

Task I

Erstellung eines Grundverkehrsplan für St.Veit an der Glan



Michal Kovař, Petr Richter, Petr Červenka



Róbert Péter Tóth, Bence Németh



Félix Schons

Main targets

- Increase public transport to 20%
- Increase pedestrian and cycling to 40%
- Decrease individual motorized traffic from 77% to 40%

Mobilitäts
Masterplan
Kärnten
2035

LAND  KÄRNTEN

MoMaK²⁰³⁵

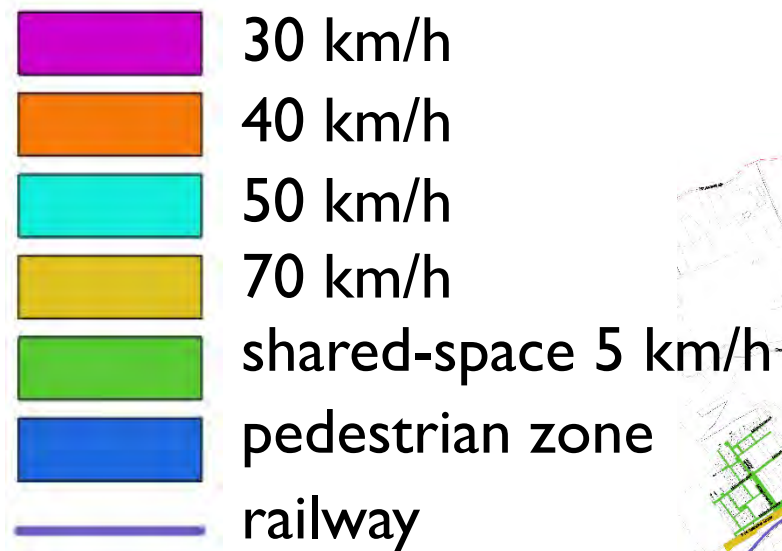


Important points

- Review and harmonize existing speed limits
- Slow down the traffic and design centers to be safe
- Reduce traffic volume in center areas
- Simplify traffic flow
- Implementation of fair traffic light control (pedestrians)

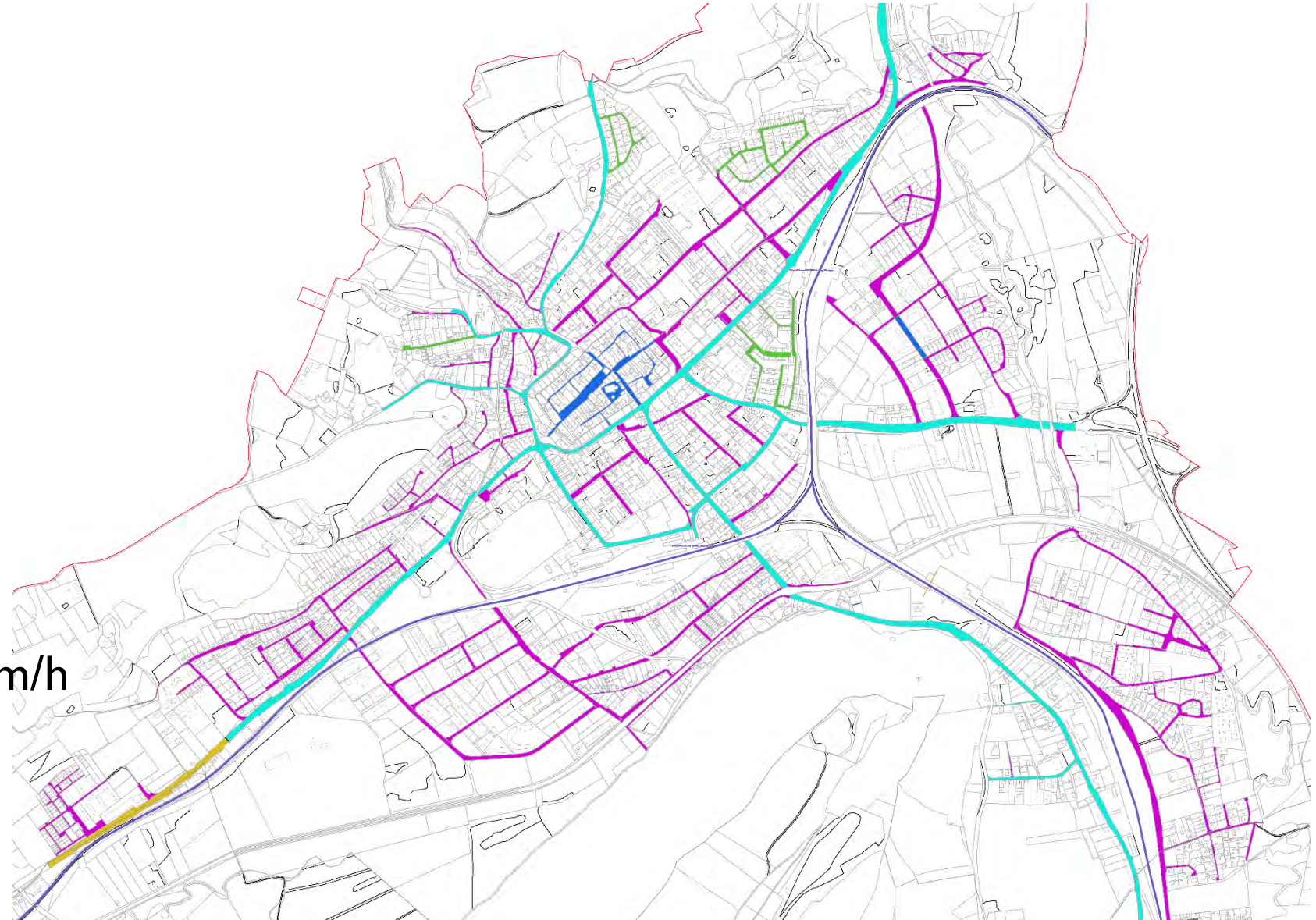
Speed zones

- Complexity
- Discontinuous



Speed zones

- Simplify
- Harmonize



Speed zones

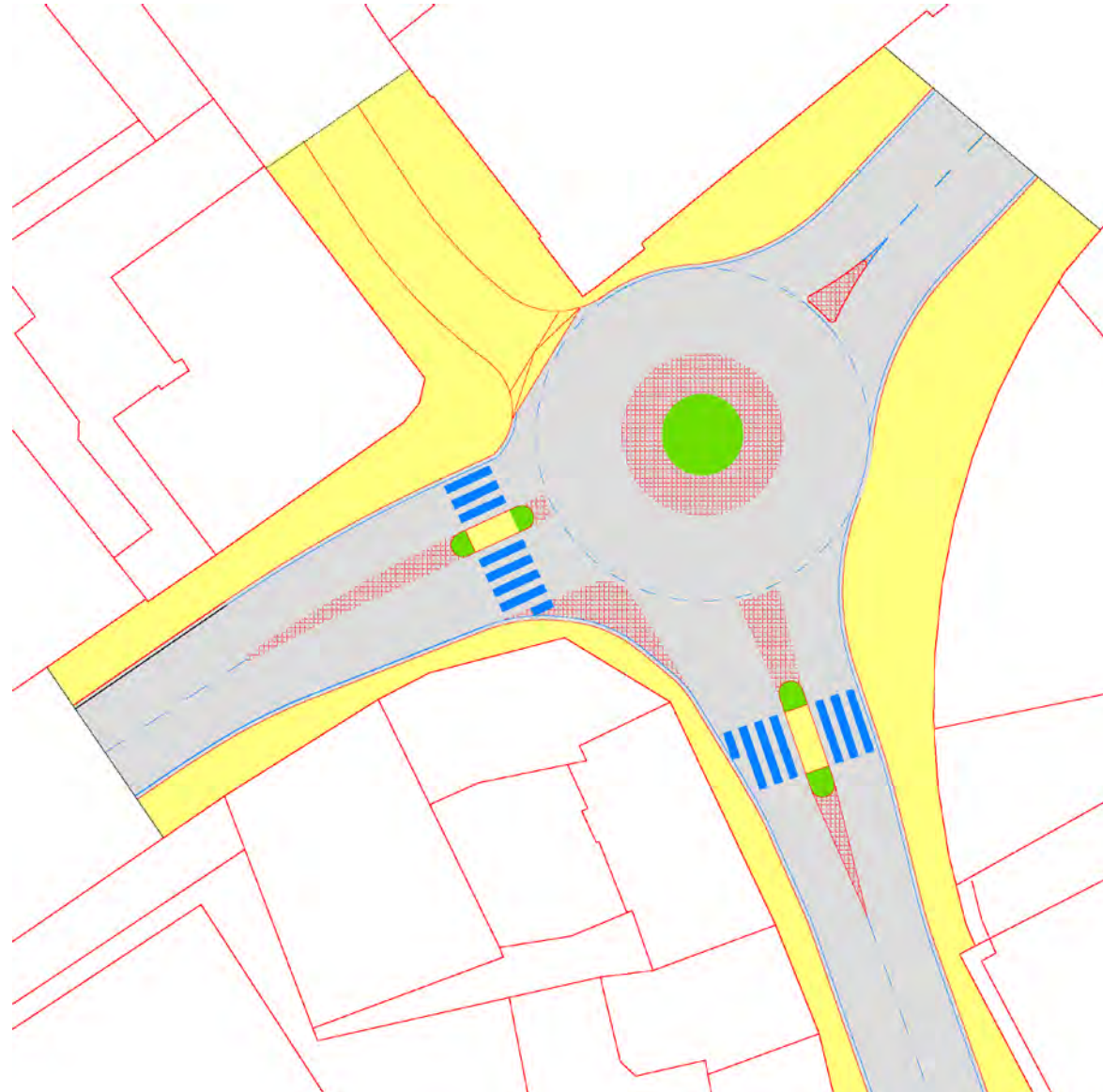
- Expand main network
- Decentralize volumes
- Attractive for cycling

Roundabout



Roundabout

- Redesign center area
- Slow down traffic
- Safety



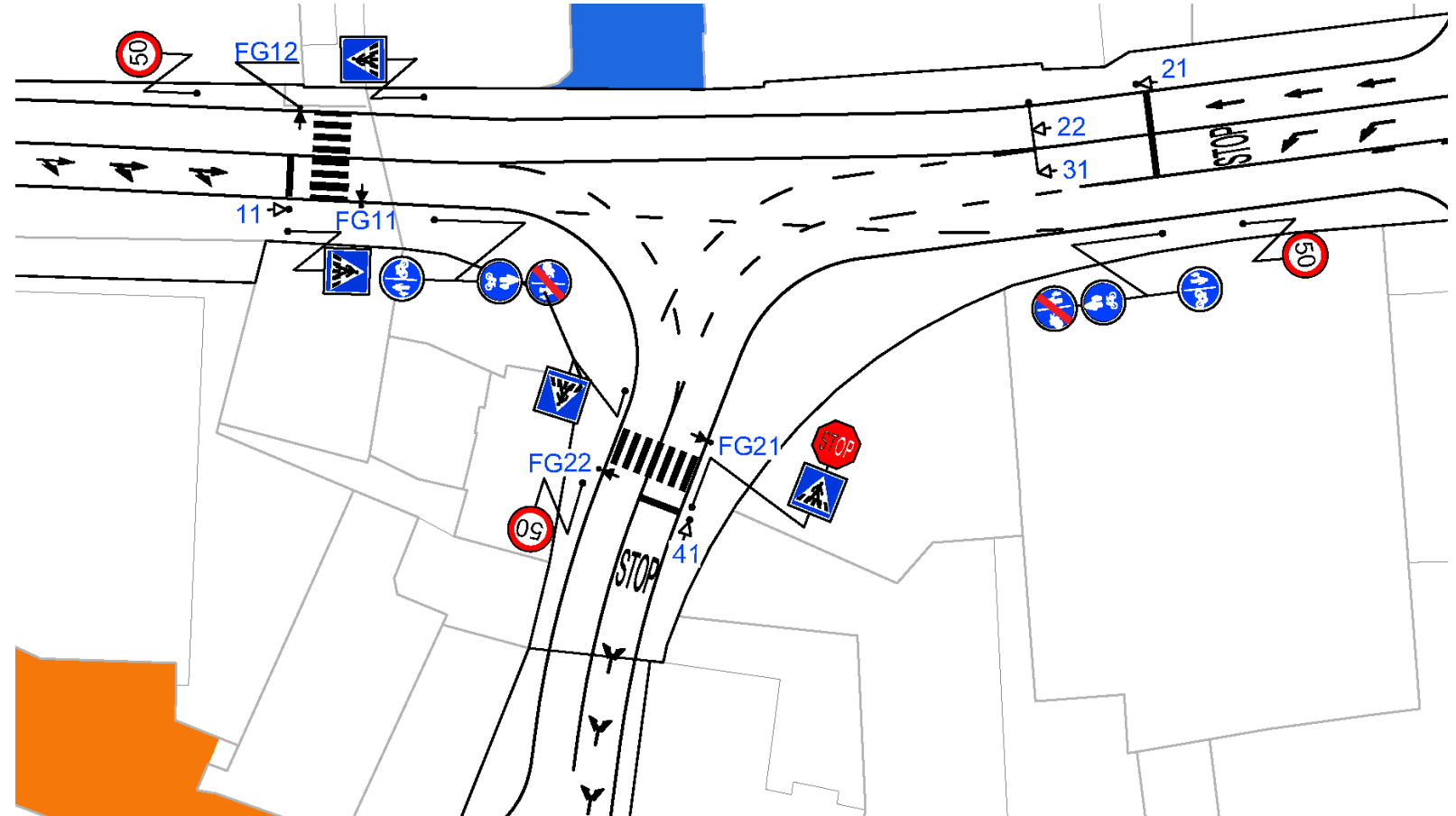
Traffic lights

- Unify system
- Harmonize control
- Green wave



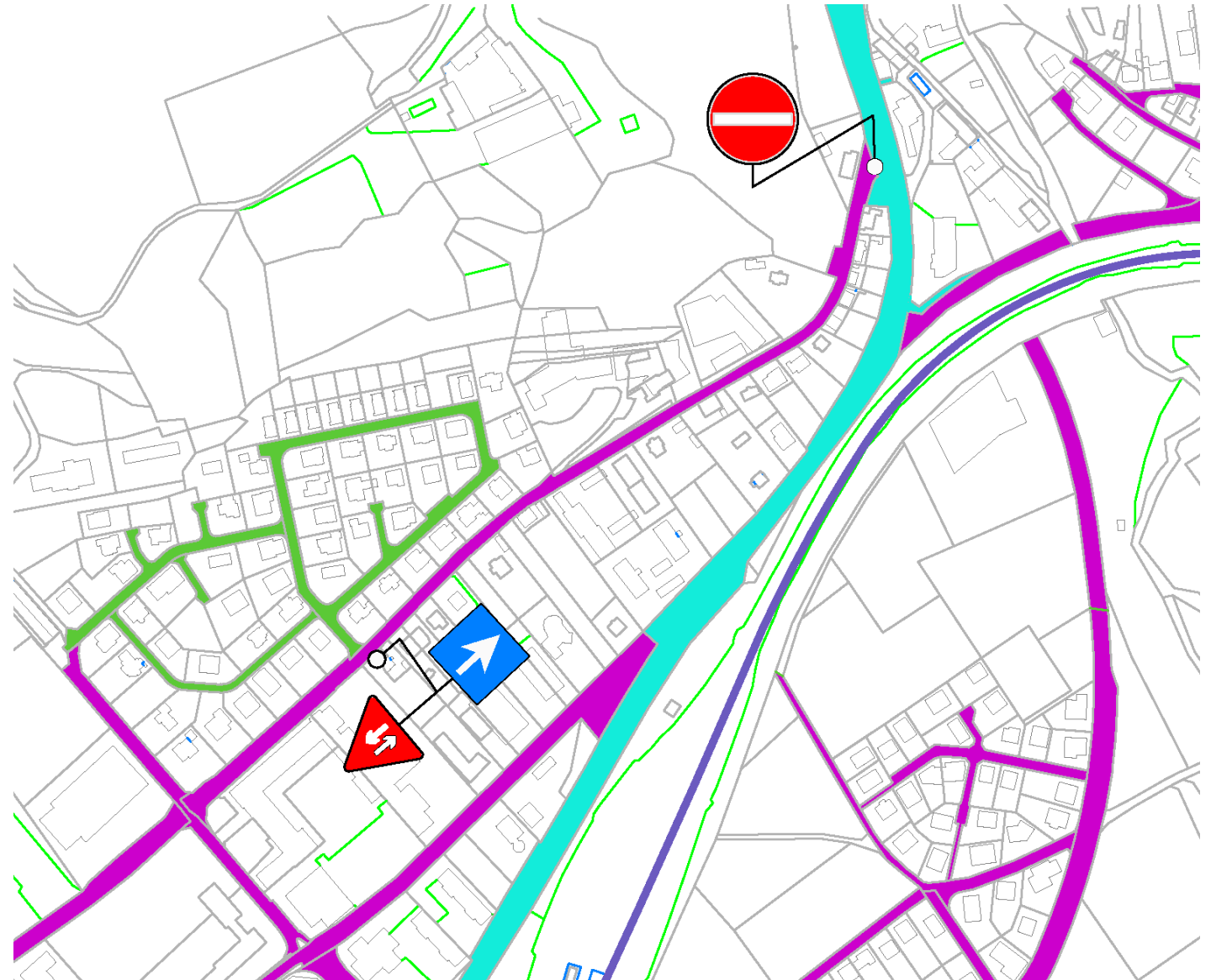
Traffic lights

- Static plans
- Implement detectors
- Fair light control



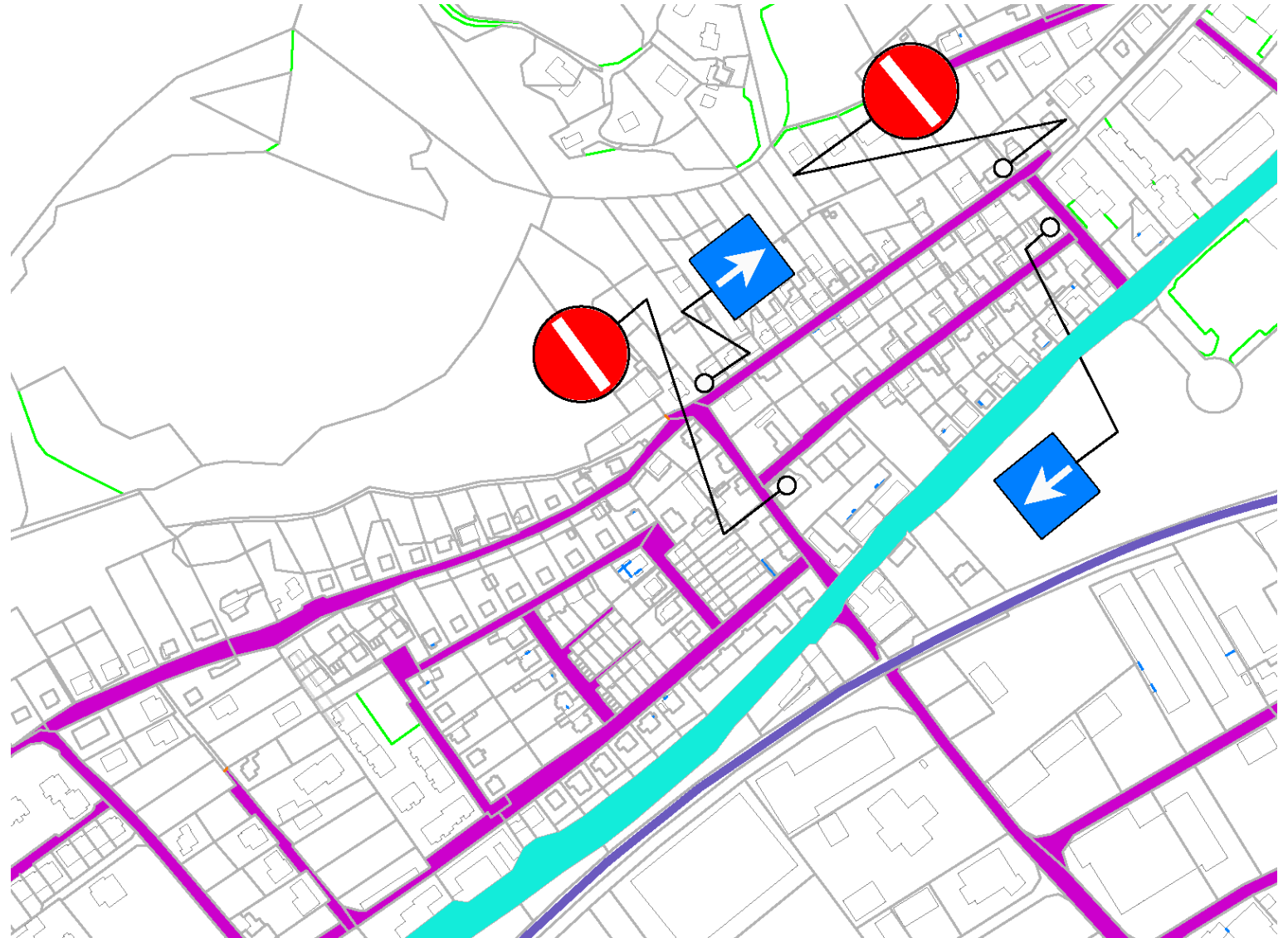
One-way roads

- Redirect Northern traffic
- Relieve living area



One-way roads

- Narrow road
- Safety



Thank you for your attention!

Bicycle Concept St. Veit

Radverkehrs-konzept St. Veit

Anna Tailliez, Peter Vopalecky, Polina Zayats, Urmat Saparbekov, Martin Asztalos, David Mester

Mitteleuropäisches Planungsseminar 2019 (St. Veit an der Glan)
Task 2 – Bicycle Concept

Survey – Bike use in St. Veit an der Glan

Date: Wednesday, 15th May 2019

Place: Railway station & Hauptplatz

List of questions:

- Are you a local/non-local ? (local = live in the district of St. Veit)

LOCAL / NON-LOCAL

- Age group:

[0 – 16] ; [16 – 25] ; [25 – 45] ; [45 – 55] ; [55 – 65] ; [+65]

- Do you own a bike ?

YES/NO

- How often (and where) do you ride a bike ?

Several times per day – Every day – Several times per week (...) – Monthly – Never

Everywhere – Only in St. Veit – Only when I am not in St. Veit

- What is the main reason(s) you ride a bike ?

To go to work/school – Leisure activity – Grocery shopping – Appointments in the city center –
Other reason(s): ...

- On a scale of one to ten, how much *safe/convenient* are, in your opinion,
the bike facilities of the surrounding ?

0 ——— 5 ——— 10

- If there was a bike-sharing system here, would you use it ?

YES/NO

- What are you missing the most when you are riding a bike in St. Veit ?

☹ : ...

- What do you like the most when you are riding a bike in St. Veit ?

😊 : ...

- Some personal (anonymous) remarks you want to add about the bike use in
St. Veit an der Glan ?

...



