TIME SCHEDULE

P1

Site Analysis and Project Hypothesis

# Project Title and Abstract.
# Theoretical Structure.
- Literature (min 3 articles).
- Word formulation of project and Site.
# Methodology and Planning.
# Site Research.
- Regional Analysis.
- Local Analysis.
- Experimental Analysis.
- Diagram of relevant landscape system.
- Historical Research.
- Present Research.

# Site Introduction / Selection.
# Literature / Methodology review.
# Case studies.

P2

Site Selection and Concept Design

# Project Title and Abstract.
# Theoretical Structure.
- Abstract.
# Methodology and Planning.
# Mapping.
# Conceptual Design.
- Conceptual Diagram
- Site Selection
- Regional Concept
# Design.
# 3D Drawings and Collages.
# Working Model (conceptual).

P3

Detail Design

# Conceptual Diagrams
# Regional Concept
# Design
# Technical Drawing Detail
# 3D Drawings and Collages.
# Working Model 1:200

P4

Final Design

# Integral report (theoretical and Methodological Structure).
# Review Analysis
# Final Design
- Conceptual Diagram
- Regional Concept
- Design
- Technical Drawing Detail
- 3D Drawings and Collages.
- Presentation Model 1:200

P5

Public Presentation

# Integral report (theoretical and Methodological Structure).
# Final Presentation.
## CONTENTS

### CONTEXT EXPLANATION

1. Fascination  
2. Site Selection  
3. Problem Statement  
4. Research Question

### SITE ANALYSIS

1. Natural aspects  
2. Urban development  
3. Social aspects

### DESIGN THEORY & CASE STUDY

1. Design theory  
2. Design principles  
3. Case study

### DESIGN ELABORATION

1. First concept  
2. Design interventions  

### REGIONAL DESIGN

1. Design Concept  
2. Design Process  
3. Master plan  
4. Regional design potential

### OUTLOOK

1. Scale design  
2. Next step and focus.
1. Fascination
2. Site Selection
3. Problem Statement
4. Research Question

1. Natural aspects
2. Urban development
3. Social aspects

1. Design theory
2. Design principles
3. Case study

1. Design Concept
2. Design Process
3. Master plan
4. Regional design potential

1. First concept
2. Design interventions
3. Potential and Possibilities

1. Scale design
2. Next step and focus.
# The enjoyable quality of life in the city which the landscape can be an important part to encourage it.

# The interrelation of the people toward the urban open space.
URBAN-SOCIAL ASPECT PROBLEMS
URBAN ASPECT PROBLEMS LOST CONNECTION
BETWEEN OLD HISTORICAL CITY - NEW RESIDENTIAL DEVELOPMENT
Research Question

How to reconnect the relationship of new-old establishment and recreate a sense of community in specific society through working with the landscape.

How can we use landscape to solve urban tissue problems in floodplain area.

What are the strategies that can achieve the better quality space, provide the sustainable and livability city for people of Bratislava.
## SITE ANALYSIS

1. Natural aspects
2. Urban development
3. Social aspects

### CONTEXT EXPLANATION
1. Fascination
2. Site Selection
3. Problem Statement
4. Research Question

### SITE ANALYSIS
1. Natural aspects
2. Urban development
3. Social aspects

### CASE STUDY
1. Design theory
2. Design principles
3. Case study

### REGIONAL DESIGN
1. Design Concept
2. Design Process
3. Master plan
4. Regional design potential

### DESIGN ELABORATION
1. First concept
2. Design interventions
3. Potential and Possibilities

### OUTLOOK
1. Scale design
2. Next step and focus

---

**RESEARCH DESIGN METHODOLOGY**

<table>
<thead>
<tr>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTEXT EXPLANATION</td>
<td>SITE ANALYSIS</td>
<td>CASE STUDY</td>
<td>REGIONAL DESIGN</td>
<td>DESIGN ELABORATION</td>
<td>OUTLOOK</td>
</tr>
</tbody>
</table>
Most part are sandy. Some parts are gravel from Holocene and Pleistocene.

**WOODLAND**  Salix-Populas floodplain forest

**MARCH**

**FIELD**

**SWAMP**

**LEAF**
1768-1789
1806-1869
1869-1887
1983
2014

AD. 907 Emerging of Presporok (Bratislava)
1741 Golden Age of Bratislava
Maria Theresia of Austria
1918 Austro-Hungarian Empire Breakup : Establish Czechoslovak.
1919 Bratislava established as a Capital of Slovakia
1948 CITY EXPANSION
1993 Divided Slovakia and Czech Republic
Building Boom / lost of open space.

Population

33,000
42,238
78,000
115,000
425,420

141.2
agriculture
61.7
developed land
159.4
water + forest

367.6 km²

TIMELINE DEVELOPMENT
HISTORY
URBAN ASPECT PROBLEMS

UNRELATED SPACE USAGE
RESIDENCES - CITY’S GREEN OPEN SPINE.

