



SZÉCHENYI
ISTVÁN
EGYETEM

1th INTERNATIONAL WEEK
On Practice Oriented Higher Education at SIU

City & Traffic International Planning Workshop

20 years of experience



Emese Mako

associated professor

Szechenyi Istvan University

Department of Transport Infrastructure

About the project

The Workshop City and Traffic (originally Seminar fuer Verkehr und Staedtebau) was initiated by Prof. Dr.-Ing. Hartmut Münch and started in 1996 at the University of Applied Sciences Erfurt, Faculty Civil Engineering.

Languages: German, later English

Since then it has been held yearly for one week in July. In the beginning members of universities or technical colleges of four countries took part in this workshop, by now there are many more participants.



Partners



Cracow University of Technology



*Czech Technical University in Prague
Faculty of transportation Sciences*



*Institute for Transport Studies,
Department of Landscape, Spatial and
Infrastructure Sciences, BOKU*



Vilnius Gediminas Technical University



Slovak Technical University



*Department of Transportation Infrastructure
and Municipal Engineering*



*Department of Transportation Engineering
Faculty of Civil Engineering
at the University of Maribor*



Bauhaus-University Weimar



University of Belgrade



Locations, organisers

- | | | | |
|-----|------------------------------|-----|--------------------|
| 1) | 1996 Erfurt (D) | 11) | 2006 Győr (H) |
| 2) | 1997 Modra (SK) | 12) | 2007 Tulln (AT) |
| 3) | 1998 Győr (H) | 13) | 2008 Erfurt (D) |
| 4) | 1999 Klosterneuburg (A) | 14) | 2009 Decín (CZ) |
| 5) | 2000 Erfurt (D) | 15) | 2010 Maribor (SLO) |
| 6) | 2001 Banska Stiavnica (SK) | 16) | 2011 Kraków (PL) |
| 7) | 2002 Győr (H) | 17) | 2012 Vilnius (LT) |
| 8) | 2003 Kraków – Wieliczka (PL) | 18) | 2013 Malacky (SK) |
| 9) | 2004 Maribor (SLO) | 19) | 2014 Győr (H) |
| 10) | 2005 Vilnius (LT) | 20) | 2015 Weimar |



Financing

Traditionally the host country organizes the main part of the financing and accommodation of the workshop participants. Council of Ambassadors approved the funding for project „City and Traffic 2014 - Győr“, within the Visegrad Fund Small Grant Scheme.

Further supporter was the Local Government of Győr and the SIU.



Task

The task of the workshop is to develop improvement suggestions for urban areas, streets, etc. with obvious transport problems.

Especially traffic safety and the functionality have to be kept in mind, but also the overall appearance of the townscape has to be considered.



Organisation

The work is done in groups (students and one or more supervising person in support). They are mixed up in order to socialize and strengthen the international contacts. This helps to improve the international exchange of the respective experience.

Group 3	Anne	Voßnacke	D
	Jūratė	Venckauskaitė	LT
	Petr	Jandík	CZ
	Roland	Schuster	HU
	Piotr	Ostaszewski	PL
	Jovana	Antić	SRB



Program

Sunday: Arrival of participants,
welcome dinner

Monday: Opening, chief architect, city hall
Overview of the program and tasks
Work in groups, site survey
Analysis of the current situation

Tuesday: Work in groups
Social activities

Wed.: Work in groups
Supervisors meeting

Thursday: Work in groups

Friday: Work in groups, cleaning of working rooms
Preparation of posters for presentation
Students presentations and summary of the workshop
Farewell dinner and party

Saturday: Departure of the participants



Outcomes

The improvement suggestions, jointly developed by the groups of students and supervisors, are presented and discussed in a final plenum. Thus a critical evaluation of the proposed solutions is conducted. In this way not only students and teachers but also local decision-makers learn about the importance, as well as the problems of a humanly compatible and safe design of roadside environment and street space, respectively.