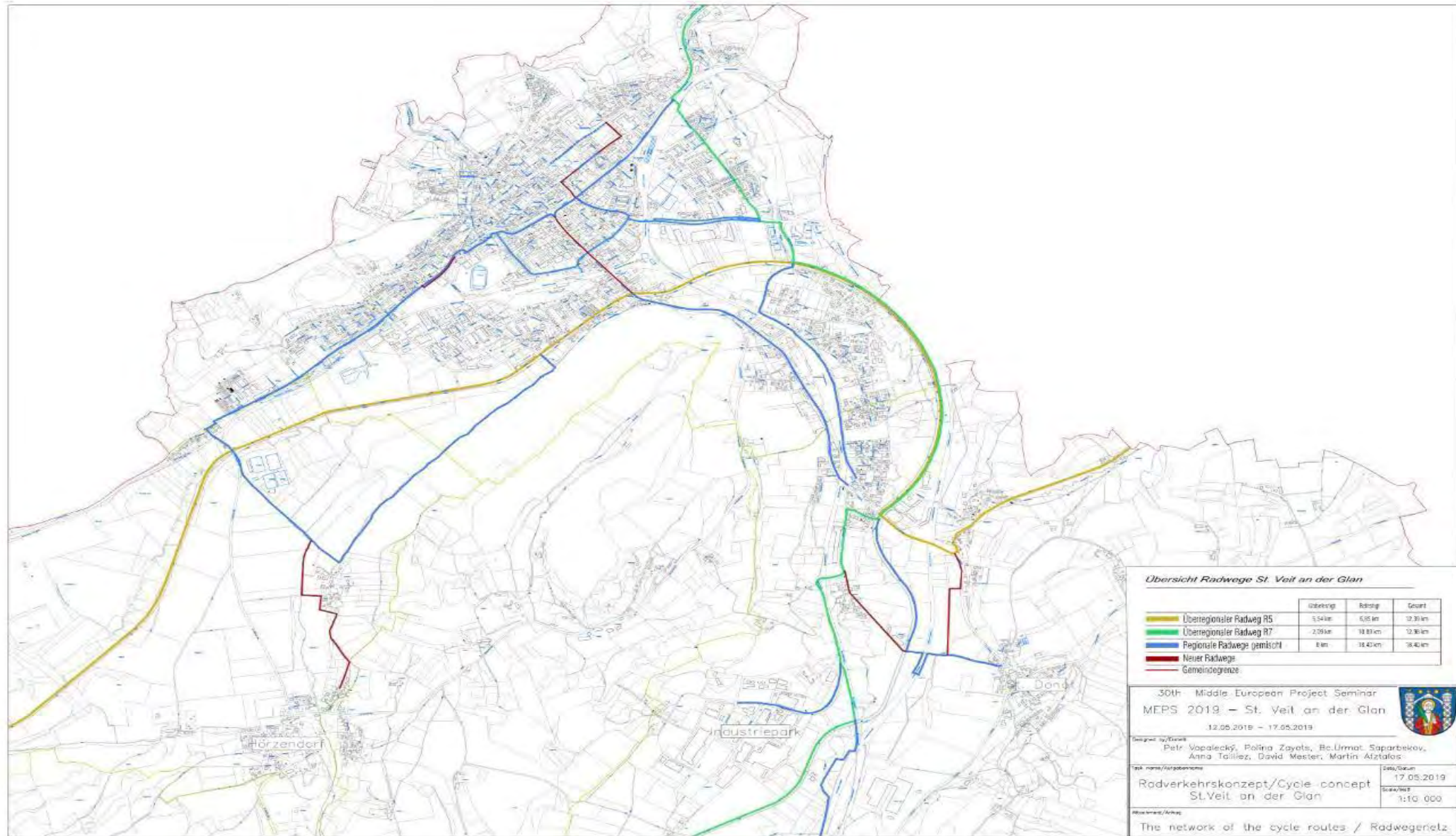
- High demand of bicycles
- Existent network of bike lanes
- The size of the city allows to use bicycles as a main transportation

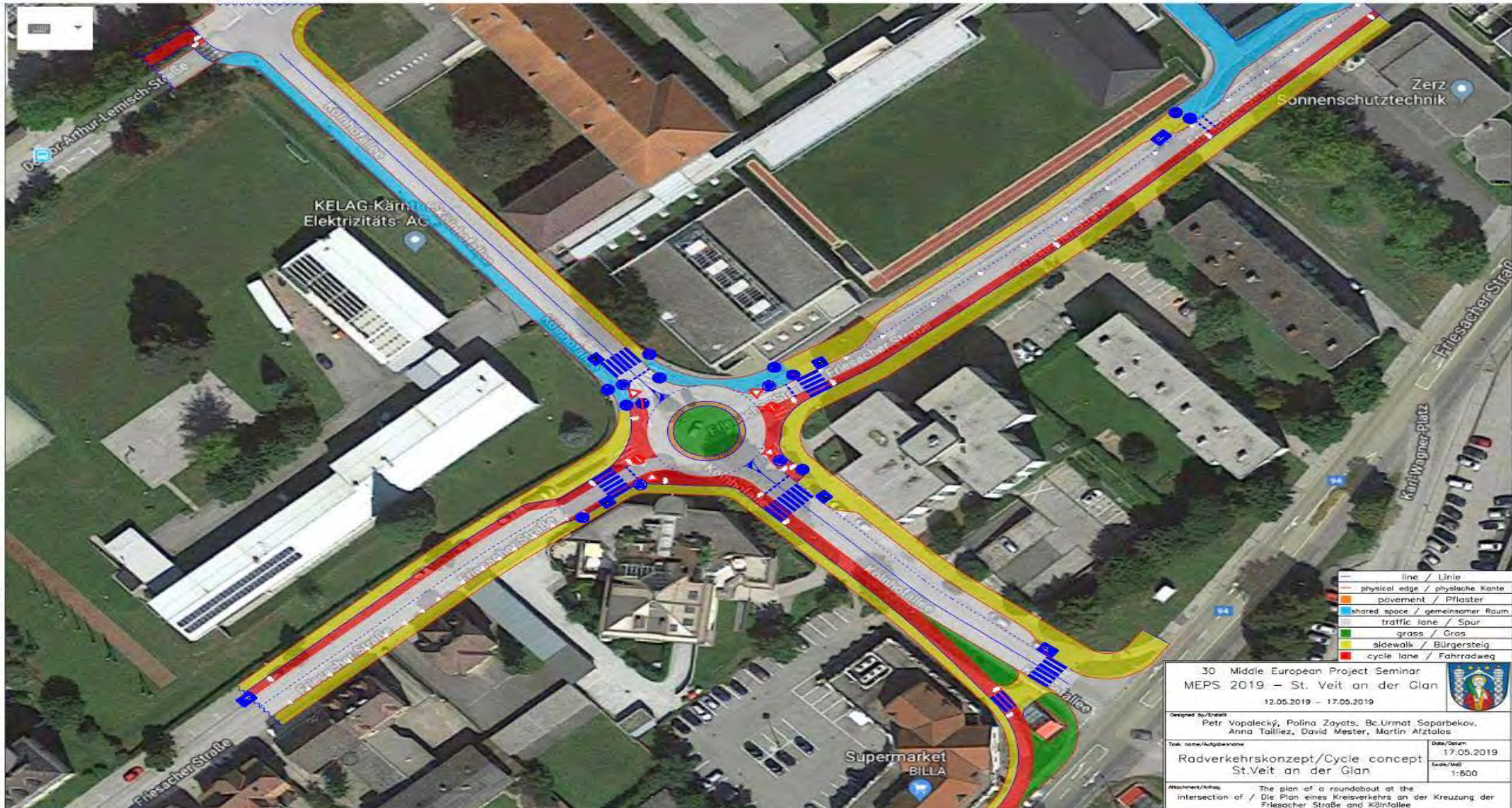
- Insufficient width of the road
- Absence of highways with nearby villages
- Absence of road signs and markup
- Absence of connections between existent roads
- Dissatisfying quality of the bike lane surface

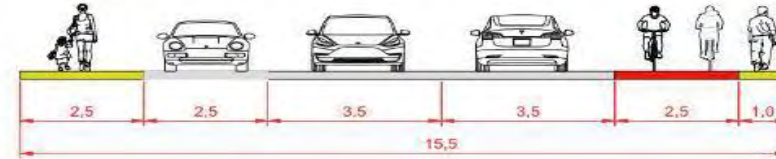


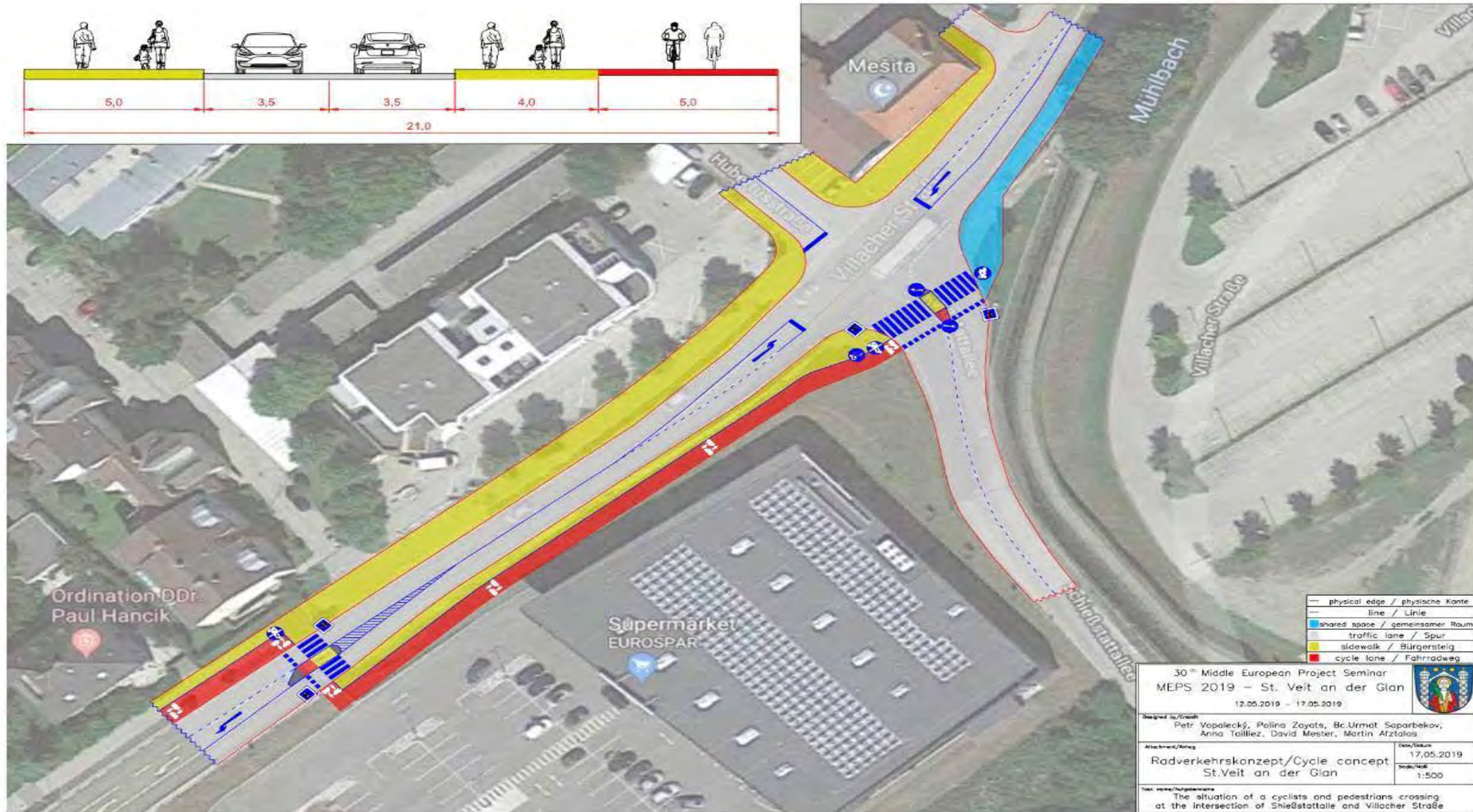
- Connect existing cycling routes
- Connect remote areas to the city centre
- Make new cycle path
- Change for greater safety cyclists











Öffentlicher Verkehr

in Sankt Veit an der Glan

Stefan Mladenovic
Adam Palcovics
Thomas Riedler
Michal Supej
Vaclav Taborsky

Aufgabenstellung

- Analyse des bestehenden ÖV-Konzeptes
- Aufzeigen von Verbesserungsmöglichkeiten
- Potenzialabschätzung für Carsharing, Mikro-ÖV, etc.

Bestandsanalyse

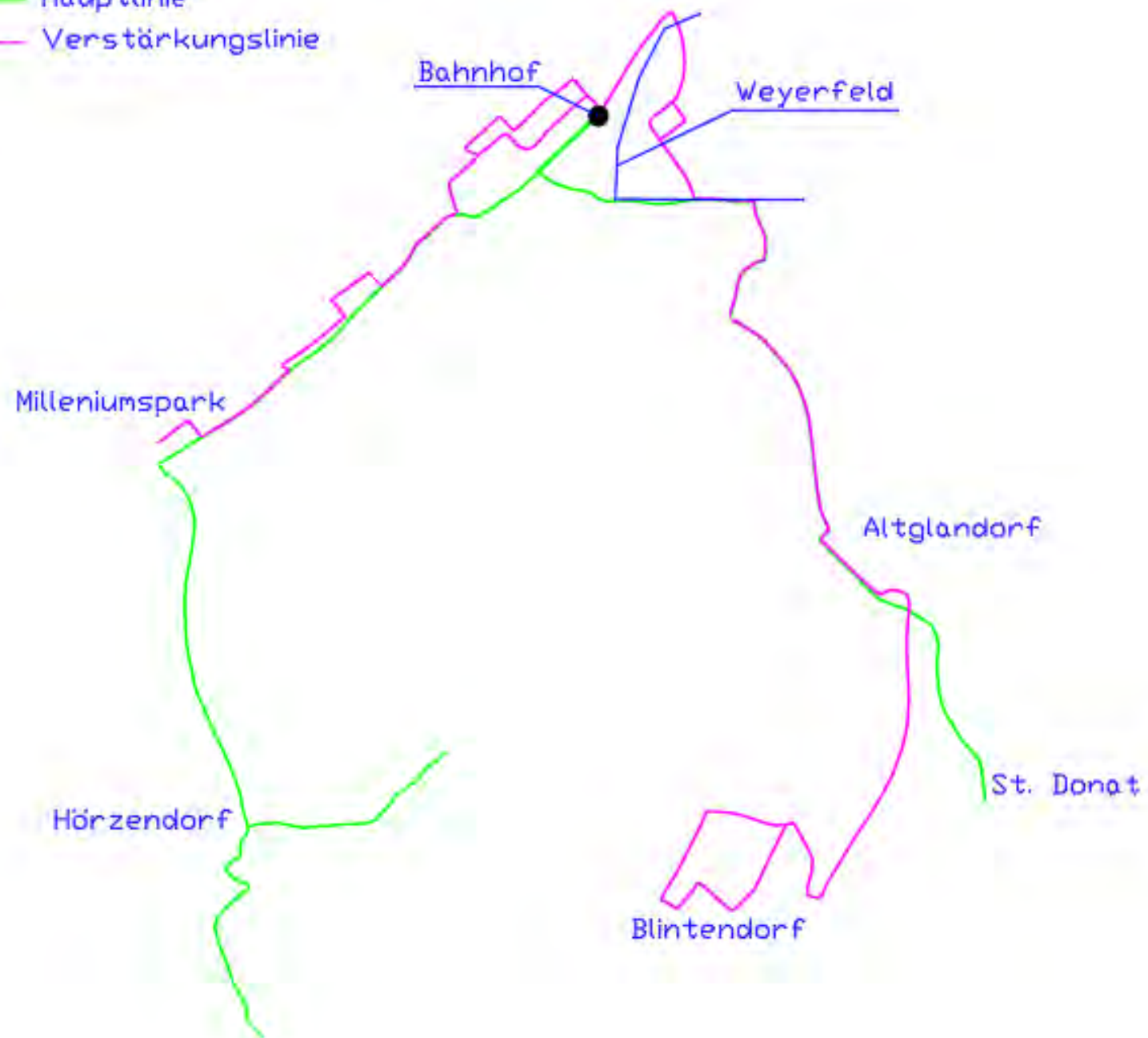
- Fahrplan Linie 5371

		Montag - Freitag														
Fahrtnummer		5371 801	5371 304	5371 803	5371 805	5371 806	5371 807	5371 808	5371 809	5371 210	5371 811	5371 813	5371 215	5371 818	5371 819	5371 820
Nr.	Anmerkungen	1 518	1 519	1 518	1 518	1 518	1 518	1 518	1 518	1	1 518	1 518	1	1 518	1 518	1 518
1	St.Veit/Glan Bundesschulzentr. ab				7.11						12.28			13.25	13.35	
2	St.Veit/Glan Volksschule						7.32		12.00	12.00		12.48	12.50		13.37	
3	St.Veit/Glan Sandgasse						7.33		12.02			12.50		13.27		
4	St.Veit/Glan Graf-Egger Straße						7.34		12.03			12.51		13.28		
5	St.Veit/Glan Wayerstraße						7.35		12.04			12.52		13.29		14.00
6	St.Veit/Glan Bundesschulzentr.													13.35		
7	St.Veit/Glan Hallenbad									12.03				12.53		14.05
8	St.Veit/Glan Verbindungsstraße									12.04				12.54		
9	St.Veit/Glan Dammgasse									12.06				12.56		
10	St.Veit/Glan Finkenweg									12.08				12.58		14.10
11	St.Donat					7.23				12.13				13.03		
12	Altglandorf Bahnunterführung		7.00			7.28				12.18				13.08		14.15
13	St.Veit/Glan Glandorf		7.01													
14	St.Veit/Glan Gh Kalter Keller		7.02													
15	St.Veit/Glan Glanbrücke		7.03													
16	St.Veit/Glan Volksschule		7.06													14.20
17	St.Veit/Glan Finkenweg					7.30				12.20				13.10		
18	St.Veit/Glan Dammgasse					7.32				12.21				13.11		
19	St.Veit/Glan Verbindungsstraße					7.34				12.22				13.12		
20	St.Veit/Glan Hallenbad					7.35				12.23				13.13		
21	St.Veit/Glan Wernitznig				7.14				12.07		12.31	12.55			13.40	
22	St.Veit/Glan Gh Lackner				7.16				12.09		12.33	12.57			13.42	
23	St.Veit/Glan Glückstraße	6.15			7.19				12.11		12.35	12.59			13.44	
24	St.Veit/Glan Einsiedlergasse	6.18			7.22				12.14		12.38	13.02			13.47	
25	St.Veit/Glan Milleniumspark	6.20		6.58	7.24			11.40	12.17		12.41	13.05			13.50	
26	St.Veit/Glan Einsiedlergasse			7.01												
27	St.Veit/Glan Gh Lackner	6.23		7.04					12.19		12.43	13.07			13.52	
28	St.Veit/Glan Wernitznig	6.25		7.05	7.27				12.21		12.45	13.09			13.54	
29	St.Veit/Glan Postamt	6.27		7.06	7.29				12.22		12.46	13.10			13.55	
30	St.Veit/Glan Volksschule			7.08	7.31	7.38	7.39				12.48					
31	St.Veit/Glan Bundesschulzentr.			7.10		7.40			12.24			13.12				
32	St.Veit/Glan Bahnhof (Busbahnhof)	6.32	7.07			7.43		11.45		12.25			13.15		13.57	
33	St.Veit/Glan Wernitznig	6.36														
34	St.Veit/Glan Gh Lackner	6.39														
35	St.Veit/Glan Einsiedlergasse	6.41														
36	St.Veit/Glan Milleniumspark	6.43														
37	Unterbergen Gh Reidenwirt	6.45														
38	Unterbergen Abzw P St.Veit/Gl	6.47														
39	Hörzendorf Schirnegger	6.49														
40	Hörzendorf Siedlung	6.50														
41	Arndorf Volksschule an	6.53														

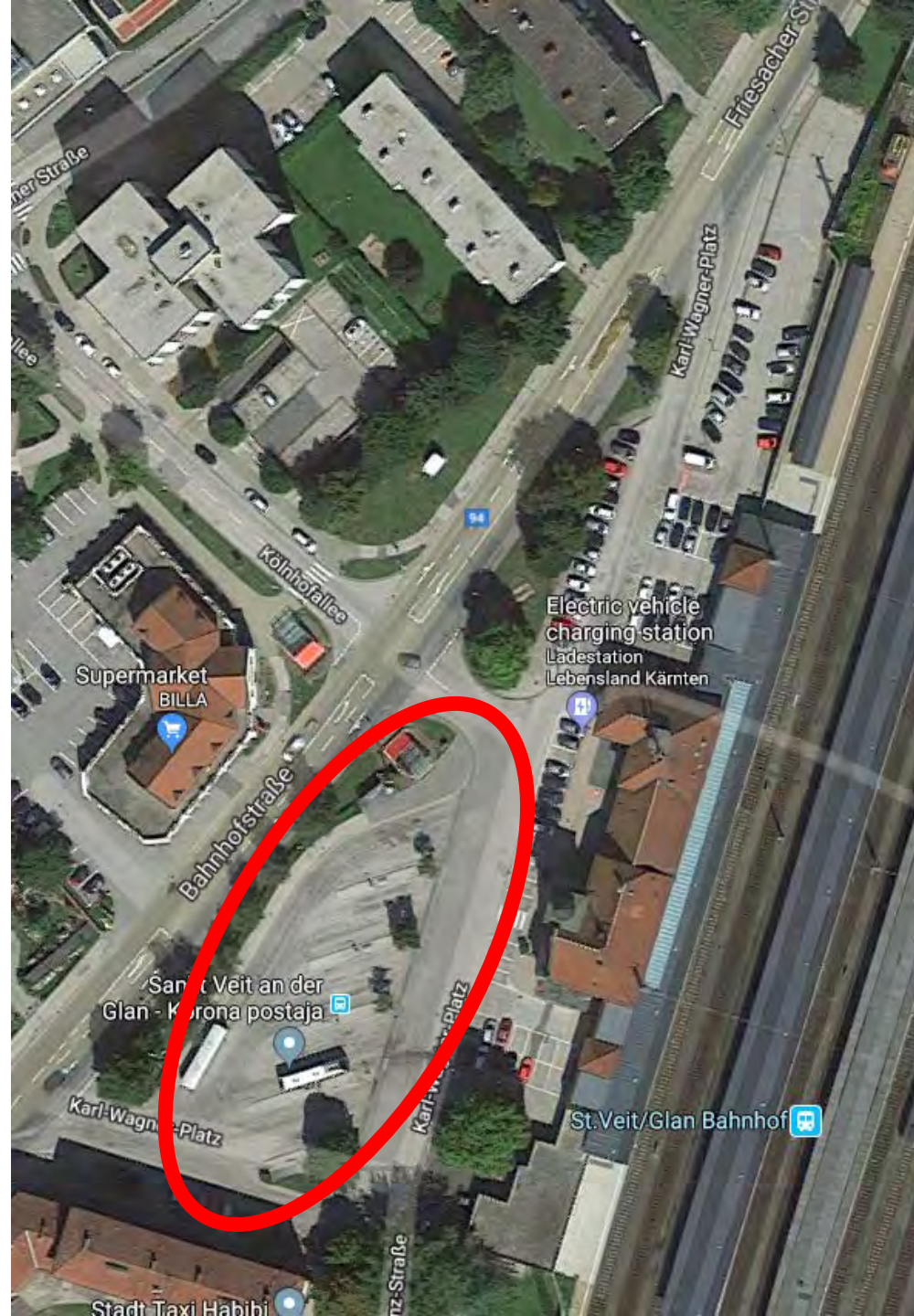
Bestandsanalyse

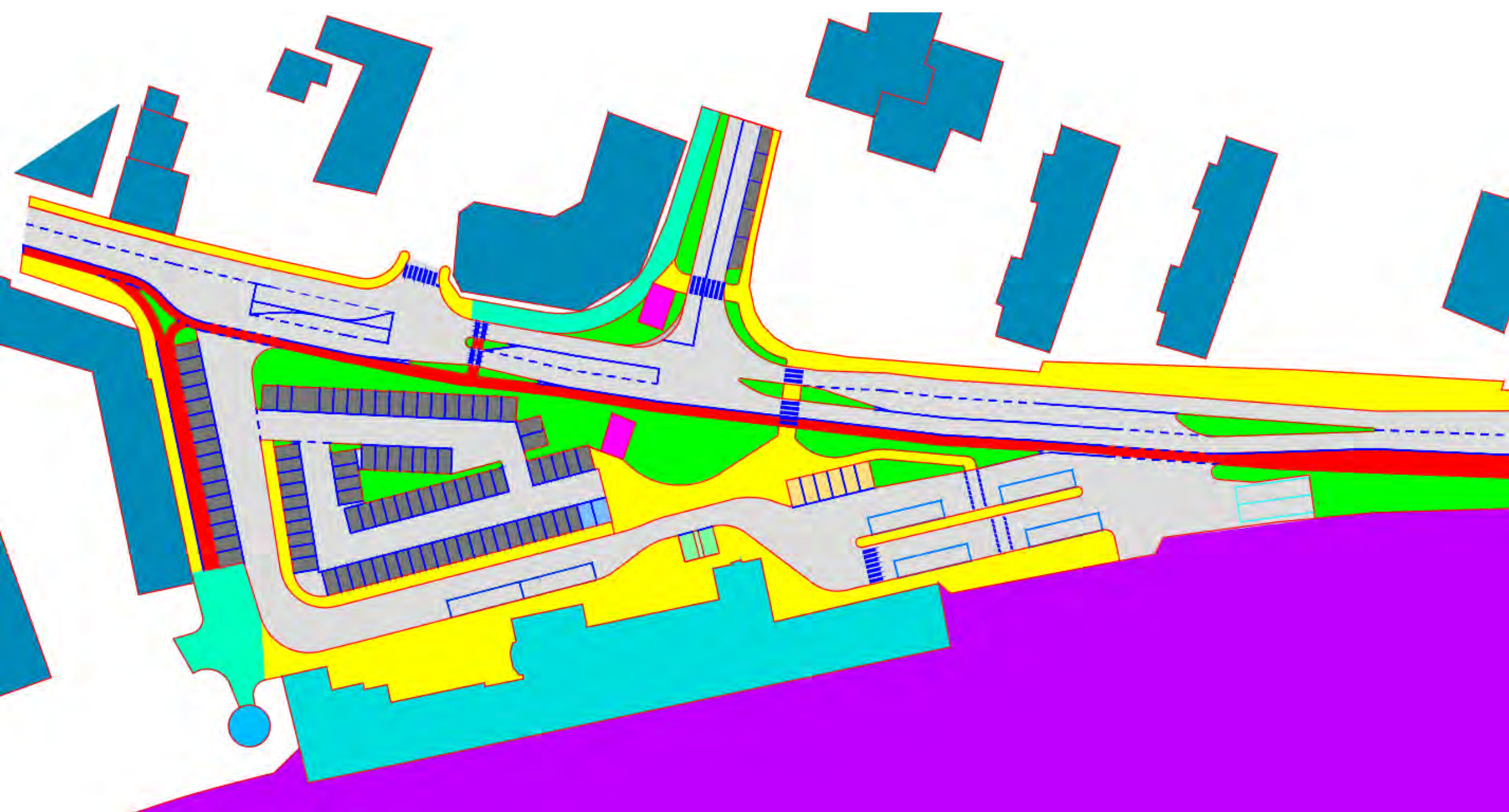
- Fahrplan Linie 5371
- keine Regelmäßigkeit
- zusammengesetzt aus verschiedenen „Überbleibseln“ von früher
- komplette Neukonzeption

- Hauptlinie
- Verstärkungslinie











Neugestaltung des Bahnhofes

- bessere Versorgung mit weniger Bushaltestellen
- Verlegung der Bushaltestellen
- „Fahrrad-Turm“



VÍTEJTE V CYKLICKÉ
BUDOUCNOSTI!