INTROVERTED NEIGHBORHOOD
NO CONNECTION BETWEEN EACH OTHER.

SEPERATED NEIGHBORHOOD
NO CONNECTION TO OPEN SPACE

INTROVERTED NEIGHBORHOOD
Urban water and discharge water

Higher possible of floods and more water discharge

Permeability

Petrzalka area
- 28.7 km²
- Petrzalka city area: 13.4 km²
- Not Permeable: 75%
- Permeable: 25%

Petrzalka area
- 10.18 km²
- Permeability: 75%
- Not Permeable: 25%

Average precipitation (mm)

January: 10.5 (10%), 78.5 (79%), 10.4 (10.4)
February: 11.5 (11.5), 60.5 (60.5), 12.5 (12.5)
March: 13.5 (13.5), 75.5 (75.5), 14.5 (14.5)
April: 15.5 (15.5), 80.5 (80.5), 16.5 (16.5)
May: 17.5 (17.5), 85.5 (85.5), 18.5 (18.5)
June: 19.5 (19.5), 90.5 (90.5), 20.5 (20.5)
July: 21.5 (21.5), 95.5 (95.5), 22.5 (22.5)
August: 23.5 (23.5), 100.5 (100.5), 24.5 (24.5)
September: 25.5 (25.5), 105.5 (105.5), 26.5 (26.5)
October: 27.5 (27.5), 110.5 (110.5), 28.5 (28.5)
November: 29.5 (29.5), 115.5 (115.5), 30.5 (30.5)
December: 31.5 (31.5), 120.5 (120.5), 32.5 (32.5)
Annual: 33.5 (33.5), 125.5 (125.5), 34.5 (34.5)

Average temperature (°C)

January: 0.5 (0.5), 10.5 (10.5), 1.5 (1.5)
February: 1.5 (1.5), 11.5 (11.5), 2.5 (2.5)
March: 2.5 (2.5), 12.5 (12.5), 3.5 (3.5)
April: 3.5 (3.5), 13.5 (13.5), 4.5 (4.5)
May: 4.5 (4.5), 14.5 (14.5), 5.5 (5.5)
June: 5.5 (5.5), 15.5 (15.5), 6.5 (6.5)
July: 6.5 (6.5), 16.5 (16.5), 7.5 (7.5)
August: 7.5 (7.5), 17.5 (17.5), 8.5 (8.5)
September: 8.5 (8.5), 18.5 (18.5), 9.5 (9.5)
October: 9.5 (9.5), 19.5 (19.5), 10.5 (10.5)
November: 10.5 (10.5), 20.5 (20.5), 11.5 (11.5)
December: 11.5 (11.5), 21.5 (21.5), 12.5 (12.5)
Annual: 12.5 (12.5), 22.5 (22.5), 13.5 (13.5)
URBAN ASPECT PROBLEMS

UNCONNECTED CITY TO RIVERFRONT BLOCK BY THE HIGHWAY

ACCESSIBILITIES
URBAN ASPECT PROBLEMS

- LOW MAINTAINANCE BUILDINGS / AREAS
- DESOLATE NEIGHBORHOOD

- LEFT UNUSE SPACE
  NO ACTIVITIES / UNORGANISED AREA.

DISCONNECTED LEVEL
LESS ACTIVITIES / NO RELATIONS TO RELATED IN THE NEIGHBORHOOD
PETRZALKA IDENTITY
Film by Juraj Chlпиk
http://festival.azyl.sk/player/play.html?id=1338
Petržalka Identity, Graphic Design Boris Melus, Published by O.K.O. & Slovart
The University of Economics is based in Petržalka, with campuses situated in different locations around Bratislava.

There are 11 elementary schools and 19 kindergartens administered by the borough.[12][13] Gymnasium high schools include the state-administered Albert Einstein[14] and Pankúchova 6 gymnasiums[15] and the private Mercury Gymnasium.[16]

The borough is also known for its football club, Artmedia Bratislava, a participant in the 2005–06 UEFA Champions League.
REGIONAL PARK CONNECTION

NATURAL FLOOD PROTECTION

WATER ACTIVITIES

FOREST RECREATION AREA

URBAN WETLAND

RAINWATER STORAGE
NEW FUNCTION BUILDINGS

MORE SPACE FOR THE CITY

TRANSPORTATION

BRIDGE BUILDING

WATERFRONT PLAZA

SMALL WATERFRONT HOUSE

LEFT OVER SPACE

OPEN SPACE CLOSE TO RESIDENCE
01. Design theory

02. Case study

03. Design theory & Case study

1. Design theory
2. Case study
Place Attachment.

**Radical Contextualism**

Fig. 1. The tripartite model of place attachment.
Water design techniques

Flood plain

River bed and current

Dynamic River Landscape
CASE STUDY

BIJLMER, AMSTERDAM, THE NETHERLANDS

BEFORE

Demolition of high-rise flat blocks
Rehousing of residents
Restructuring of public areas
Repositioning of the blocks of flats

AFTER
The Greater New Orleans, USA
Designer: Waggonner and Ball
http://livingwithwater.com/urban_water_plan/about/

Greater New Orleans possesses a 100-year hurricane protection system—the envy of other coastal cities. But with more than sixty inches of rain each year and growing risk posed by climate change, last century’s overmatched drainage infrastructure is inadequate to present and future challenges. The consequences of the current approach to water management, which removes stormwater as fast as possible, are visible in sinking land and broken infrastructure.