Posters:

1. Current situation, problems
2. Low cost solution
3. Long term solution
4. Evaluation





Szövetség utca 1 HUF SOLUTION

Legend: Scale 1:500



RECTANGULAR SPEED BUMP



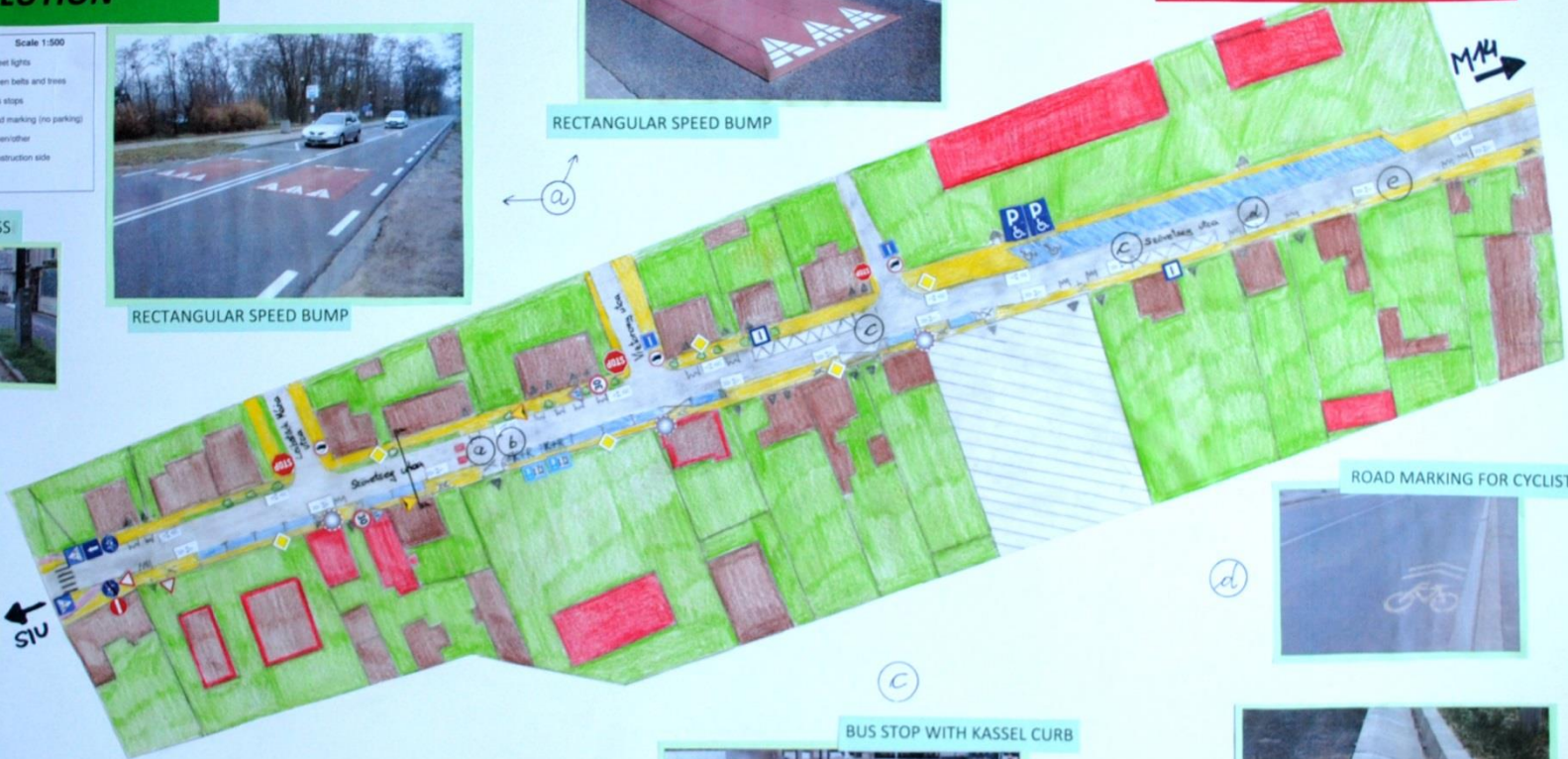
RECTANGULAR SPEED BUMP



ROAD MARKING AT ACCESS



(b)