Carsharing

- 5 E-Autos vorhanden
- in Anspruch genommen von Bürgern, Gemeindemitarbeitern und Unternehmen
- System funktioniert gut, wird weiter ausgebaut

Carsharing

- Potenzial: Touristen
- z.B. Möglichkeit vom Bahnhof zur Burg zu gelangen mit E-Auto
- Verschiedene Möglichkeiten der Preisgestaltung

Task 4

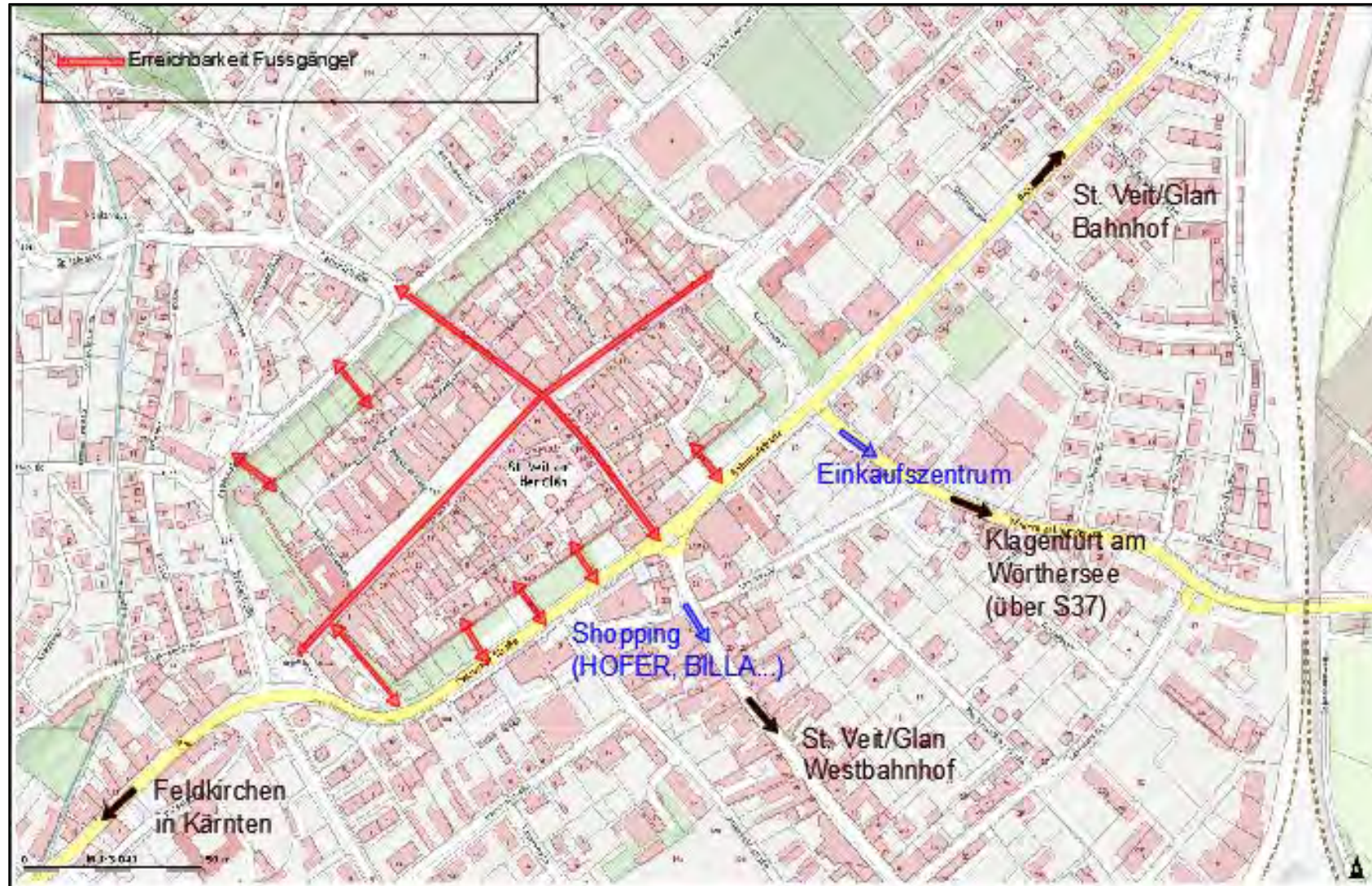
Analyse der Erreichbarkeit der Innenstadt

[Audrey Dupuy, Benedek Németh, Richárd Lestál, Gréta Mányi, David Hudec, Aneta Matysková]

“Die Zufahrtsmöglichkeit in die Altstadt wurde in den letzten Jahren einige Male geändert. Die jetzige Regelung besteht aus einer Fußgängerzone mit zeitlich beschränkter Ladetätigkeit, drei fußläufig erreichbaren Parkgaragen und gebührenpflichtigen Kurzparkzonen”

1. Analyse der Erreichbarkeit und der Attraktivität der Stadt
2. Auswertung der Stellplatzstatistik von Parkhäusern und Kurzparkzonen
3. Bewertung der Konkurrenz durch periphere Einkaufszentren
4. Lösungen
5. Konklusion

1. Analyse der Erreichbarkeit und der Attraktivität der Stadt



- **Not enough people are going to the old town. Why? (1)**

The services aren't attractive enough

No cycling roads

Accessibility

Price of the parking

- **Are all these cars supposed to be in the pedestrian zone? (2)**

High speed of cars

Unfunctional Bollards

Nicht genug Leute gehen in die Altstadt. Warum? (1)

- Die Dienstleistungen sind nicht genug attraktiv
- Keine Fahrradwege
- Erreichbarkeit
- Preis des Parkens

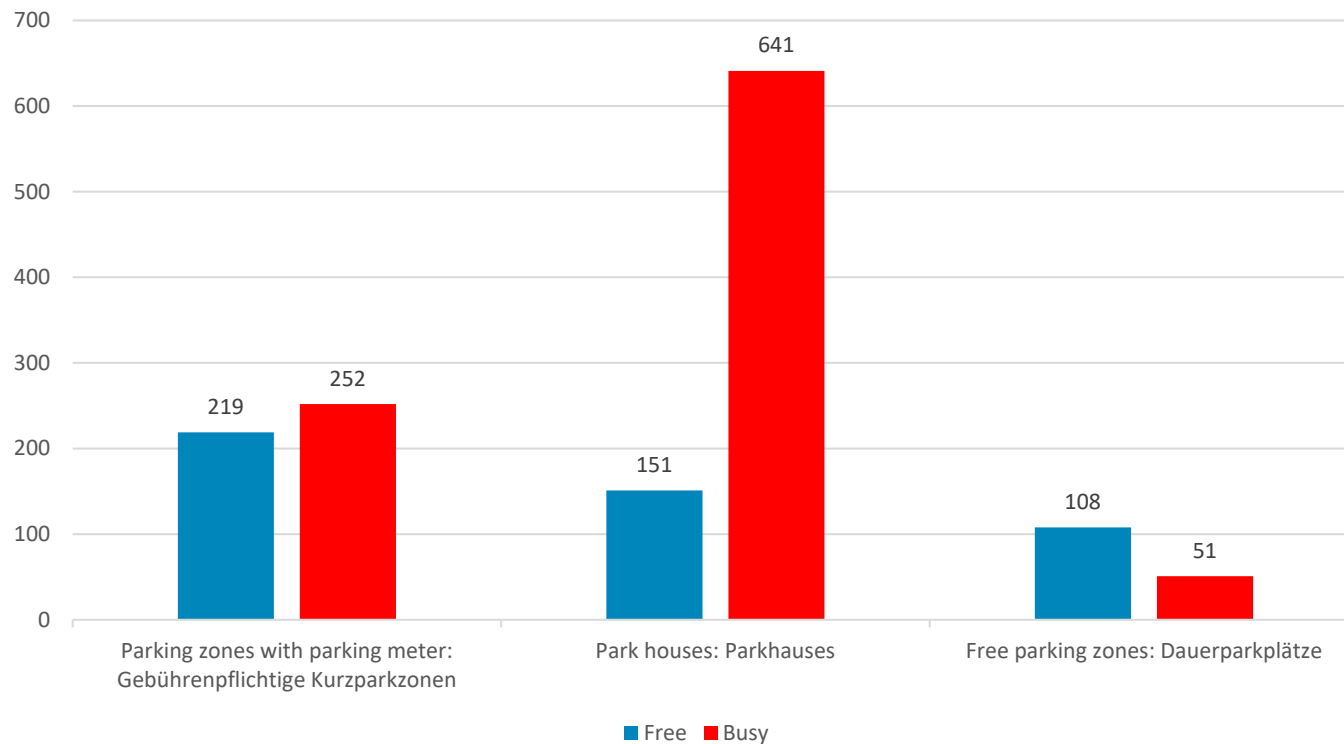
Sollen alle diese Autos in der Fußgängerzone sein? (2)

- Hohe Geschwindigkeit von Autos
- Nicht funktionierende Poller

FRAGEN	JA	NEIN	ZUM TEIL
Sind Sie mit der Qualität der Fußgängerzone zufrieden?	3	0	3
Finden Sie diese Fußgängerzone interessant?	1	3	2
Sind sie mit der Barrierefreiheit dieser Zone zufrieden?	3	0	3
Sind Sie mit der Freizeit- und Entspannungsmöglichkeiten dieser Fußgängerzone zufrieden?	0	3	3
Sind Sie mit der Qualität der Beschilderung dieser Fußgängerzone zufrieden?	4	0	2
Fühlen Sie sich in Sicherheit in dieser Fußgängerzone?	4	0	2
Ist die Reinigung/Instandhaltung der Zone zufriedenstellend?	6	0	0
Sind Sie mit dem Erscheinungsbild dieser Zone zufrieden?	3	1	2
Sind Sie mit den Straßenmöbeln (Bänke, Karten...) zufrieden?	3	1	2
Kaufen Sie oft in dieser Fußgängerzone ein?	2	2	2

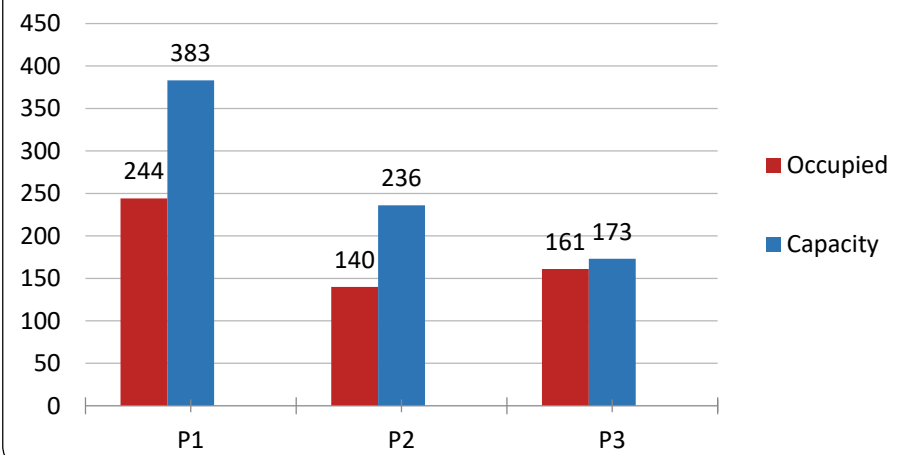
2. Auswertung der Stellplatzstatistik von Parkhäusern und Kurzparkzonen

Usual occupancy in different parking zones in the city.

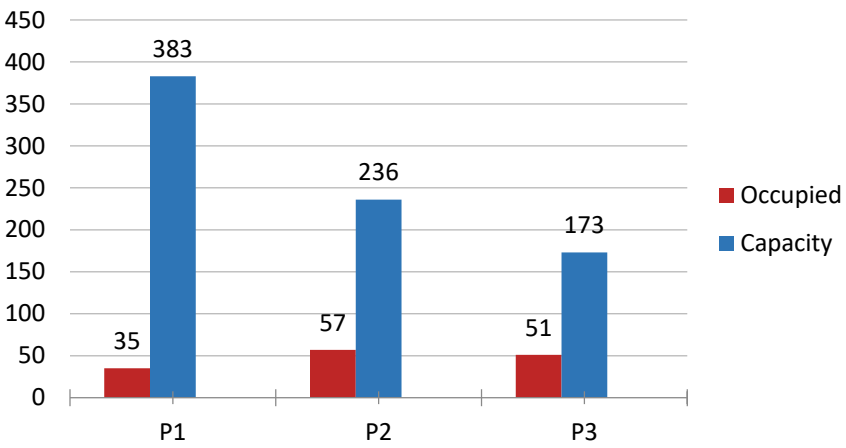


- 1422 parking lots are in the town
- 792 are in the local parkhouses
- 471 are in the blue zones so it's paid type
- 159 are free within any cost this are in the yellow zones.

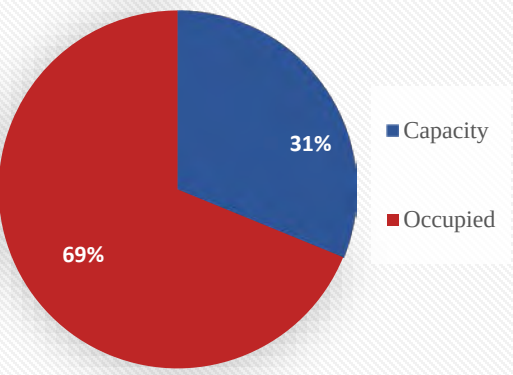
Auslastung und Kapazität der Parkhäuser (untertags)



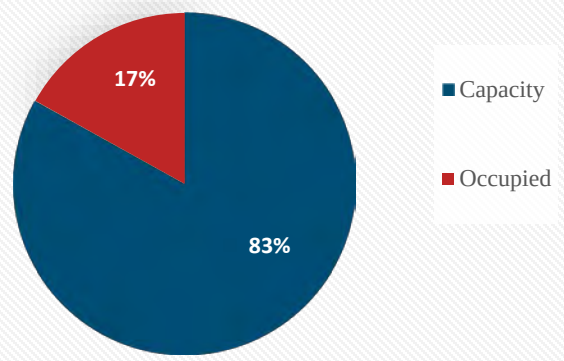
Auslastung und Kapazität der Parkhäuser (nachts)



Auslastung der Parkhäuser zwischen 5 und 20 Uhr



Auslastung der Parkhäuser nach 21 Uhr



3. Bewertung der Konkurrenz durch periphere Einkaufszentren

[illegible]

4 Moving columns

1 of 4 is fix

3 of 4 are automatic

This 1 doesn't work
and down all day

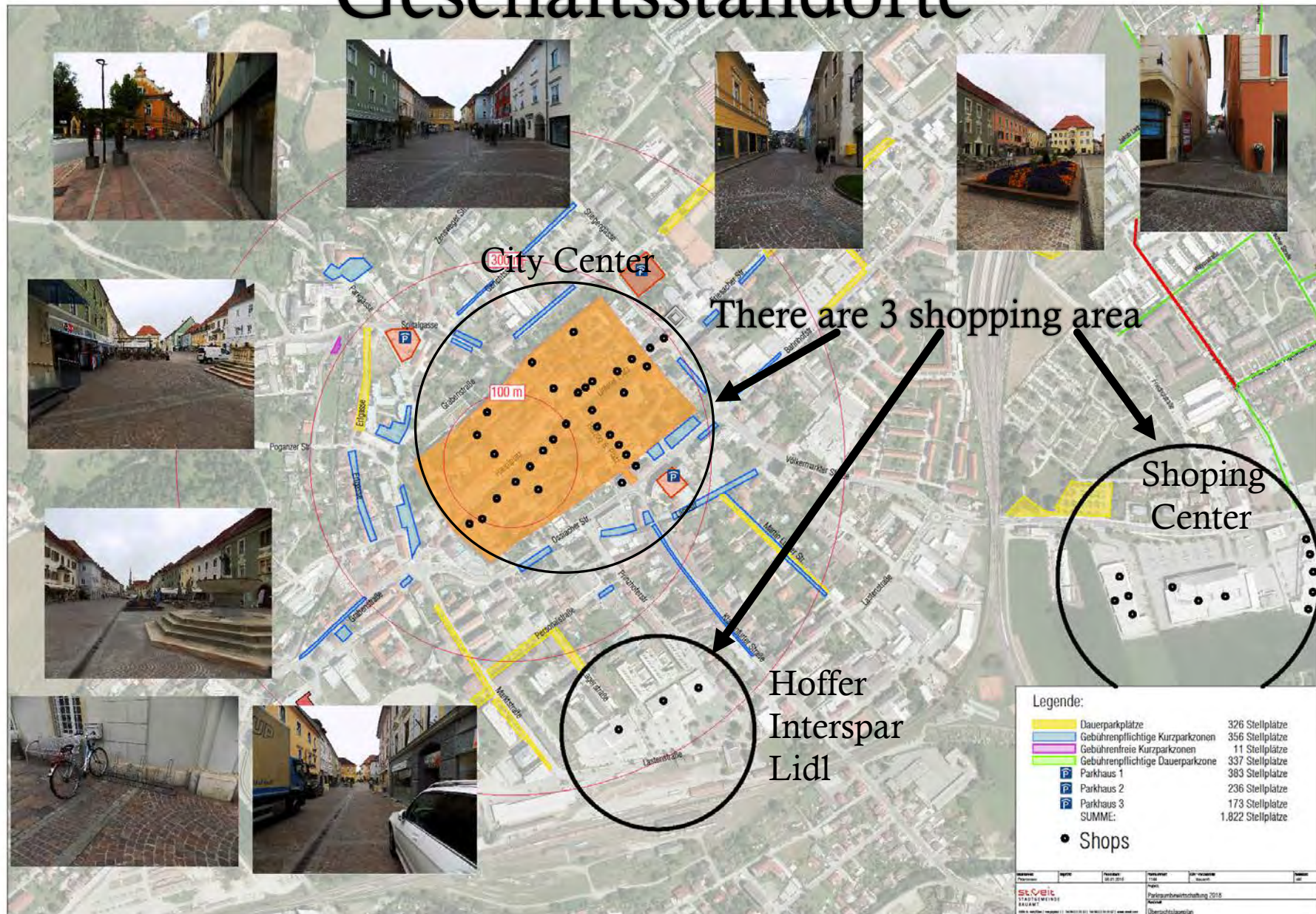
Legende:

	Dauerparkplätze	326 Stellplätze
	Gebührenpflichtige Kurzparkzonen	356 Stellplätze
	Gebührenfreie Kurzparkzonen	11 Stellplätze
	Gebührenpflichtige Dauerparkzone	337 Stellplätze
	Parkhaus 1	383 Stellplätze
	Parkhaus 2	236 Stellplätze
	Parkhaus 3	173 Stellplätze
	SUMME:	1.822 Stellplätze

- Bollers

Geobasis Parksystem	Geoplt	Flächenart 08.01.2018	Flächenname 1146	Flächeninhalt ...m²	Wohnort ...
		Parkschaubild Parkraumbewirtschaftung 2018 Flächentyp Übersichtstagesplan			

Geschäftsstandorte



4.Lösungen

Fußgängerzone/ Pedestrian zone – Variant A

- Solution/Lösung:

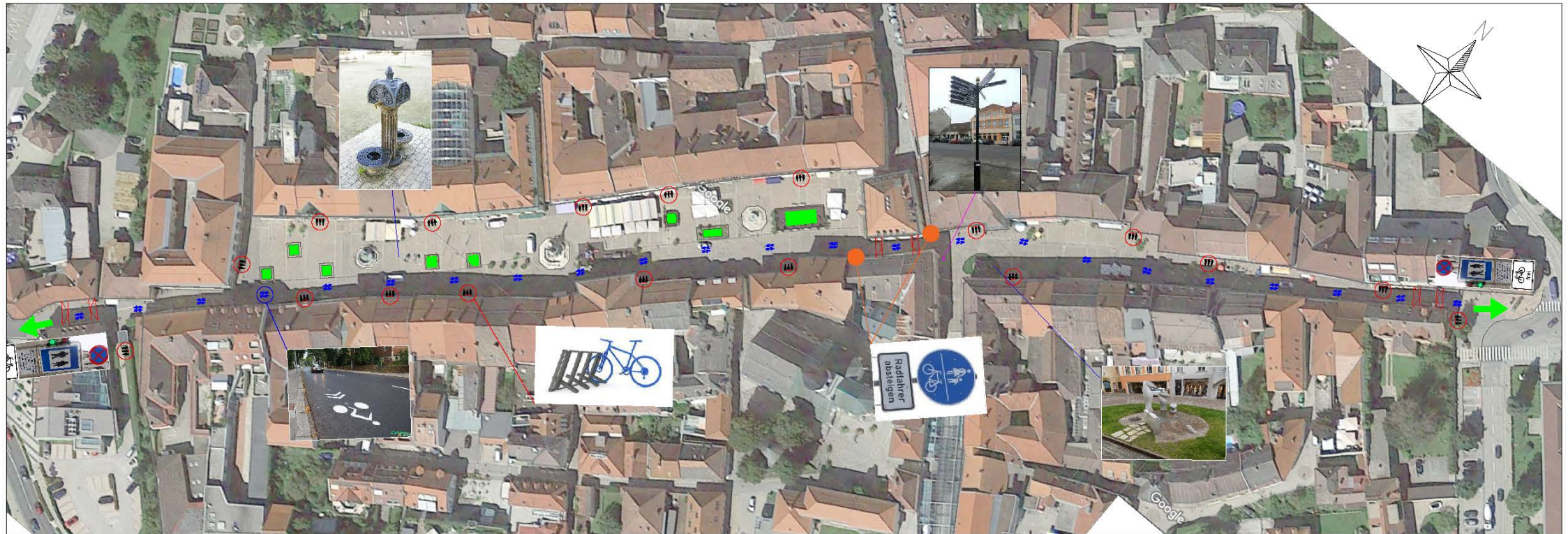


Fußgängerzone/ Pedestrian zone – Variant A

- Solution/Lösung:

