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Univerza v Ljubljani
Fakulteta za gradbeništvo in geodezijo

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PROMETNOTEHNIŠKI INŠTITUT

KAPACITETNA ANALIZA KLJUČNIH KRIŽIŠČ ZA POTREBE IZDELAVE IDP REKONSTRUKCIJE IN PRESTAVITVE DELA ŠMIHELSKE CESTE V NOVEM MESTU

KONČNO POROČILO

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2501		**000.2102**	**10.1**	

10 NASLOVNA STRAN Z OSNOVNIMI PODATKI O ELABORATU PTI-010/2014

10.1 Elaborat – Prometna študija:

Rekonstrukcija in prestavitev dela Šmihelske ceste v Novem mestu - R3-664, odsek 2501 Gaber – Uršna Sela – Novo mesto

Investitor/Naročnik	GPI d.o.o. Ljubljanska cesta 26, 8000 Novo mesto
Vrsta in lokacija objekta:	OBJEKT PROMETNE INFRASTRUKTURE – Kapacitetna analiza variant rekonstrukcije
Vrsta projektne dokumentacije:	KAPACITETNA ŠTUDIJA OPTIMALNE UREDITVE PRIKLJUČKA
Za gradnjo:	Rekonstrukcija ceste
Izvajalec:	Univerza v Ljubljani, Fakulteta za gradbeništvo in geodezijo Prometnotehniški inštitut Jamova c. 2, 1000 Ljubljana
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Žig in podpis:	
Odgovorni vodja projekta:	
Žig in podpis:	
Številka projekta:	010/2014
Številka, kraj in datum izdelave elaborata:	PTI-010/2014, Ljubljana, april 2014

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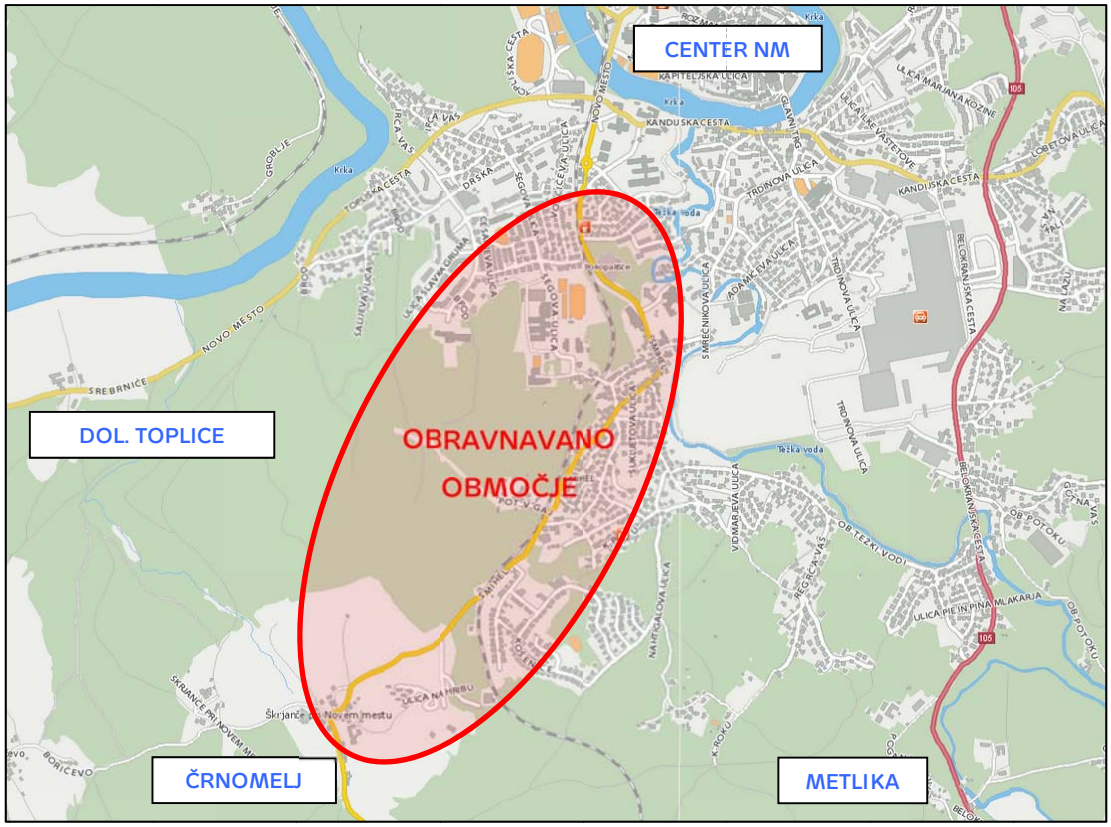
T.1 SPLOŠNO

