

Silesia

TRANSFORMATION OF POST-INDUSTRIAL AREAS
on an example of Rozbark/ Bytom/ South Poland



Anna Gralka

Urban Regeneration - Department of Urbanism - Faculty of Architecture, Urbanism and Building Sciences
Delft University of Technology

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SILESIA REGION

THE CITY OF BYTOM

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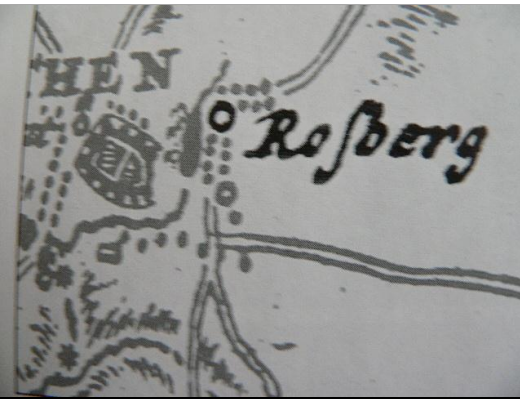
DESIGN PROCESS

DESIGN: Construction Site: 1st Stage

Construction Site: 2nd Stage

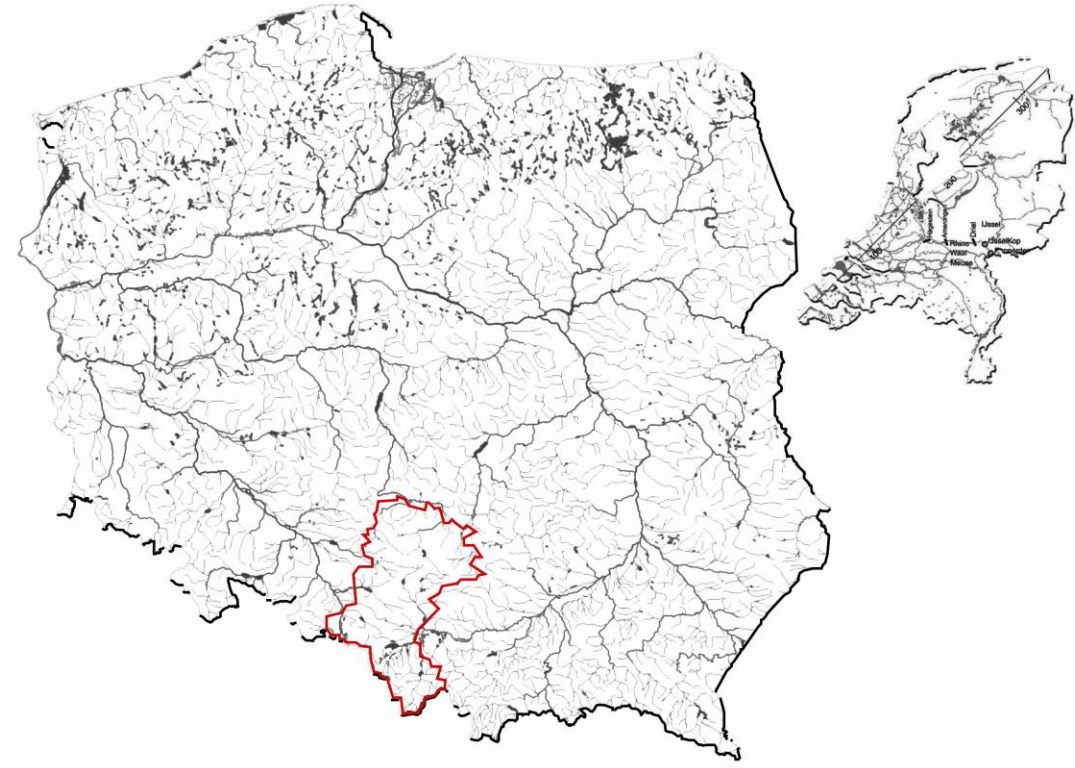
Construction Site: 3rd Stage

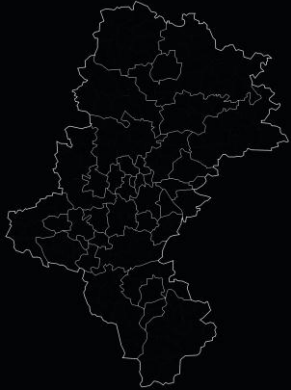
CONCLUSION



INTRODUCTION

Location. South Poland

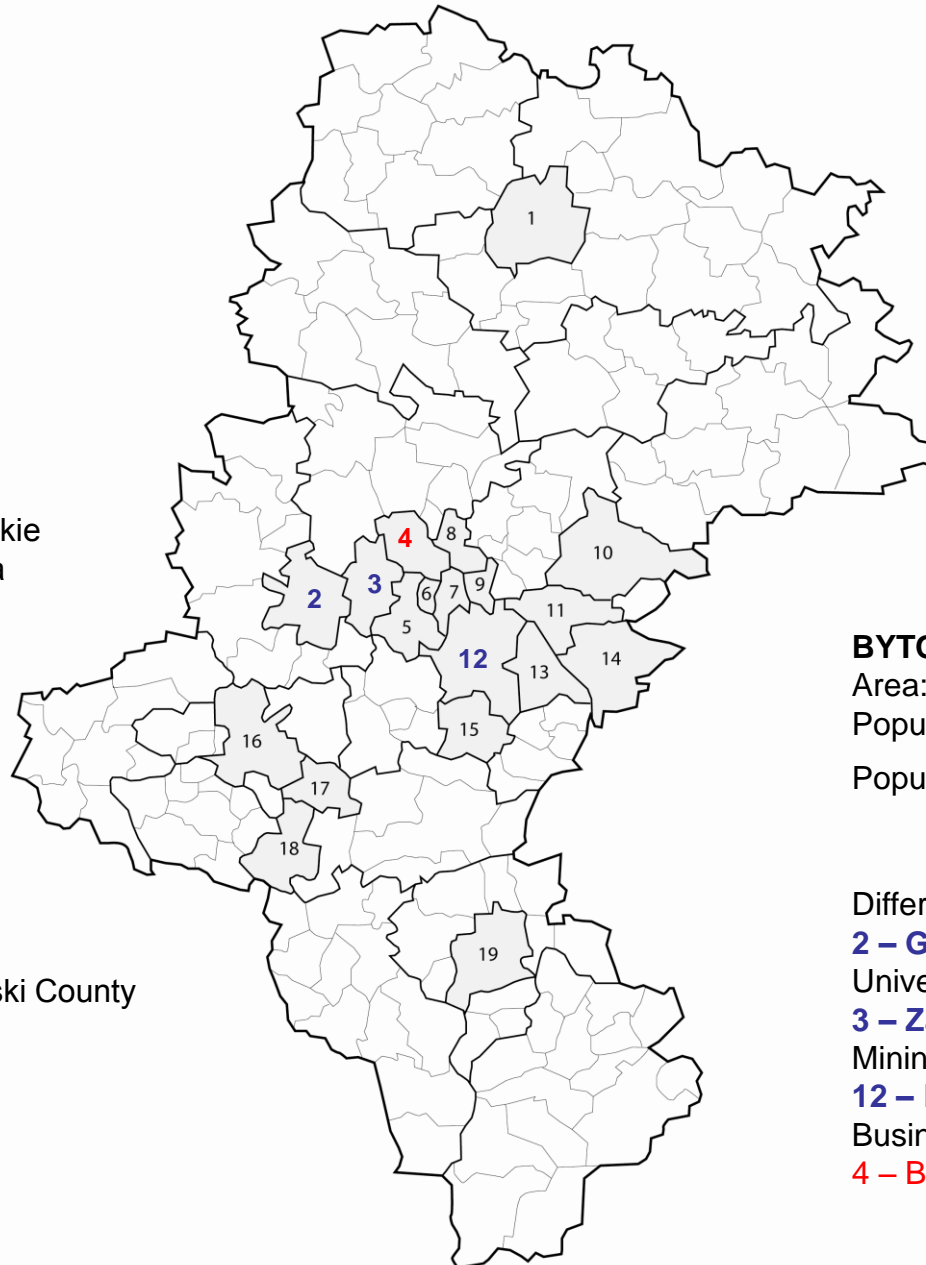




SILESIA REGION

Location in the region

1. Częstochowa
2. Gliwice
3. Zabrze
4. Bytom
5. Ruda Śląska
6. Świętochłowice
7. Chorzów
8. Piekary Śląskie
9. Siemianowice Śląskie
10. Dąbrowa Górnicza
11. Sosnowiec
12. Katowice
13. Mysłowice
14. Jaworzno
15. Tychy
16. Rybnik
17. Żory
18. Jastrzębie-Zdrój
19. Bielsko-Biała
20. Rybnicki County
21. Bieruńsko-Lędziński County



BYTOM

Area: 8.000 sq. km

Population: 4 mln

Population/sq. km: 230

Different identities:

2 – Gliwice:

University of Technology

3 – Zabrze:

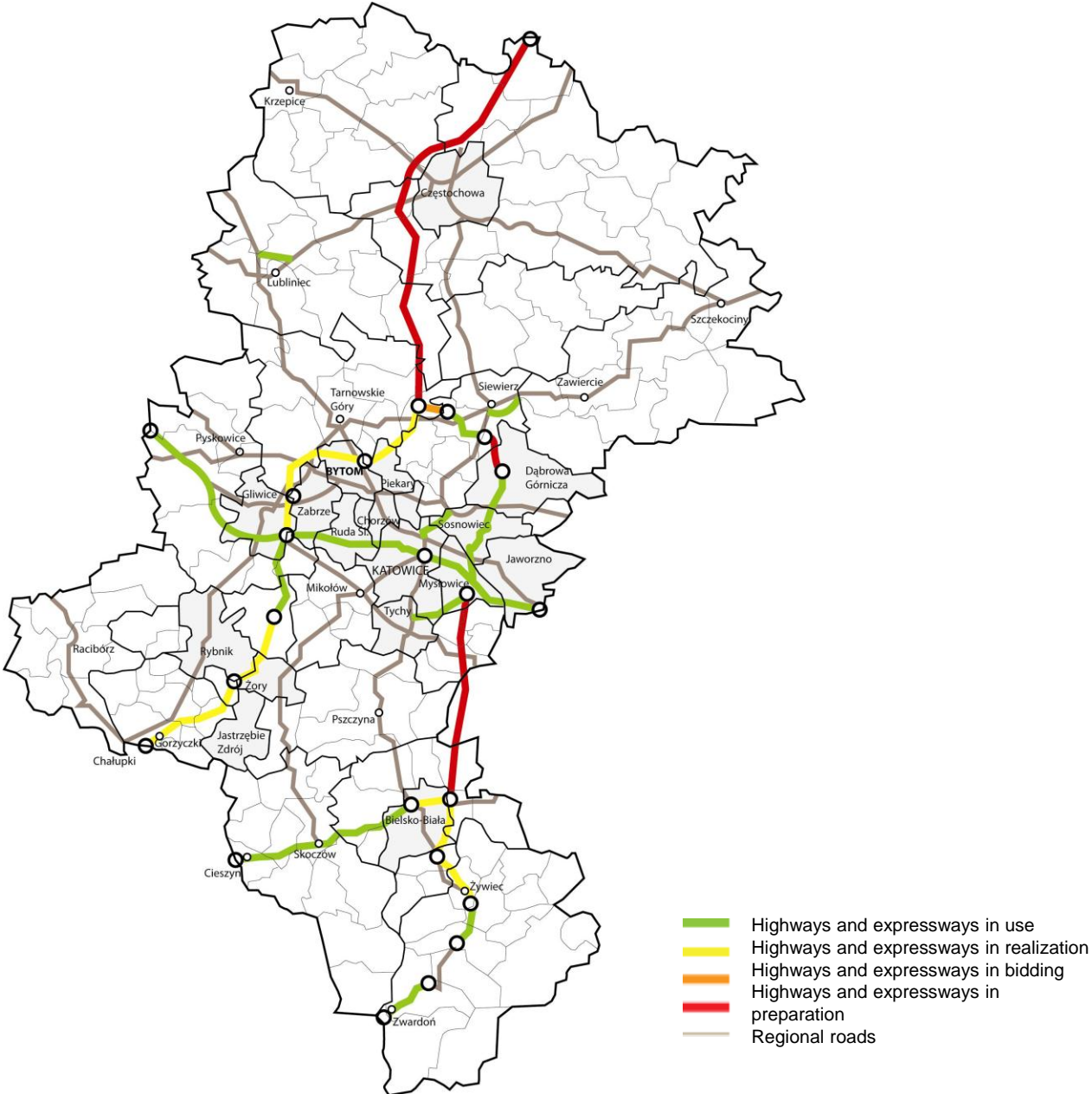
Mining Museums

12 – Katowice:

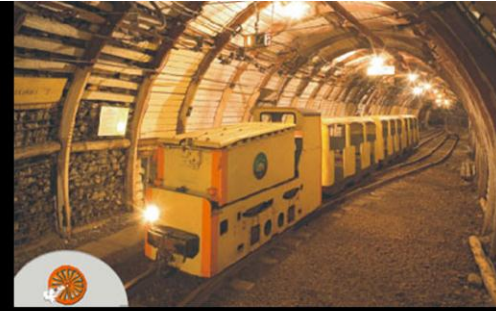
Business Centre

4 – Bytom: ?

Silesia - Infrastructure



The Silesian Industrial Monuments Route

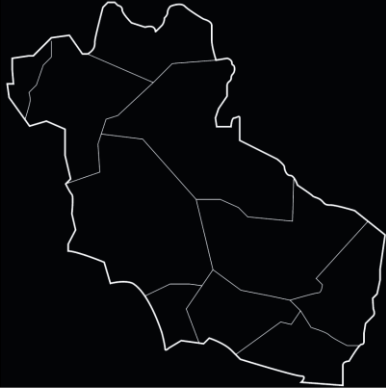


The Silesian Industrial Monuments Route

Beginning station of narrow-gauge railway/ Bytom

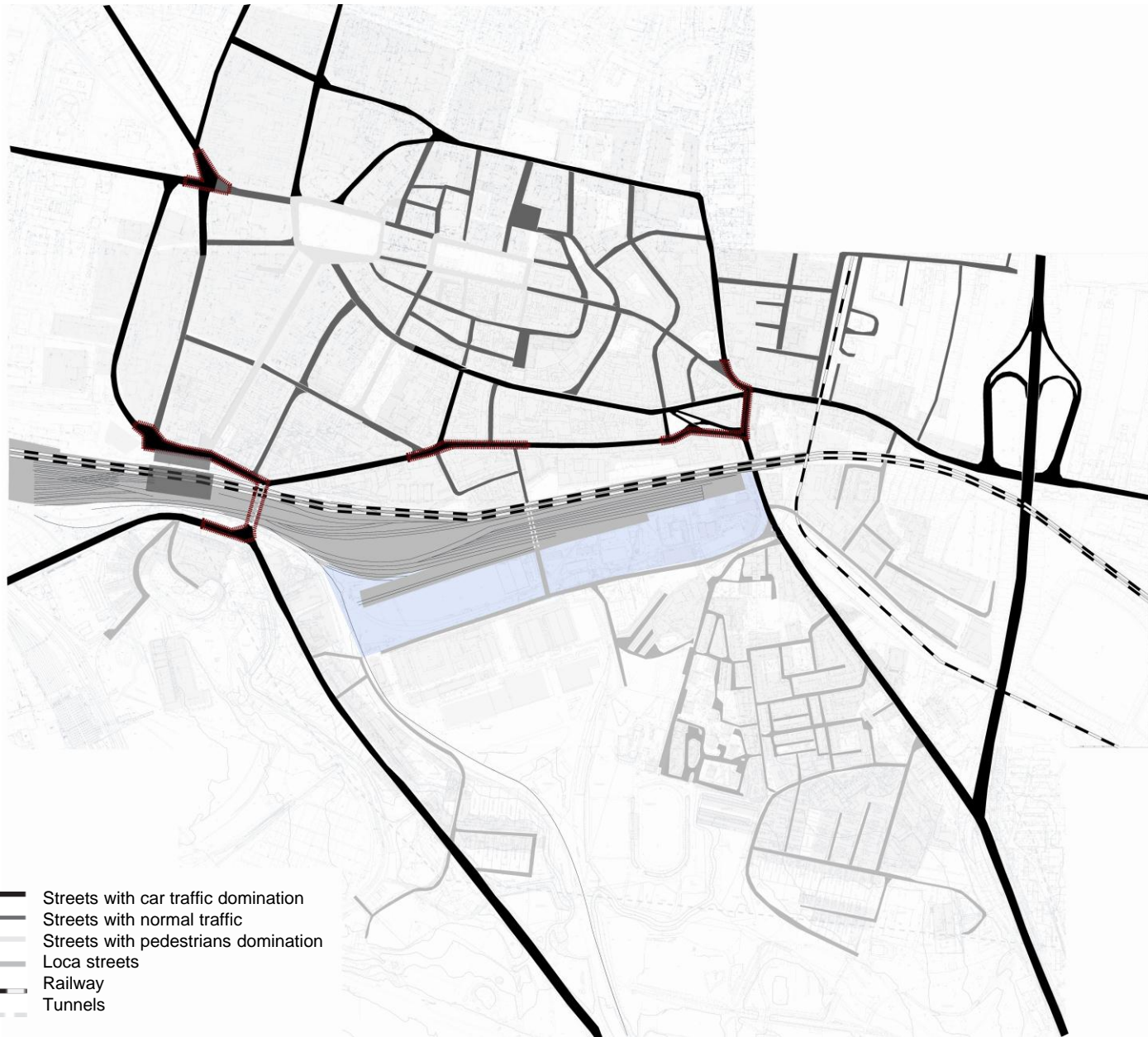


„Industriada 2010” thermal-electric power station Szombierki/ Bytom

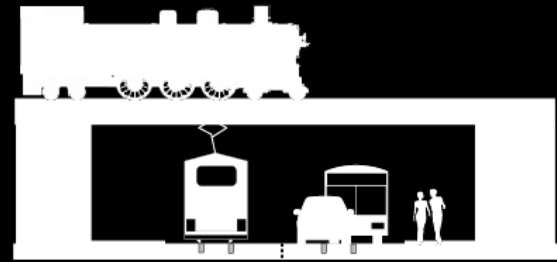


The CITY of BYTOM

BYTOM - Infrastructure



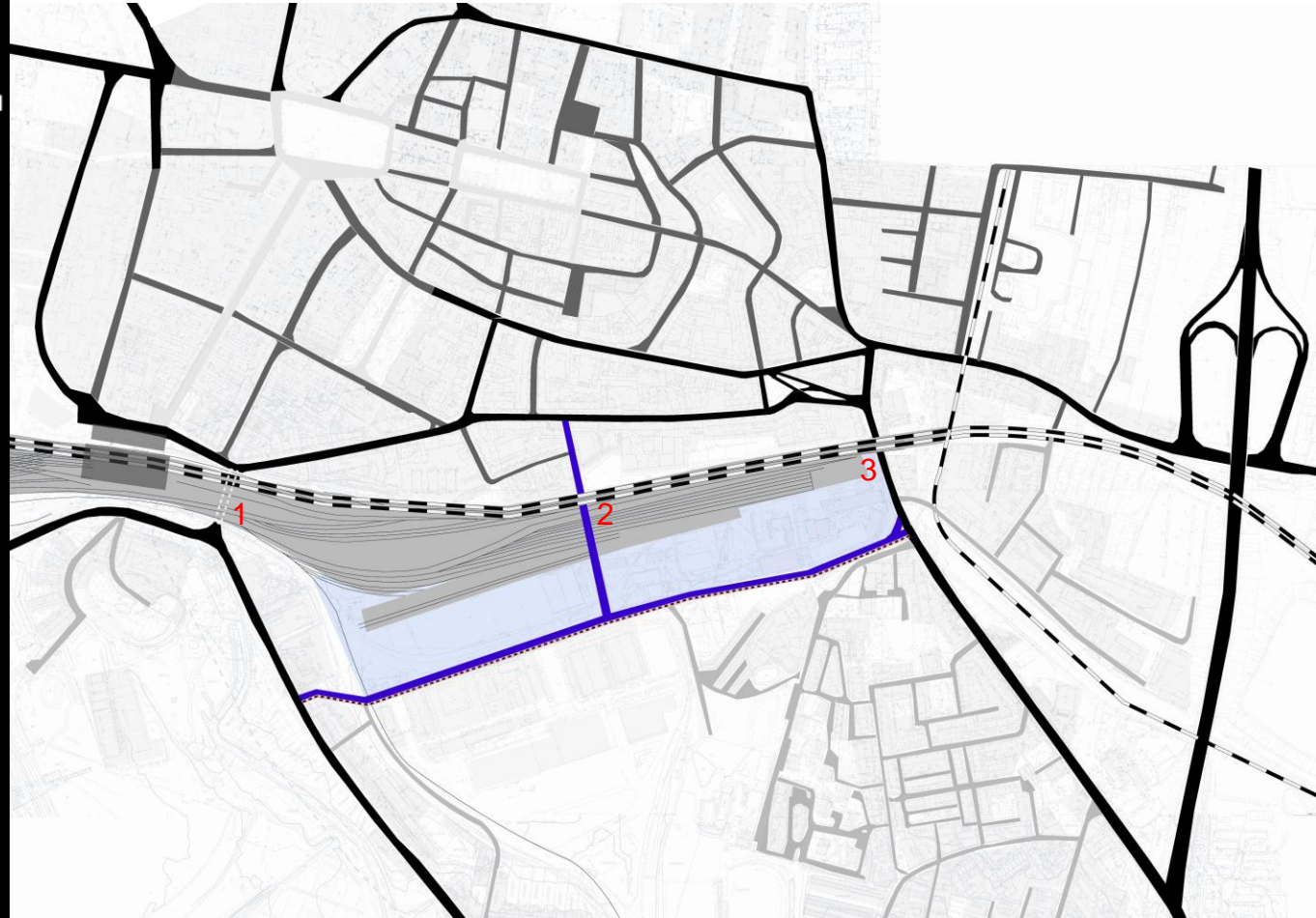
BYTOM – Connections North-South



Tunnel 1 & 3



Tunnel 2



- Streets with car traffic domination
- Streets with normal traffic
- Streets with pedestrians domination
- Loca streets
- - - Railway
- - - Tunnels
- New/ improved roads
- - - New bus line