ROAD MARKING FOR CYCLISTS



(d)

BUS STOP WITH KASSEL CURB



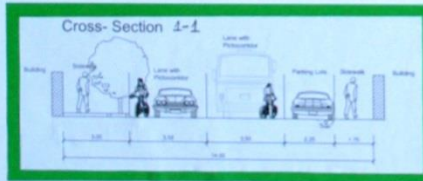
(e)



EXAMPLE OF OPEN SEWER

1 HUF solution:

- Two-lane street with 20 km/h limit in both directions.
- 20 km/h limit near nursery / kindergarten.
- Tree-line street (alley).
- Street with the electric poles.
- The drainage system is situated under the surface.
- Width of carriageway is 6,507,2 meters with the share lanes for bicycles and motor vehicles in both directions.
- In connection with the parallel parking places the width of the carriageway is also 7 meters, with the share lanes in both directions.
- In connection in front of the police station the width of the carriageway is 4,5 meters.
- Width of the pedestrian path is 3 meters in both directions (including tree alley).
- In connection with the parking/stop or tree alley, the width of sidewalk is 2 meters.
- Extended bus stop platforms on the both sides.
- 45 degree angle of parking in front of the police station.
- 20 parking lots in front of police station 2 for disabled people.



Supervisors: Václav Novotný, Tomasz Kulpa

Students: Bernhard Antony, Marek Braniš, Vukan Jovanović, Ringaile Petrauskaitė, Gregor Salobir

SOLUTION - VERSION 1



Szövetség utca
10⁶ HUF SOLUTION

ELEVATED CARRIAGEWAY SURFACE
(SPEED REDUCTION)



I



MARKING OF KISS&RIDE FACILITY

II

CONCRETE BUS STOP PAVEMENT



ROAD MARKING OF PARKING PLACE FOR HANDICAPPED

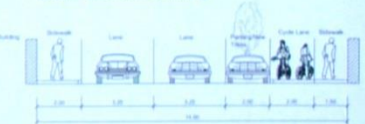
V



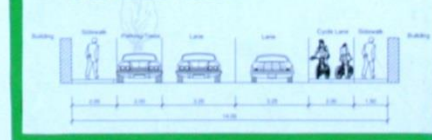
PARKING PLACES WITH TREES

IV

Cross-Section Version 2



Cross-Section Version 1



Legend:

carriageway	street lights
housing	green belts and trees
commercial buildings	bus stop
parking lots	road marking (no parking)
infrastructure for pedestrians	green clover
infrastructure for cyclists	construction site
house entry	

Scale 1:500

- 1 million HUF solution:**
- Two-lane street with 50 km/h limit in both directions;
 - 30 km/h limit near nursery / kindergarten;
 - New trees between the parking places (old trees should be cut down);
 - Electricity under the surface;
 - The drainage system situated under the surface;
 - Two-way cycle path separated from carriageway;
 - The division of the cyclepath and carriageway provided by trees and parking lots;
 - Width of carriageway -- 6,50 meters;
 - Width of the cyclepath will be 2,0 meters;
 - Sidewalks, with the width 1,5 and 2,0 meters will be situated on both sides of the street;
 - Extended bus stop platforms on the both sides;
 - 45 degree angle of parking in front of the police station;
 - 25 parking lots in front of police station (2 for disabled people).