T.1.1 Namen in cilji naloge

Študija je narejena z namenom kapacitetne preverbe ključnih križišč za potrebe izdelave IDP rekonstrukcije in prestavitve dela Šmihelske ceste v Novem mestu.
Idejni projekt se izdeluje za potrebe rekonstrukcije in prestavitve dela Šmihelske ceste (obvoznica Šmihela) v Novem mestu oziroma regionalne ceste R3-664, odsek 2501 Gaber – Uršna Sela – Novo mesto (v nadaljevanju obravnavano območje – Slika 1), od km 21.620 do navezave na državni prostorski načrt 3. razvojne osi – južni del v nasprotni smeri stacionaže.



Slika 1: Obravnavano območje (vir: www.zemljevid/najdi.si)

Na podlagi predhodno izdelanih prometnih študij, ki so bile izdelane za cestno omrežje Novega mesta, za DPN in za Študijo variant obvoznice Regrča vas, smo s kapacitetno analizo preverili in predlagali najbolj optimalno geometrijsko obliko vseh križišč na novi cesti, križišč pri navezovanju na lokalne ceste in vseh priključkov (Slika 2).



Slika 2: Lokacija obravnavanih križišč na predvideni trasi rekonstruirane državne ceste R3-664, odsek 2501

Izdelana je kapacitetna analiza petih križišč na spremenjenem poteku dela Šmihelske ceste (obvoznica Šmihela) in priključnih cest:

- K1 križišče nove Šmihelske ceste s podaljškom Smrečnikove ulice (LZ299011) in novim nadvozom/podvozom – podaljškom do Šegove ulice (LZ299045) – cesta za Šmihel,
- K2 križišče nove Šmihelske ceste z novogradnjo lokalne ceste - cesta za Drsko, ob zahodni strani Šolskega centra NM do Ulice Slavka Gruma in priključkom do romskega naselja Šmihel – cesta za romsko naselje,

- K3 križišče Ulice Slavka Gruma z novo povezovalno lokalno cesto ob zahodni strani Šolskega centra NM – cesta za Drsko,
- K4 križišče obstoječe Šmihelske ceste s Smrečnikovo ulico in novo povezovalno cesto do križišča K1 - podaljškom Smrečnikove ulice (cesta za Šmihel),
- K5 križišče podaljška Šegove ulice mimo Šolskega centra NM s cesto za Šmihel (cesta proti nadvozu/podvozu) in s priključkom iz parkirišča OŠ Dragotina Ketteja.

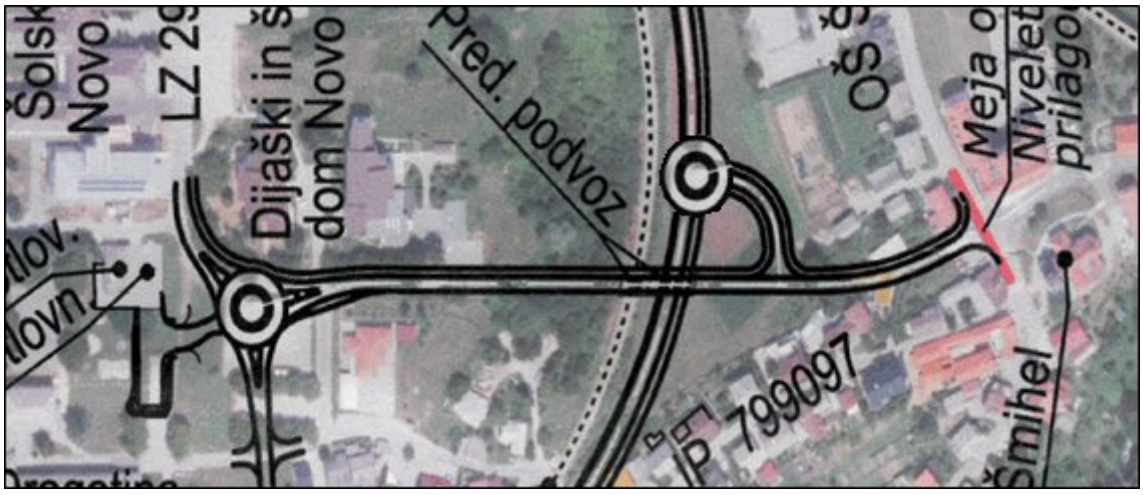
Križišča so preverjena v dveh časovnih obdobjih in sicer, takoj po predvidenem začetku obratovanja (2015) in po 20-letni planski dobi (2035).