BYTOM – Public Spaces



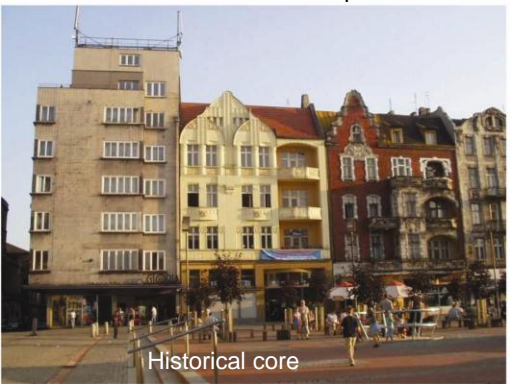
Library and Silesian Museum



Shopping Mall and Market Square



Pedestrian Street and Opera House



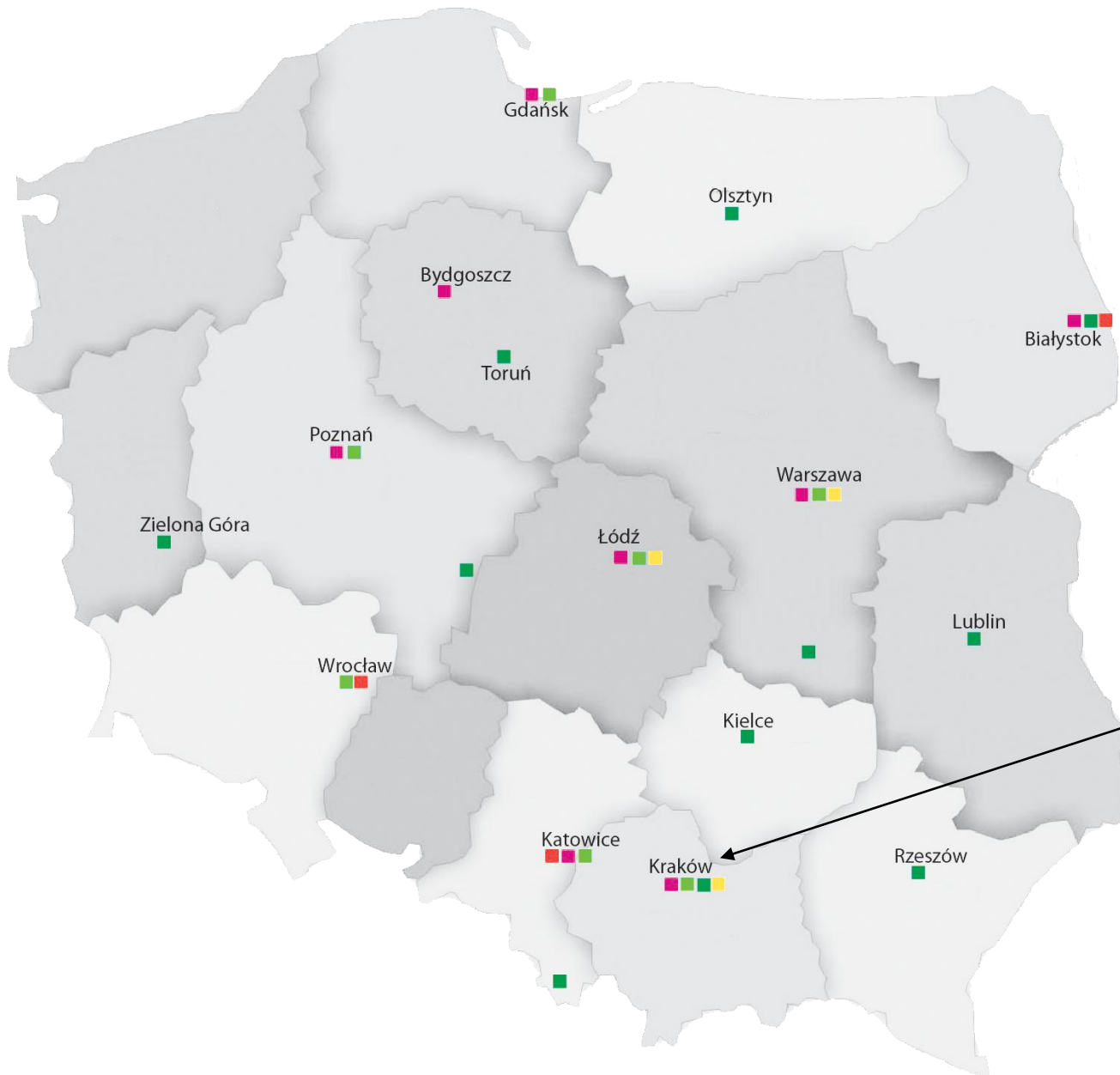
Historical core



- Pedestrian street
- Building in construction stage
- Public squares
- Buildings
- Important public buildings
- Court of Justice
- Sacred buildings
- Service/ commerce

Sport fields

Artistic Academies in Poland



Krakow School of Theatre and Film



LARGE -national -scale project
within
SMALL -site -scale development

BYTOM – Cultural Institutes

Culture Centre of Bytom & Silesian Dance Theater



Town main library & 'Rotunda' Gallery

Upper-Silesian Museum

Branch of the Upper-Silesian Museum

Silesian Art Gallery

Usable-art Gallery

'Suplement' Gallery

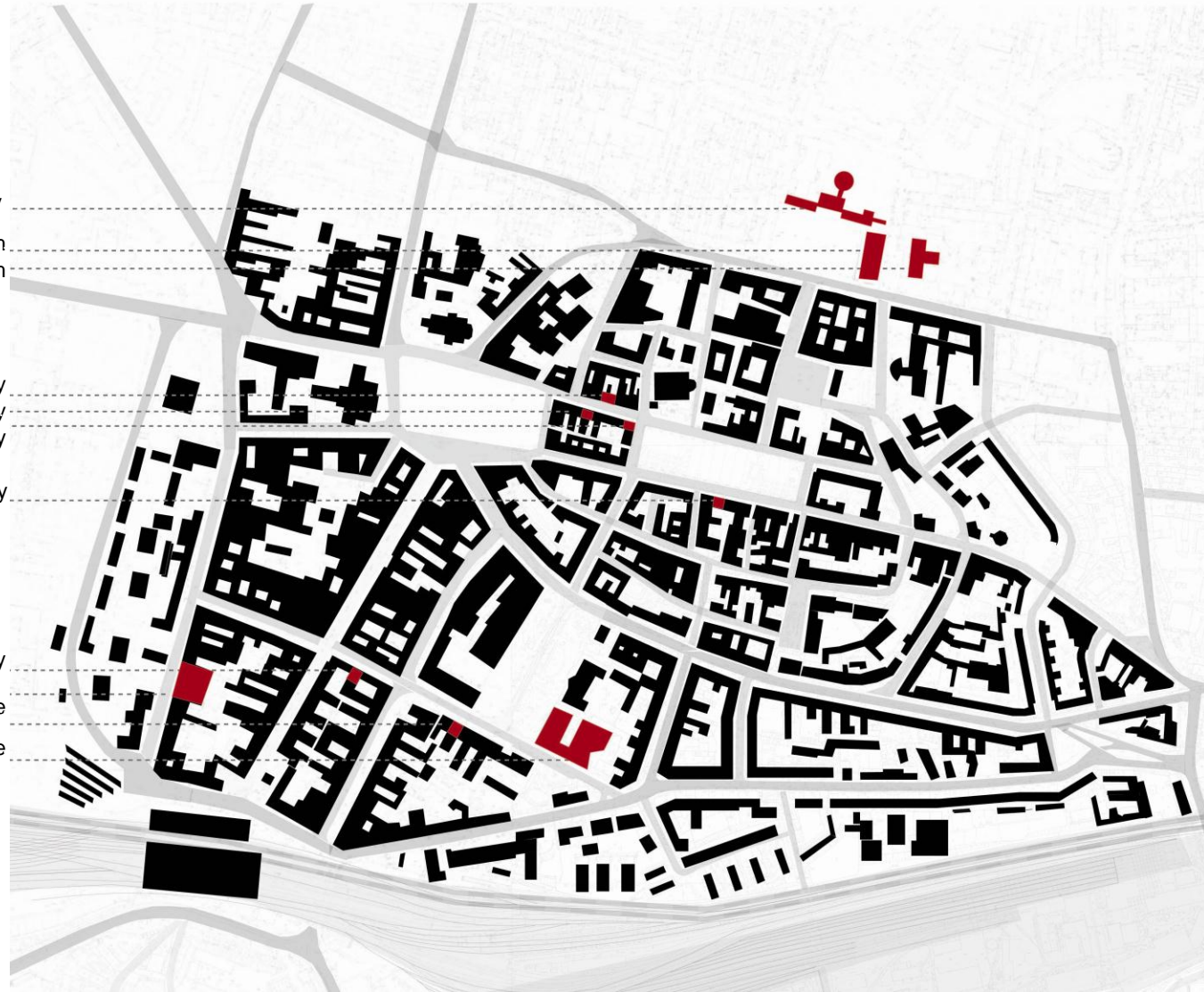
'Kronika' Gallery

'Pod Czapla' Gallery

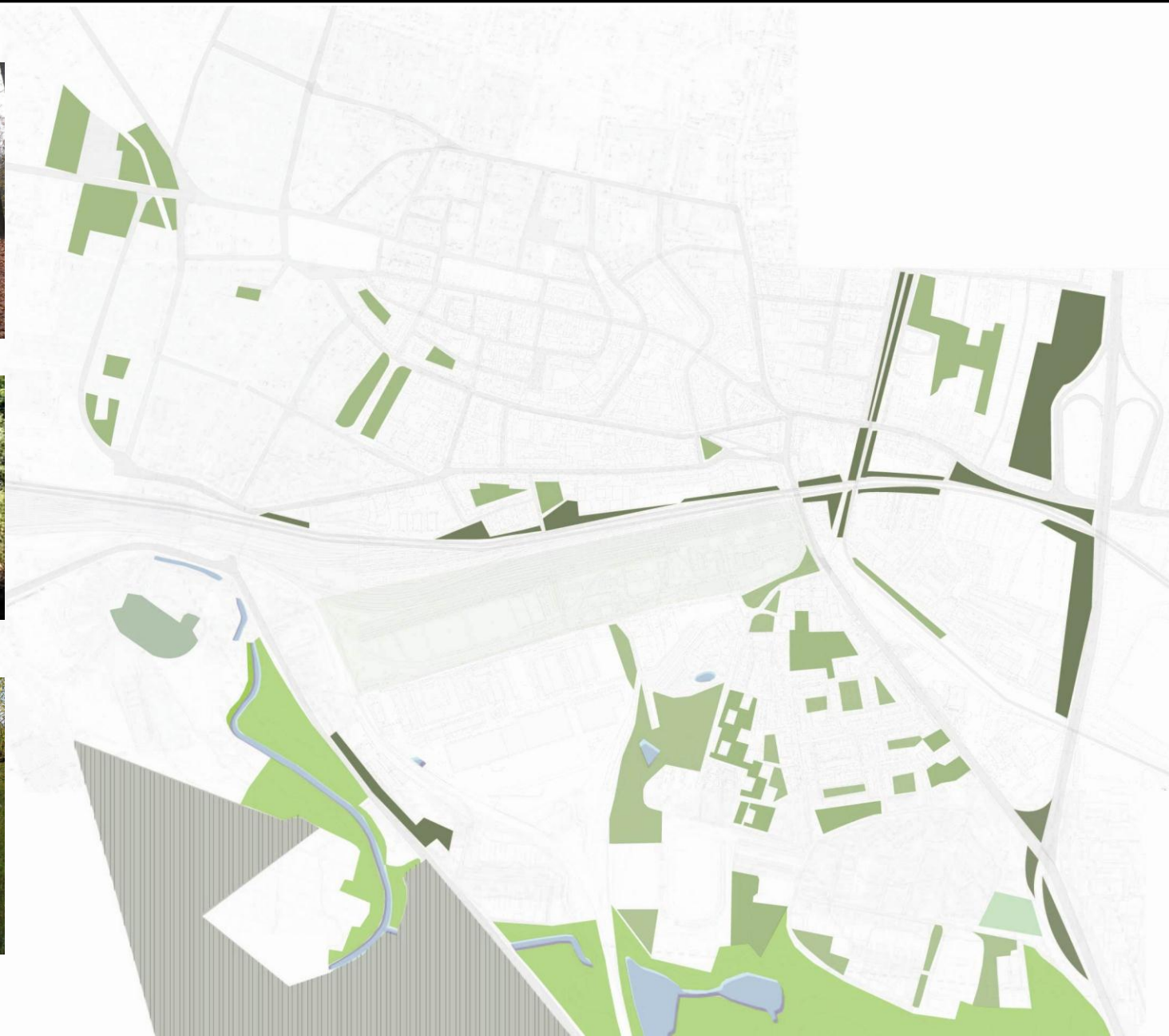
Youth Culture Centre no1

Public Musical Centre

Opera House



BYTOM – Green & Water



Problem Definition

Abandoned post-industrial field (together with the rail track) separating north and south parts of the city

Too low budget for big investments

Social problems; high crime rate, thievery of the leftover elements of the sites

Housing estates without a production plant

BYTOM

Housing/ Service/ Commerce

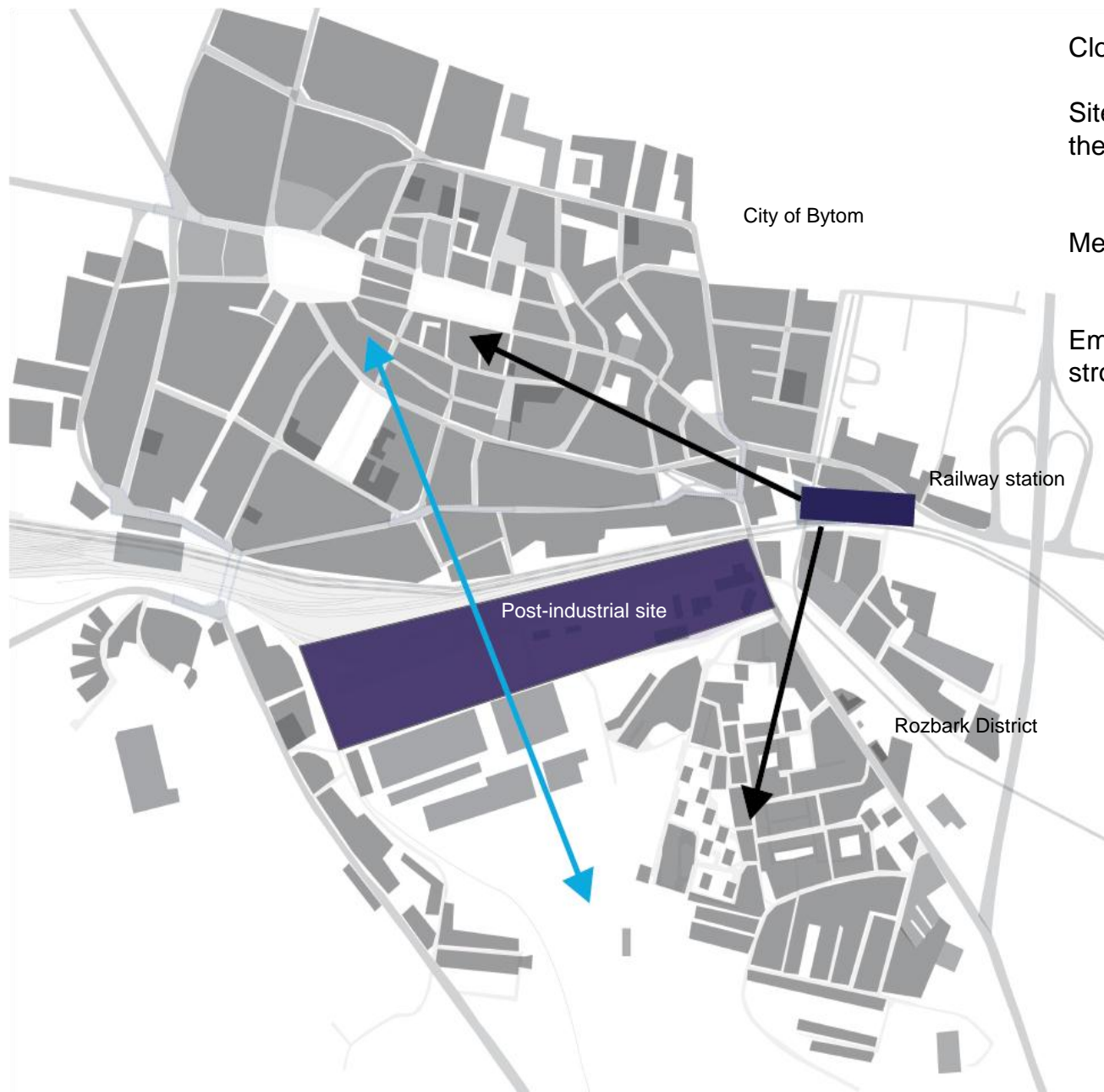
INDUSTRY

ROZBARK

Housing/ Service/ Commerce



Opportunities of the Mine Field

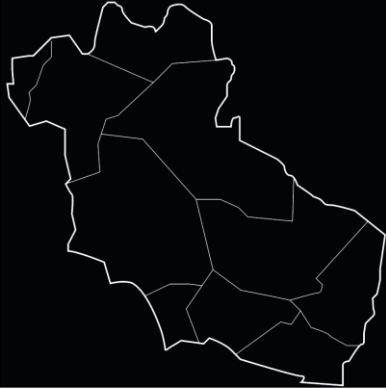


Close location to the future railway station

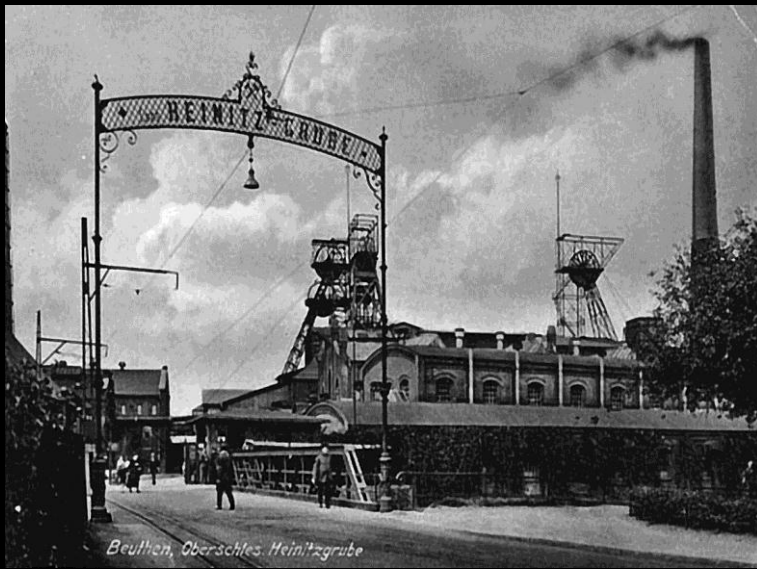
Site in-between the city centre of Bytom and the district of Rozbark

Meaningful heritage of the site

Emotional attachment of local inhabitants; strong identity



ROZBARK DISTRICT



Rozbark Mine in the heydays

ROZBARK 'Rosenberg'

1233 – the origin; village situated on the east of the Bytom city walls

1929 – annexation to the city of Bytom

Rapid development in the **19th century** as a result of coal and zinc ore extraction

2004 – close of the mine

Heavy industries played an essential role in the life of the local communities and represented decisive factors of its economic welfare.

PRESENT

Coal mining as a closed chapter in the district's history.
Deserted area of the mine. Demolished or destroyed buildings.
Housing estates without a production plant.