Criteria	Version 1	Version 2
The safety of pedestrians and cyclists	😊	😊😊
Ecological cost	😊😊	😊😊😊
Parking space	😊	😊😊
Investment cost	😊😊	😊😊😊
Maintenance cost	😊😊	😊😊😊
Inhabitants benefits	😊😊	😊😊😊

Legend: 😊 bad 😊 neutral 😊😊 good

Group 1 Supervisors: Václav Novotný, Tomasz Kulpa
Students: Bernhard Antony, Marek Braniš, Vukan Jovanović, Ringaile Petrauskaitė, Gregor Salobir

SOLUTION - VERSION 2



Szövetség utca EVALUATION

Strengths
Invest. costs
Quick building
Design
More safer than current
PT passengers conditions
Big vehicles conditions
Accessibility



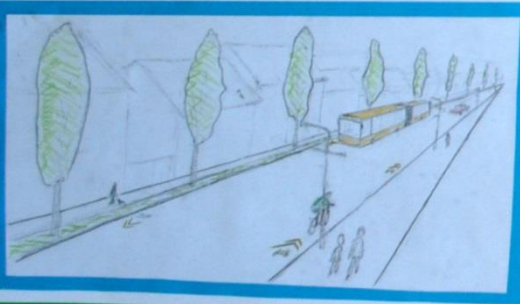
NICE LOOKING IKEA STOP

Weaknesses
Not complexity

1 HUF solution:	1 million HUF solution:
- Two-lane street with 50 km/h limit in both directions;	- Two-lane street with 50 km/h limit in both directions;
- 30 km/h limit near nursery / kindergarten;	- 30 km/h limit near nursery / kindergarten;
- Tree-line street (alley);	- New trees between the parking places (old trees should be cut down);
- Street with the electric poles;	- Electricity under the surface;
- The drainage system is situated under the surface;	- The drainage system situated under the surface;
- Width of carriageway is 6,5/7,0 meters with the share lanes for bicycles and motor vehicles in both directions;	- Two-way cycle path separated from carriageway;
- In crosssections with the parallel parking places the width of the carriageway is also 7 meters, with the share lanes in both directions;	- The division of the cyclepath and carriageway provided by trees and parking lots;
- In crosssection in front of the police station the width of the carriageway is 6,5 meters;	- Width of carriageway – 6,50 meters;
- Width of the pedestrian path is 3 meters in both directions (including tree alley);	- Width of the cyclepath will be 2,0 meters;
- In crosssection with the parkingplaces or tree alley, the width of sidewalks is 2 meters;	- Sidewalks, with the width 1,5 and 2,0 meters will be situated on both sides of the street;
- Extended bus stop platforms on the both sides;	- Extended bus stop platforms on the both sides;
- 45 degree angle of parking in front of the police station;	- 45 degree angle of parking in front of the police station;
- 28 parking lots in front of police station (2 for disabled people).	- 26 parking lots in front of police station (2 for disabled people).

Strengths
Complex
Safer in general (ex.cyclists)
Design
Houses value
PT passengers conditions
Big vehicles conditions
Accessibility
Better P possibility
Healthier trees

Weaknesses
Invest. costs
Reconstr. time
Cutting trees



Opportunities
More livable street
Less accidents
Houses value

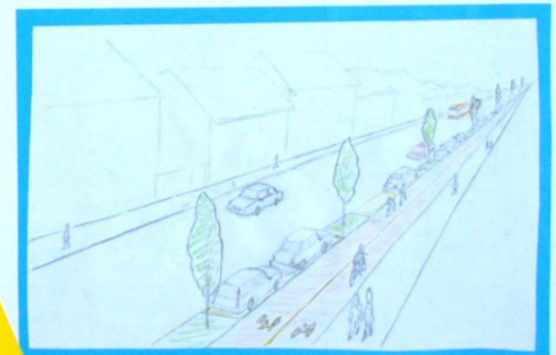
Threats
Worse possibility
Induced traffic
Environment problems
Cyclists safety