With the Urban Water Plan, Greater New Orleans can directly address these challenges and make better use of its water assets, while bringing innovations in engineering, planning, and design to other coastal regions where robust water infrastructure is critical to survival and economic prosperity.

Flooding
Subsidence (the sinking of the ground)
Water Assets Wasted

Principles: Adapting the Flow
# Water
When it rains, slow and store
# Ecology
Live with Water
Work with Nature
# People
Work Together
Design for Adaptation

The Urban Water Plan proposes the restoration of the city’s canals to prominence as historic water corridors, each of which provides the city’s residents with access to new water-based amenities in the form of blueways, greenways, water plazas, and parklands.

Restored wetland habitats, linear parklands, and a combination of urban blueways and neighborhood-scale water features build upon the basin’s existing canal network and ecological assets.
SCALE PROBLEM

Regional scale

City scale

Neighborhood scale
01 CONTEXT EXPLANATION
1. Fascination
2. Site Selection
3. Problem Statement
4. Research Question

02 SITE ANALYSIS
1. Natural aspects
2. Urban development
3. Social aspects

03 CASE STUDY
1. Design theory
2. Design principles
3. Case study

04 DESIGN ELABORATION
1. First concept
2. Design interventions
3. Potential and Possibilities

05 REGIONAL DESIGN
1. Design Concept
2. Design Process
3. Master plan
4. Regional design potential

06 OUTLOOK
1. Scale design
2. Next step and focus
Complete the green structure of the Region.
connect water structure
WATER MANAGEMENT

Regional scale: FLOODED FROM RIVER - By pass

Local scale: FLOODED FROM CITY - Rain waters storage and discharge

protect both old-new city flooding

protect town flooding and flood in city downstream
Regional scale

River By pass
Flood situation
Wet Season (June - July)

prepare for water fluctuation.
Regional scale

River By pass
Normal situation
Dry season.

remaining creek
water channel becomes ecological
green corridor.
01 CONTEXT EXPLANATION
1. Fascination
2. Site Selection
3. Problem Statement
4. Research Question

02 SITE ANALYSIS
1. Natural aspects
2. Urban development
3. Social aspects

03 CASE STUDY
1. Design theory
2. Design principles
3. Case study

04 DESIGN ELABORATION
1. First concept
2. Design interventions

05 REGIONAL DESIGN
1. Design Concept
2. Design Process
3. Master plan
4. Regional design potential

06 OUTLOOK
1. Scale design
2. Next step and focus.
Urban Sponge
Rain waters storage and discharge

Natural Landscape
City scale

Rain waters storage and discharge
Natural Landscape
Cultural Landscape

Place Attachment
“The bonding that occurs between individuals and their meaningful environments”

Radical Contextualism
“Not only a respect for reality and exiting conditios, but also an openness to multiple layers of meaning and wide variety of inputs.”
Archipelago Cultural Landscape

Flooded Neighborhood disconnected Less permeability area Social Problems disconnect levels

Not Permeability 75 %
10.18 km²

Permeability 25 %
3.22 km²
Archipelago
Archipelago

Cultural Landscape

Island - Isolateness
People generation - Individualist who want to share

Island - self world which can be connect to the outer world.
Connector - linkage to the others
Border - define an island openness - enclosure.
Island Typology
Island Typology

**TYPE**

**CONDITIONS**

**CHARACTERISTICS**

### NATURE

- Recreation

### CITY

- Allotment

### CITY - NATURE

- Recreation

### CONNECTOR

- Social meeting place
Linkage - Connection between Islands

Border & Potentials
Water Channel
SEASONAL ASPECTS

DRY SEASON

RAINY SEASON

WATER FRONT PARK

CITY SPINE

RESIDENCE RELATED TO OPEN SPACE
1. Fascination
2. Site Selection
3. Problem Statement
4. Research Question

1. Natural aspects
2. Urban development
3. Social aspects

1. Design theory
2. Design principles
3. Case study

1. Design Concept
2. Design Process
3. Master plan
4. Regional design potential

1. First concept
2. Design interventions

1. Scale design
2. Next step and focus.

OUTLOOK
MIDDLE SCALE
SMALL SCALE

Connection towards old city.

Island structure
Landscape relationship
Connector - Bridges
Water Channels
Island structure

Landscape relationship - Network

Water Channels

Water related Housing

Connector - Bridge
Thank you!