Analizirali smo štiri variante, ki se razlikujejo le po geometrijski zasnovi – ureditvi križanja nove Šmihelske ceste (obvoznica Šmihela) in ceste za Šmihel (od Šolskega centra NM do obstoječega križišča stare Šmihelske s Smrečnikovo ulice – K4) in sicer:

- Varianta 1: Križišče K1 je urejeno kot izven nivojsko, torej sestavljeno je iz dveh trikrakih semaforiziranih križišč in povezovalno cesto med njima. Cesta do Šolskega centra poteka v nadvozu nad novo obvoznico Šmihela in železniško progo.



- Varianta 2: Križišče K1 je urejeno kot izven nivojsko, torej sestavljeno je iz dveh trikrakih križišč in povezovalne ceste med njima. Križišče nove obvoznice Šmihela in povezovalne ceste se uredi v smislu trikrakega krožnega križišča, križišče ceste za Šmihel (od Šolskega centra NM), podaljška Smrečnikove in povezovalne ceste med obema križiščema pa se uredi kot trikrako semaforizirano križišče.



- Varianta 3: Križišče K1 je urejeno kot izven nivojsko, torej sestavljeno je iz dveh trikrakih križišč in povezovalne ceste med njima. Križišče nove obvoznice Šmihela in povezovalne ceste se uredi v smislu trikrakega krožnega križišča, križišče ceste za Šmihel (od Šolskega centra NM), podaljška Smrečnikove in povezovalne ceste med obema križiščema pa se uredi kot trikrako semaforizirano križišče. S tem da se spremeni geometrija in sicer se poudari glavno smer od krožnega križišča na novi obvoznici Šmihela do obstoječega križišča na stari Šmihelski (križišče K4). Cesta do Šolskega centra se priključi pravokotno.



- Varianta 4: Križišče K1 je urejeno kot štirikrako krožno križišče. Cesta do Šolskega centra poteka v podvozu pod železniško progo.



Predpostavili smo, da v letu 2015 (takoj po izgradnji), še ne bo zgrajen del celotnega projekta oziroma še ne bo zgrajena cesta za Drsko - povezovalna lokalna cesta ob zahodni strani Šolskega centra NM.

Ostala križišča, ki so v obeh variantah enaka, imajo naslednjo geometrijsko obliko:

- K2 kot štirikrako enopasovno krožno križišče z enim uvoznim ter izvoznim pasom na vsakem kraku; dva kraka predstavlja nova obvoznica Šmihela, en krak novogradnja cesta za Drsko, povezovalna lokalna cesta ob zahodni strani Šolskega centra NM do Ulice Slavka Gruma, ter en krak priključek do romskega naselja Šmihel,
- K3 kot trikrako nesemaforizirano križišče, brez posebnih pasov za zavijalce, Ulice Slavka Gruma s cesto za Drsko, novo povezovalno lokalno cesto ob zahodni strani Šolskega centra NM,
- K4 kot štirikrako semaforizirano križišče, brez posebnih pasov za zavijalce, obstoječe Šmihelske ceste s Smrečnikovo ulico in novo povezovalno cesto do križišča K1 (podaljškom Smrečnikove ulice),
- K5 kot trikrako krožno križišče z enim uvoznim ter izvoznim pasom na vsakem kraku; vzhodni krak predstavlja cesto za Šmihel, severozahodni krak obstoječo

cesto mimo Šolskega centra NM (Šegovo ulico), ki se bo v bodoče zaprla na severni strani Šolskega centra, in južni krak priključek za OŠ Dragotina Ketteja.

Podrobno so geometrijski elementi križišč prikazani v poglavju T.4 Kapacitetna analiza križišč.

Študija vsebuje naslednje korake:

- pridobivanje podatkov o obstoječem stanju cest in prometa,
- pridobivanje podatkov o predvideni rekonstrukciji in novem poteku dela Šmihelske ceste,
- pridobivanje prometnih obremenitev za plansko dobo,
- opis metodologije,
- kapacitetna analiza ključnih križišč takoj po izgradnji,
- kapacitetna analiza ključnih križišč ob koncu planske dobe,
- primerjava rezultatov analize ter vodenja prometa na celotnem obravnavanem območju,
- predlog optimalne rešitve ter določitev ukrepov.