Szövetség utca
1 HUF SOLUTION



ROTATIONAL CAR PARK
(CAPACITY 10 VEHICLES)

Szövetség utca
10⁶ HUF SOLUTION



Opportunities
More livable street
Less accidents

Threats
Induced traffic
Environment problem
lack of money for reconstruction



Group 1

Supervisors: Václav Novotný, Tomasz Kulpa

Students: Bernhard Antony, Marek Braniš, Vukan Jovanović, Ringaile Petrauskaitė, Gregor Salobir

EVALUATION



INTRODUCTION

The 2017 Summer EYOF was presented in Hungary for the City of Győr. There will be nine sports on the programme of the 2017 Summer EYOF, all located in the city of Győr: Aerobic Circuit, Archery, Basketball, Cycling, Handball, Judo, Judo-Bronze, Tennis, Volleyball.

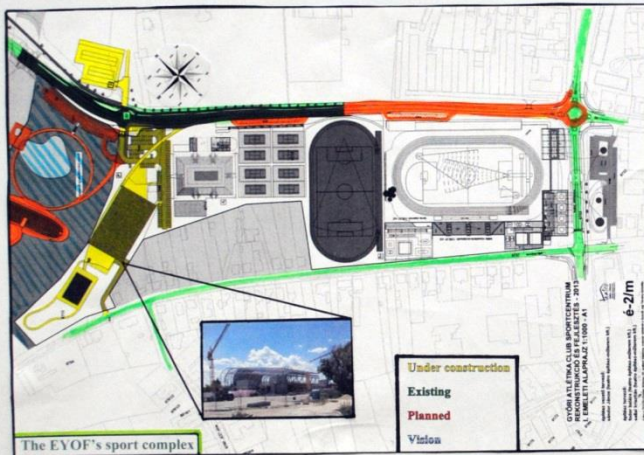
The Youth Olympic games will take place on nine sites, one of them is the Recreation Park. The infrastructure is managed by the Győr-Region Ltd. They already designed the place of the different sports-fields, but the exact areas and north-south orientation of the sports field is not ready. The task is to find out the place of the sports fields, and to give alternative solutions for the traffic of the surrounding area.



- Users:**
- Sportsman
 - Tourist
 - Citizens
 - Transports (car, taxi, buses, public buses)
 - Cargo
 - Staff



SUMMER EYOF 2017



Topic	Problems	
1 Public	➤ Far from entries	
1 Transport	➤ Road crossing (contact with 5)	
2 Bike roads	➤ Missing lane on bridge	➤ Road crossing
3 Bus turn	➤ Conflict with pedestrians	➤ Tourist buses load and turning problems (space-location)
4 Taxi waiting and parking	➤ Conflict with buses	➤ Don't disturb the visitors
5 Walking path	➤ Safe crossing (pool-parking place, pool-hotel)	➤ How to solve?
6 Supplies	➤ Save trees	➤ River view save
7 View-Nature saving	➤ Minimize (contact with 8)	➤ Recharging place
8 Parking	➤ Disabled parking	➤ Emergency parking
9 Public places	➤ Weather protection	➤ Rain protection for walkers
	➤ Shadow	

1. Public Transport
The public transport stop is far from the hotel and the pool centres, the pedestrians have to take at least 5 minutes' walk to get there.
To get the destination they have to cross a main road more times, which can be dangerous.

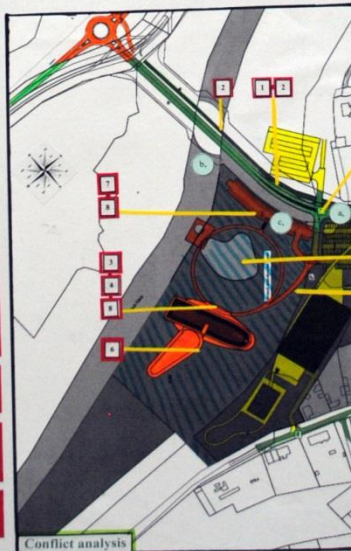


3. Bike roads
The walking path and the bike path are not so separated. After the first step on the bridge they path have one side-ride on one direction the concrete right side for cyclist and left side for pedestrians, but from the pool's parking place the pedestrian cross the bike path.
There is an actual situation above, from the visitors can get to the hotel and the swimming pool by this.