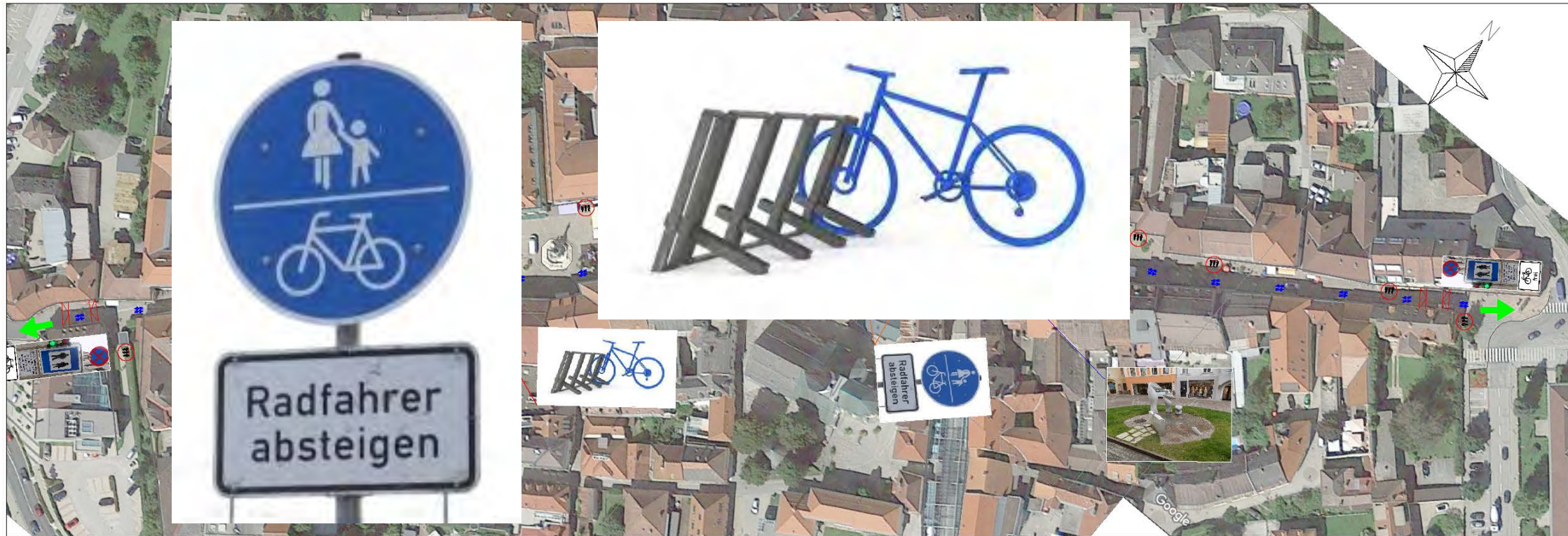


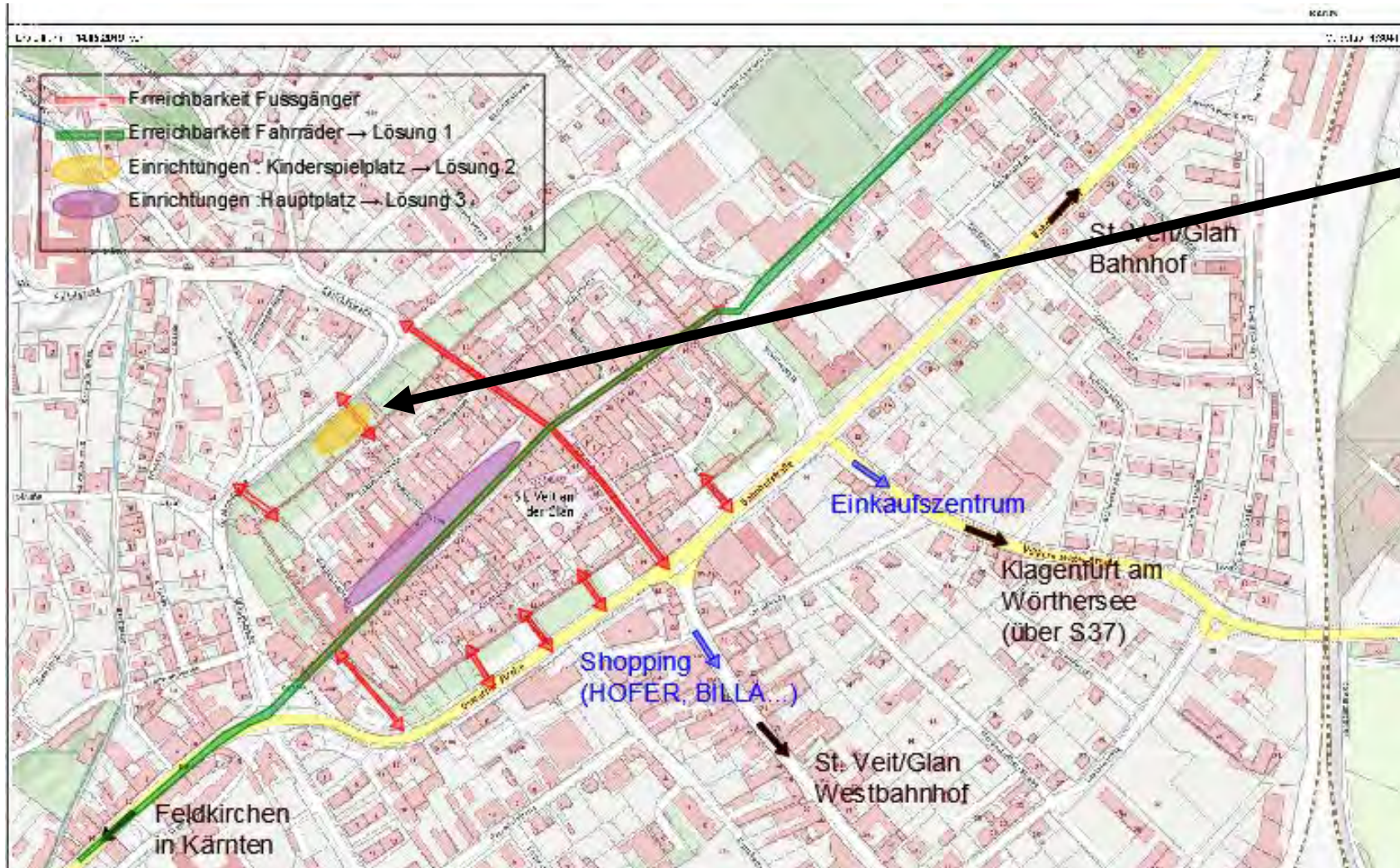
- Solution/Lösung



Fußgängerzone/ Pedestrian zone – Variant B

- Solution/Lösung





Graben-garten

- Unused green area near the town
- Really nice atmosphere
- Attractivity for families with children

-
- Unbenützt Grünfläche in der Nähe der Stadt
 - Wirklich schöne Atmosphäre
 - Attraktivität für Familien mit Kindern



Thank you for your attention
Vielen Dank für Ihre Aufmerksamkeit

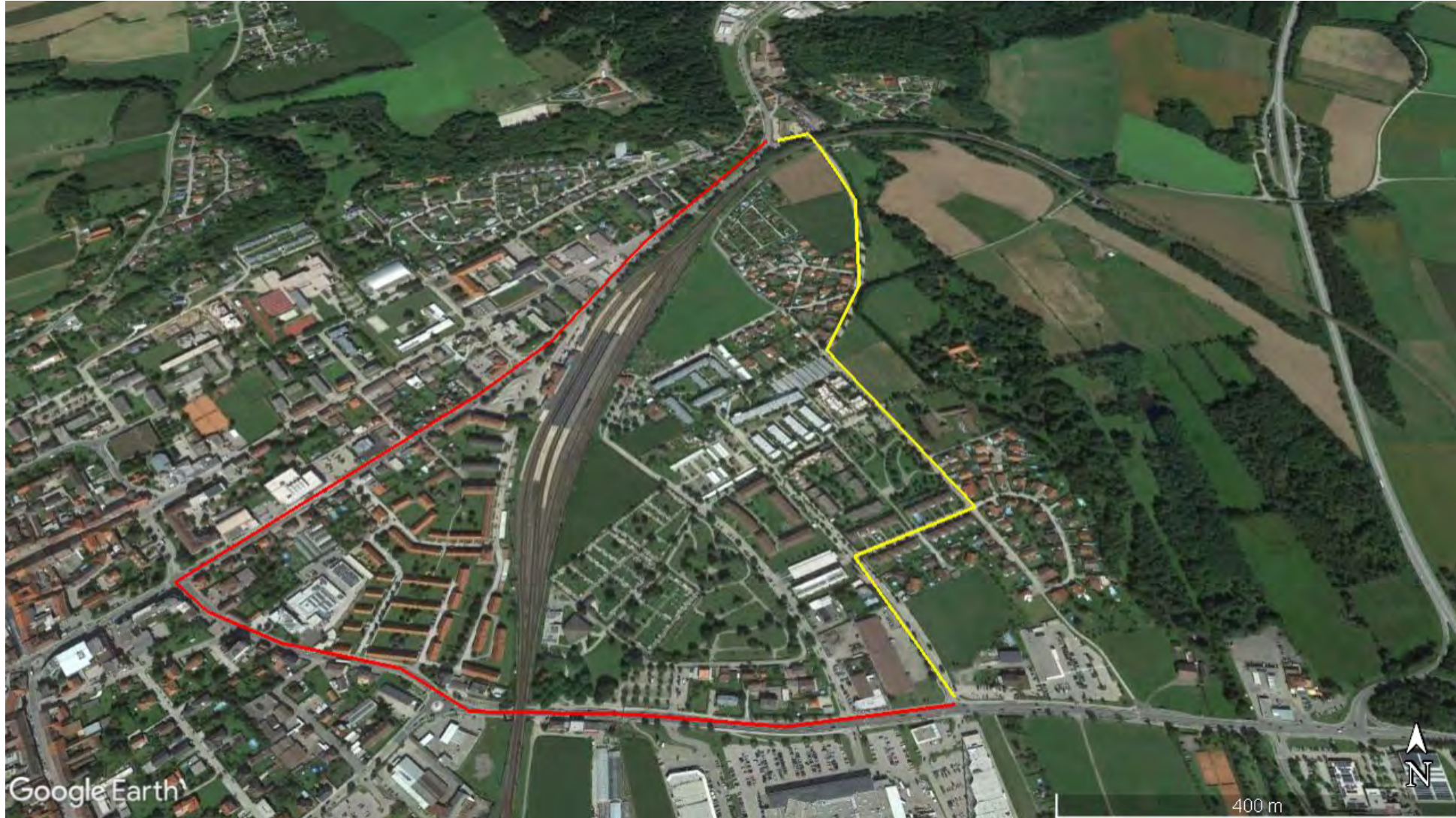
Task 5

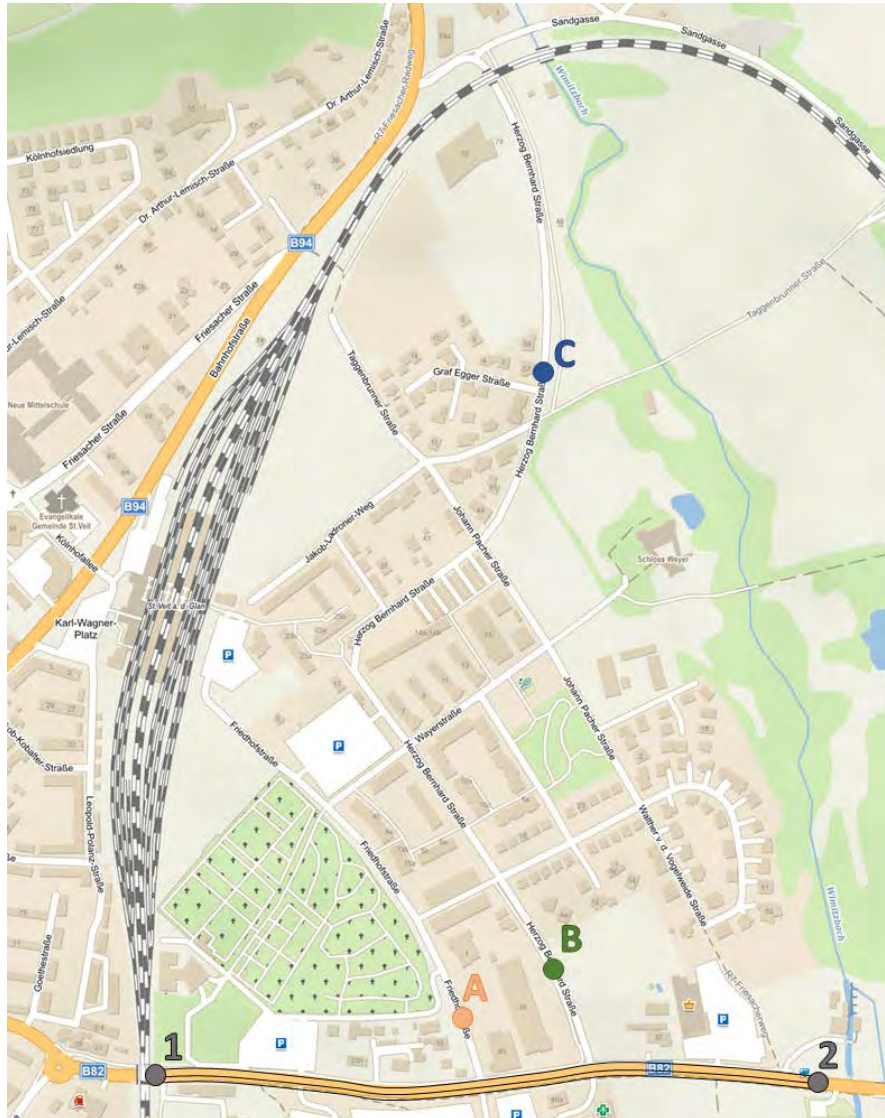
Traffic Noise Mitigation in Wayerfeld area

Mohammad Sadegh Aminian, Karolína Moudrá, Andreas Papadopoulos, Jani Vag, Zombó Dávid

- The task objectives:
 - To reduce traffic noise in the Wayerfeld region
 - To find out the character of the traffic (gothrough vs local)
 - Eliminate shortcut traffic
 - Reduce vehicular traffic
 - Promote active mobility
- Methodology
 - Section control and license plate registration
 - Amending the direction and function of the inner streets network
 - Evaluating the effectiveness of 5km/h speed limit
 - Redesign B82 intersections to calm traffic and prioritize active mobility
- Results







A,B,C Gates section Control

Morning pick (07:00-08:00): 427 cars/hour

Evening pick (17:00-18:00): 409 cars/hour

B82 road car traffic per hour per direction

Morning traffic: (10:00-11:00)

W-E: 613 cars/hour

E-W: 596 cars/hour

Evening Traffic (16:00-17:00)

W-E: 643 cars/hour

E-W: 582 cars/hour

Pedestrian and cyclists to the Shopping Center

Morning (10:00-11:00)

Pedestrian: 26

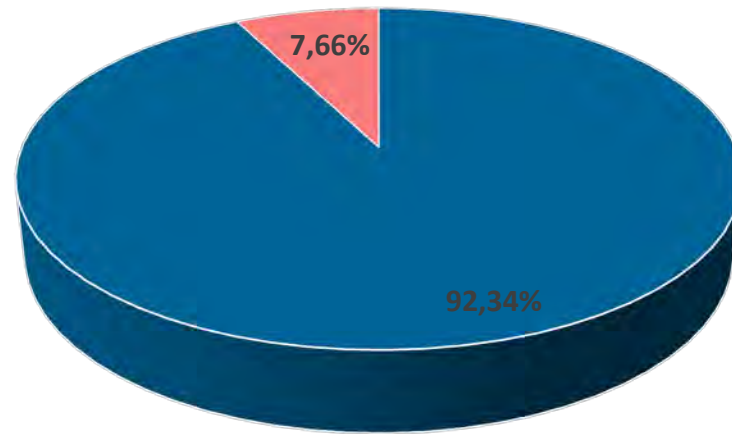
Cyclist: 15

Evening (16:00-17:00)

Pedestrian: 59

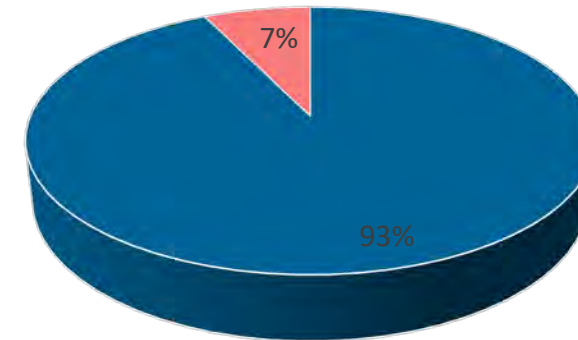
Cyclist: 16

Shortcut in Weyerfeld - morning

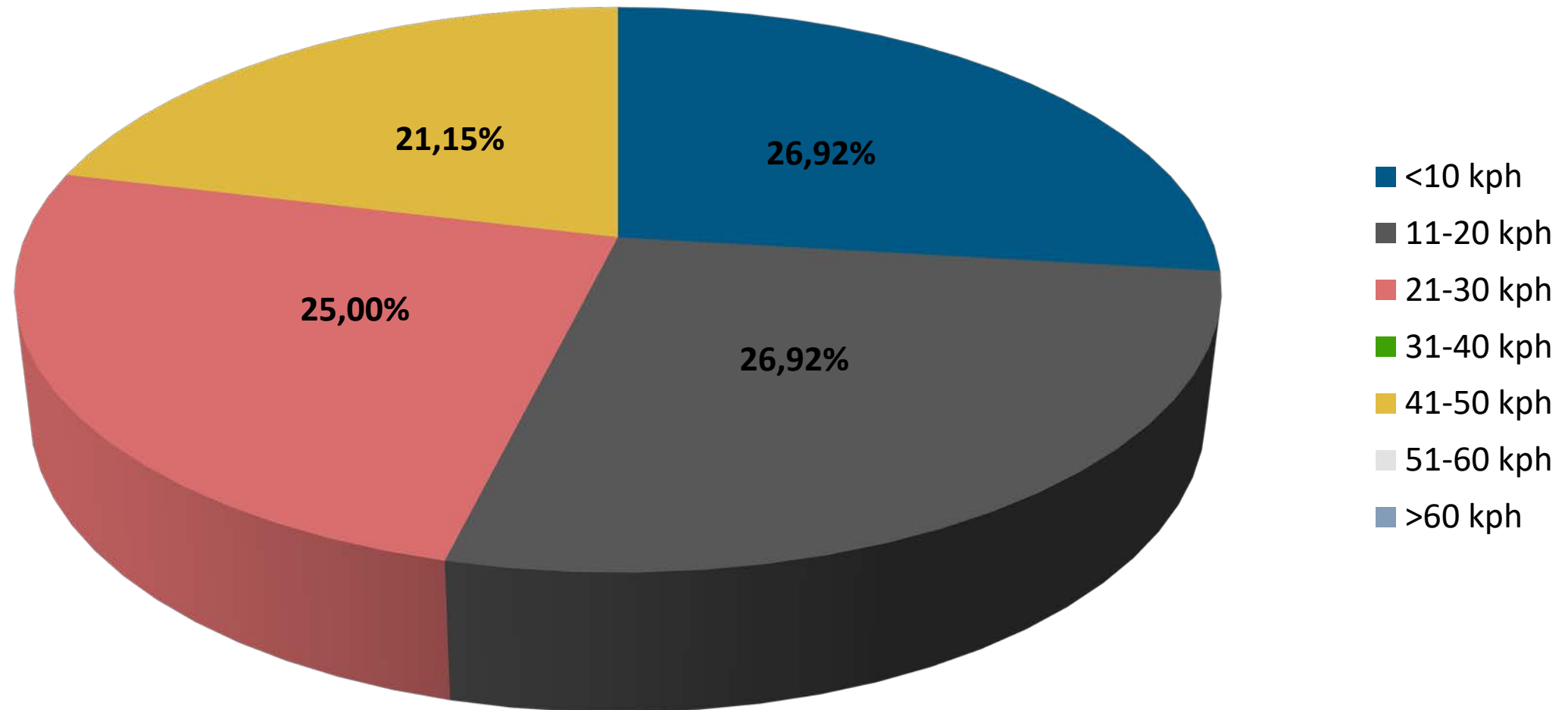


■ others ■ shortcut

Transportation in Weyerfeld - afternoon



■ local ■ shortcut

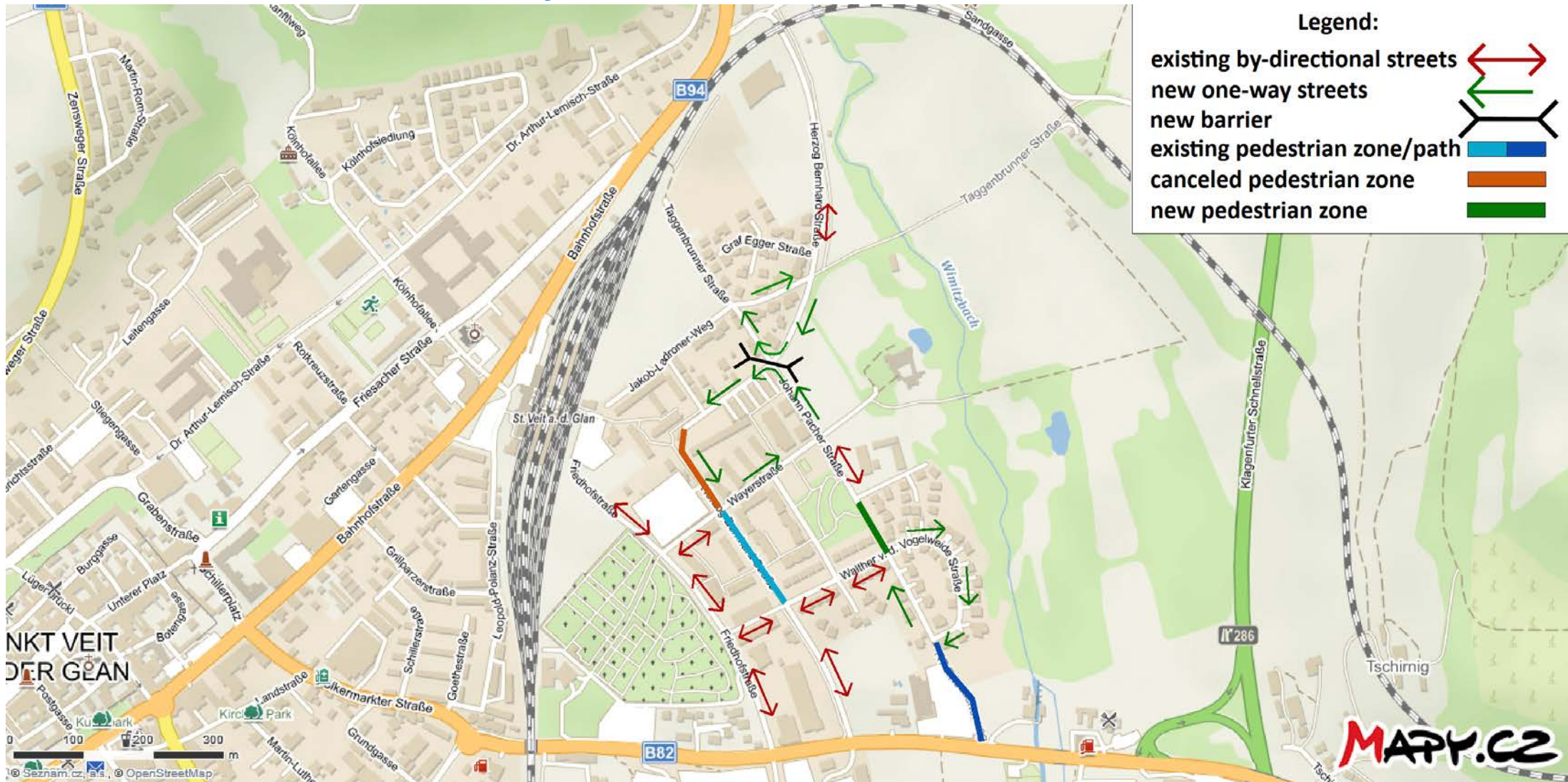


- Our approach to mitigate traffic noise problem
-
1. Eliminate shortcut traffic
 2. Reduce local go-through traffic
 3. Reduce vehicular traffic
 4. Make walking and cycling safer, more comfortable and enjoyable