Rozbark Mine nowadays



NEW CHALLENGES

Rozbark Mine – Urban Fabric



1. Guildhall



2. Boiler room



3. Building of a historical exhaust machine

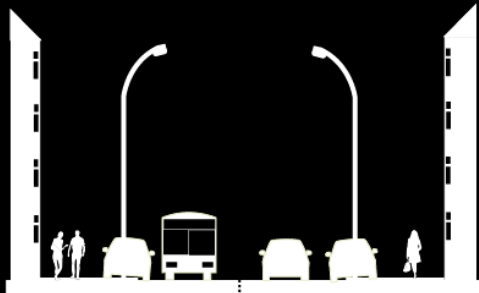
Rozbark – Streets' Profiles



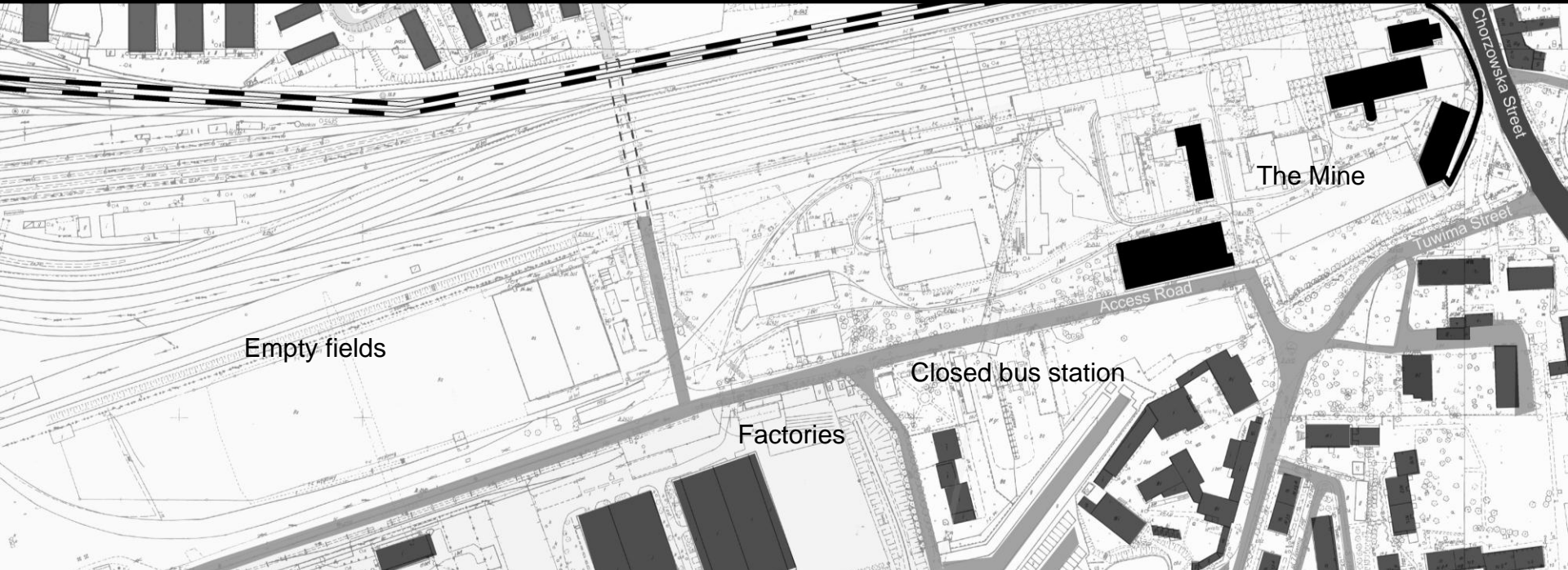
Chorzowska Street

Tuwima Street

Access Road



Rozbark Mine and its surrounding



How to deal with the future landscape development in the context of the eventful industrial history of the last 150 years and how to preserve the characteristics of local/ regional identity?

How to redevelop the site as such that?

1. The original industrial character of the place can be experienced
2. A better living environment for the whole city of Bytom occurs
3. Regional and emotional meaning of bytom improves



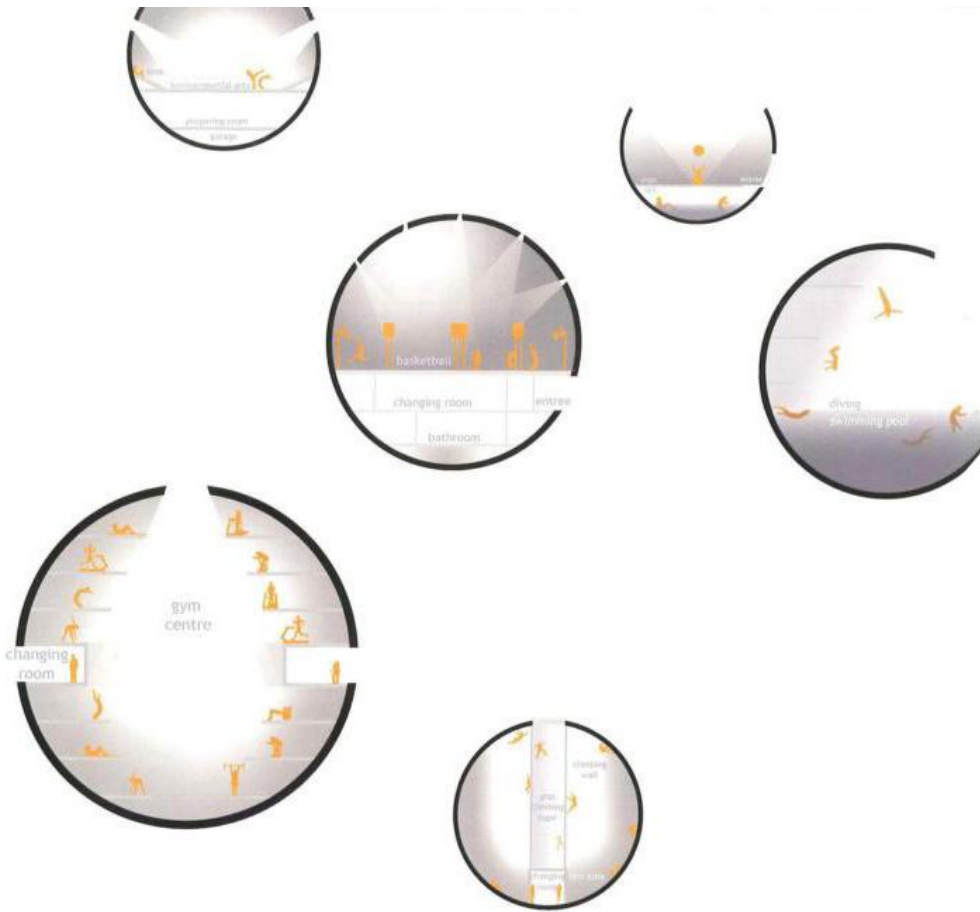
Strategic planning

Strategic vision is concerned with creating the framework in which longer-term goals, aims and objectives can be realized. The creation of a strategic vision can ensure that resources, for example land or capital, are used in such a way as to achieve the best overall effect (Roberts and Sykes, 2004).

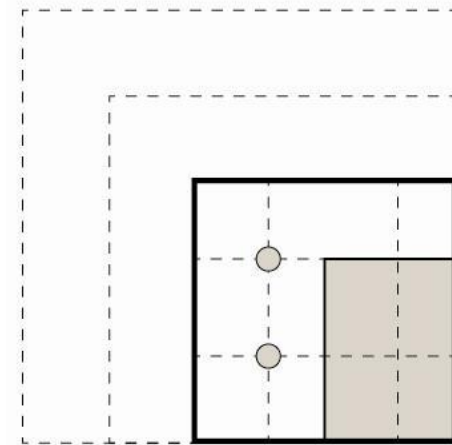


Theory of Urbanism – Strategic planning

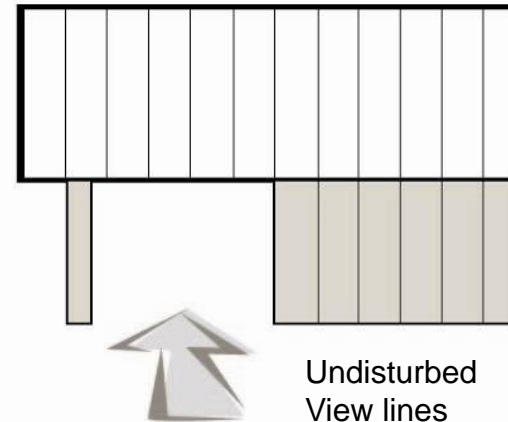
Concept of long-term development



Units



Experimental planning;
Extension if successful



Heritage

“Heritage is what makes us human. Heritage is what sustains a society. We are nothing without memory; society is nothing without its heritage” (Hardy, 2008)



Sustainability and Durability

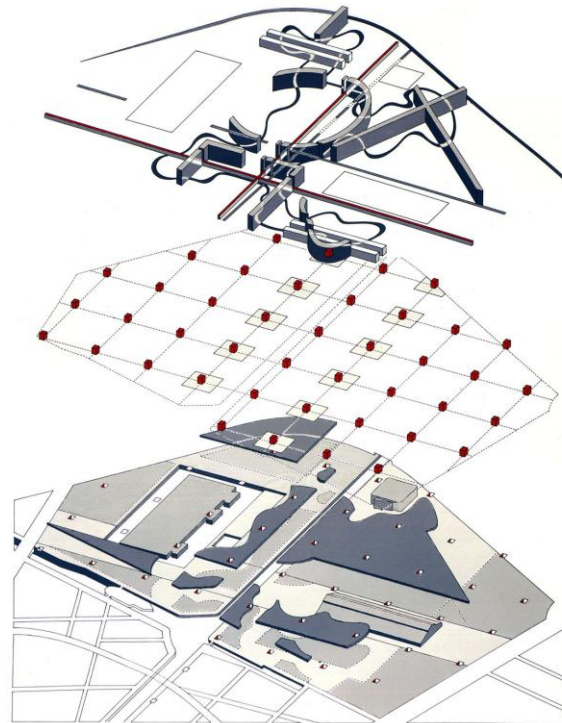
Within the context of sustainable development, urban regeneration should promote the balanced development and management of the economy, society, and the environment
(Roberts, 1997a)

Theory of Urbanism

Case Studies



Place defined by the historical values
(*Emscher Park, Duisburg Nord; de Ruhr, Germany*)



Place defined by system and structure
(*Parc de la Villette; Paris*)

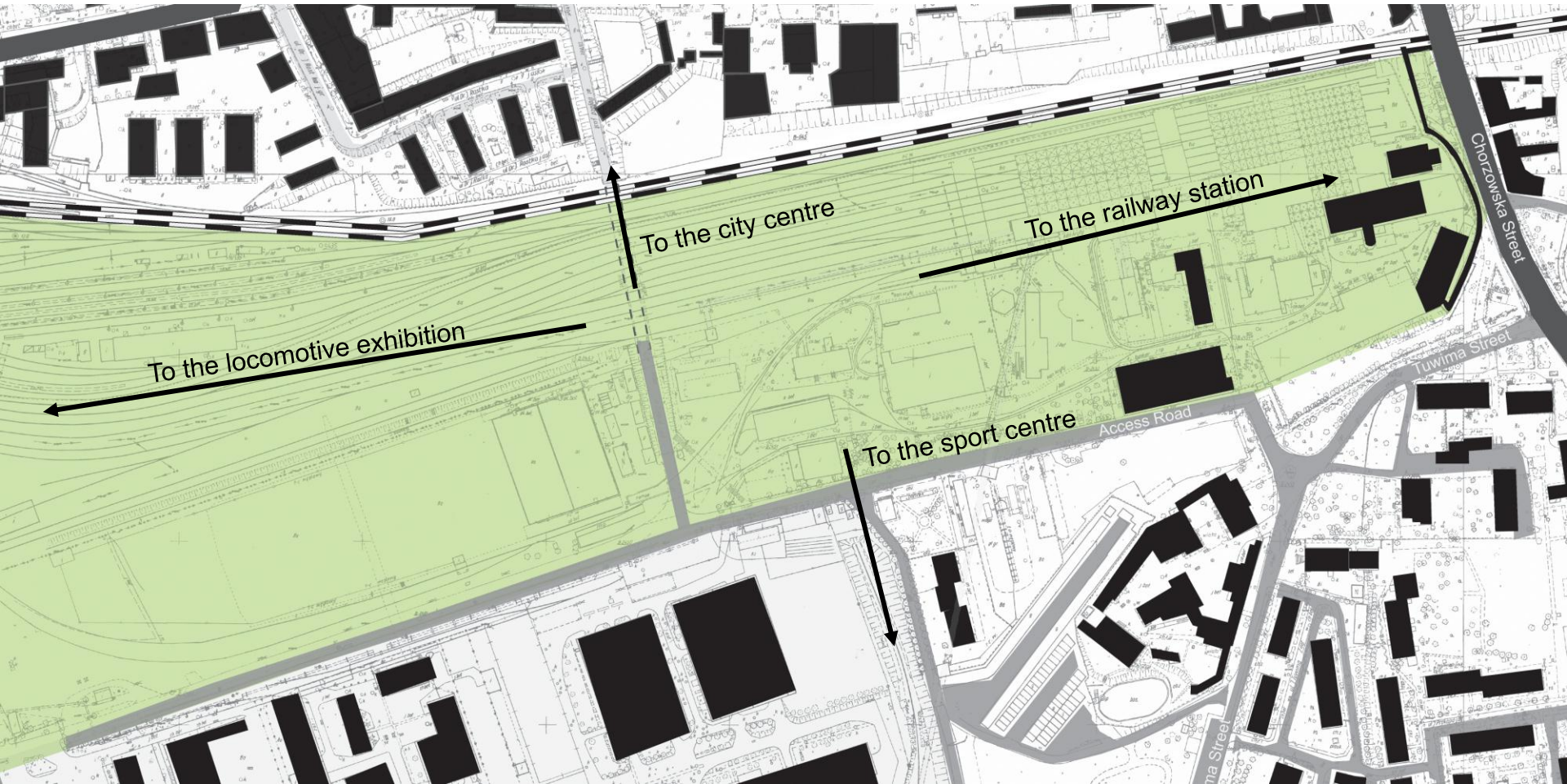


Place defined by function
(*The Stanislaw Lem Garden of Experience, Krakow, Poland*)