3. Bus lane
The pedestrian is free to walk on a small place to find up and behind the tourist is not clear on the other.

4. Taxi waiting and parking
The cars needed to return by passenger they could conflict with buses.
Otherwise the taxi drivers have to wait in a separated place, where they can't observe the visitors parking and walking.

5. Walking path
The walking path should connect with the parking place and the hotel, swimming pool, needed to be transparent and safe.



5. Streets
There is bike cars above from the staffs, the cargo drivers parking. It must be hidden from the visitors and separated their visitor's parking place.



7. View-Nature saving
The original place is well nature, it is important to save the original feeling for the environment. Here there is a step, we can't disturb the backwater's wildlife. Find the best way to maintain of both.

8. Parking
Design for every kind of parking the recharging place for cars. There enough personal cars parking area, make a protected bike parking place against the weather. Take care about the disabled parking with the emergency's separated.



9. Public places
The public place has to be possible and enjoyable.

CURRENT STATE ANALYSIS



① MISSING CYCLING INFRASTRUCTURE AT A BUSY AREA - (SZEENT ISTVAN UT)

②

② UNSAFE MOVEMENTS OF CYCLISTS AND PEDESTRIANS



③



③ DANGEROUS BEHAVIOR OF VEHICLES AND CYCLISTS THAT ARE CHANGING THEIR DIRECTION



④

④ LONG WAITING TIMES AT A RAILWAY CROSSING



⑤ RED LIGHT VIOLATION ON THE RAILWAY CROSSING

⑥



⑦

⑦ TREE SPACE WITH NO SPECIAL FUNCTION



⑧

⑧ INSUFFICIENT SURFACE OF THE CYCLE PATH AND SIDEWALK

⑨

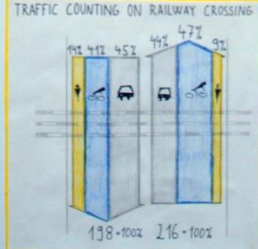
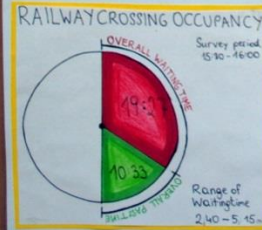


⑨ UNATTRACTIVE SIDEWALK, CREATED IN THE SECTION AREA

⑩



⑩ UNCOMFORTABLE GREEN SPACE WITHOUT BENCHES, GREENERY AND SHADOW

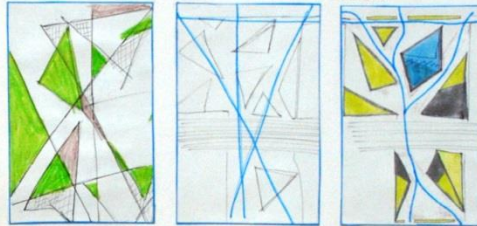




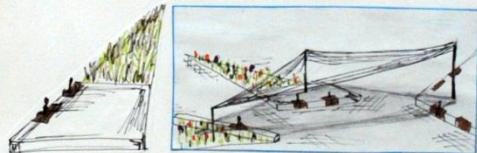
PICASSO PASSAGE

- ELIMINATE MOTORIZED TRAFFIC
- SHARED SPACE FOR P&C
- PRESERVE MAIN CONNECTIONS OF P&C
- SLOW DOWN THE CYCLISTS BY USING TRIANGLE-SHAPED STRUCTURE
- CREATE ATTRACTIVE AND INTERESTING WAITING AREAS FOR P&C
- INCREASE THE QUALITY AND COMFORT BY USING GREENERY, SUN SAILS, WATER...