Za kapacitetno analizo ključnih križišč (nivo uslug, izračun prepustnosti, dolžine kolon, dolžina zamud, število ustavljanj,...) v obeh koničnih urah (jutranja in popoldanska) smo uporabili metodologijo, ki jo priznava Direkcija RS za ceste. Uporabili smo računalniški program Synchro/Simtraffic.

T.2 PROMETNO DIMENZIONIRANJE - METODOLOGIJA

Vsi kapacitetni izračuni oziroma preveritve križišč so narejeni po metodologiji HCM (Highway Capacity Manual), ki jo priznava in predpisuje tudi Direkcija RS za ceste za semaforizirana in nesemaforizirana križišča in je določena s Pravilnikom o projektiranju cest (Ur.l. RS, št. 91/2005, Ur.l. RS, št. 26/2006, 109/2010-ZCes-1) ter Pravilnikom o cestnih priključkih na javne ceste (Ur.l. RS, št. 86/2010, Ur.l. RS, št. 109/2010-ZCes-1). Vsi izračuni in pomembnejši parametri (geometrija križišča, merodajne prometne obremenitve, zamude in nivo uslug - NU, dolžine kolon) so zaradi preglednosti dokumentirani in prikazani grafično. Vhodni podatki po smereh so organizirani glede na orientacijo in geometrijo križišča v prostoru.

Uporabljena metodologija HCM je primerljiva z metodologijo, ki je podana v Tehničnih normativih za projektiranje in opremo mestnih prometnih površin (FGG-PTI, poglavje Kriterij prometnih obremenitev, 1991). Poleg navedenega kriterija so upoštevane še dodatne zakonitosti prometnega toka, ki vplivajo na prepustnost križišča. Upoštevana je dejanska omejitev hitrosti, upoštevani so faktorji urnih konic, pridobljeni na osnovi štetij prometa v predhodnih študijah. Obravnavana geometrija posameznega križišča je prikazana na shemah ob izračunih posameznih variantah.

Za analizo prepustnosti in/ali dimenzioniranje križišč so pomembni sledeči parametri oziroma izračuni, ki so v nadaljevanju predstavljeni tudi grafično:

- predvidene prometne obremenitve - EOV/h ali voz/h,
- nivo uslug (NU) v odvisnosti od zamud in stopnje nasičenosti,
- število vozil v koloni in s tem zajezitvena dolžina v posamezni smeri,
- povprečna zamuda na vozilo (sekund/vozilo) v posamezni smeri in
- fazno zaporedje na semaforiziranih križiščih.

Za uspešnost delovanja križišča sta pomembna dva kriterija: kriterij prometnih obremenitev (kapaciteta), ki je izražen s stopnjo nasičenosti X = V/C, in kriterij čakalnih časov, ki je izražen s povprečnimi zamudami na vozilo. Merila so t.i. nivoji uslug v posameznih smereh.

Na nesemaforiziranih križiščih sta kapaciteta in čakalni časi na voznih pasovih neprednostnih priključkov odvisna od tega, koliko zadostnih časovnih razmikov med vozili na prednostnih smereh lahko izkoristijo vozila iz neprednostnih smeri, da izvršijo želeno prometno akcijo vključevanja ali prečkanja prometnega toka. Ob koncu planske

dobe je še zadovoljiva stopnja nasičenosti X = 0,85, ko je dosežen kriterij prometnih obremenitev. Čakalni časi oziroma konični NU pa je lahko "E" (povezovalna cesta), ko je dosežen kriterij čakalnih časov. V primeru NU = "F" je potrebno izvesti ustrezne ukrepe za povečanje uspešnosti in/ali kapacitete križišča (razširitev, semaforizacija, idr.) že pred iztekom planske dobe.

Kriterij čakalnih časov po HCM 2000 je prikazan v preglednici 1.

Preglednica 1: Kriterij čakalnih časov

	Zamude na vozilo, d [s]	
Nivo uslug (NU)	Semaforizirana in krožna križišča	Nesemaforizirana križišča
A	d <=10	d <= 10
B	10 < d <= 20	10 < d <= 15
C	20 < d <= 35	15 < d <= 25
D	35 < d <= 55	25 < d <= 35
E	55 < d <= 80	35 < d <= 50
F	80 < d	50 < d

Projektni elementi na križiščih so prikazani shematično.