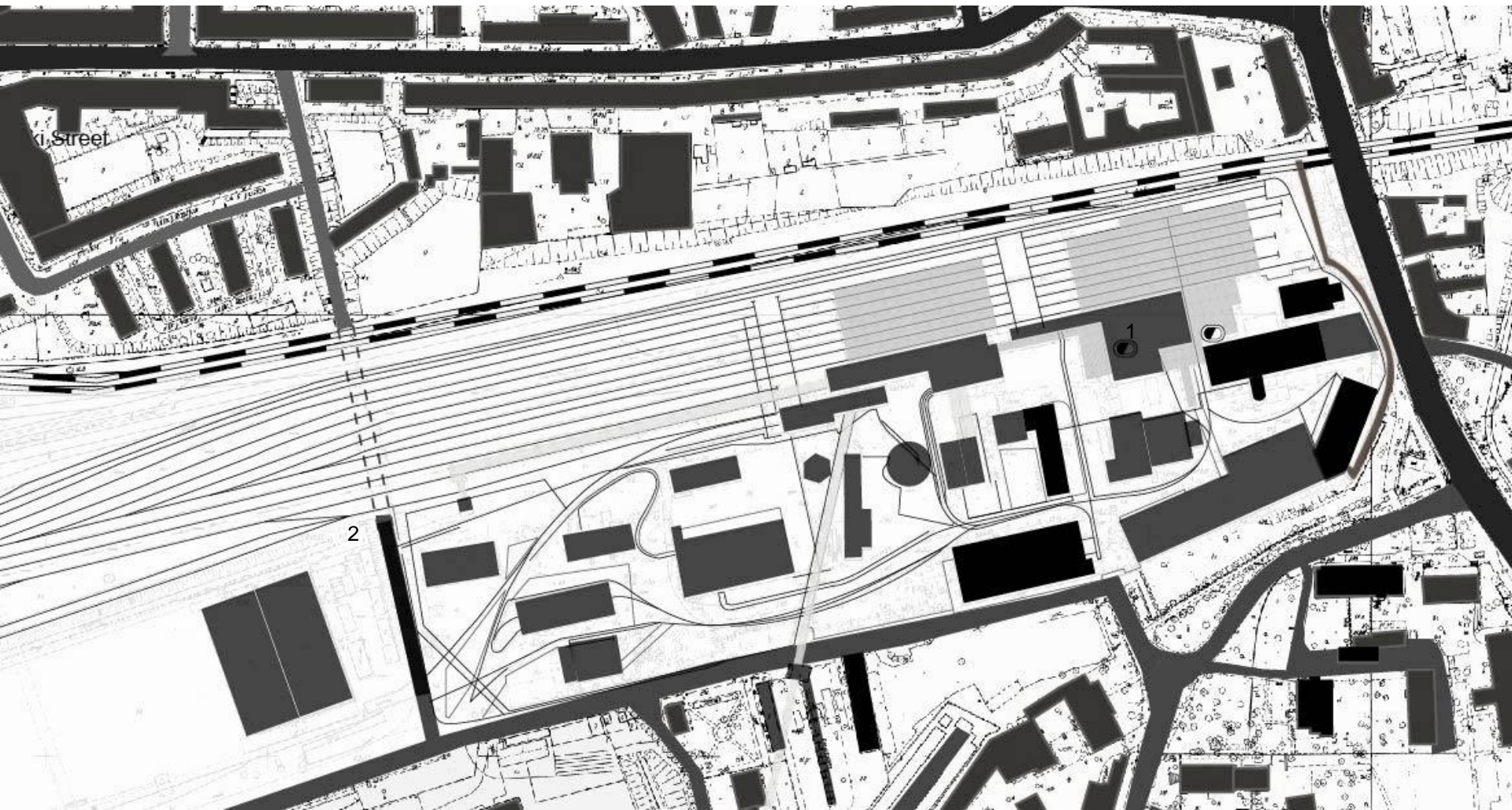


DESIGN CONTEXT

Rozbark Mine - Main directions



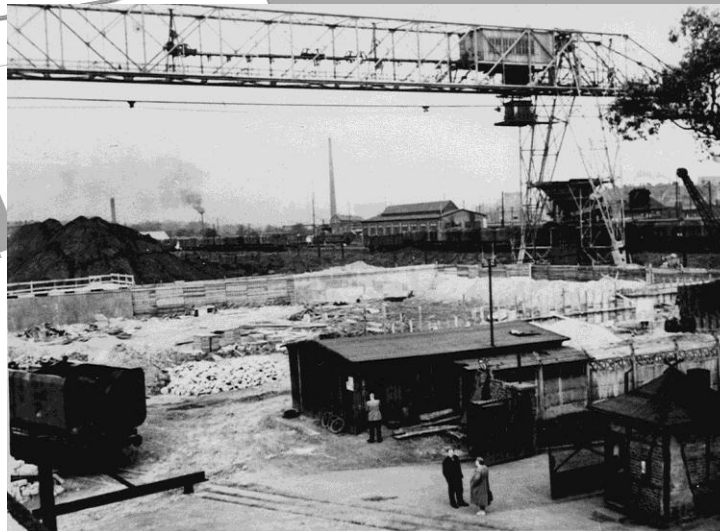
Rozbark Mine – past situation



Rozbark Mine – past situation



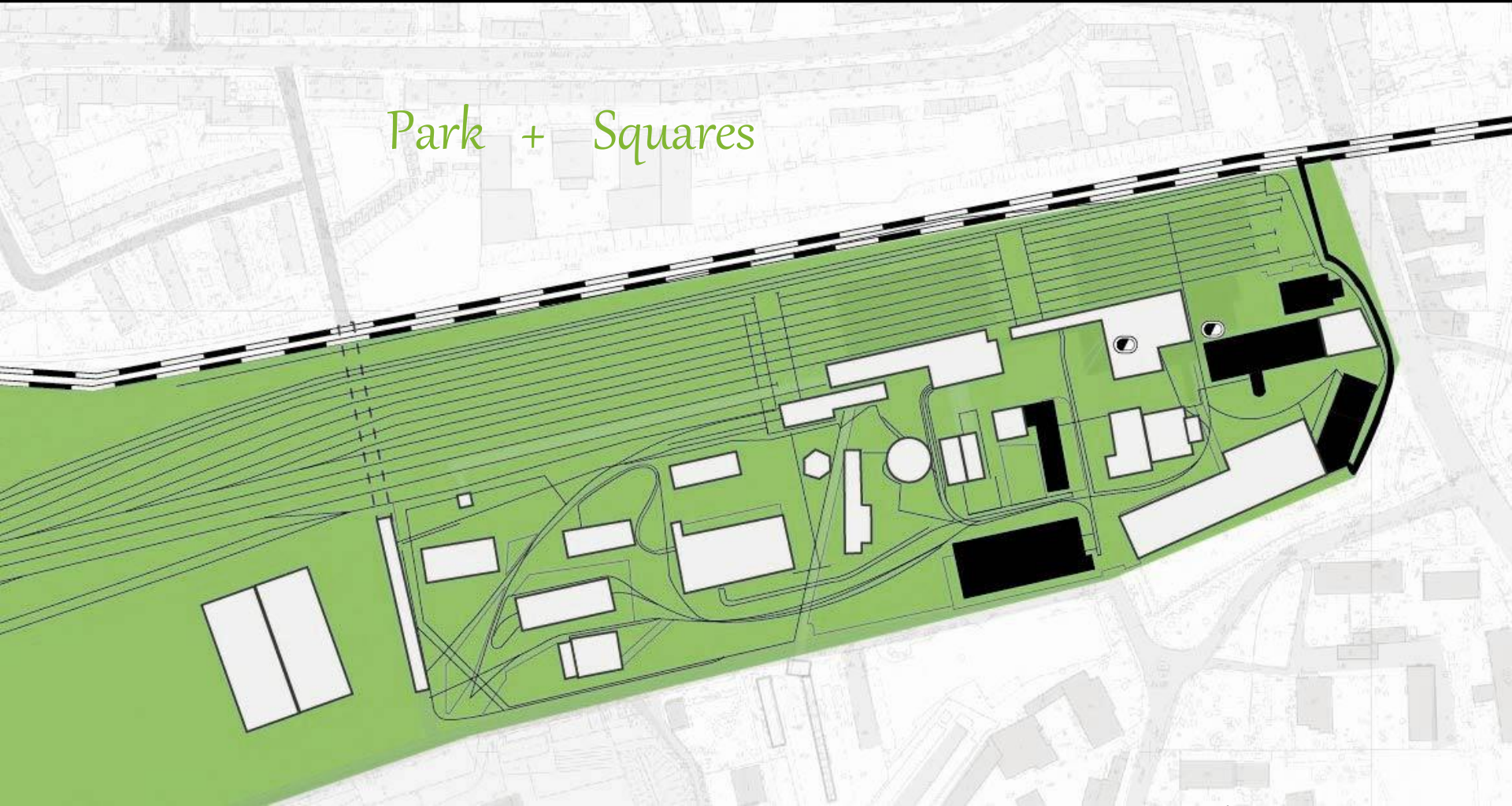
1. Bończyk Shaft



2. Gantry Crane

Rozbark Mine – concept

Park + Squares

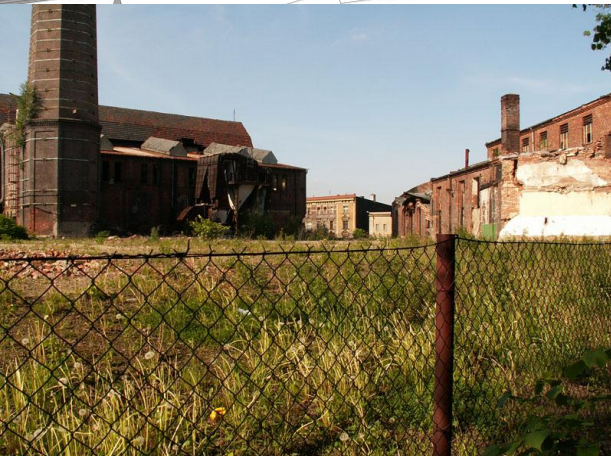


park

square



Rozbark Mine – present situation

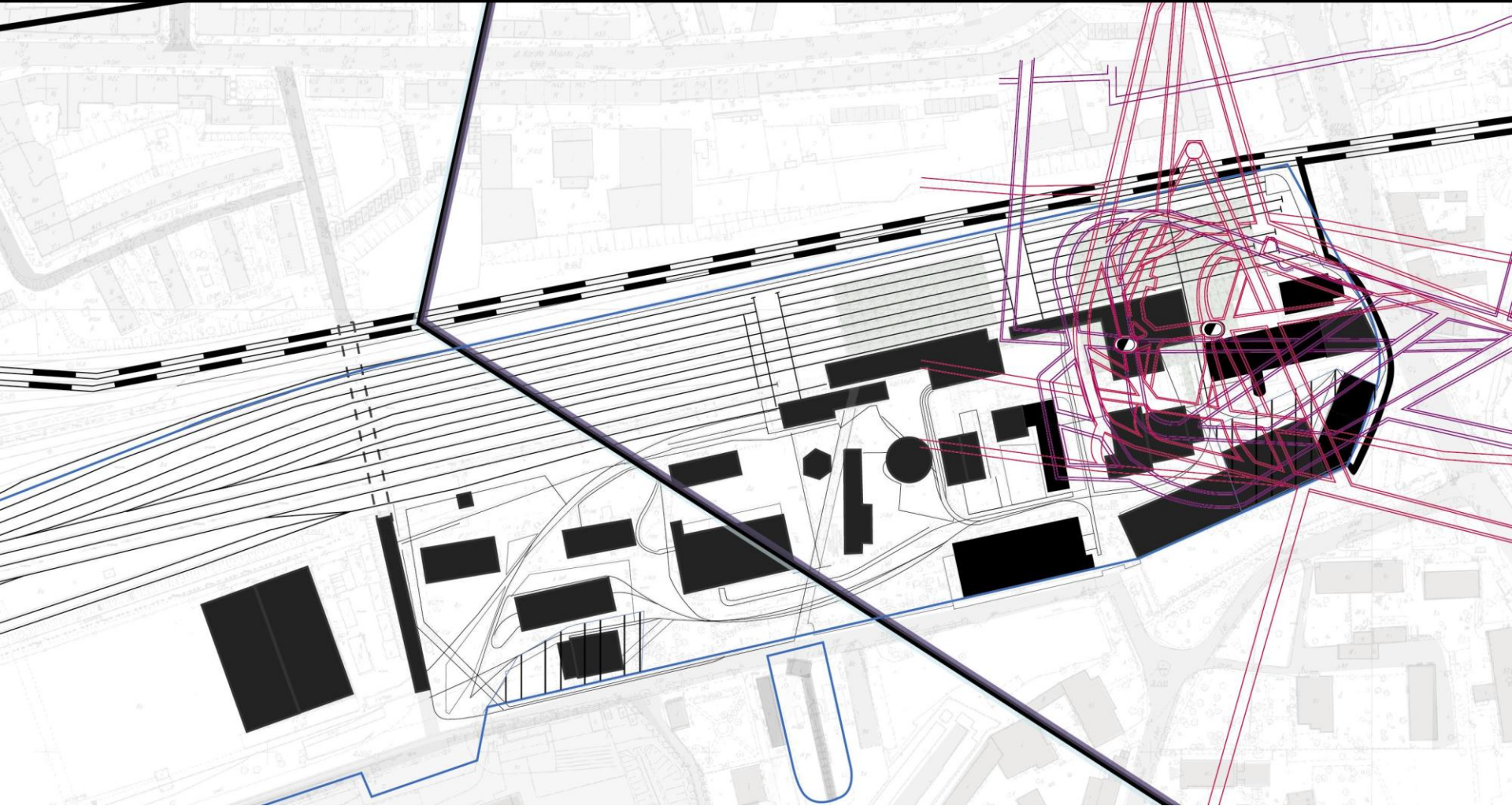


1. Boiler room



2. Building of a historical exhaust machine

Rozbark Mine – underground corridors

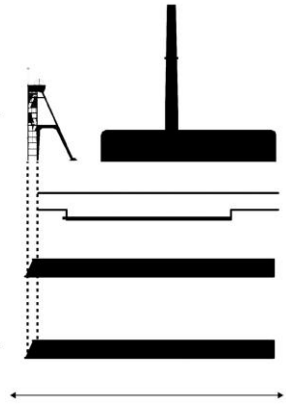




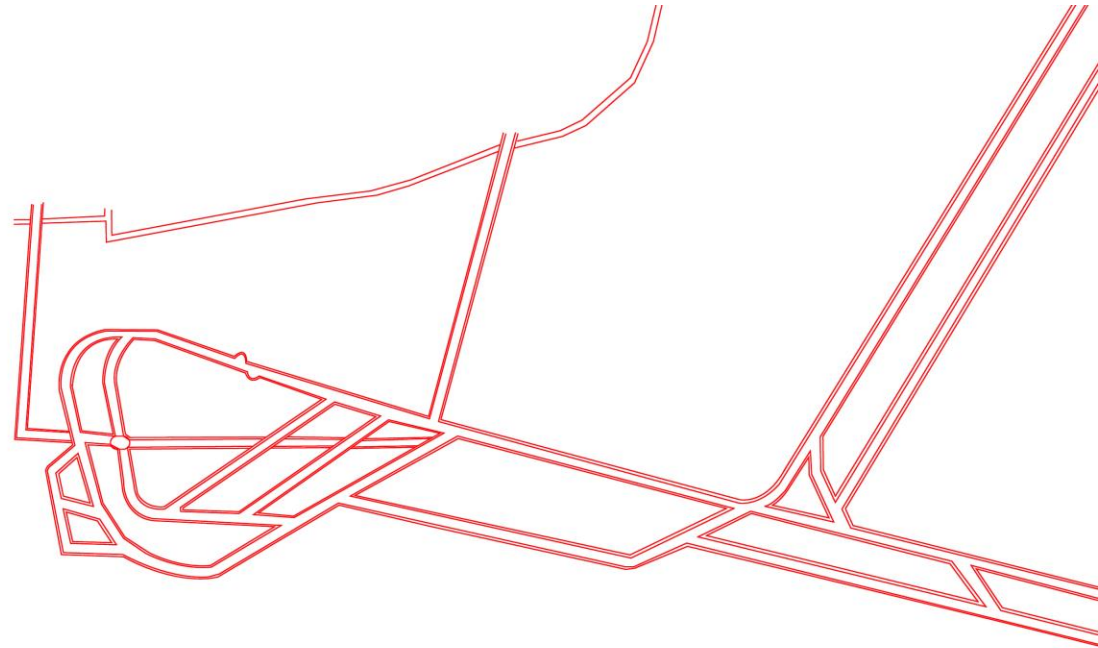
DESIGN

Construction Site – 1st Stage

Rozbark Mine – layers