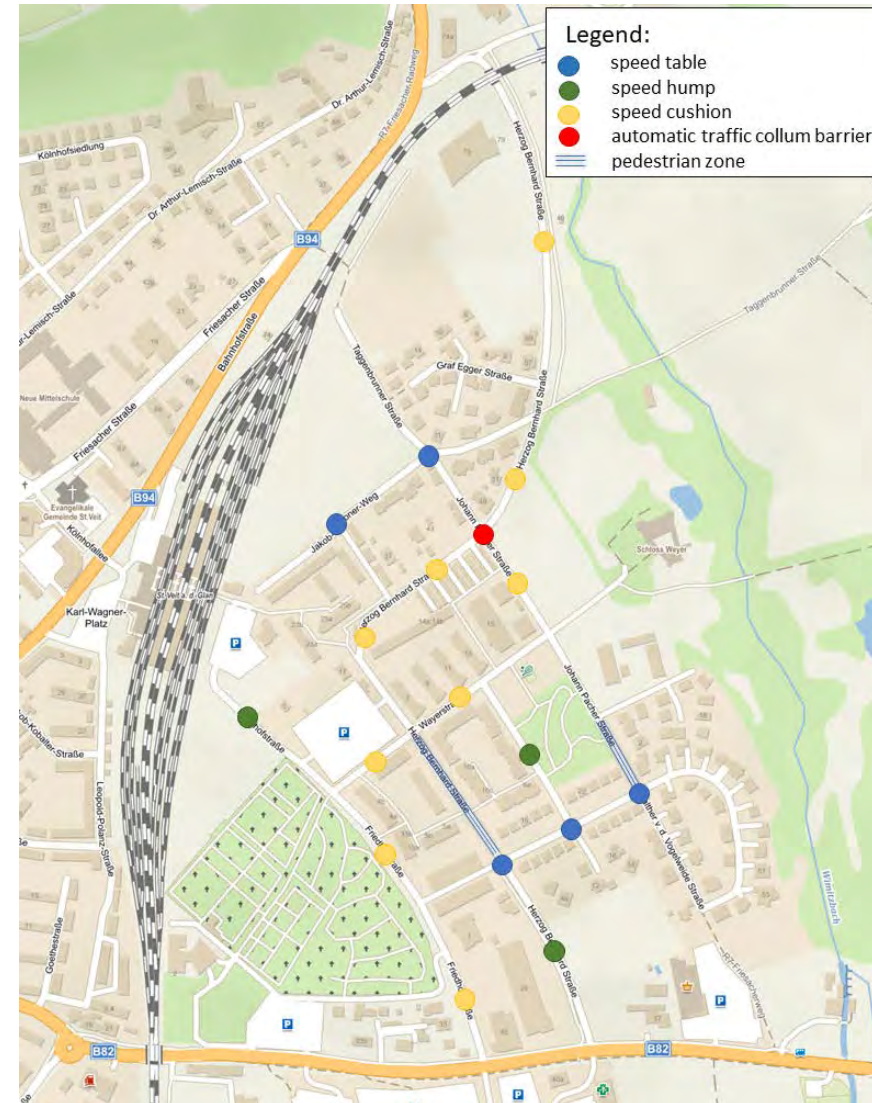
- An irrational speed limit will not be complied
- 5 km/h in Wayerfeld = No speed limit
- We suggest to replace Wohnstraße with Shared Space
- The speed limit is 20 km/h
- All road users, on foot, by bike or by car are equal
- Every one should take care

	Fußgängerzone	Wohnstraße	Fahrradstraße	Begegnungszone
				
Erlaubt ¹⁾	Keine Fahrzeuge	Radfahrer & Zu- und Abfahren	Radfahrer & Zu- und Abfahren	Alle Fahrzeuge
Durchfahrt Fußgänger dürfen benützen	verboten	verboten	verboten	erlaubt
Höchstgeschw.	ganze Straße	ganze Straße	Gehsteig	ganze Straße
Vorrang innerhalb der Verkehrsfläche	5 km/h	5 km/h	30 km/h	20 (30) km/h
Verkehrsfläche ist ...	Fußgänger	Fußgänger Radfahrer	Radfahrer	Fußgänger Radfahrer
	Ruhender Verkehr	Fließender Verkehr		
				

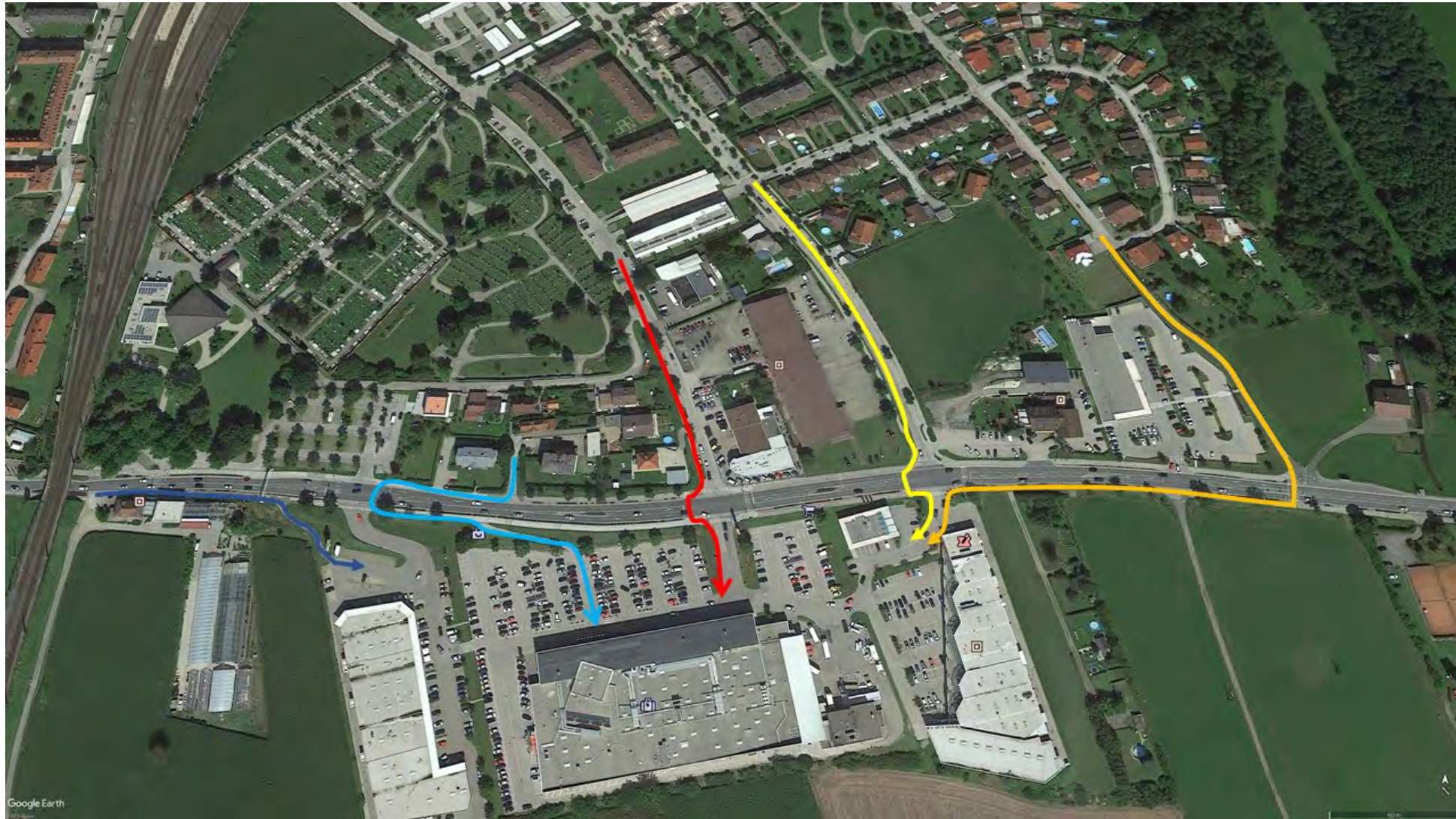
Einbahnstraße One-way street network

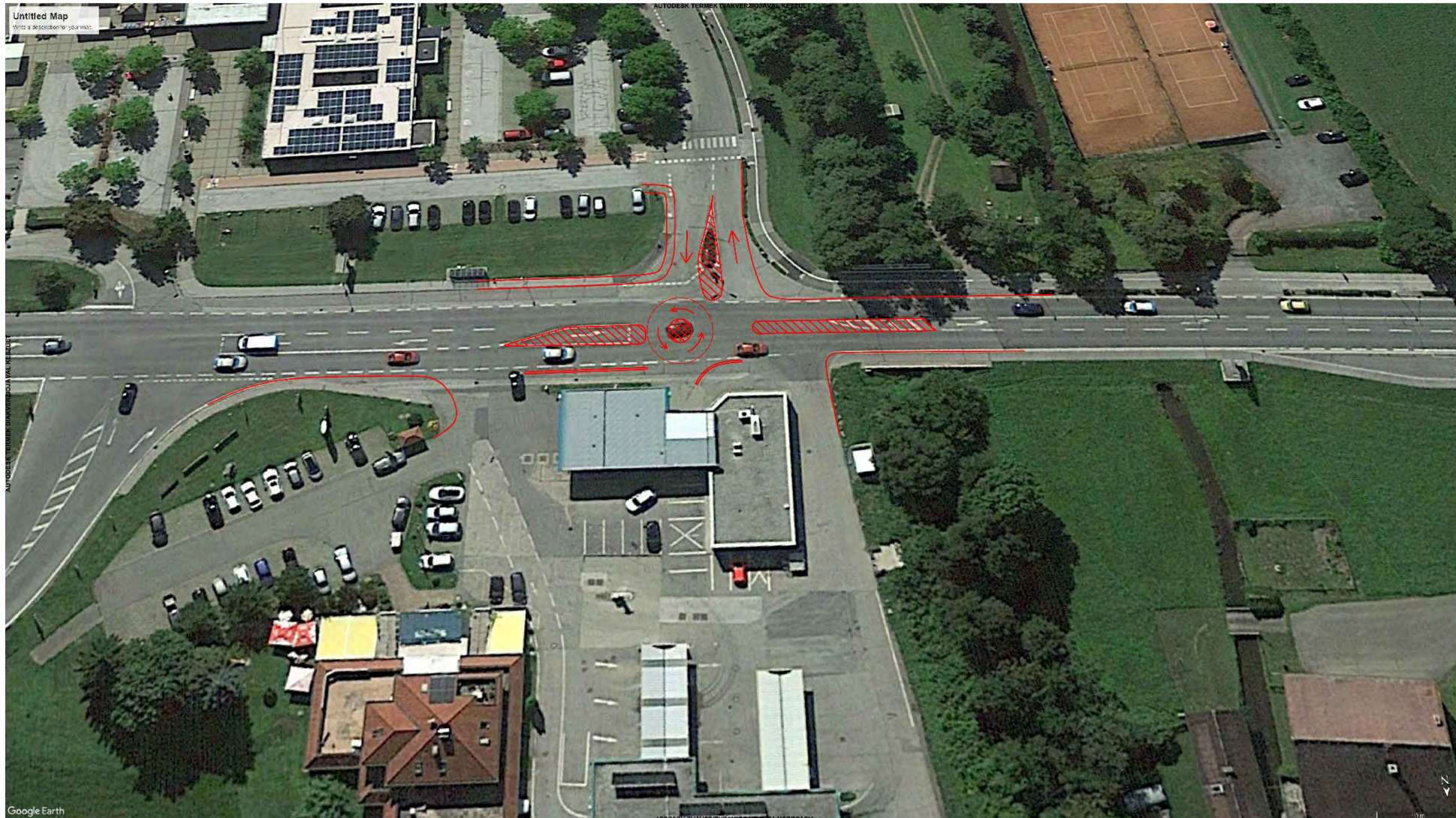


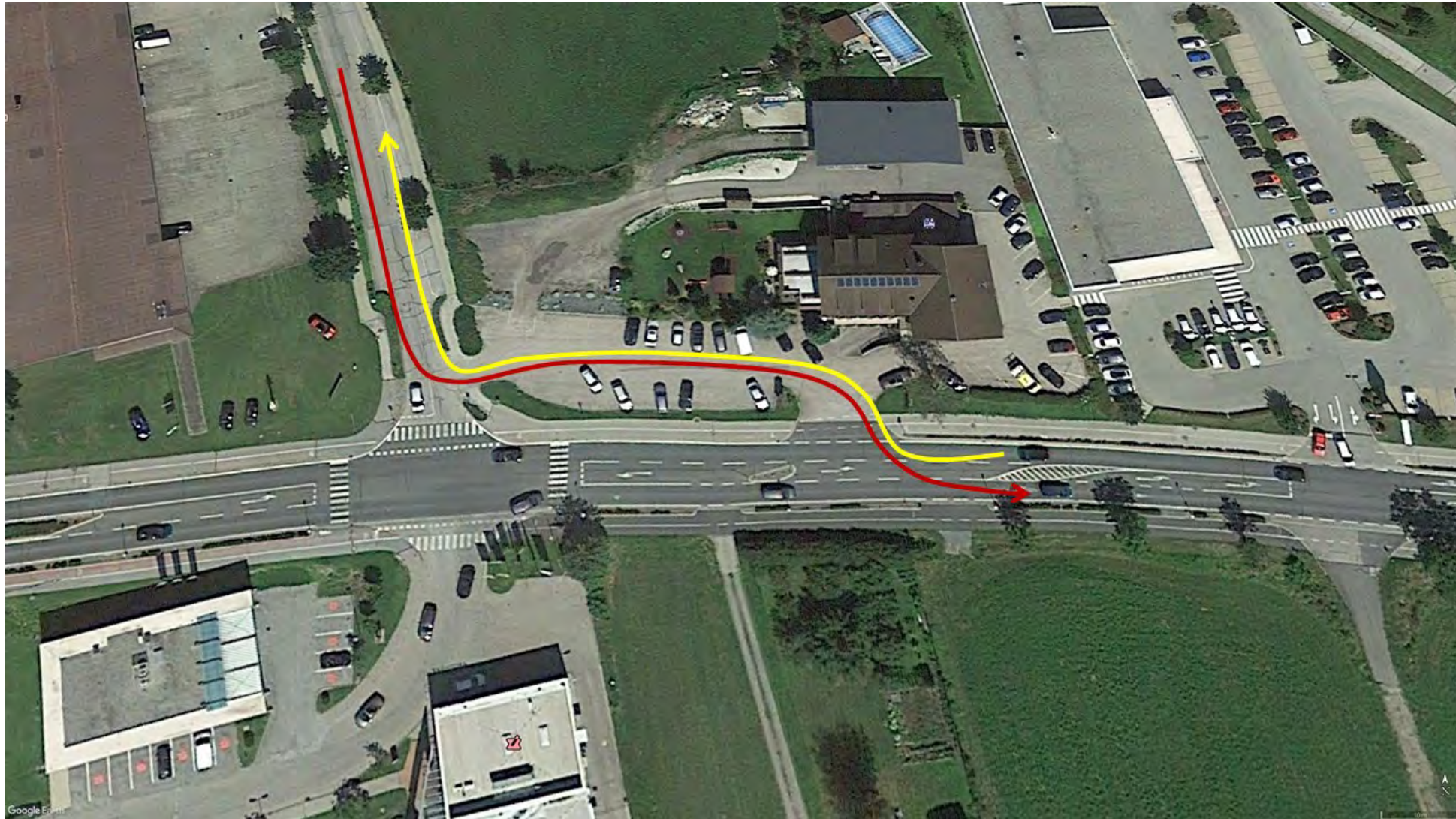
Traffic Calming Measures in the neighborhood















- The main cause of traffic noise in the area is local traffic
- Current 5 km/h speed limit has practically no influence
- The new scheme for the inner streets network eliminates shortcut traffic
- Residents go-through traffic is minimized
- Wayerfeld suffers from urban planning mistakes
- B82 traffic is calmed to make crossing for pedestrians and cyclists safe
- Car traffic is systematically made slower and difficult, while active mobility is prioritized

Task 6

Potential for future housing development

Presents: Petr Šatra



Márk Ferenczi
Erik Zsolt Kiss
Gábor Nagy



Jan Gallia
Lucie Odvodyová
Petr Šatra

- Question:

Where should the future housing development take place?

- Goals:

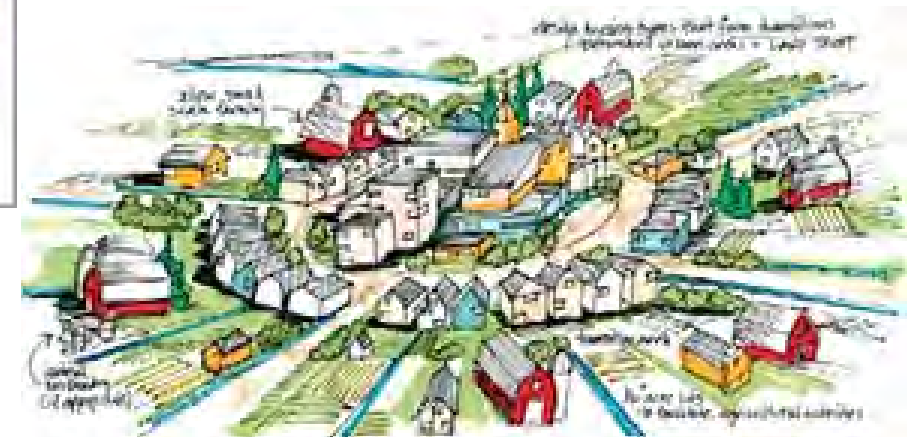
- to estimate the impact of future housing areas on the traffic
- make suggestions for the future development

- The city has banana-like shape
- The morphology of the terrain restricts the snowball-like development
- Further barriers are the rail and motorway links



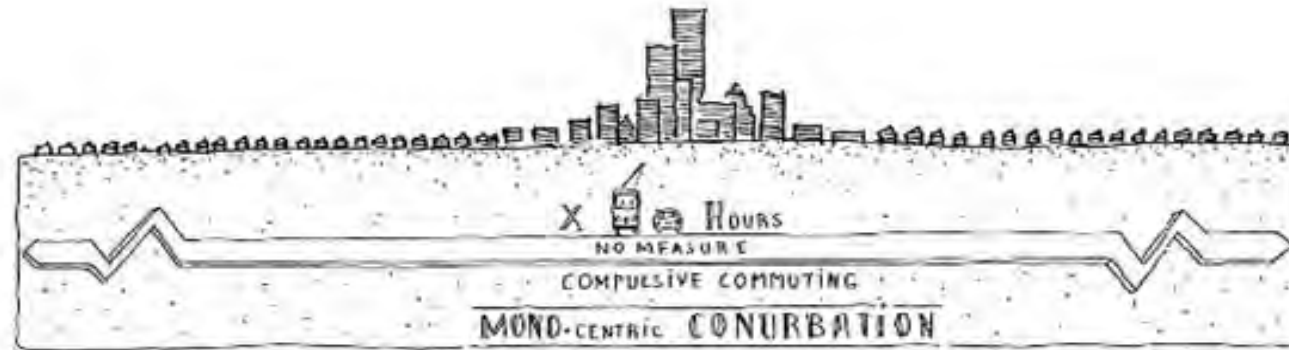
Selected ideas from modern urban planning practice

Gradual structure of the urban area



Selected ideas from modern urban planning practice

Problems with absence of local centres

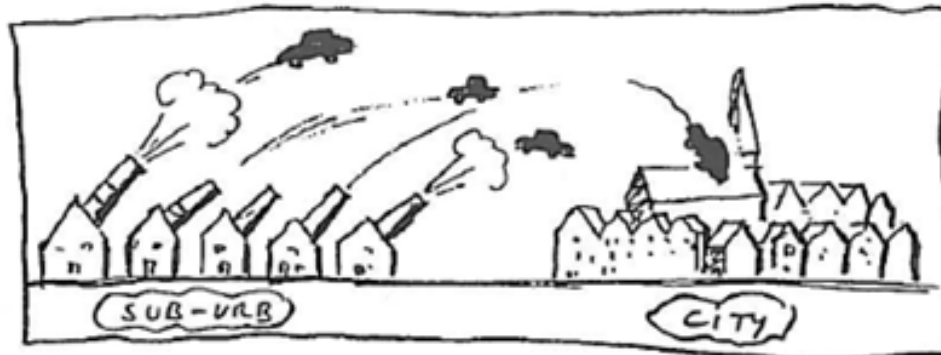


Léon Krier

Selected ideas from modern urban planning practice

Problems of suburbanization

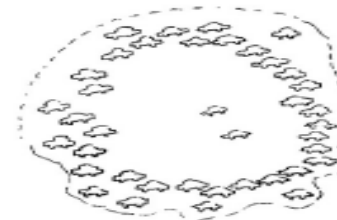
NOT THE CAR BUT THE SUBURBAN HOME IS THE DEADLY WEAPON