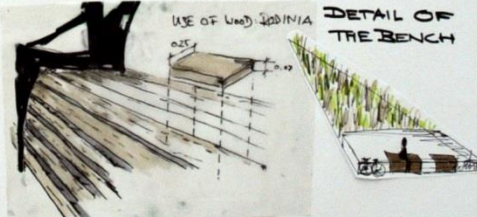
CONCEPT PROCESS



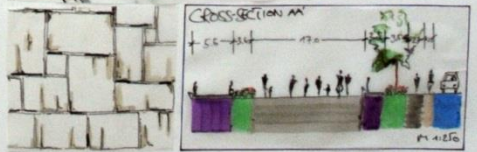
DEVELOPING THE STRUCTURE MAIN CONNECTIONS OF P&C COMBINING STRUCTURE AND MAIN CONNECTIONS



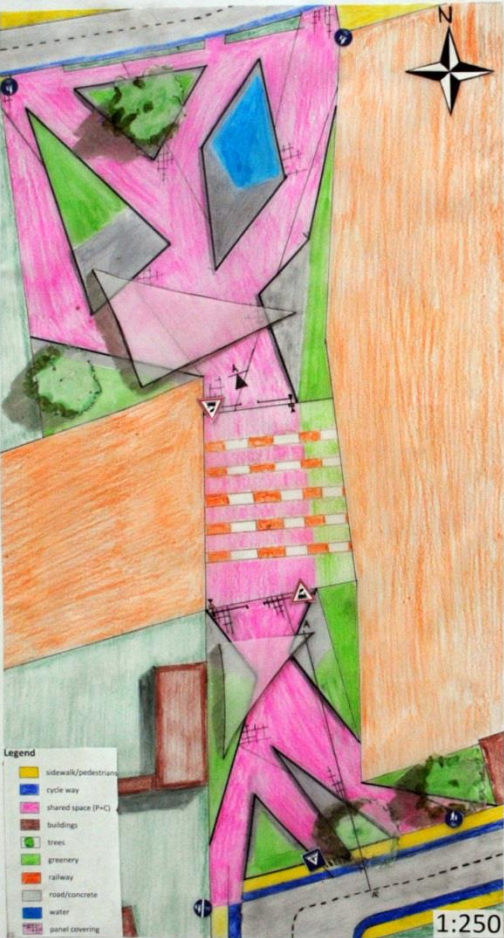
WAITING SPACE SHADOWED BY SUN SAILS



USE OF WOOD: LINDINA DETAIL OF THE BENCH



CROSS-SECTION AND PLANTING CONCEPT WITH BLOOMING TIMETABLE

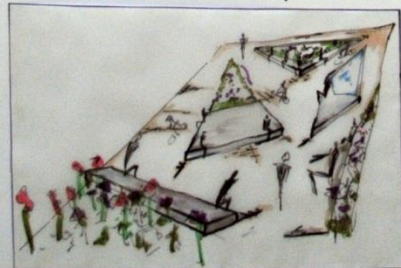


- Legend
- yellow: sidewalk/pedestrian
 - blue: cycle way
 - pink: shared space (P&C)
 - grey: buildings
 - green: trees
 - light green: greenery
 - orange: railway
 - grey: road/concrete
 - blue: water
 - pink: panel covering

1:250

PERSPECTIVE A

DETAIL OF PANEL COVERING



	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV	DEC
FRANZLINIA												
ACROGONIA												
GERANIUM												
PLANTS												
GERANIUM												
PLANTS												
GERANIUM												
PLANTS												







Closing







CIVIL ENGINEERING MSc

in English

Transport Infrastructure Specialisation
Geotechnics Specialisation





**Thank you for your
attention!**

Emese MAKO

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