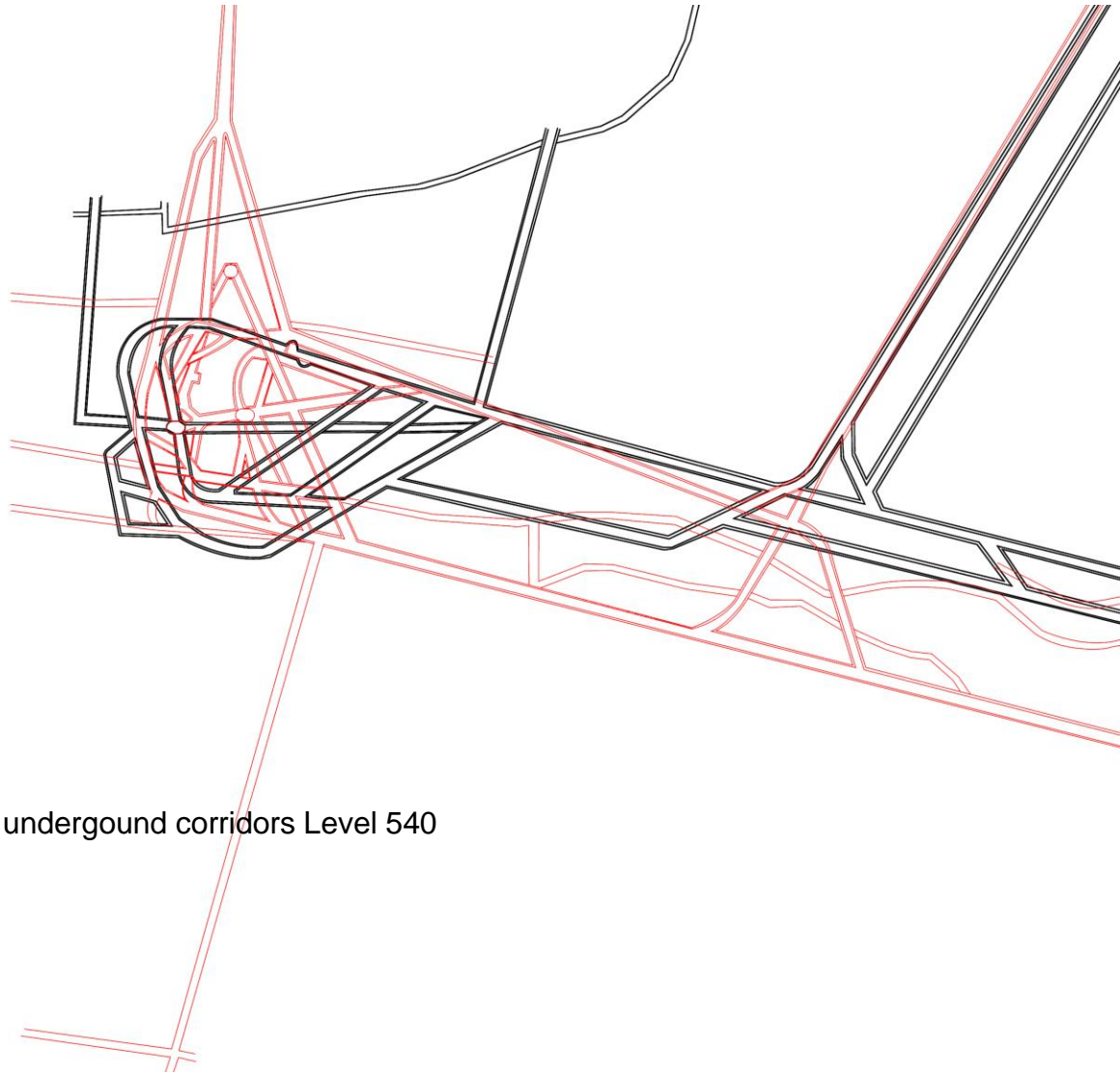


Sections



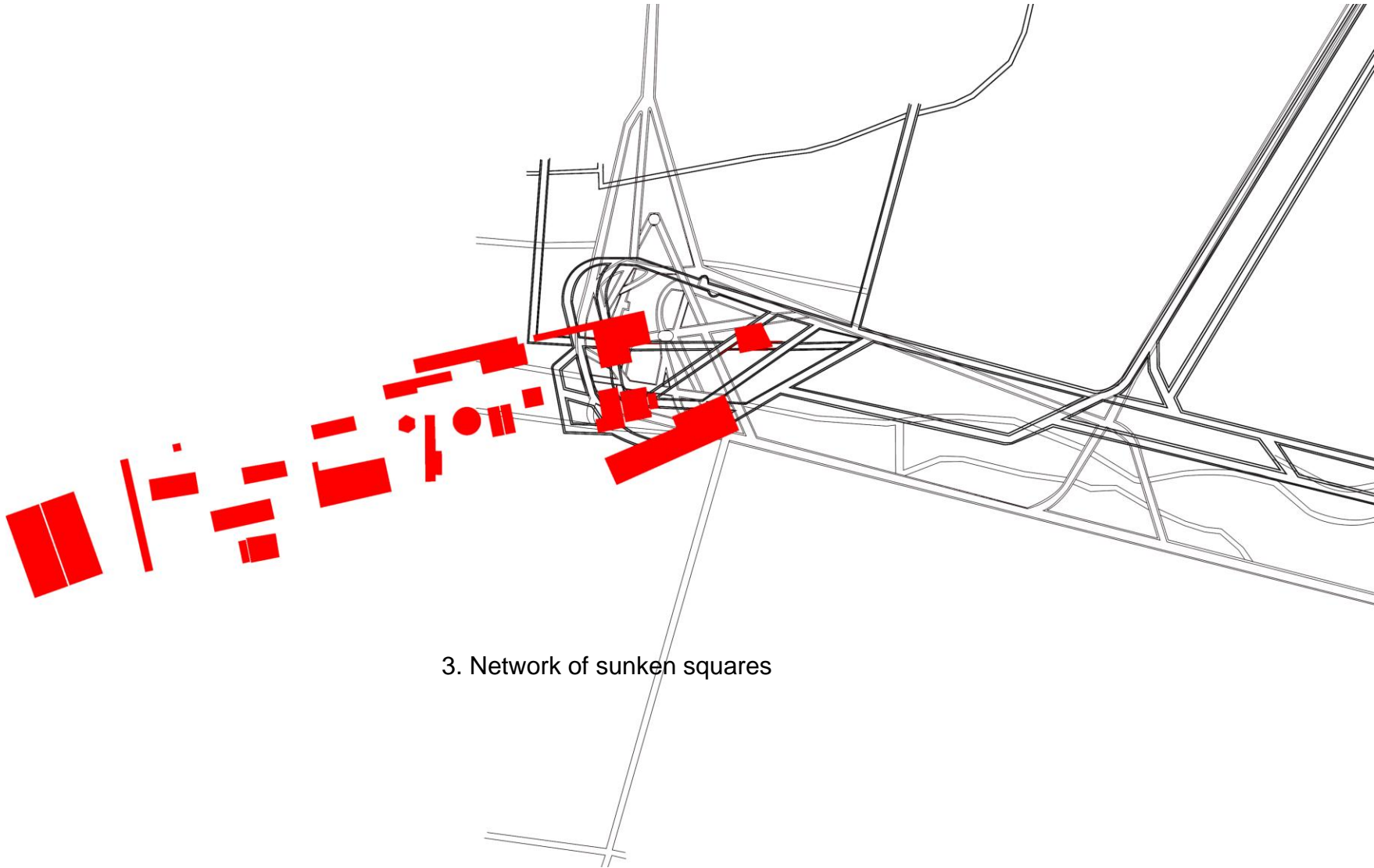
1. underground corridors Level 660

Rozbark Mine – layers

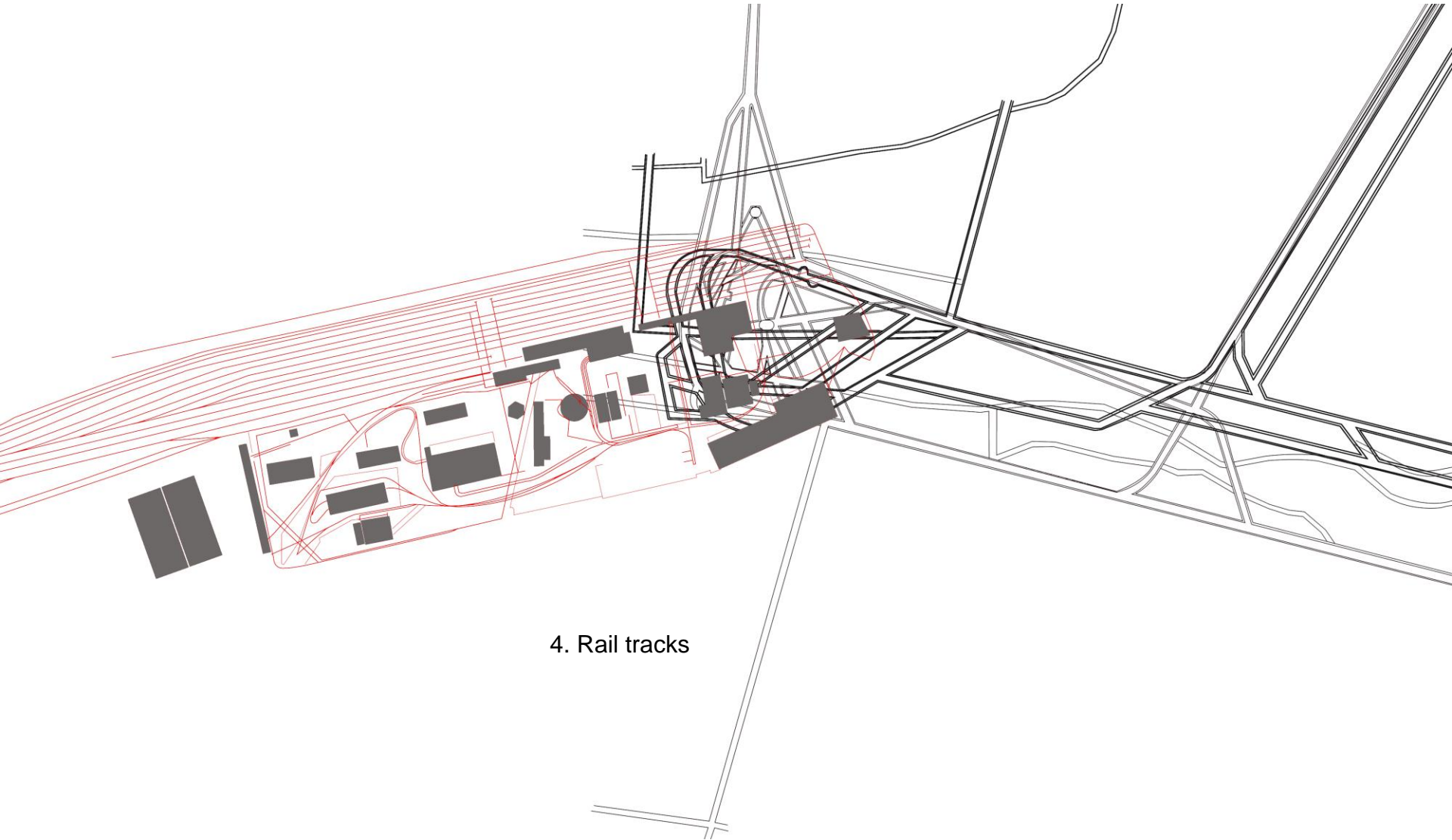


2. underground corridors Level 540

Rozbark Mine – layers

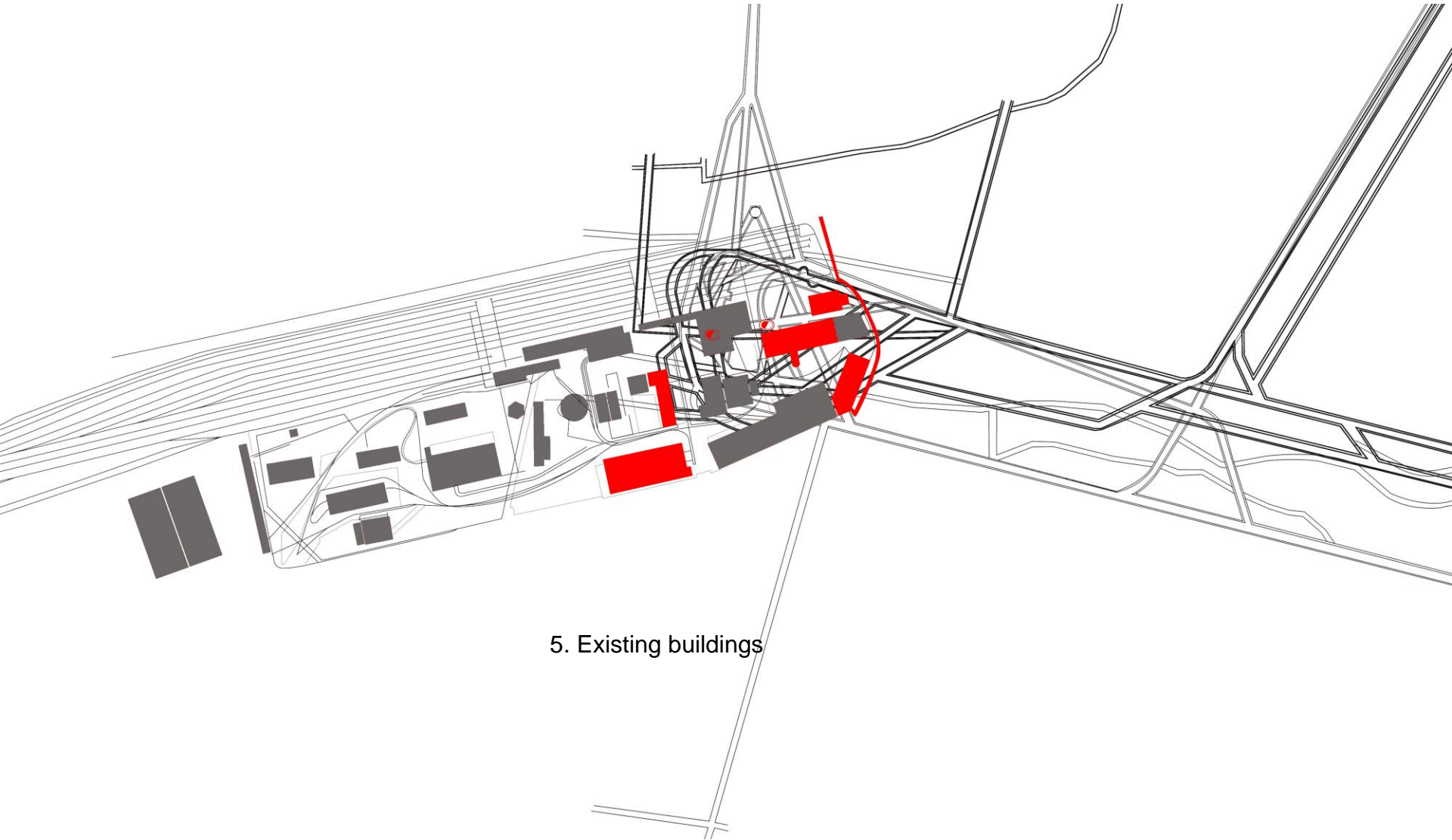


Rozbark Mine – layers

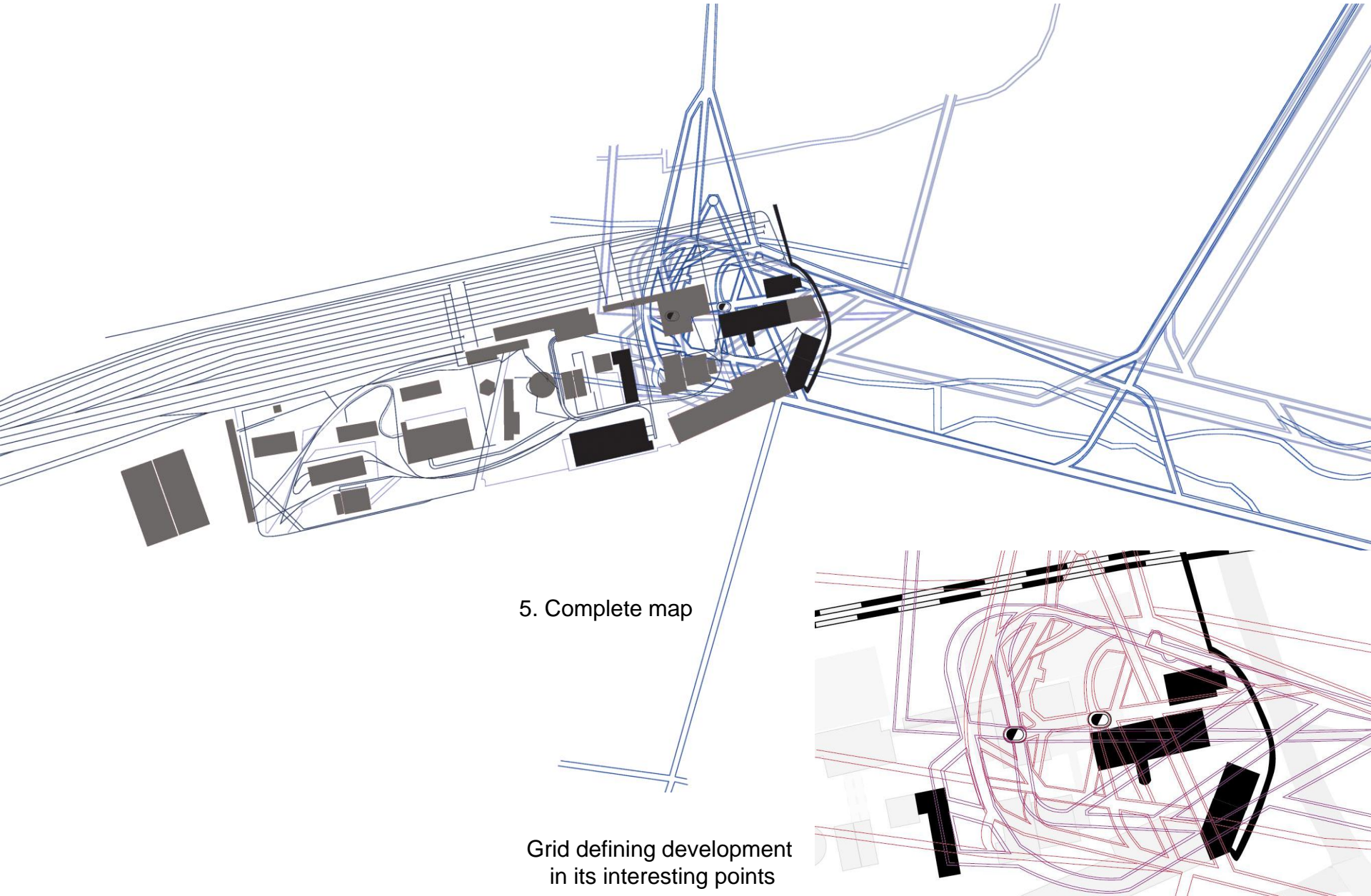


4. Rail tracks

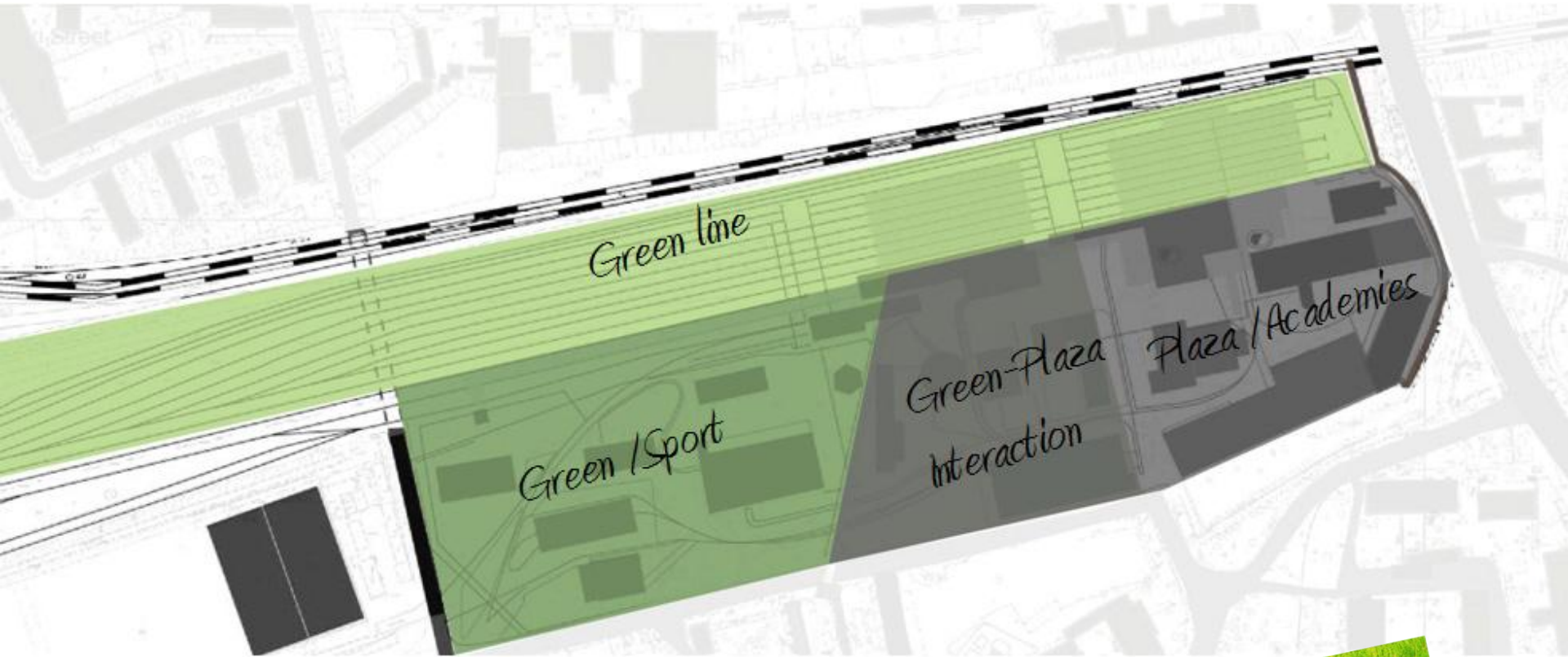
Rozbark Mine – layers



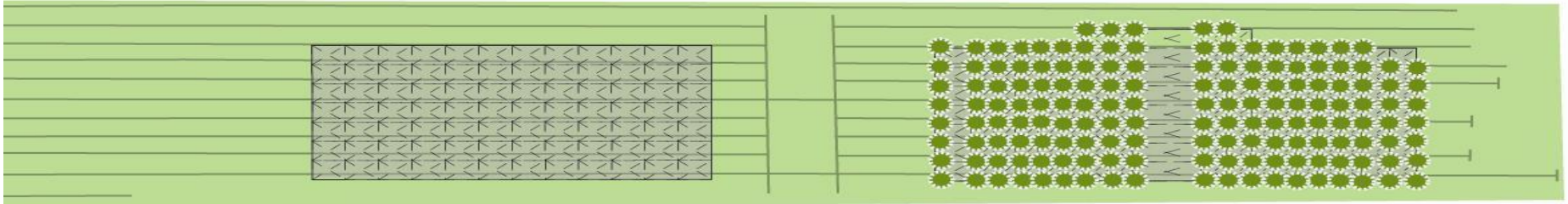
Rozbark Mine – layers



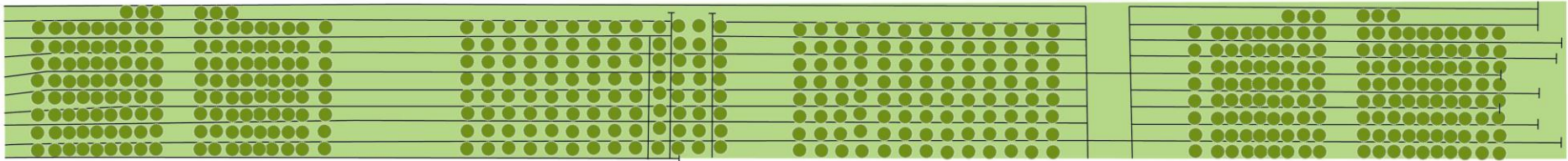
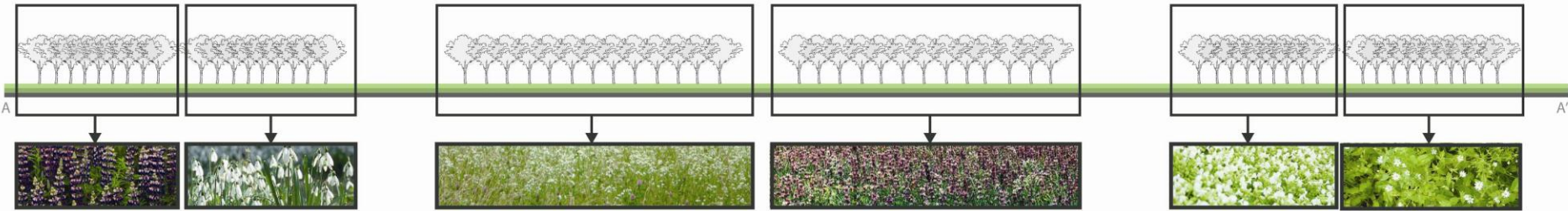
Rozbark Mine – basic zones



Rozbark Mine – green line

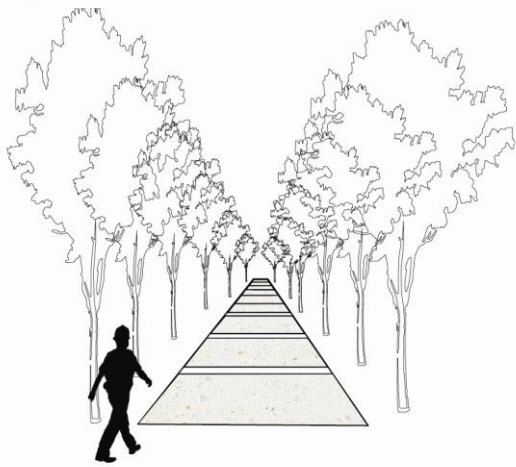
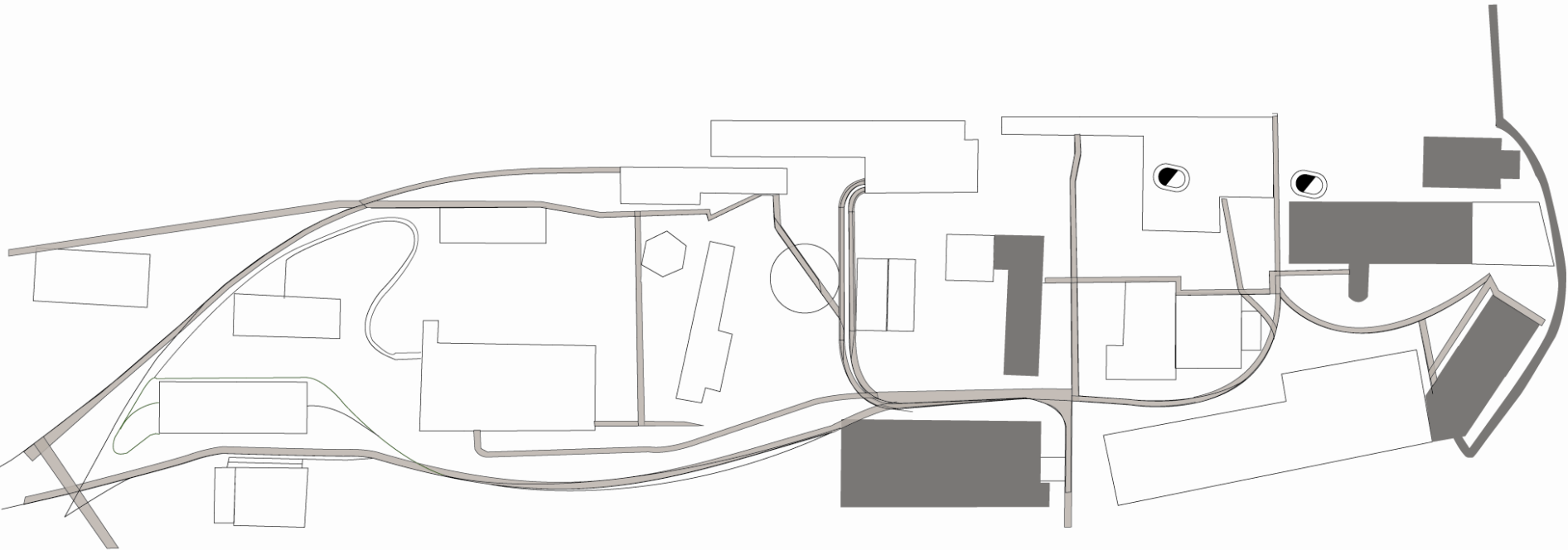