DAILY SUBURBAN MORTARFIRE AGAINST URBAN CENTERS

MOTORIZED ~ TRAFFIC
THE EFFECTS OF FUNCTIONAL ZONING

NIGHT



THE VAST PARKINGS
OF THE CENT
are
empty

RUSH, RUSH, RUSH



CONGESTION OF ROADS
AND MEANS OF TRANSPORT
compulsive
PUBLIC & PRIVATE

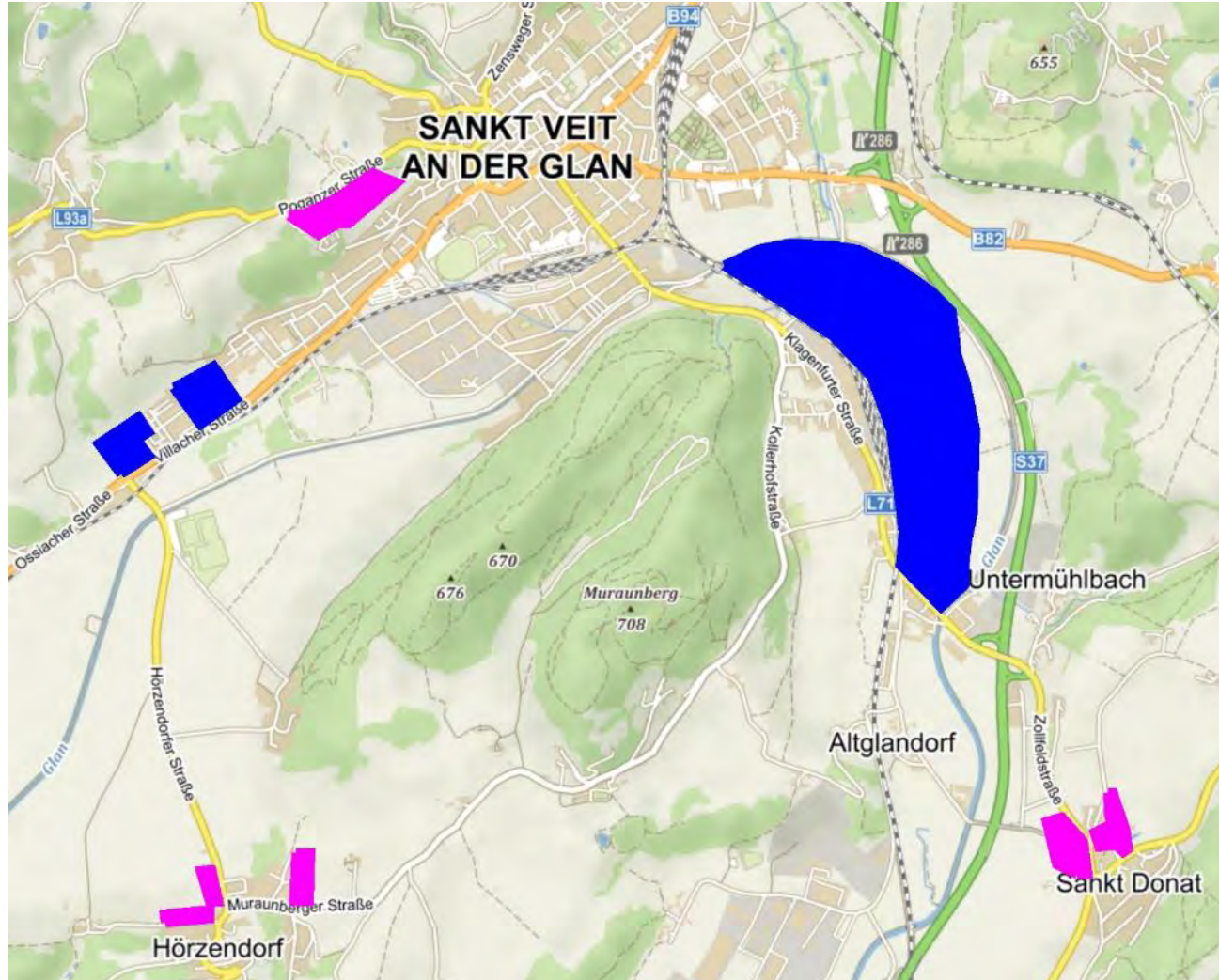
DAY

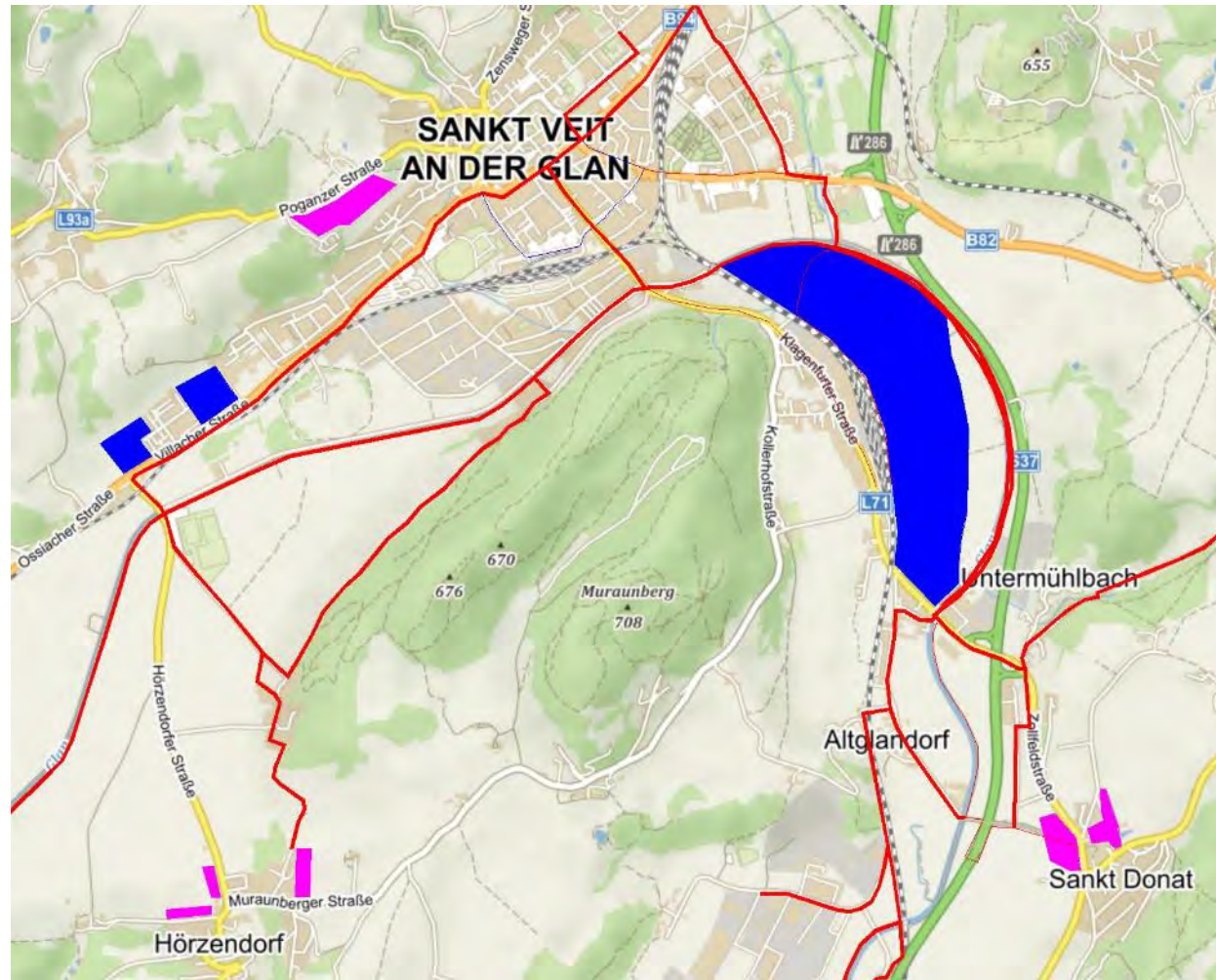


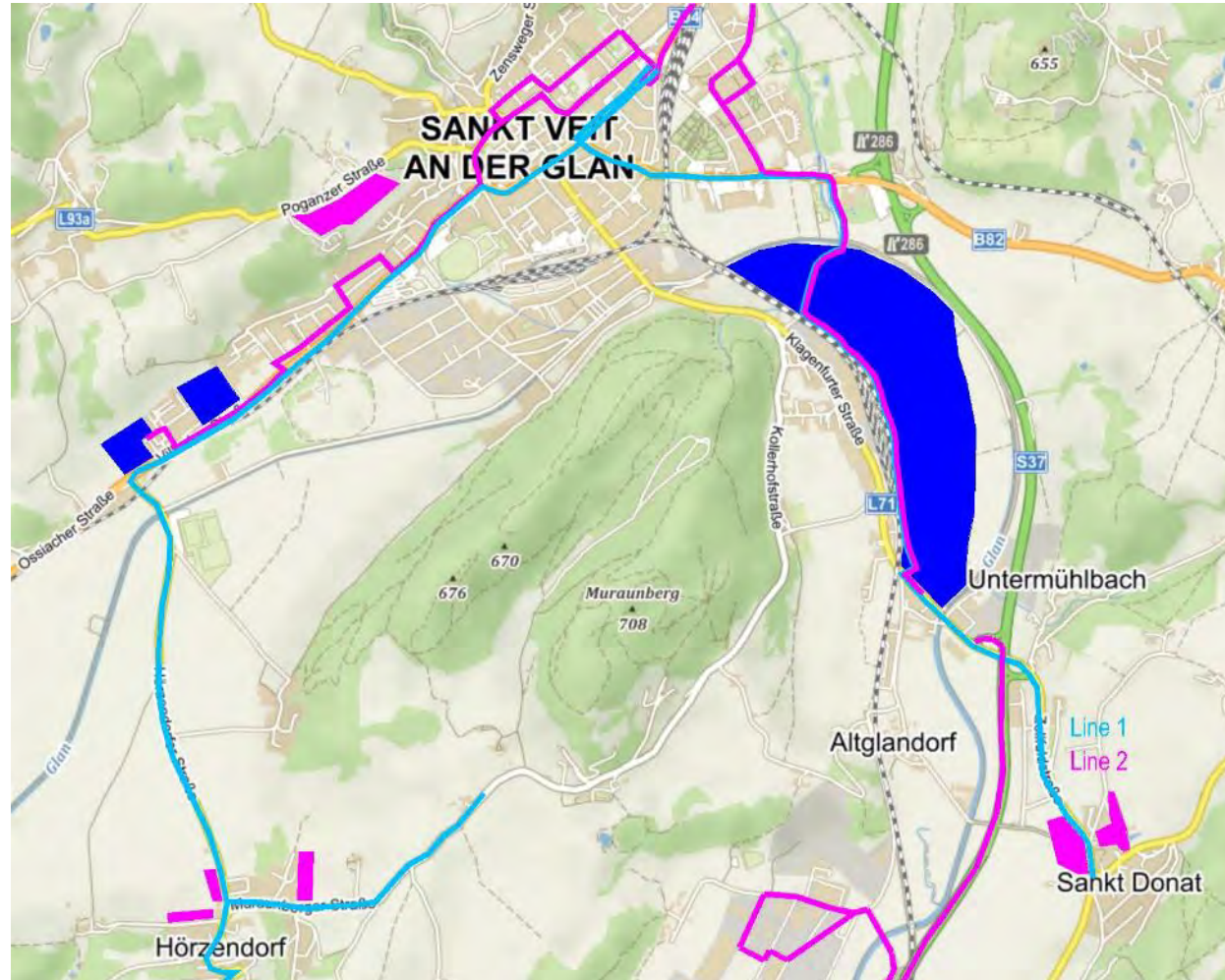
PRIVATE GARAGES ARE
empty

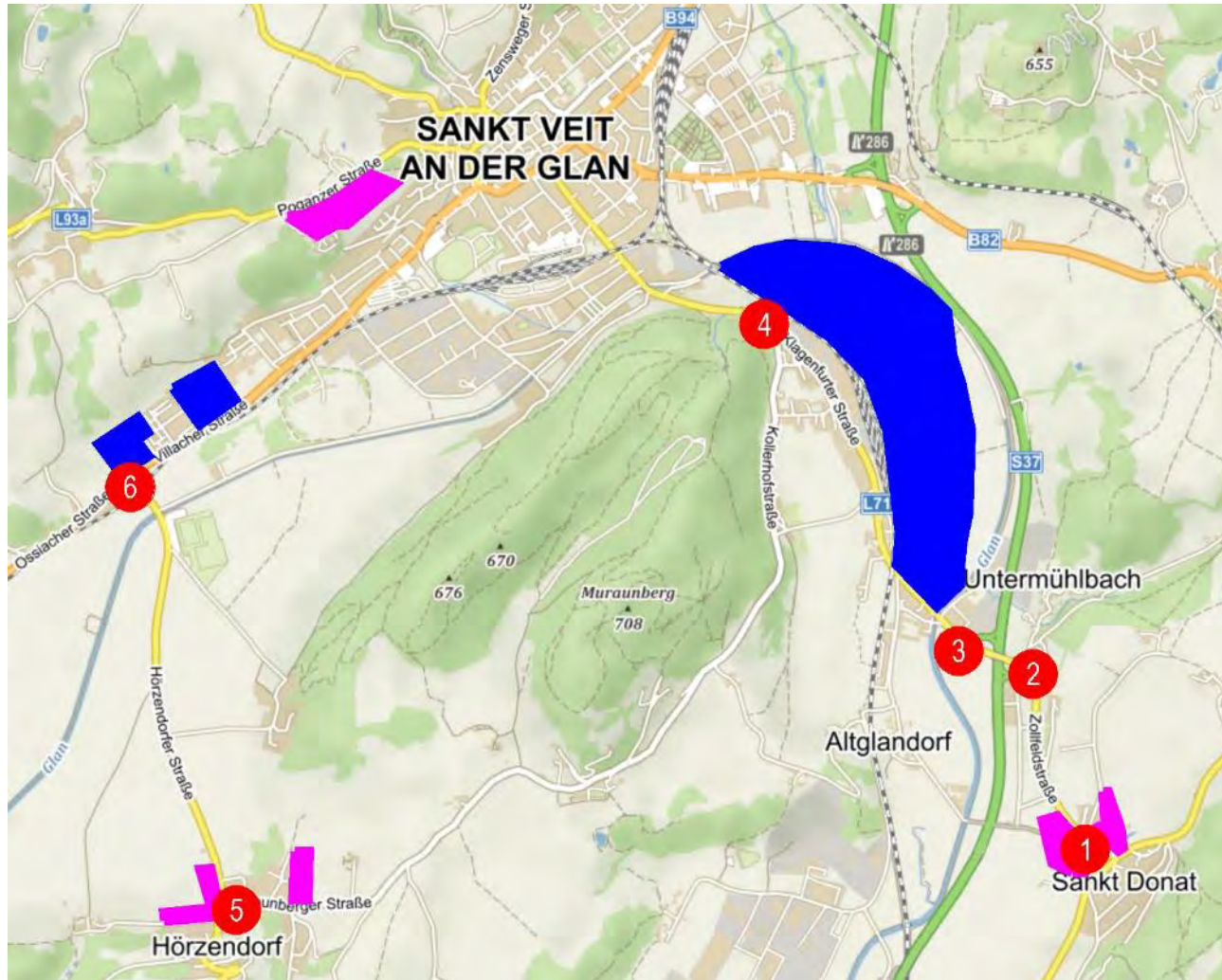
WASTAGE of human and chemical ENERGY

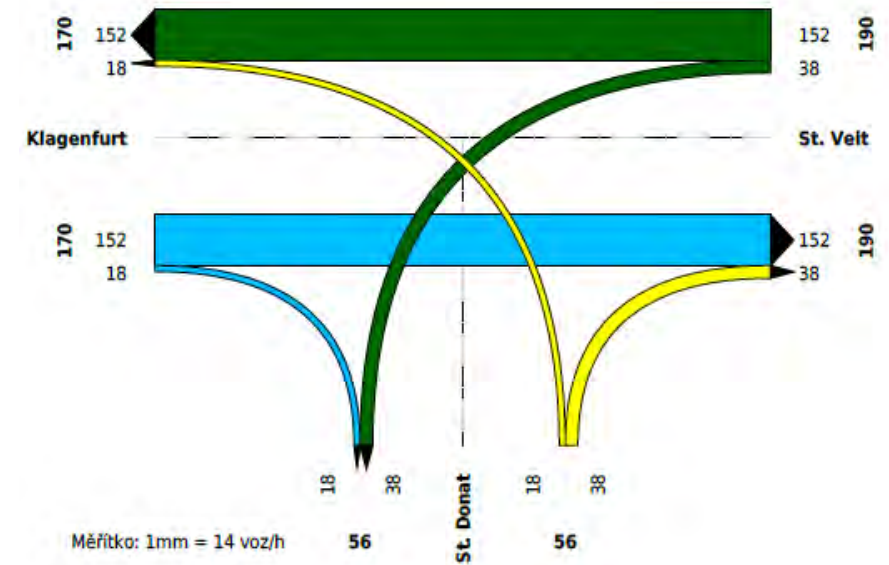
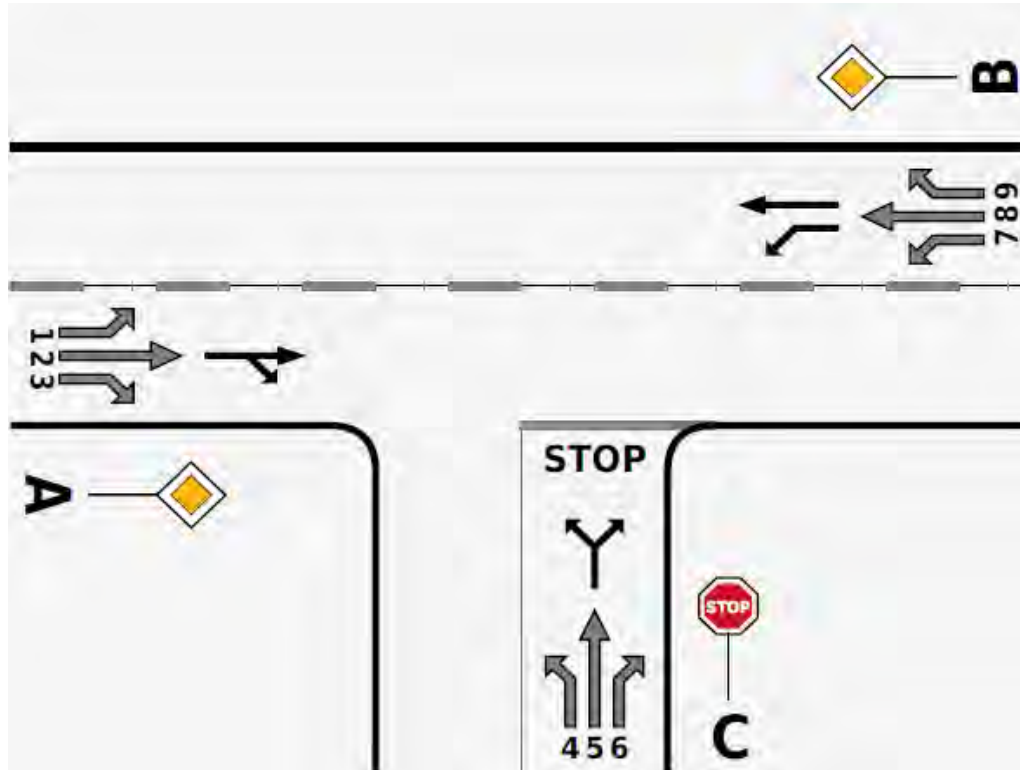
The areas for new housing





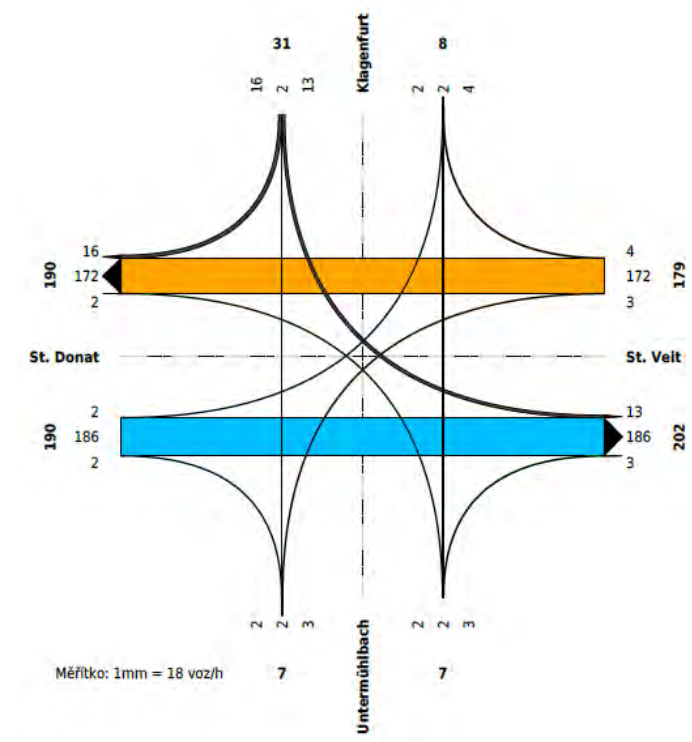
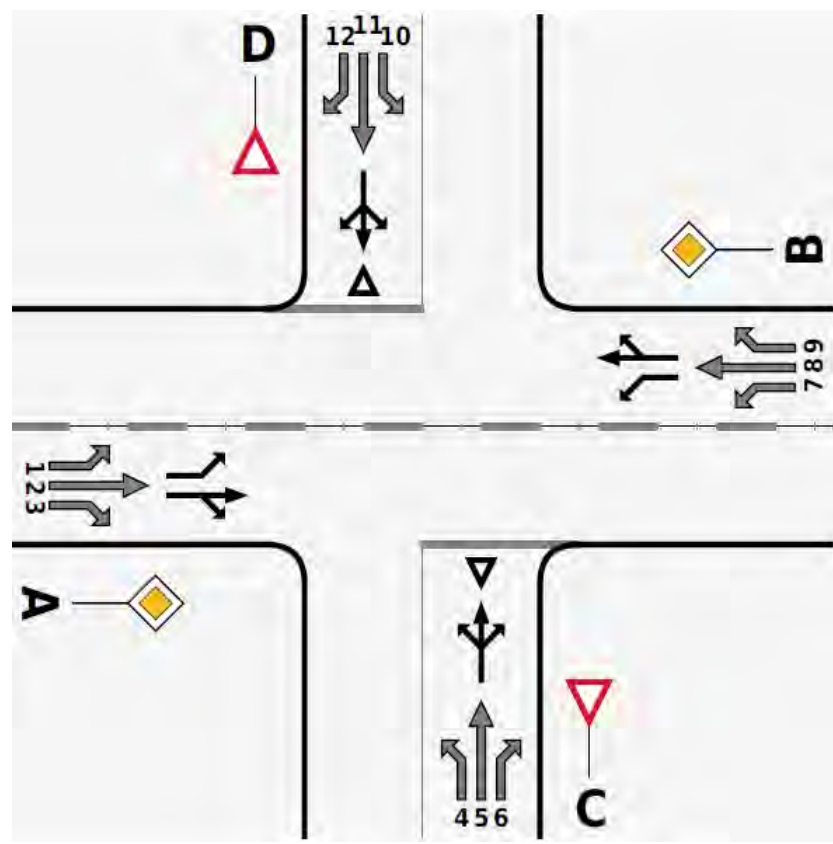






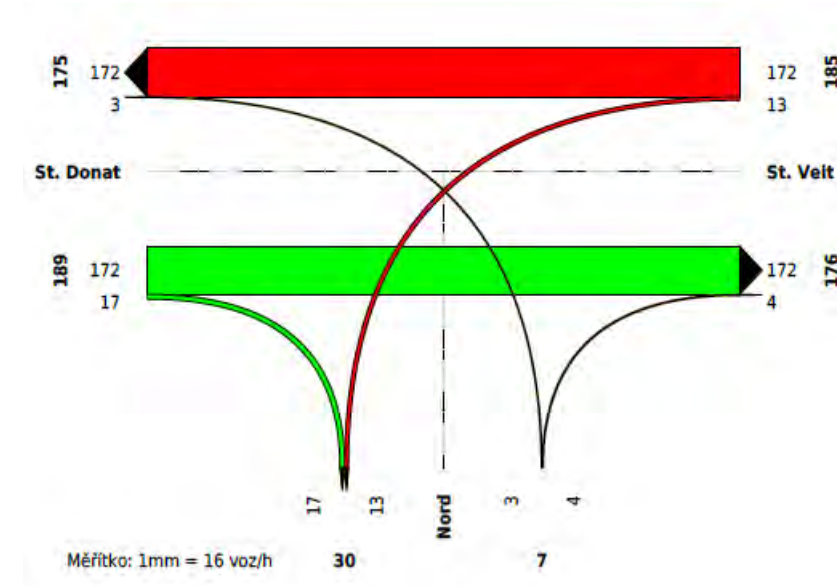
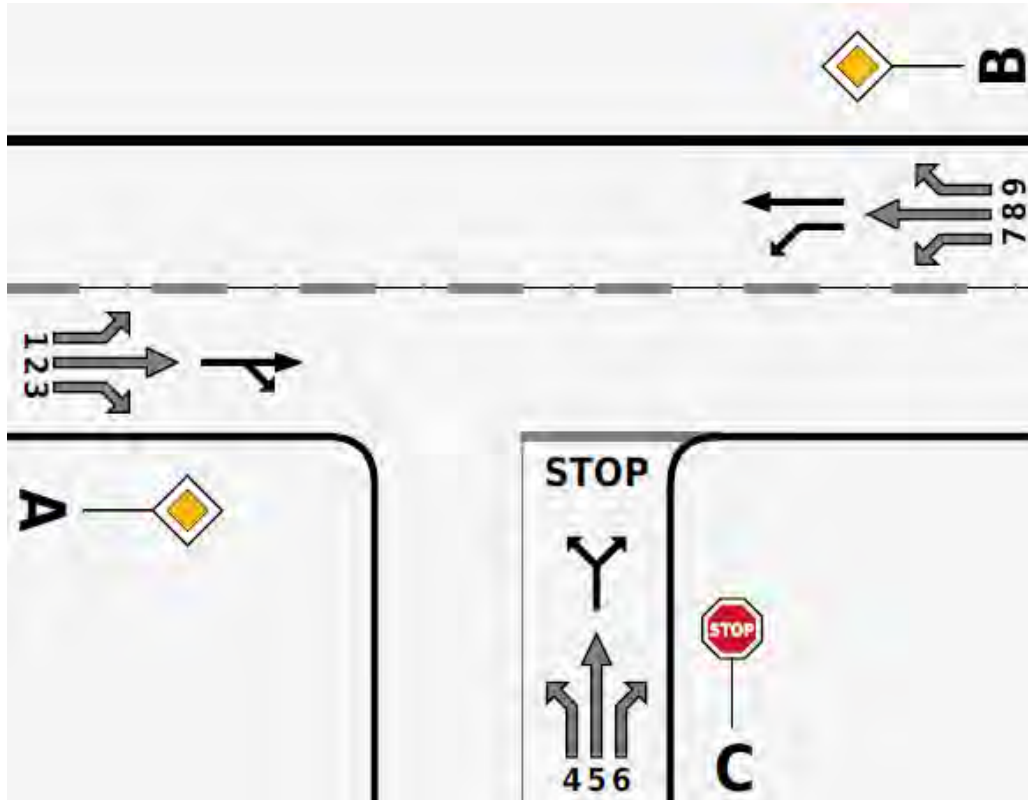
Reserve of capacity: 495 PCU
Level of Service: A

