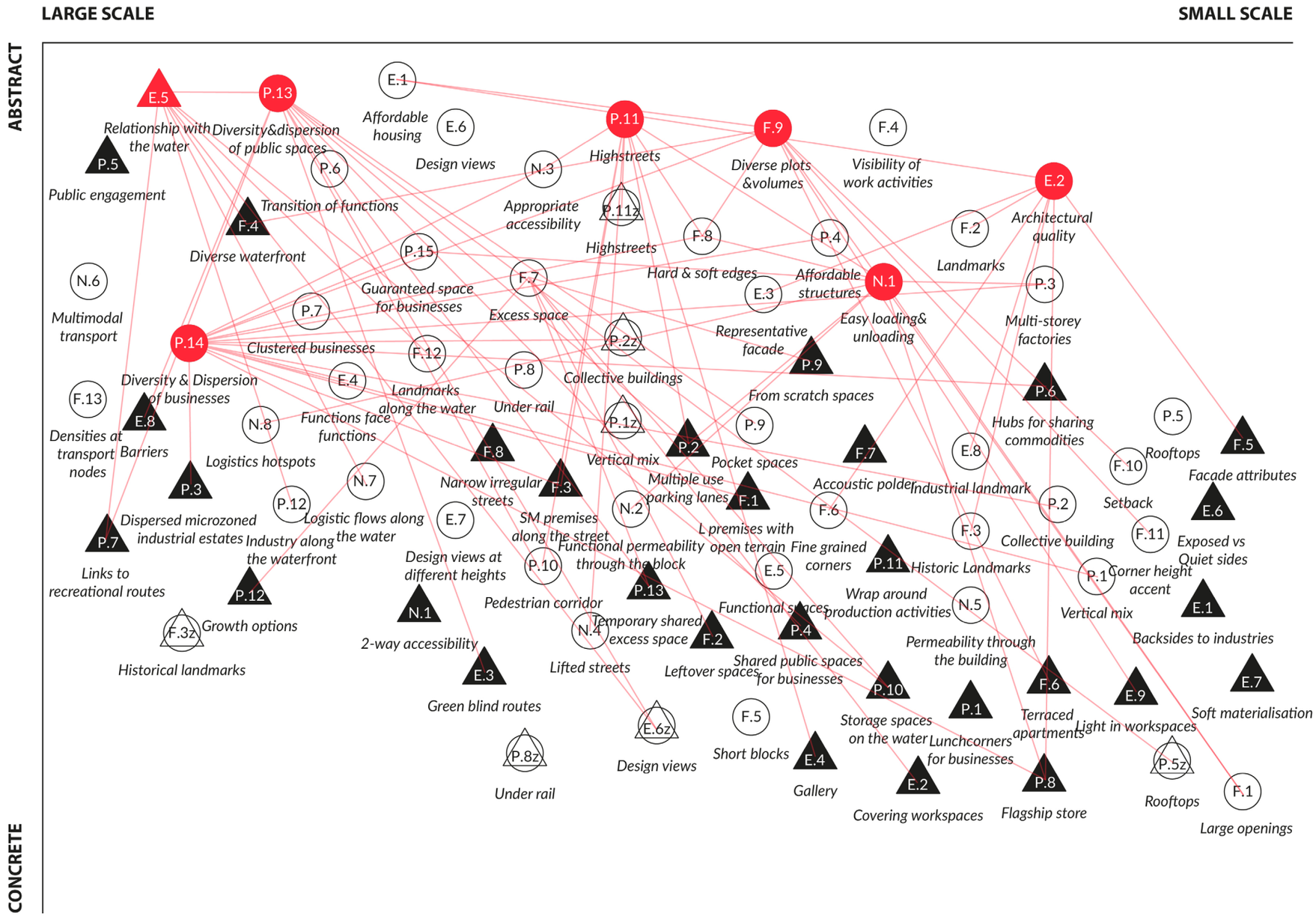
PRIORITISED PATTERNS



PRIORITISED PATTERNS



FUNDAMENTAL PATTERNS



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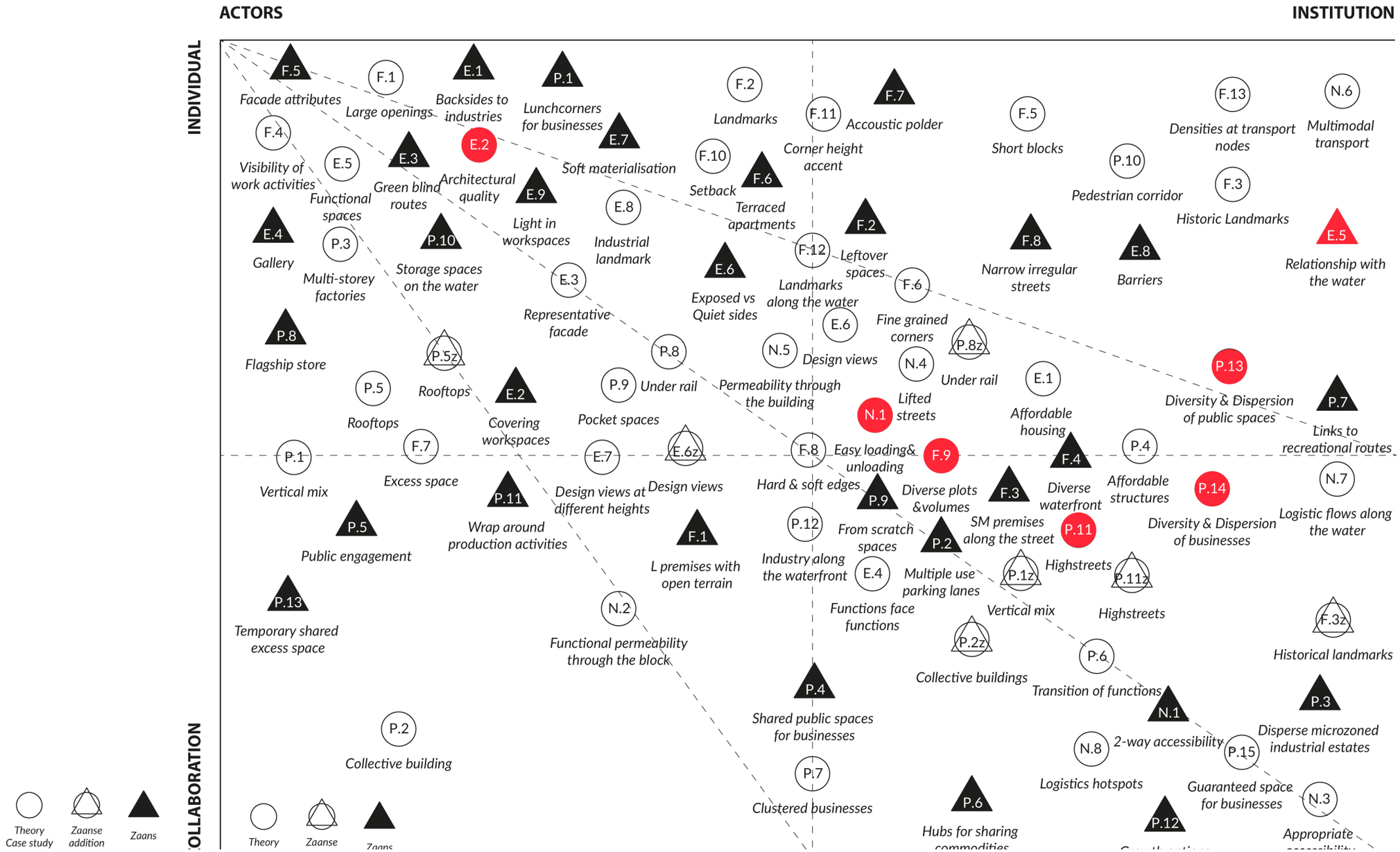

SQ *What criteria should guide contemporary compact and mixed-use spatial development and transformation?*

PLANNING STRATEGY

Backbone

Guaranteed spaces for businesses (P.15) *&*
Dispersed micro zoned industrial estates (ZP.3)
(clustering of smaller and medium sized work spaces around larger estates - "transition belt", "microzoning")

Appropriate accessibility (N.3) *Determining streets that are representative or functional, with hard or soft edges, in relation to the potential activities -> this is linked to who will use the street (presented streettypes)*
Important: Two way access route to main road network for large industrial estates/ with relatively large logictical needs

Transition of functions (P.6) *A gradual transition on district level based on 'Rust Reuring Ruis'.*
Local transitions: Orientation of residences, limit potential nuisance sources to one side; ***Shared public spaces as transition space/ soft barrier (Green corridor)***

Diversity of plots and volumes (F.9), Diversity and dispersion of businesses (P.14) and public spaces (P.13)

Collaboration & Participation!

GENERALISATION

Patterns

Patterns from theory - Western context

Zaanse Patterns - further research on transferability needed

Patterns as a planning and design tool

Patterns show potential qualities, does not determine one outcome
The context determines the design

Prioritised patterns can be used to develop a framework,
Fundamental patterns can be used to guide the infill of the framework

Groups of patterns can be found that are related to certain street types (have similar positioning in the city and connectivity in the network)

Outcome predominantly determined by choices about Large estates, keep or relocate? allow expansion or not?

CONSIDERATIONS

Historical relationship with industries, positive or negative?

Revitalisation of the highstreet

Amsterdam - Zaandam relationship, resistance to high densities

Social safety and demographic of residents

THANK YOU

Questions?