Trees distribution

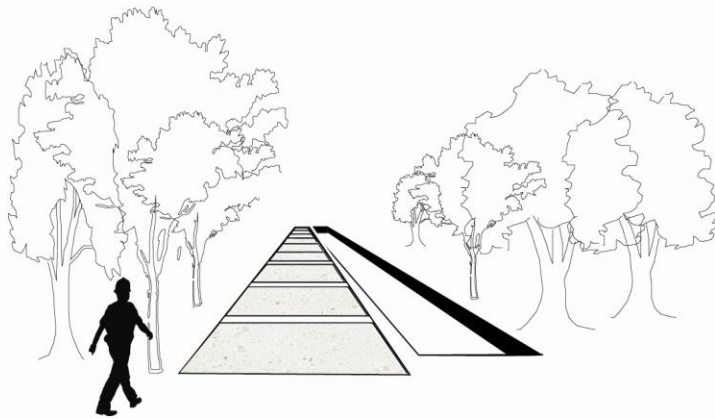


Horizontal section

Rozbark Mine – pavements



Green line

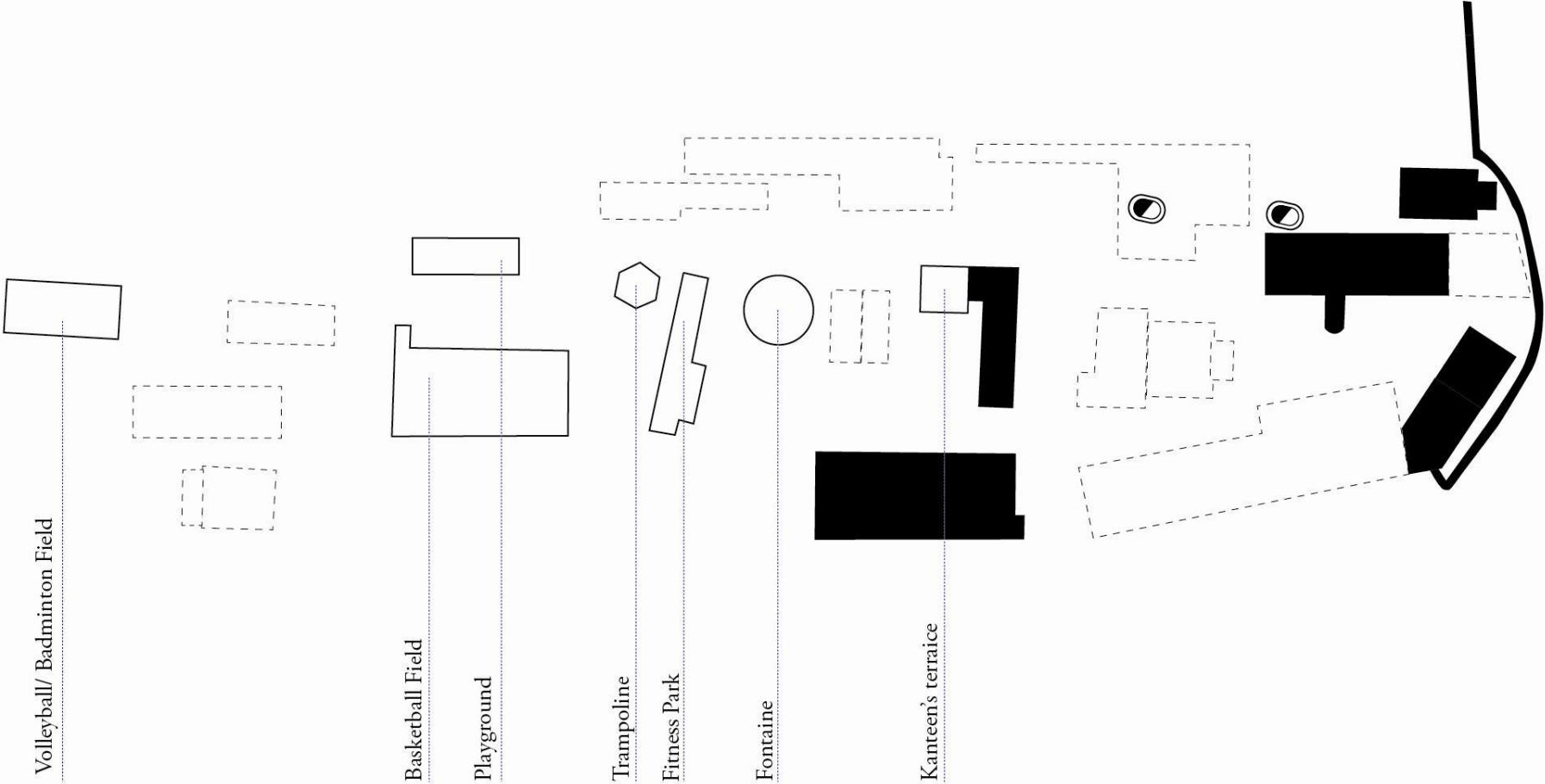


Park

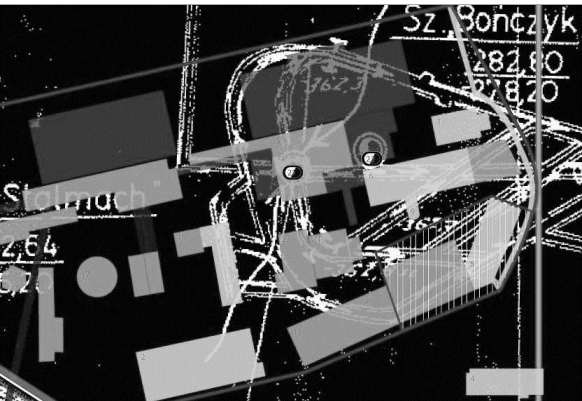


White Concrete

Rozbark Mine – 1st stage: squares



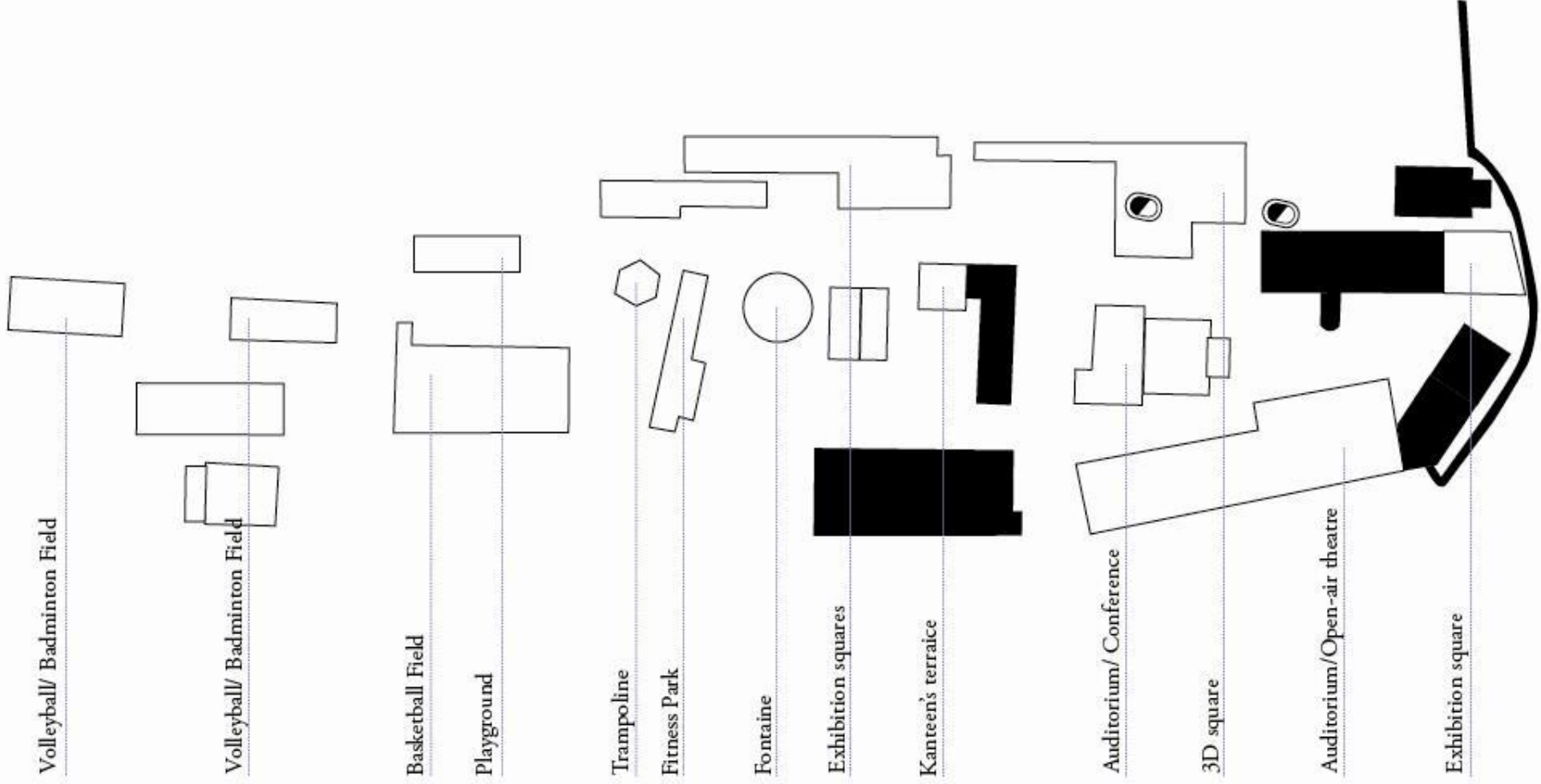
Different stages of coal



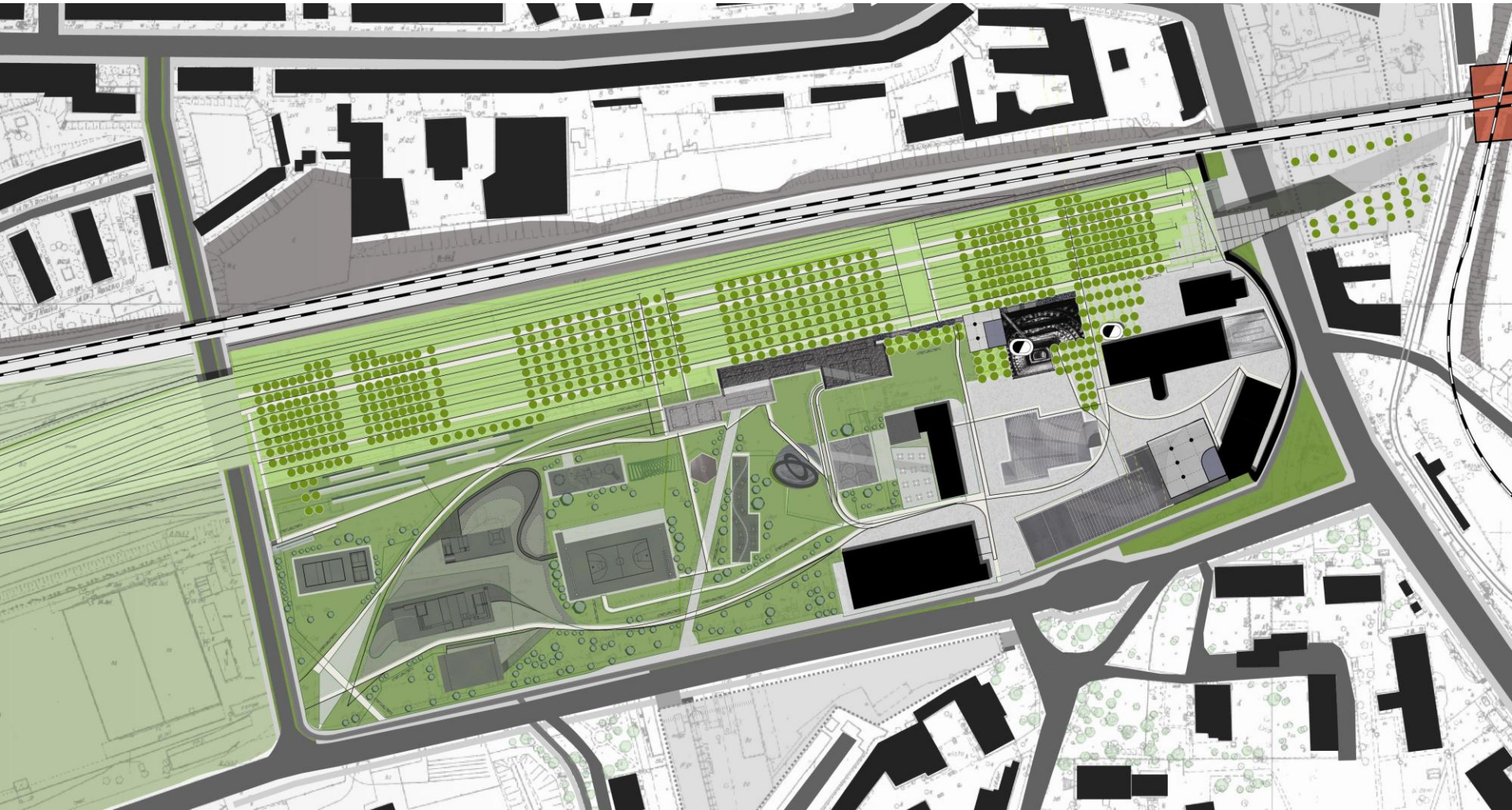
DESIGN

Construction Site – 2nd Stage

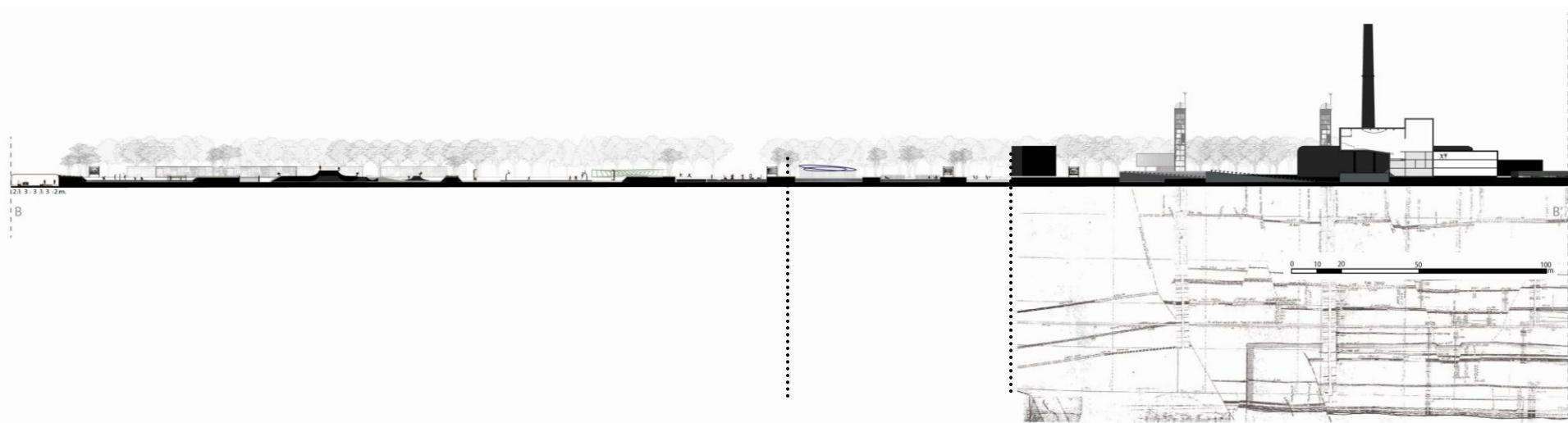
Rozbark Mine – 2nd stage: squares



Rozbark Mine – Master Plan



Rozbark Mine – horizontal section; zones



2. Sport

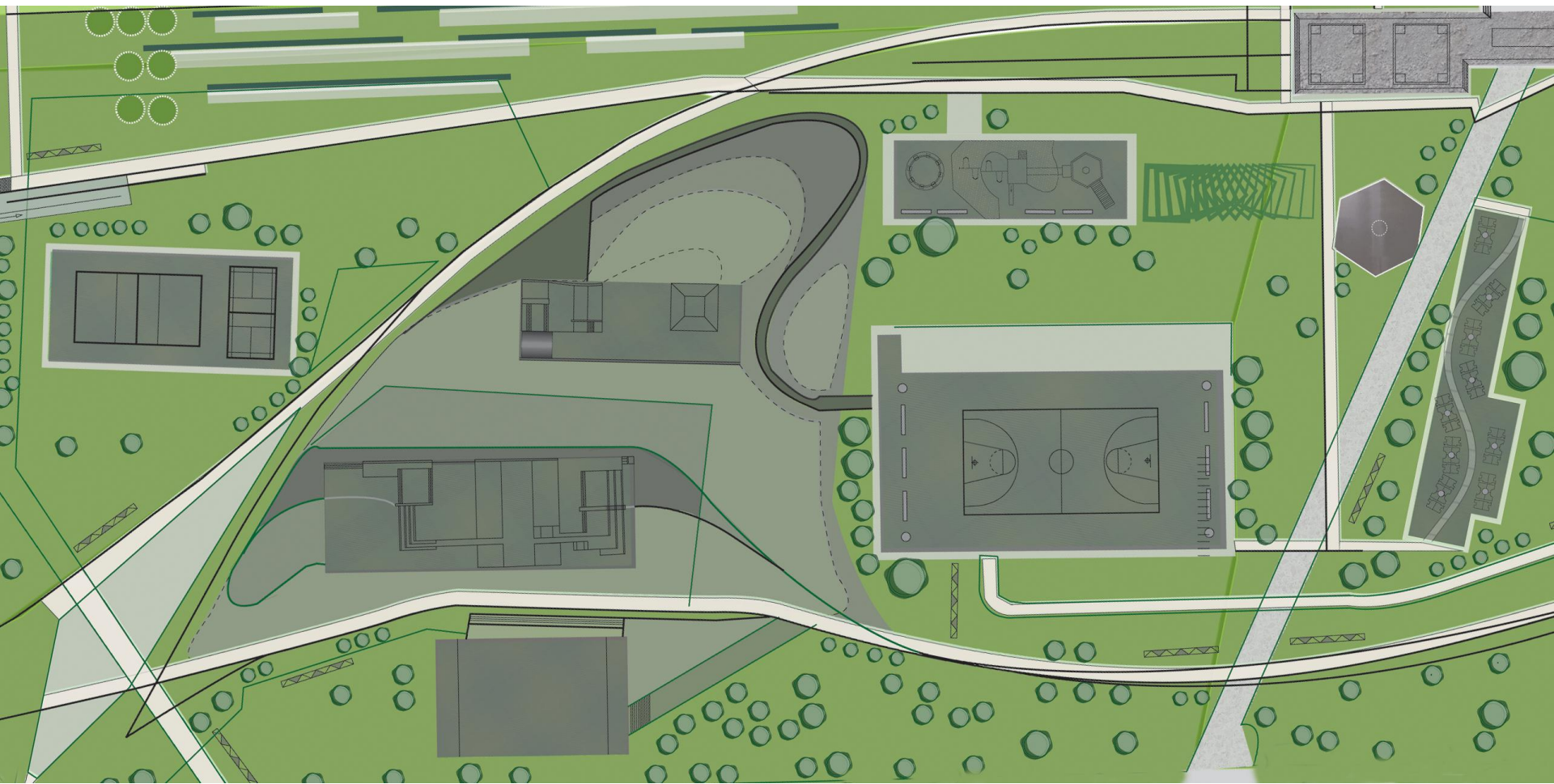
3. Leisure 4. Art/ Dance



1. Bijlmerpark, Amsterdam

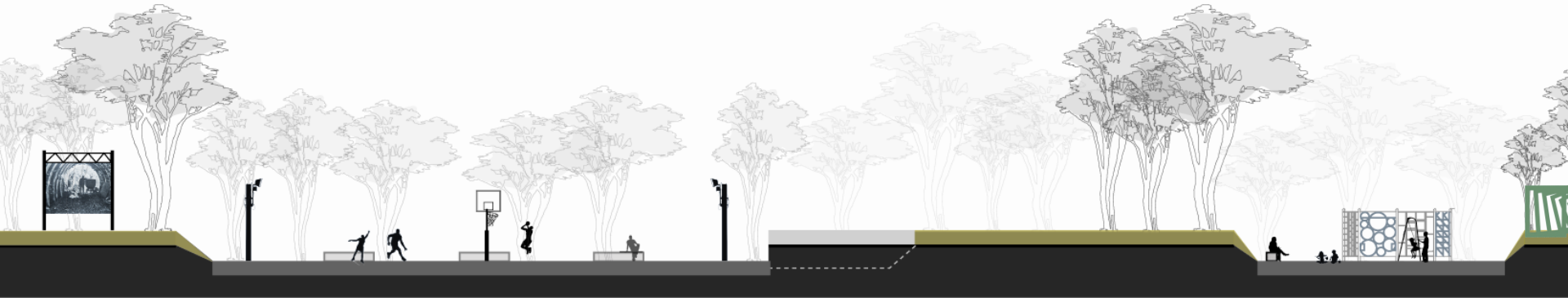
2. Openluchtmuseum voor beeldhouwkunst Middelheim, Antwerpen