A



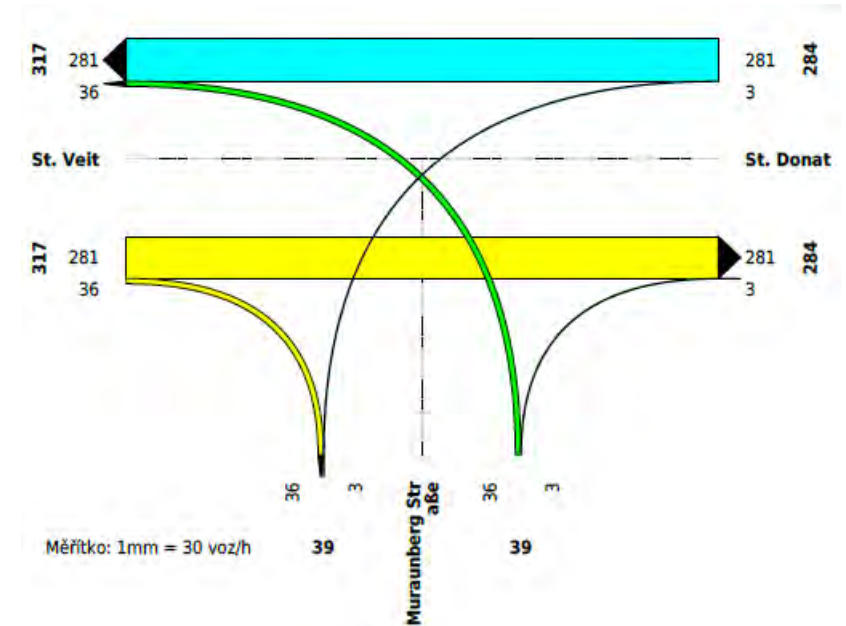
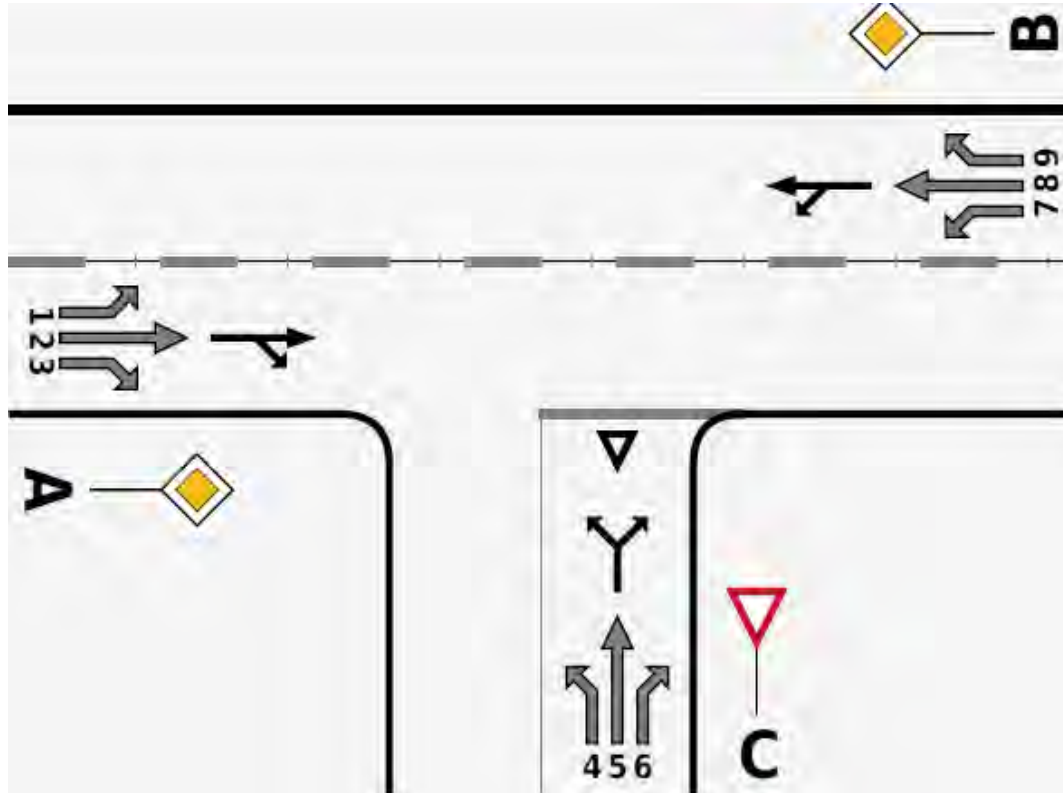
Reserve of capacity: 507 PCU
Level of Service:

A



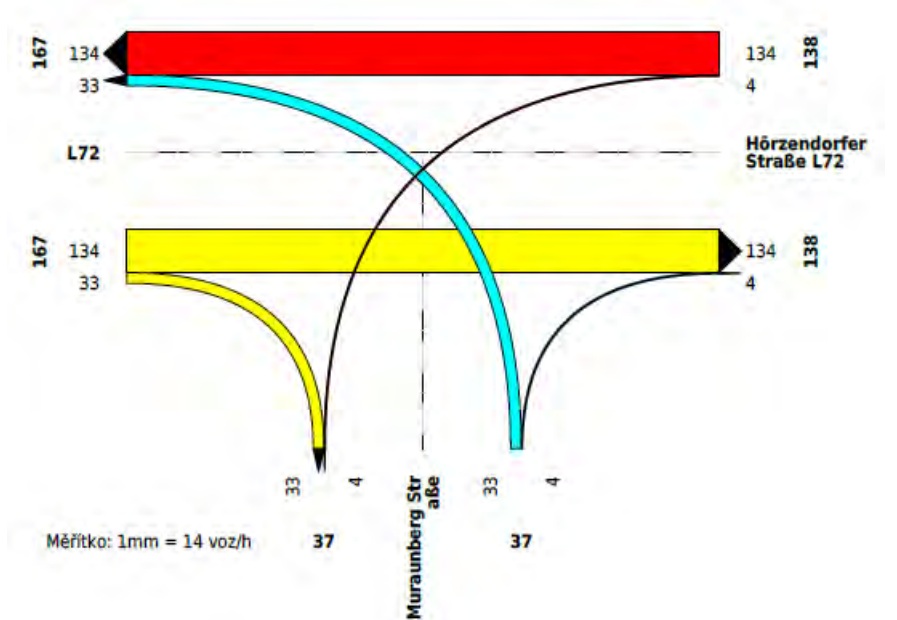
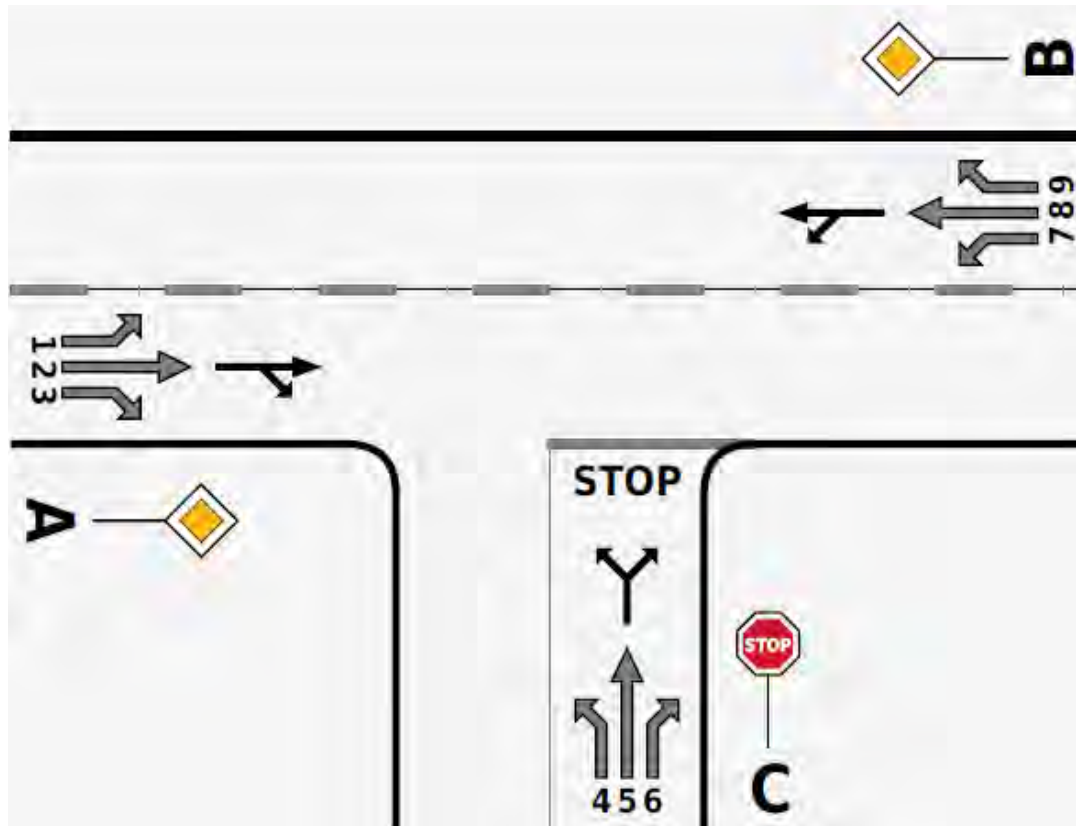
Reserve of capacity: 616 PCU
Level of Service:

A



Reserve of capacity: 378 PCU
Level of Service: A

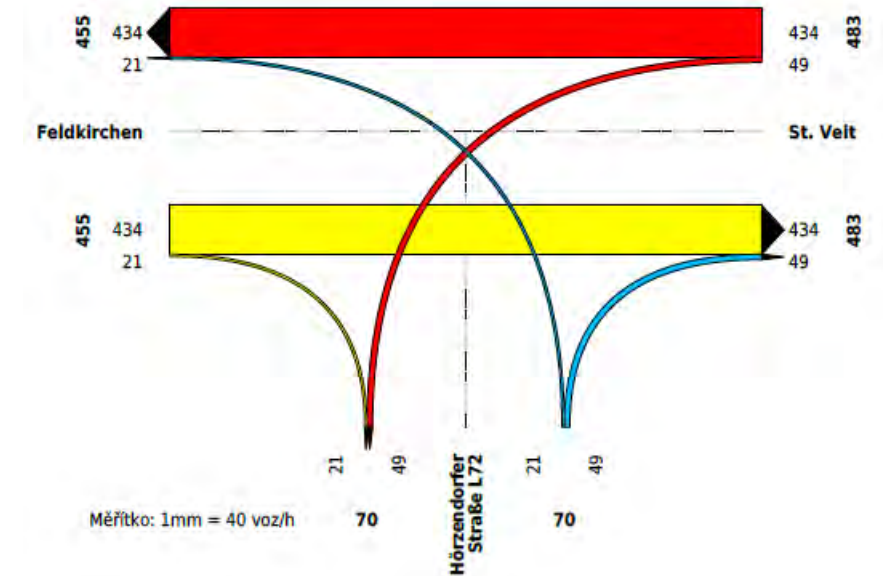
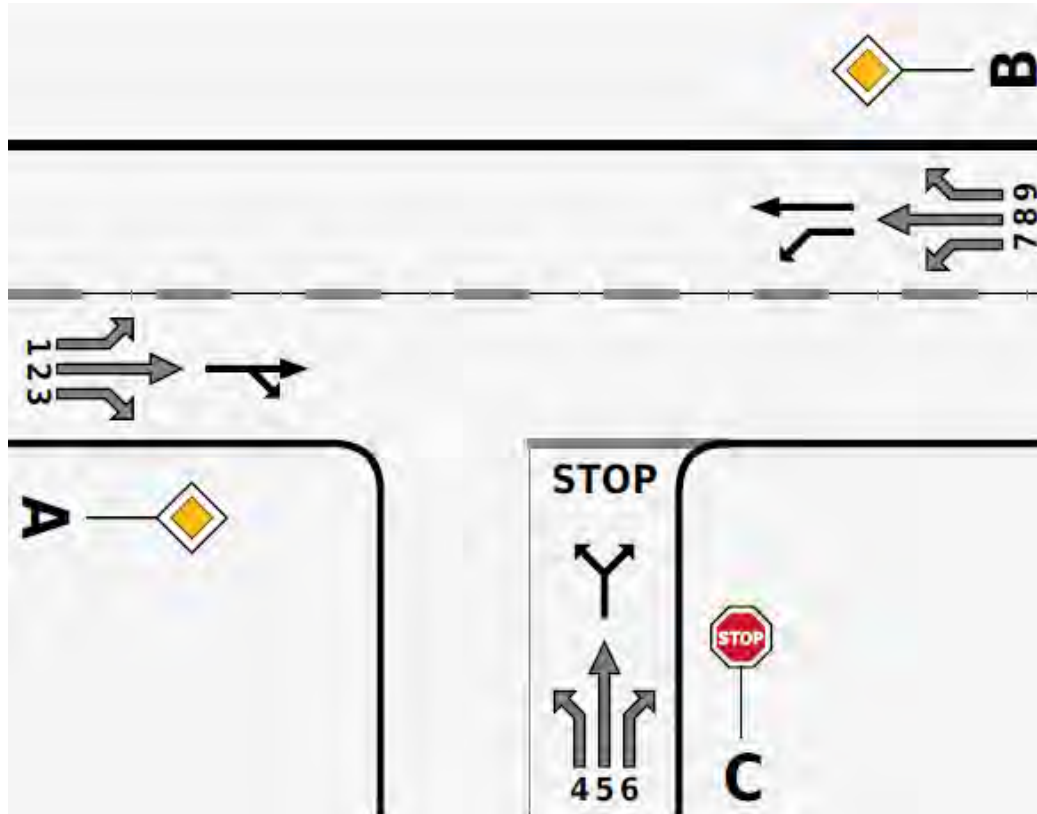
A



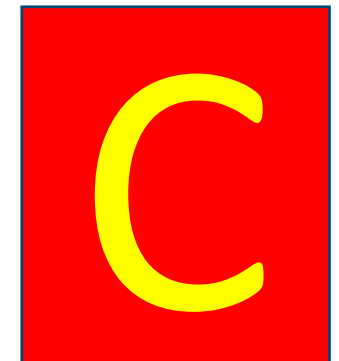
Reserve of capacity: 543 PCU
Level of Service:

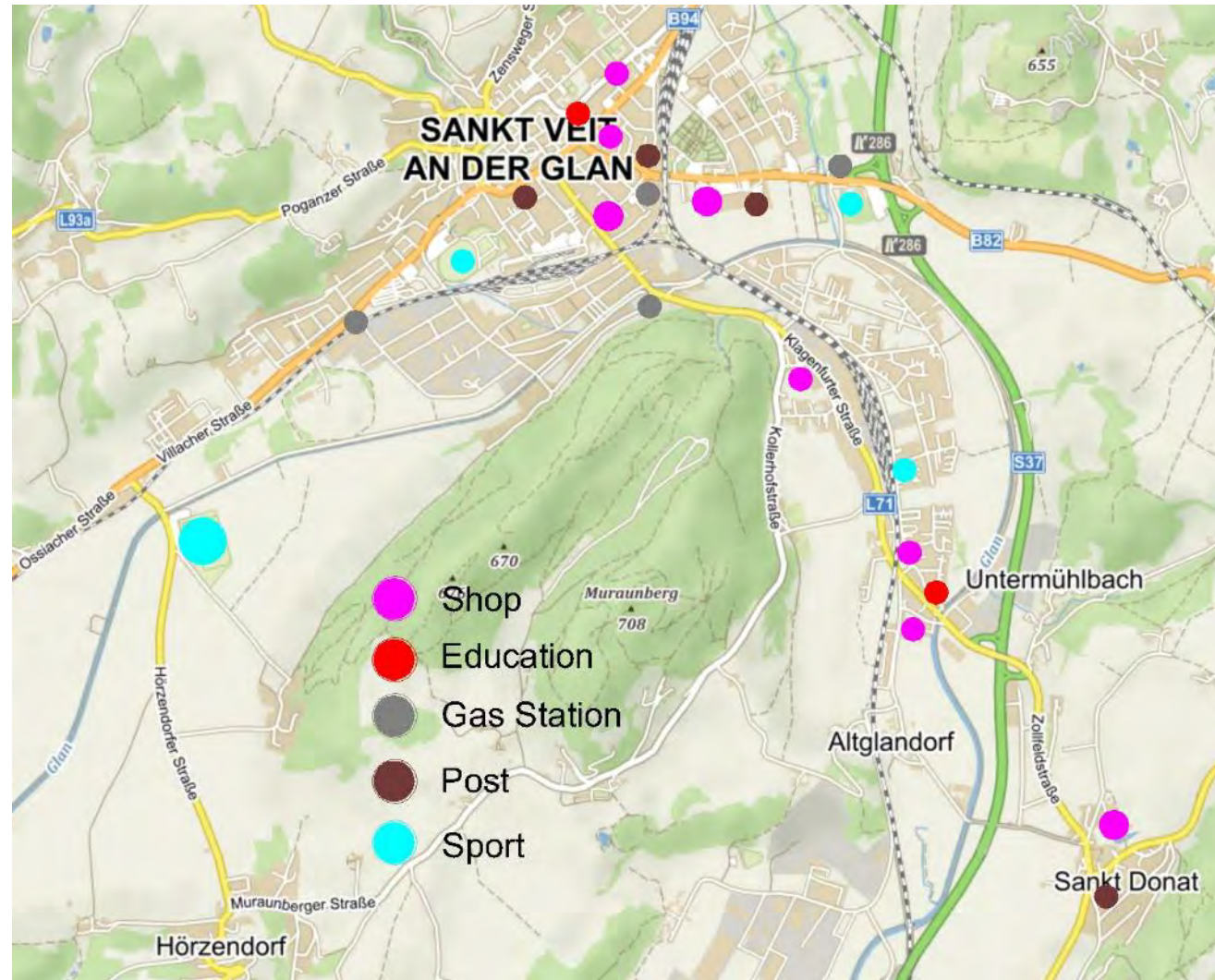
A

Junction L72 x B94 (St. Veit – West)



Reserve of capacity: 164 PCU
Level of Service:





- The town representatives has selected two key areas for potential housing development:
 - Glandorf (T1)
 - Millenniumspark (T2)
- Another three areas were added by the students to assess wider spectrum of areas:
 - Poganzer Straße (S1)
 - Sankt Donat (S2)
 - Hörzendorf (S3)

- **Description:**

- distance to downtown of St. Veit / Glan: 2,5 km
- not given traffic volumes for the junction B82 x Kalten Kellerstraße

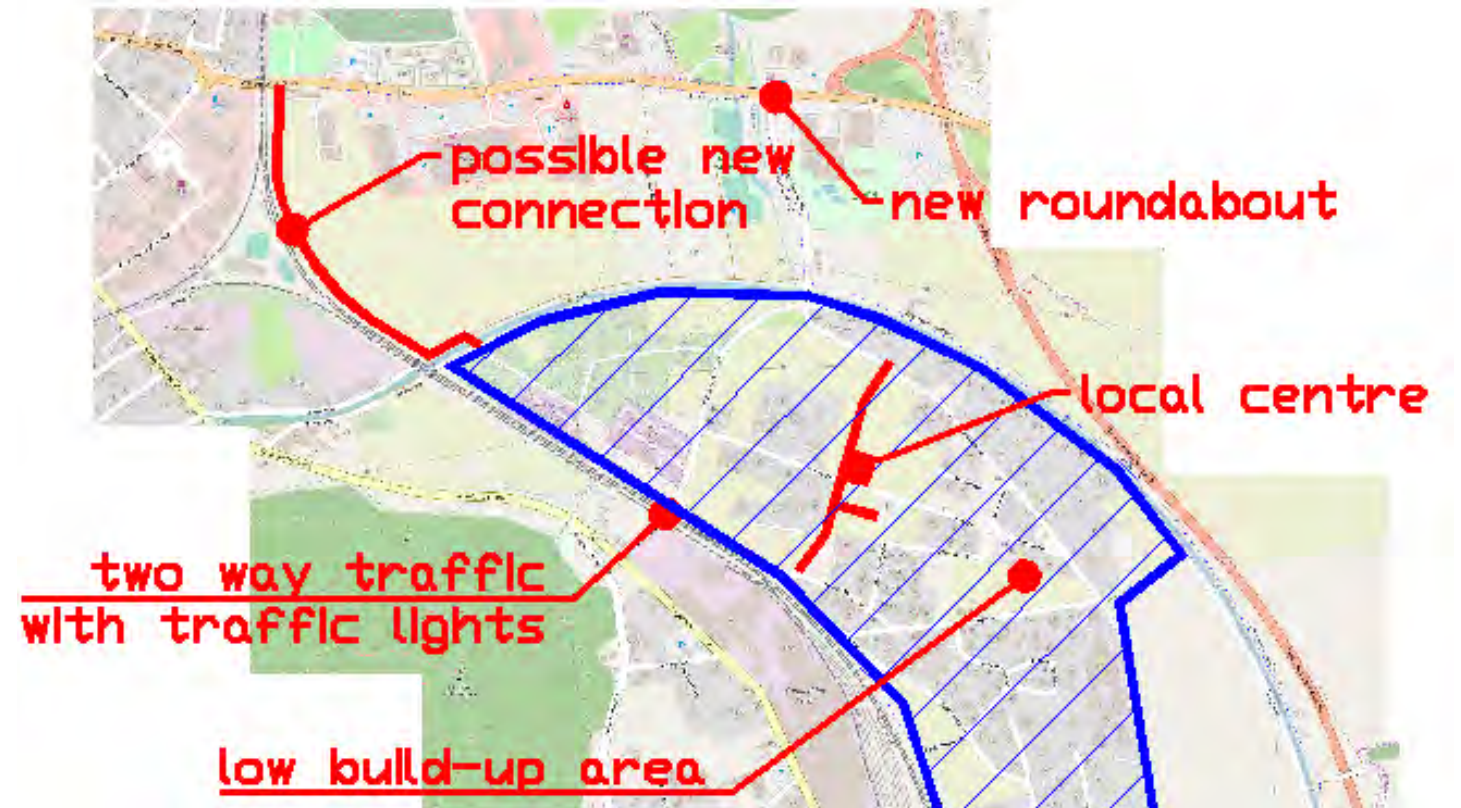
- **Advantages:**

- large area
- close to downtown
- possibility to have a family house with garden in the walking distance from the city centre