Rozbark Mine – sport zone



10m

Rozbark Mine – sport zone



Section through the basketball field and playground

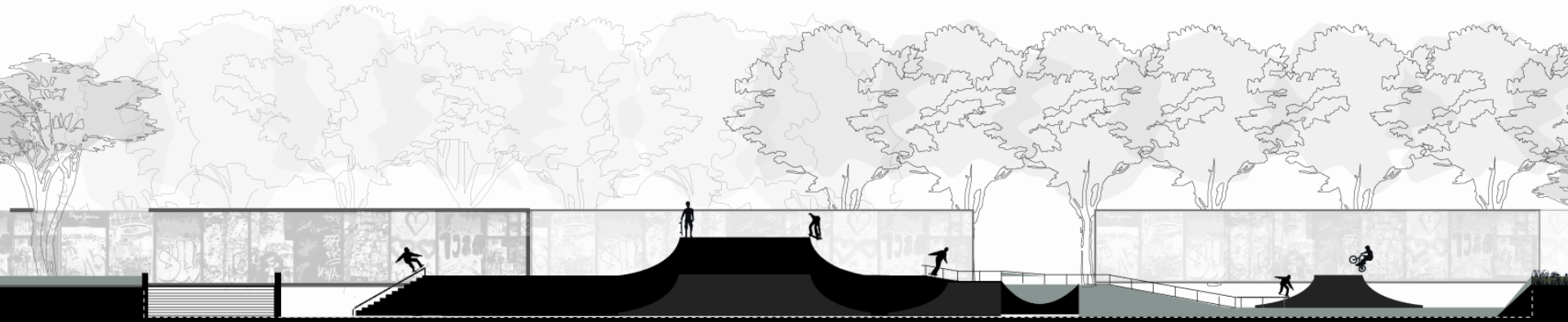


Inspiration: Chassepark, Breda, Netherlands – posters installations



Spiral tunnel leading from the playground to trampoline

Rozbark Mine – sport zone



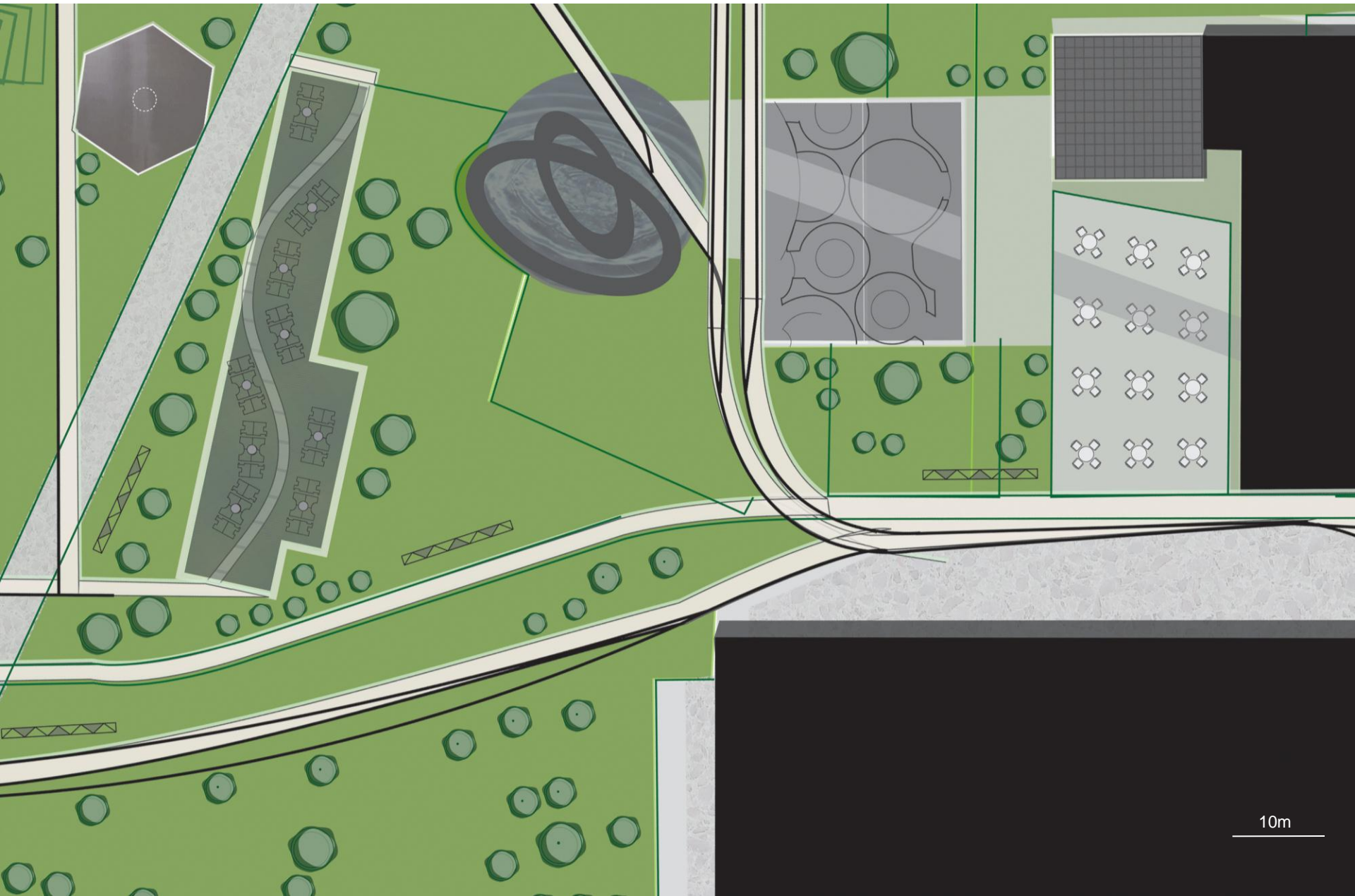
Section through the skate park



Skate park within the rail tracks and squares as islands with ramps

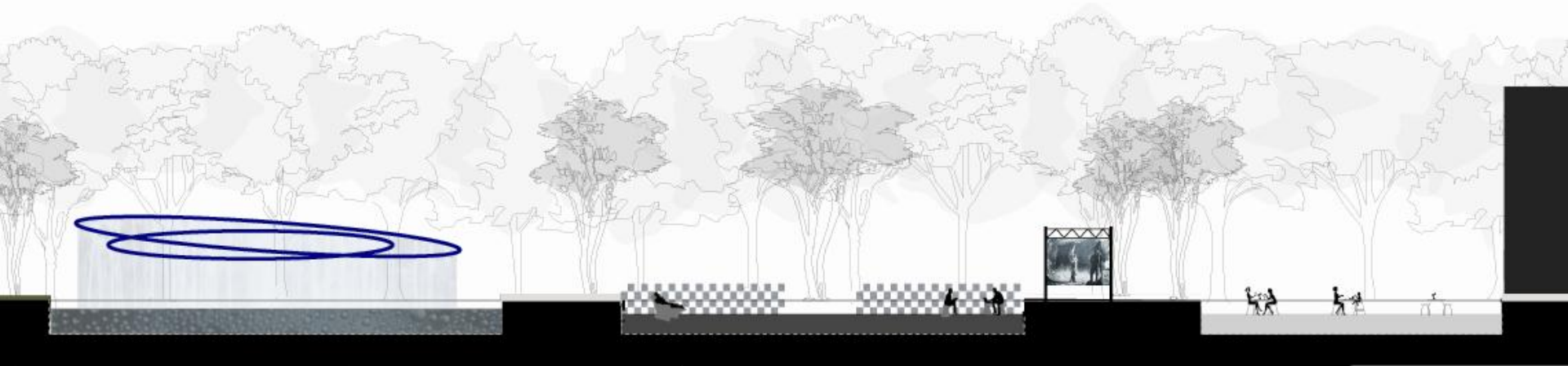
Graffiti wall

Rozbark Mine – leisure/ chill-out zone



10m

Rozbark Mine – leisure zone



Section through the leisure/ chill-out zone

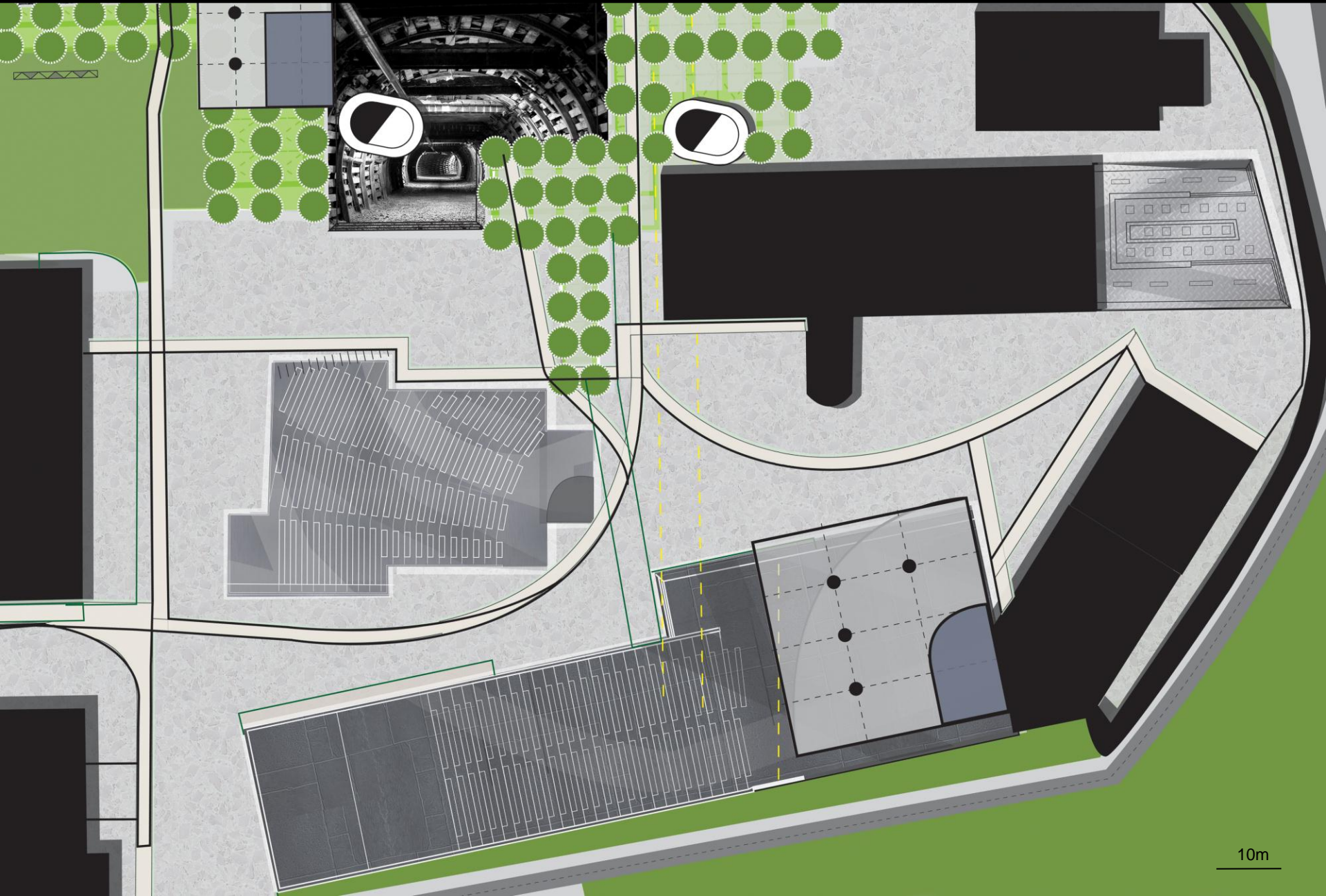


Industrial fountain



chill-out zone

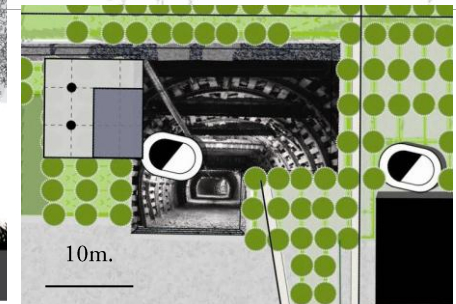
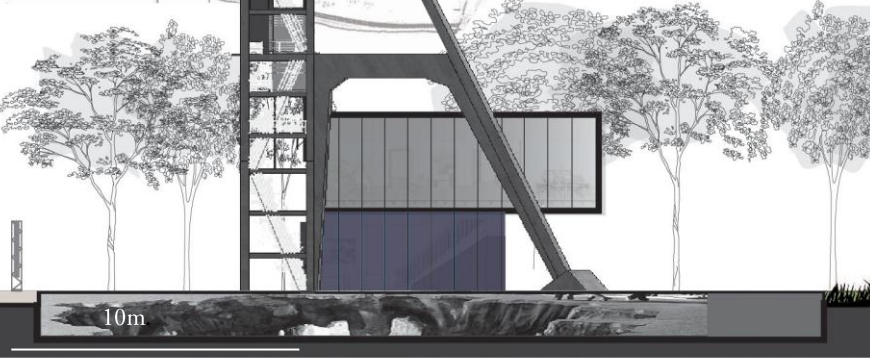
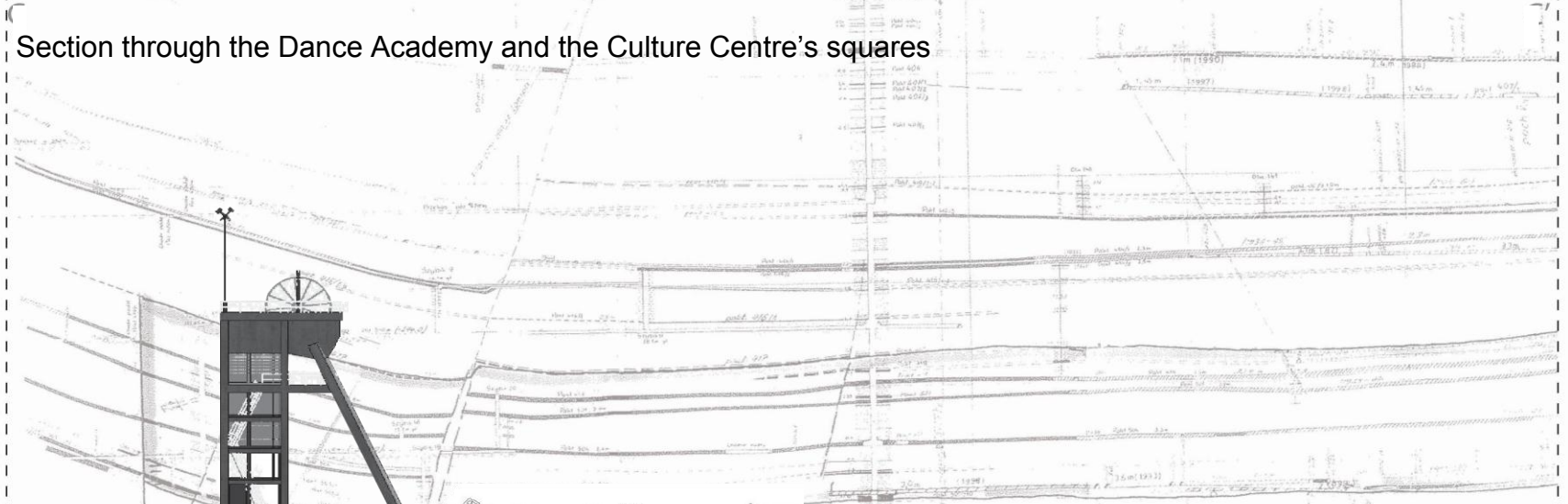
Rozbark Mine – art/ dance zone



Rozbark Mine – art/ dance zone

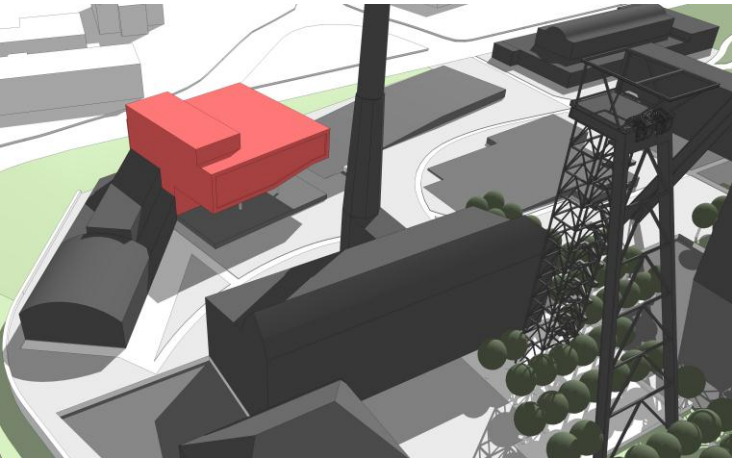


Section through the Dance Academy and the Culture Centre's squares

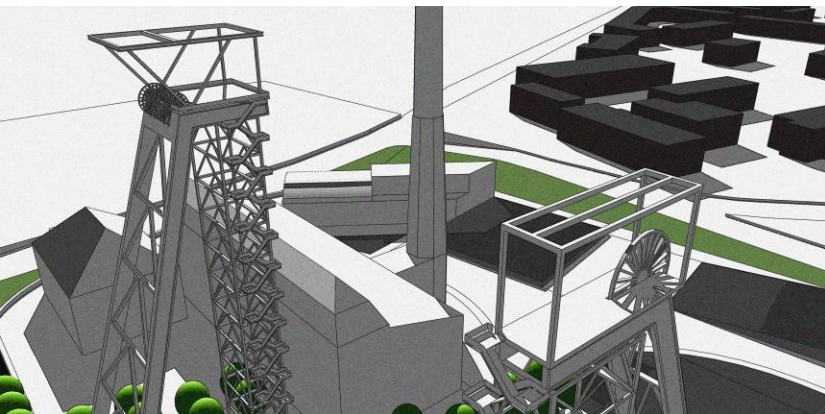
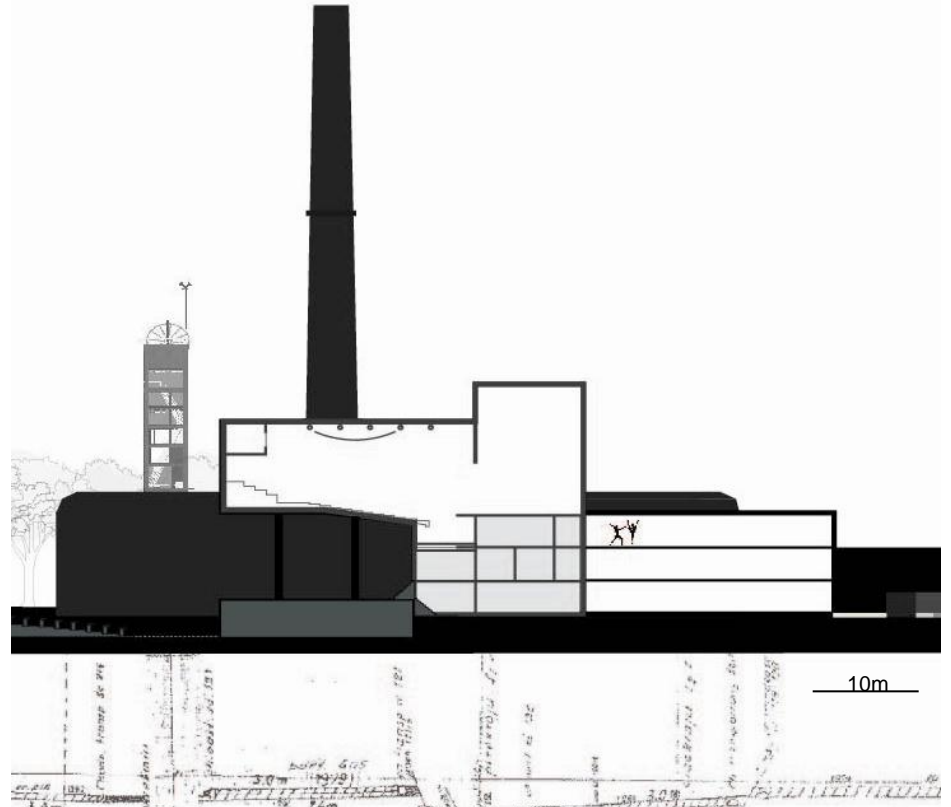


The 3D street art square

Rozbark Mine – buildings construction and reconstruction



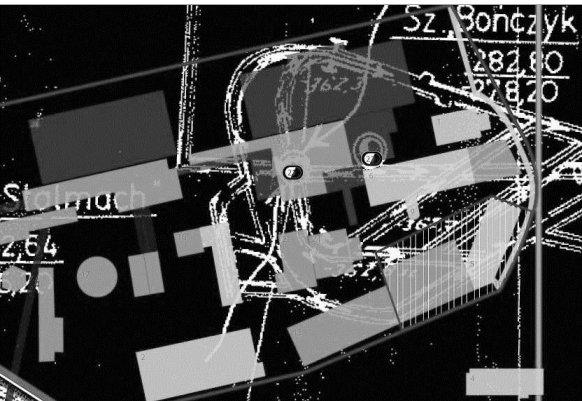
Relation between *Old* and *New*



Bringing the shafts back



Examples of modern shafts' revitalization



DESIGN

Construction Site – 3rd Stage

Rozbark Mine – future development

1. Concept:
rectangular
volume over
the site



2. Concept:
Cracked earth;
Dug corridors



3. Plan:
Squares, paths,
view lines cut out
in the volume



Rozbark Mine – future development

4. Concept:

2nd volume over the 1st one;

Undersound corridors as pattern



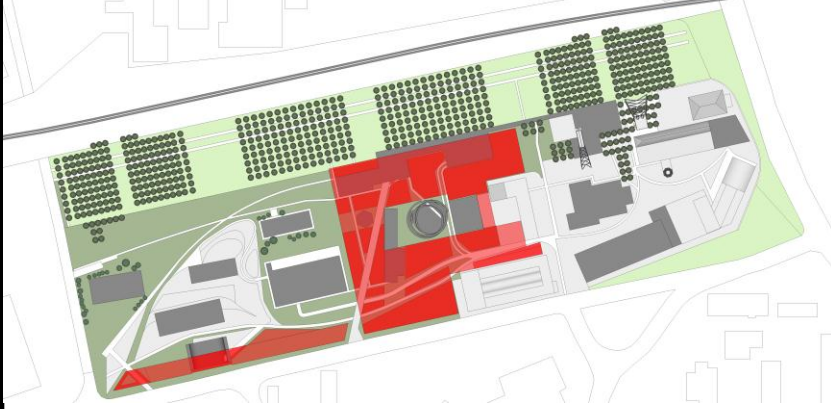
5. Plan:

Stripe separating park from roads



6. Plan:

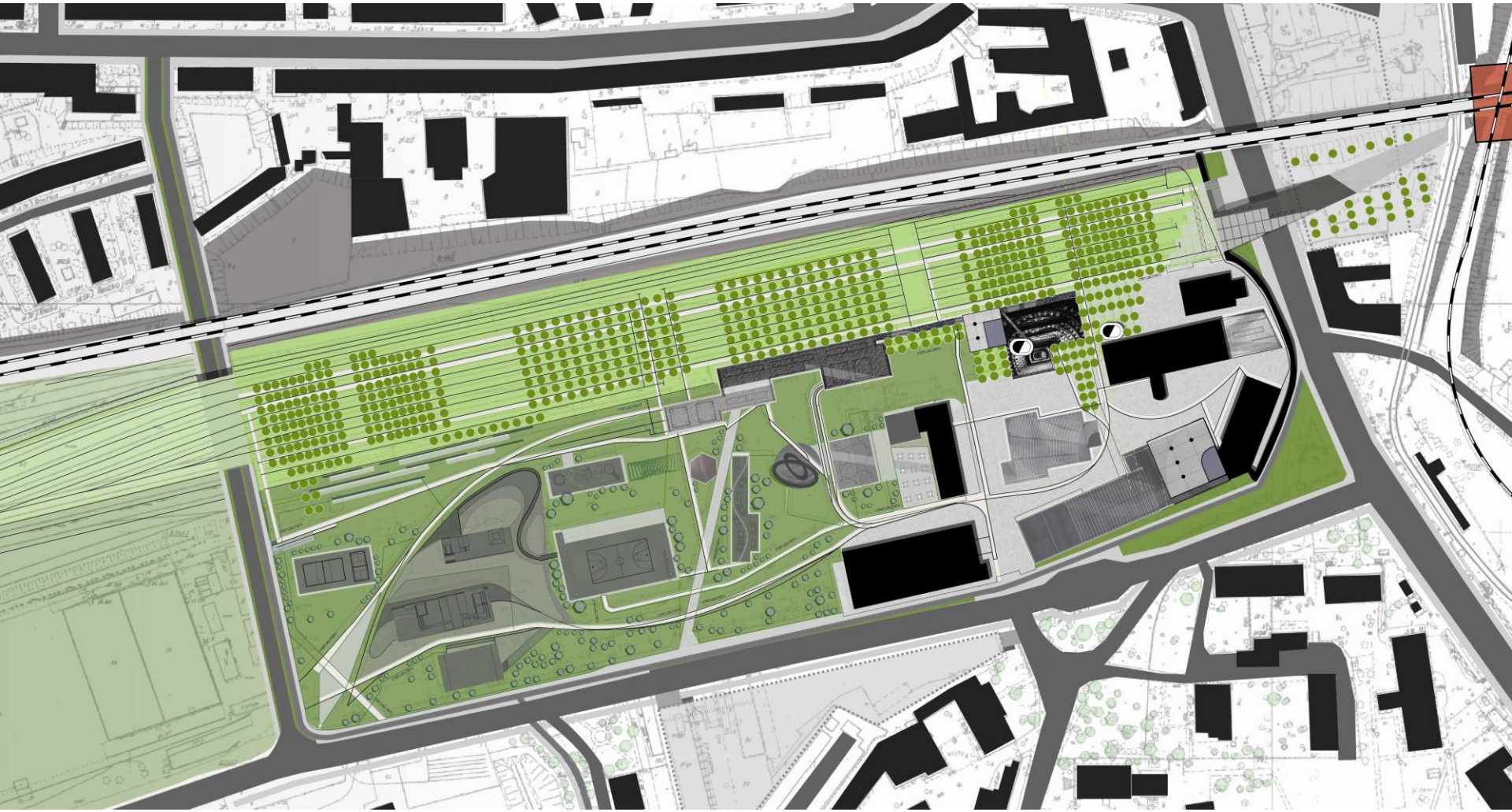
Combined vision



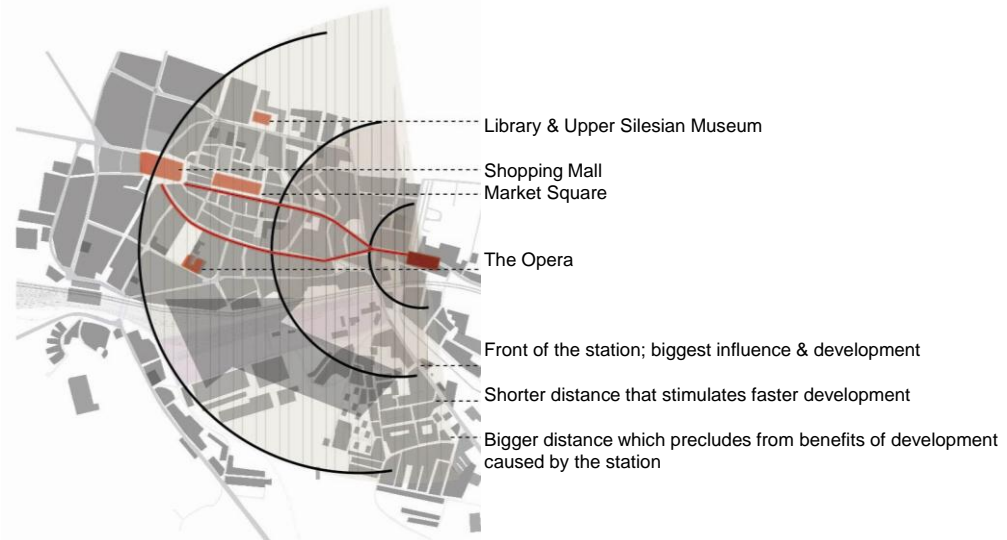
Rozbark Mine – context within the city



Rozbark Mine – context within the city



Rozbark Mine – location of the station

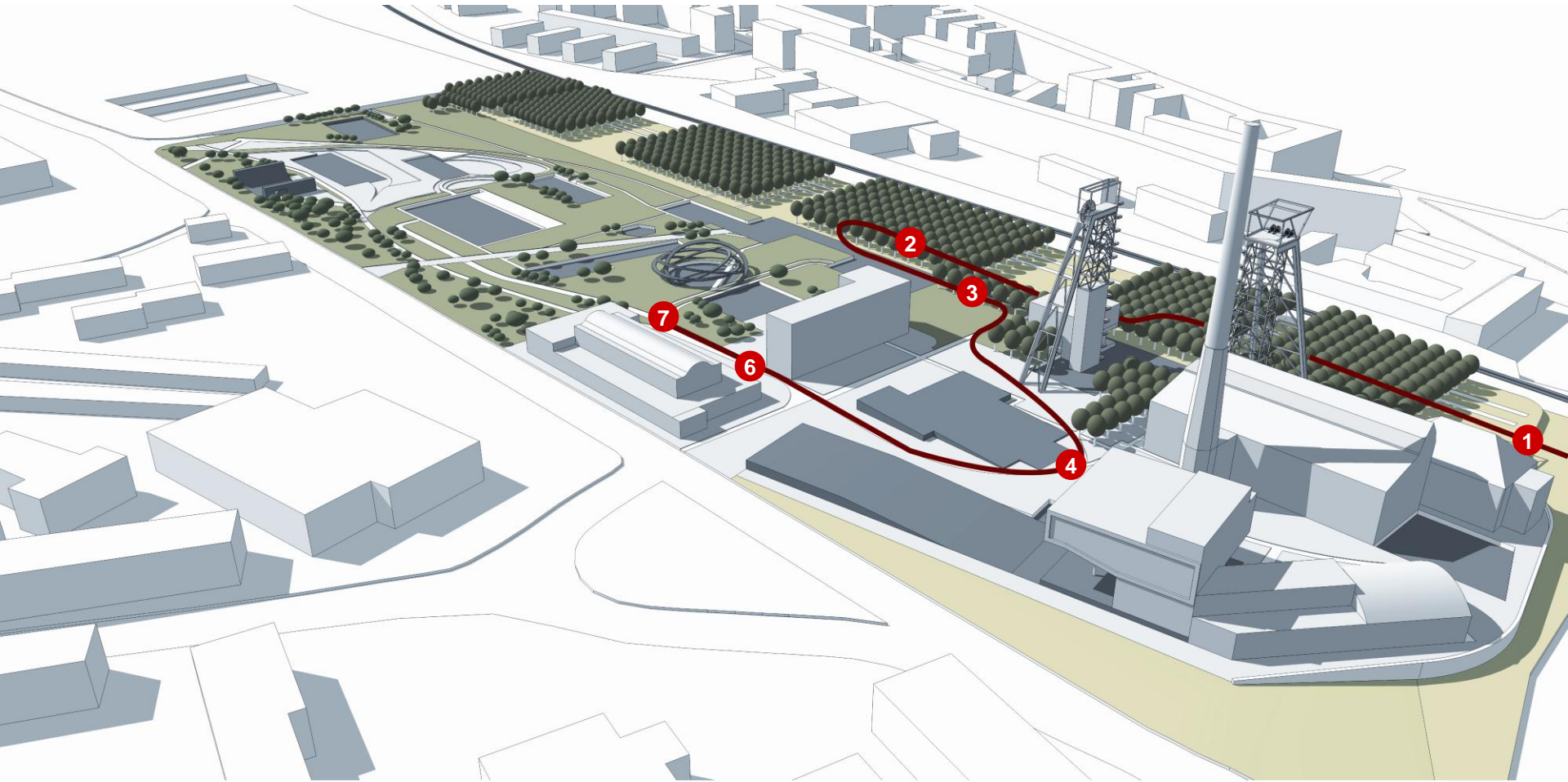


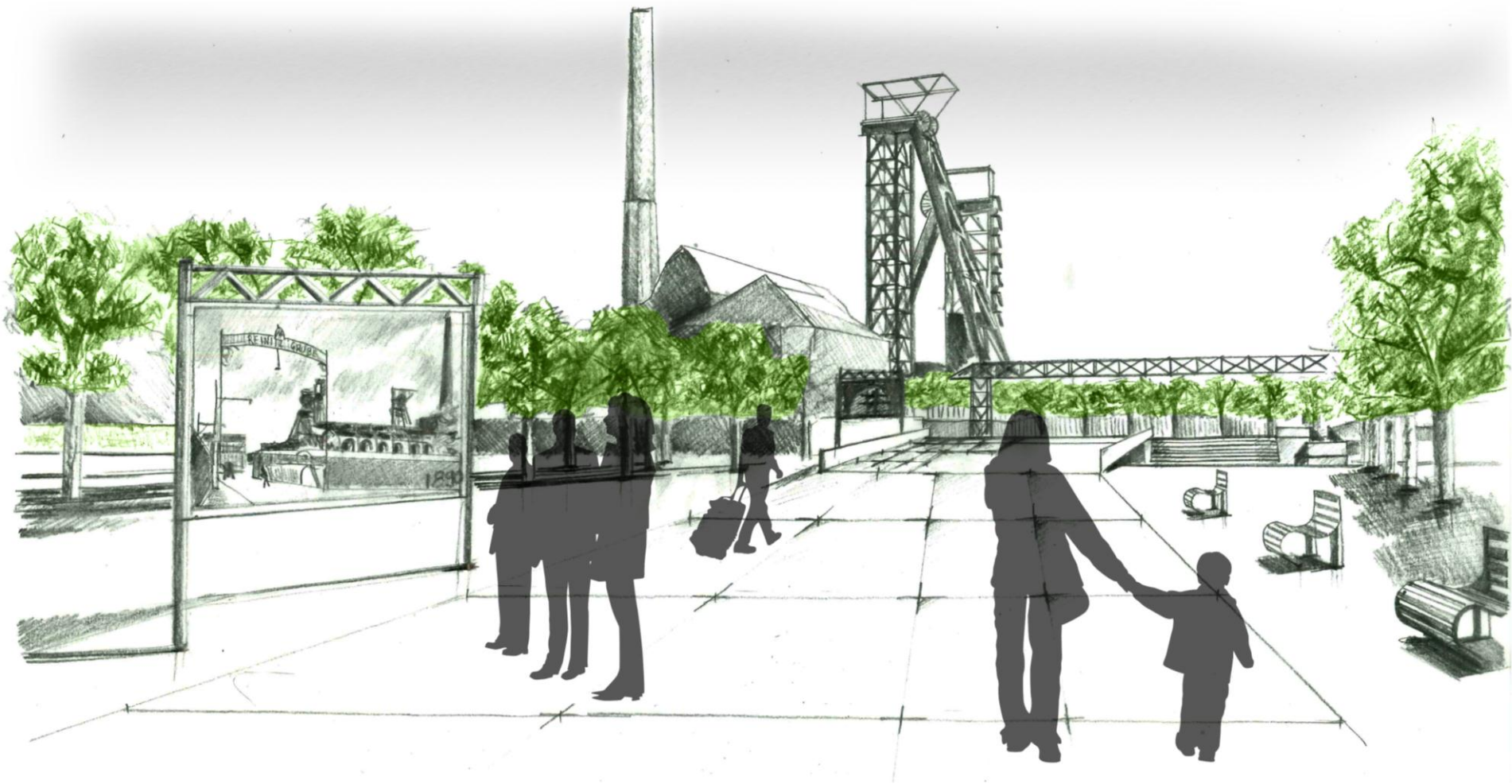
New situation of the front of the railway station

Pedestrian Flow Zones according to the distance from the station and attraction points in the city

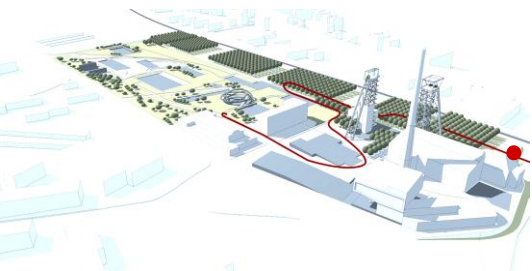


Rozbark Mine – route through the Park



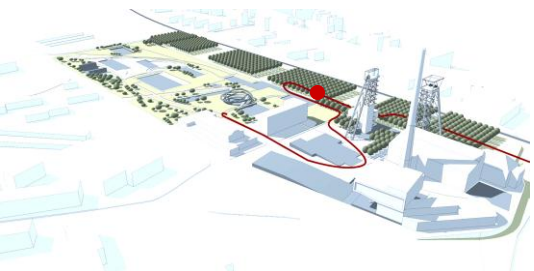


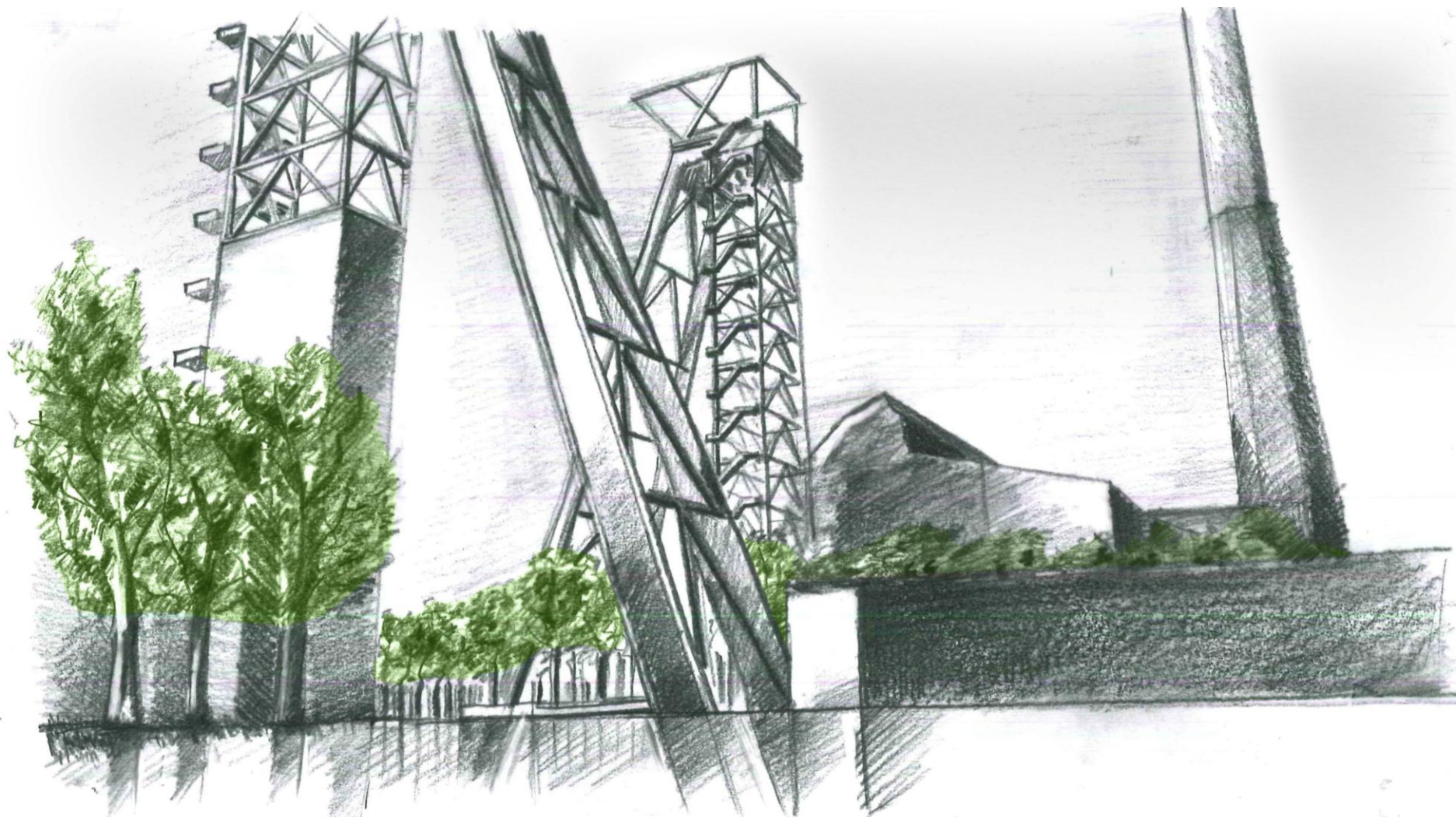
1. View on the Rozbark Park from the square in front of the railway station



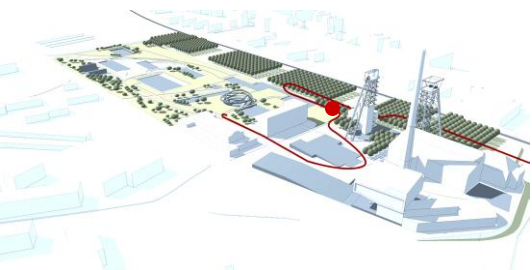


2. View on the exhibition squares from the green line area



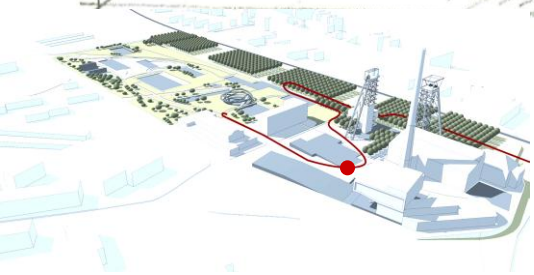


3. View on the shafts: Bończyk and Stalmacha



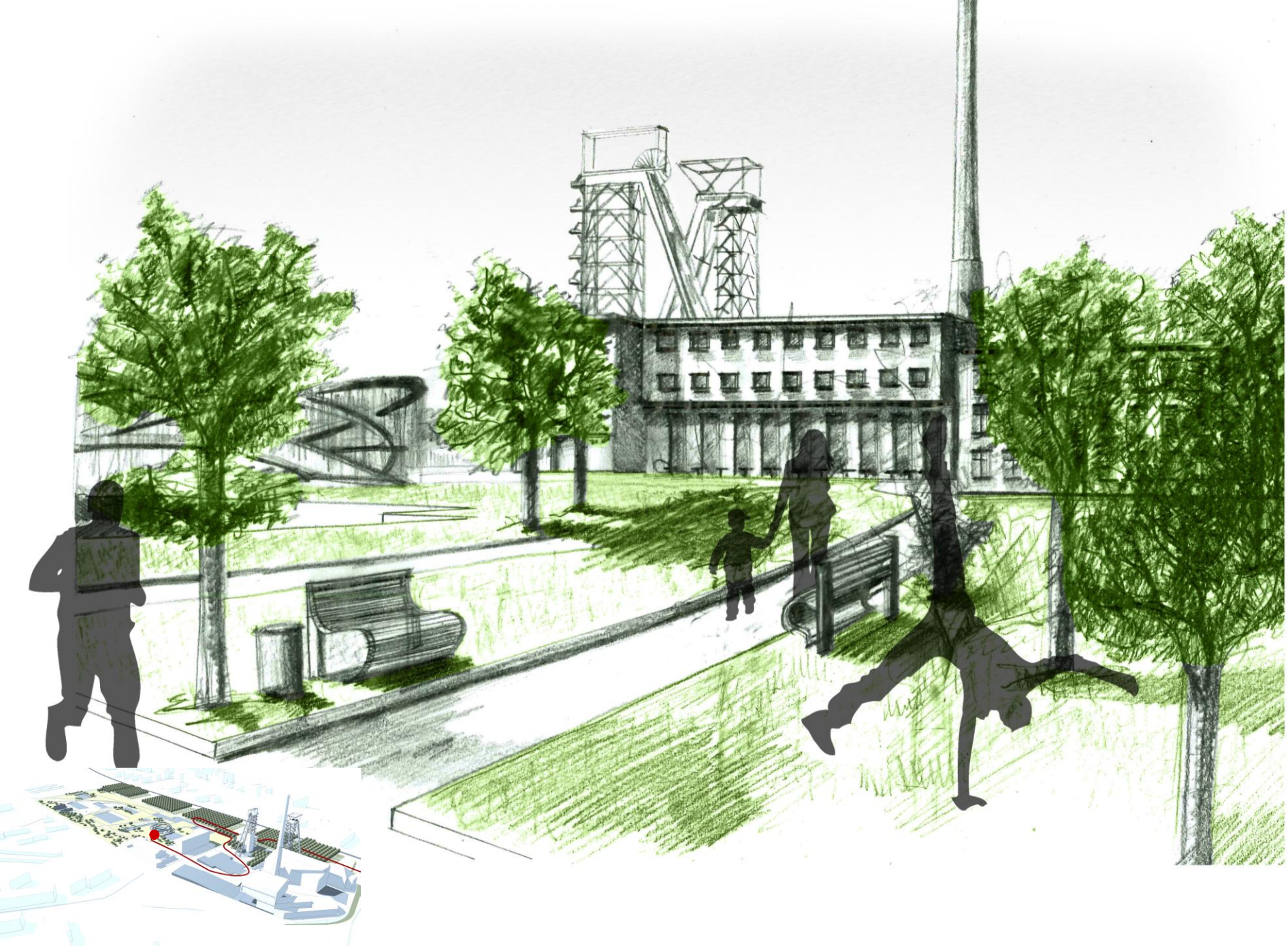


4. View on the audience square





5. View on the chill-out area and the fountain



6. View from the park on the industrial site



7. View from the park on the future project area

CONCLUSION



How to deal with the future development of the site to deal with the future landscape development in the context of the eventful industrial history of the last 150 years and how to preserve the characteristics of local/ regional identity?

Long term development strategies

Low costs of implementation

CONCLUSION



How to redevelop the site as such that?

1. The original industrial character of the place can be experienced

Adaptation of former mining buildings to new functions

Sustainable reconstruction of the leftover buildings instead of demolition

Preserving the heritage of the site and the district

CONCLUSION



How to redevelop the site as such that?

2. A better living environment for the whole city of Bytom occurs

Connecting the parts of the city instead of separating

providing greenery and public spaces

possibilities to organize events

opportunities of engagement in the project and happenings

increased quality of the city

CONCLUSION



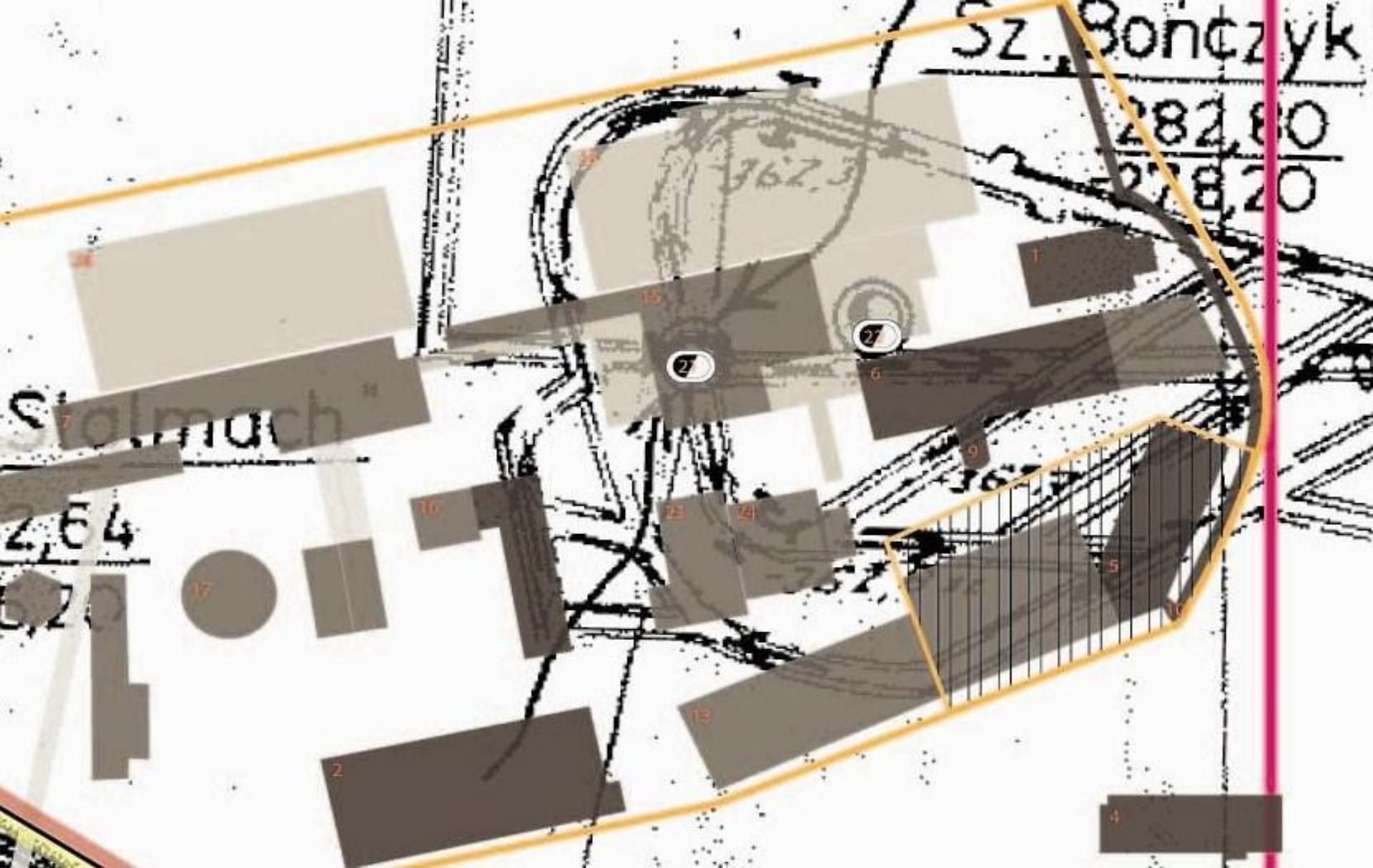
How to redevelop the site as such that?

3. Regional and emotional meaning of bytom improves

Defining the character of the city in the region

Profile at The Silesian Industrial Monuments Route

Strengthening identity of local inhabitants



The END