- **Disadvantages:**

- traffic connection to the rest of St. Veit / Glan
- 3 problematic access points:
 - * junction Klagenfurt Str. x Blintendorfer Str.
 - * one-way underpass
 - * junction B82 x Kalten Kellerstraße

- Two-way traffic in the underpass managed by traffic lights
- New road parallel with the railway track
- Proposal of some local centre
- Two new roundabouts



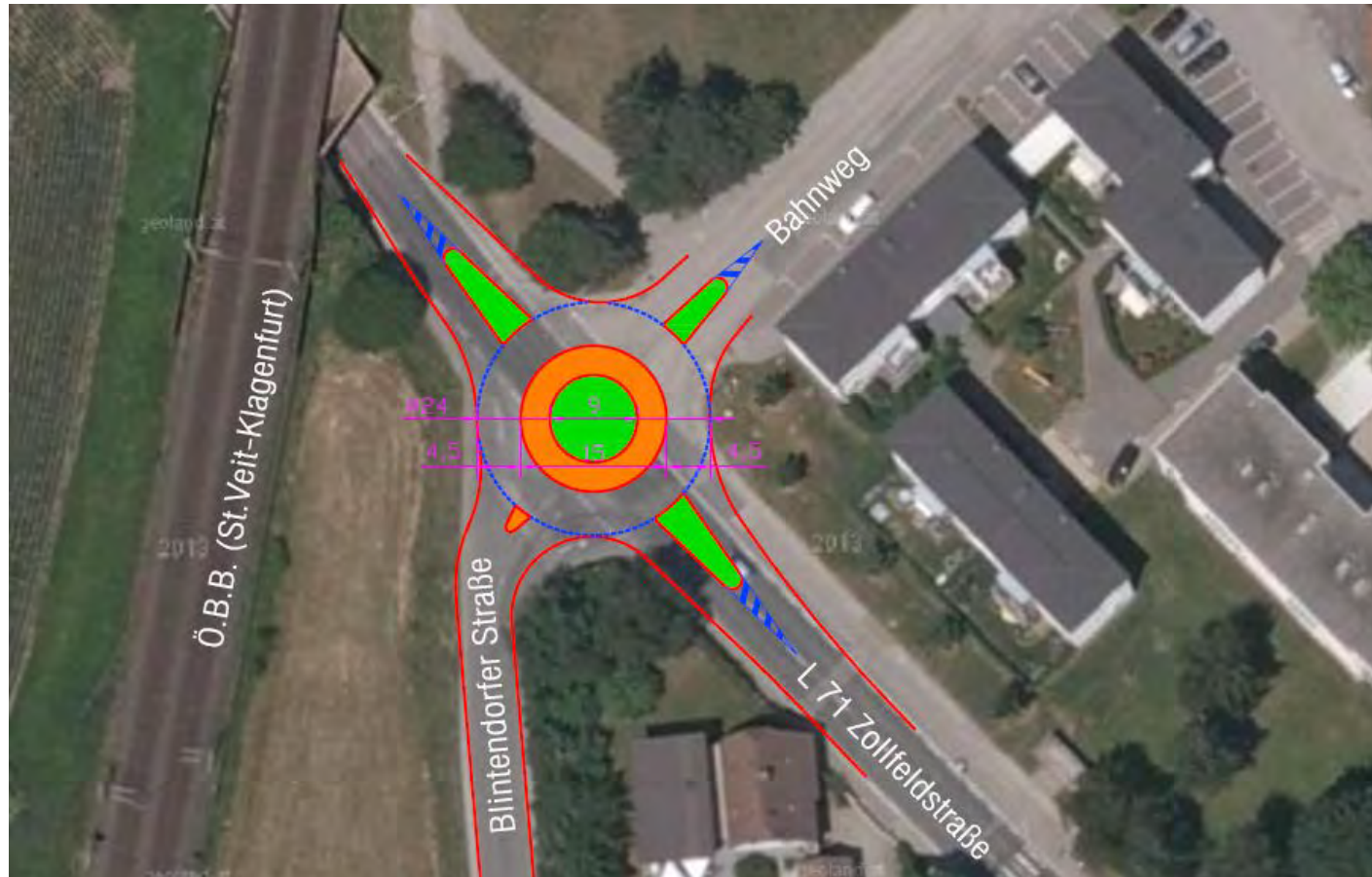
Example of one lane underpass with two way traffic managed by traffic lights



New roundabout on the junction of B82 x Kalten Kellerstraße



New roundabout on the junction of Klagenfurt Str. x Blintendorfer Str.



- **Description:**

- distance to downtown of St. Veit / Glan: 2,5 km

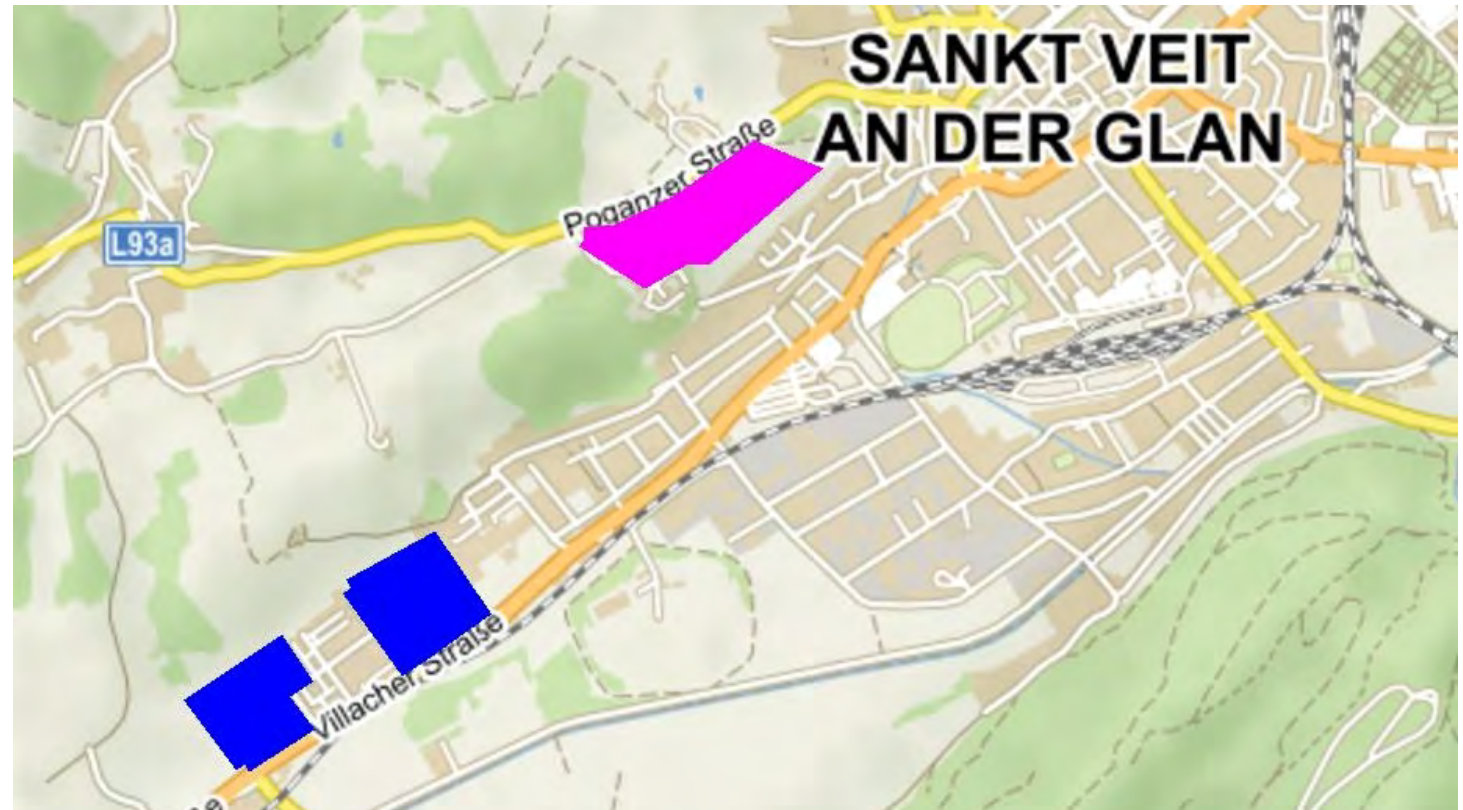
- **Advantages:**

- the buildup area of the town will be connected

- **Disadvantages:**

- creating densely populated areas on the outskirts
- capacity problem with the connection to the Villacher Str.

- Traffic lights on junction with B94 using traffic sensors on the minor road
- Greater limitation of the density of the population/housing towards the town limit (outskirts)



- **Description:**

- distance to downtown of St. Veit / Glan: 1,5 km

- **Advantages:**

- nice view
- quiet living
- proximity of nature
- segregated pedestrian access
- properties with high added value

- **Disadvantages:**

- bottleneck between the Poganzer Str. and Wagstraße
- uphill access (uncomfortable for pedestrians and bikers)

- Pedestrian access to downtown through the „Kreuzweg“



- **Description:**

- distance to downtown of St. Veit / Glan: 6 km

- **Advantages:**

- quiet living
- proximity of nature
- advantages of the rural way of life
- proximity of the motorway S37

- **Disadvantages:**

- far from the St. Veit / Glan
- scarcity of facilities (civic amenities) in St. Donat

- Maximise or minimise the new housing

- **Description:**

- distance to downtown of St. Veit / Glan: 6 km

- **Advantages:**

- quiet living
- proximity of nature
- advantages of the rural way of life

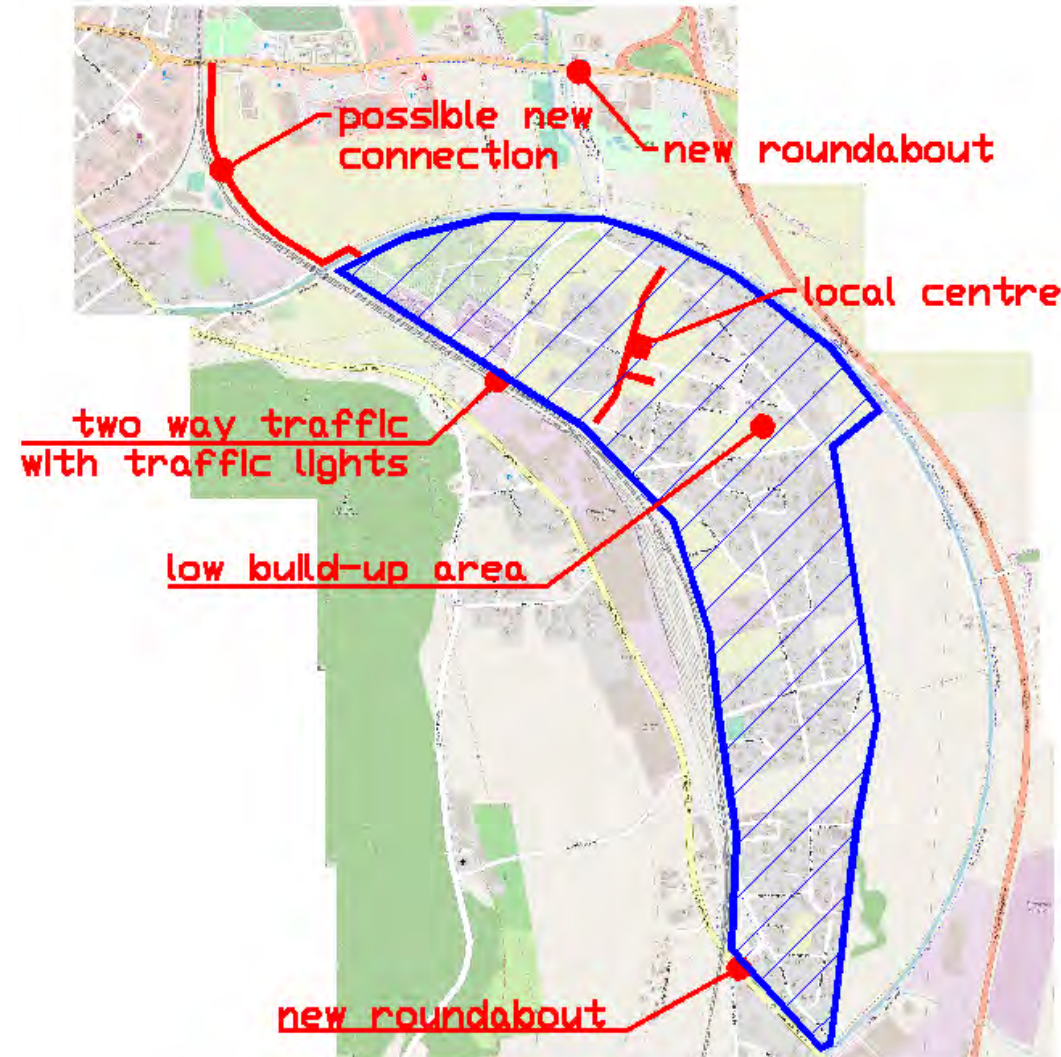
- **Disadvantages:**

- far from St. Veit / Glan
- no facilities (civic amenities)
in Hörzendorf

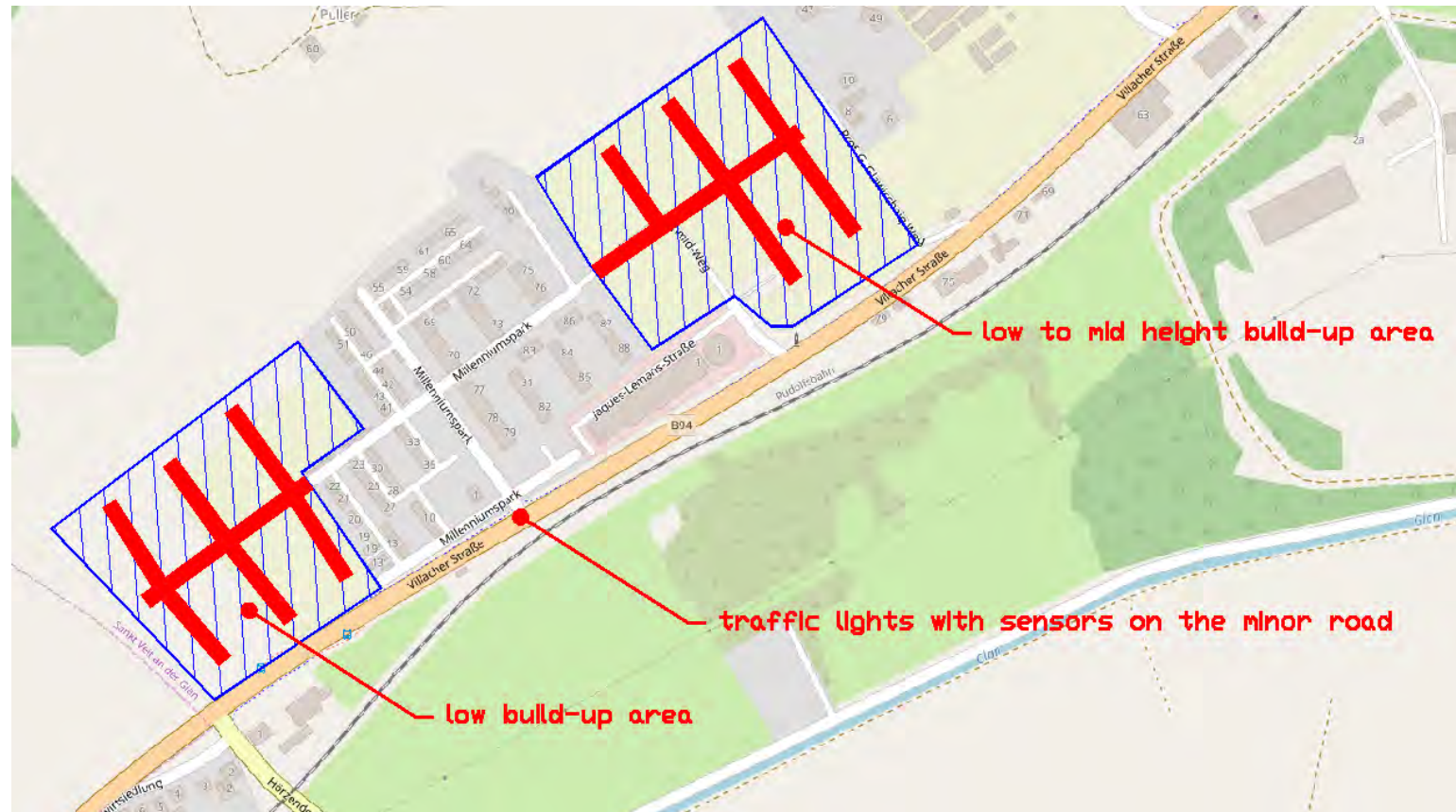
- Maximise or minimise the new housing

Conclusion

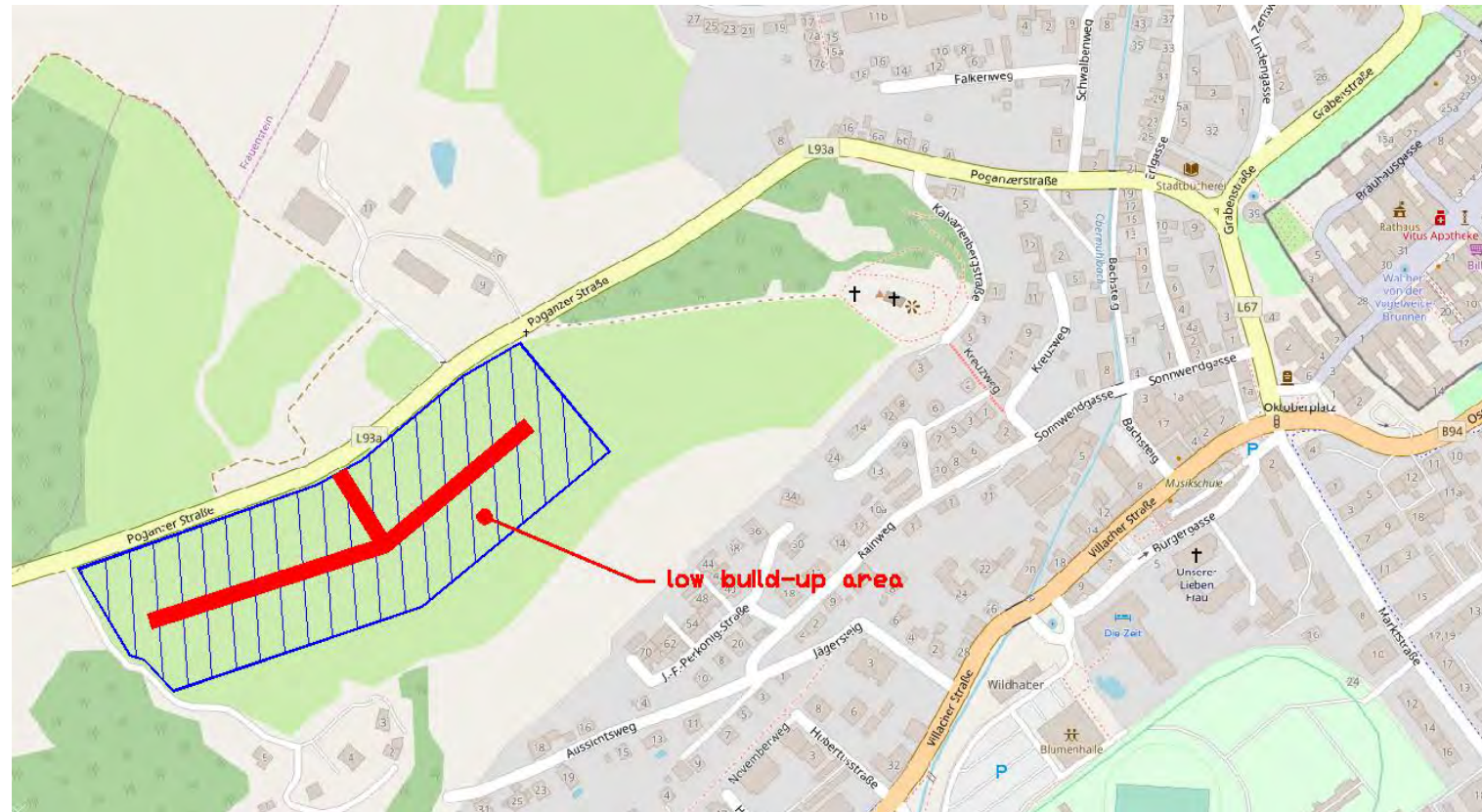
T1 - Glandorf



T2 – Millenniumspark



S1 – Poganzer Straße



S2 – Sankt Donat and S3 – Hörzendorf

- **Current situation:**

- Both areas are far from the downtown of St. Veit / Glan
- Hörzendorf is missing any civic amenities, businesses or shops
- Sankt Donat has very limited offer of civic amenities and shops

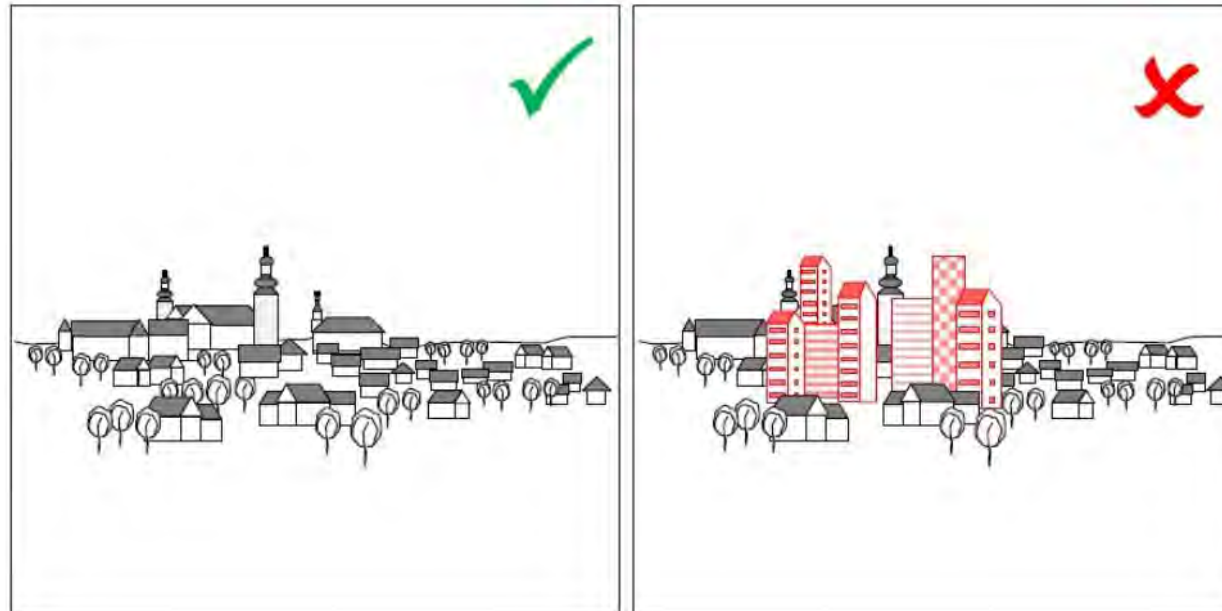
- **Expectations:**

- In case of new housing development, all the inhabitants will commute from there
- With more housing more traffic will be induced
- If there will be a lot of new housing, (more) civic amenities could be introduced there, which could decrease the pressure on commuting somewhere else

S2 – Sankt Donat and S3 – Hörzendorf

- **Recommendations:**

- Maximise or minimise the new housing
- In case the new housing will be introduced, it should be a low build-up area not to disturb the village-like look of the areas



Thank you for your
attention!