Slika 3: Obstoječe trikrako nesemaforizirano križišče Šmihelske ceste in Smrečnikove ulice

T.3 VHODNI PODATKI

T.3.1 Predvidene prometne obremenitve

Za napoved prometnih obremenitev na novo predvidenem poteku dela Šmihelske ceste – obvoznice Šmihela in priključnih cest je bil uporabljen modificiran prometni model, ki ga je v prometni študiji za državni prostorski načrt 3. razvojne osi uporabil Omega Consult d.o.o.. Omenjani model poleg napovedi PLDP, omogoča tudi napoved prometnih obremenitev v prometnih konicah, ki so potrebne za kapacitetno preveritev križišč. Model upošteva tudi vse predvidene spremembe cestnega omrežja in namenske rabe površin v bližjem in širšem vplivnem območju.

Napoved prometnih obremenitev je bila narejena za leto 2015 (takoj po izgradnji) in za leto 2035 (planska doba).

Prometne obremenitve za vsako od variant in za obe konici so prikazane shematsko pri kapacitetni analizi.

T.3.2 Merodajna prometna obremenitev za kapacitetno analizo

T.3.2.1 Splošni pogoji za ugotavljanje prometne obremenitve

Merodajna prometna obremenitev je izražena ali kot število vozil na uro ali kot število enot osebnih vozil na uro (EOV/h). Upoštevan je ustrezen faktor konične ure (FKU), ki predstavlja nihanje prometnega toka znotraj konične ure. Faktor konične ure je po navadi za vsa obravnavana križišča po posameznih smereh izračunan iz podatkov ročnega štetja prometa. V našem primeru smo prometne obremenitve pridobili s pomočjo makroskopskega modela, kjer ni podatka FKU.

Za ceste z delno oviranim prometnim tokom znaša vrednost FKU od 0,80 do 0,95. Nižje vrednosti so značilne za izven mestne ceste in pomenijo velika nihanja pretoka znotraj konične ure. Višje vrednosti so značilne za obmestne in mestne ceste in govorijo o visokih prometnih volumnih.

Predpostavili smo, glede na velikost prometnih obremenitev in izkušenj iz podobnih študij, da bodo vrednosti FKU približno 0,90 na vseh posameznih smereh novih križišč.

Delež težkih vozil (tovorna vozila in avtobusi skupaj) oziroma struktura prometa je upoštevan kot odstotek vseh vozil na posamezni smeri.
Merodajne prometne obremenitve za vsako konično uro in varianto so shematično prikazane v nadaljevanju oziroma pri kapacitetni analizi križišč.



Slika 4: Obstoječ nivojski prehod – povezava do Šolskega centra Novo mesto

T.4 KAPACITETNA ANALIZA KRIŽIŠČ

V študiji smo s programskim orodjem Synchro/SimTraffic kapacitetno preverili pet križišč na trasi obvoznice Šmihel oziroma na priključnih krakih, kjer bodo povezave z obstoječo cestno mrežo.

Opravili smo kapacitetno analizo vseh štirih variant za jutranjo in popoldansko konico za izhodiščno leto 2015 (takoj po izgradnji) in za plansko leto 2035.

Pri kapacitetni analizi križišč v letu 2015 (takoj po izgradnji) smo upoštevali dejstvo, da verjetno še ne bo zgrajena povezovalna lokalna cesta ob zahodni strani Šolskega centra NM – cesta za Drsko. Prav tako v letu 2015 še ne bo zgrajenega nobenega odseka obvoznih cest Novega mesta v sklopu 3. razvojne osi.



Slika 5: Šmihelska cesta – neustrezne razmere za vse udeležence v prometu

T.4.1 Kapacitetna analiza Variante 1, leto 2015

Varianta 1 predvideva ureditev križišča K1 (obvoznica Šmihela, cesta za Šmihel - nadvoz nad železnico do Šolskega centra NM, podaljšek Smrečnikove) v smislu dveh trikrakih semaforiziranih križišč s povezovalno cesto (rampo) med njima. Obvoznica Šmihela bo potekala ob železnici, zato se cesta za Šmihel (povezava do Šolskega centra) izvede kot nadvoz.

Križišče K4 (obstoječa Šmihelska cesta, Smrečnikova ulica, podaljšek Smrečnikove) se semaforizira. Krmilni program semaforja se sinhronizira s semaforjema na obeh križiščih križanja K1.

Križišče K2 se predvidi kot štirikrako krožno križišče z zunanjim radijem 18,0m, s tem da četrti, severni krak do zgraditve ceste za Drsko (povezovalne lokalne ceste na zahodni strani Šolskega centra NM) do Ulice Slavka Gruma še ne bo v uporabi.

Križišče K5 se predvidi kot trikrako krožno križišče z zunanjim radijem 14,0m.

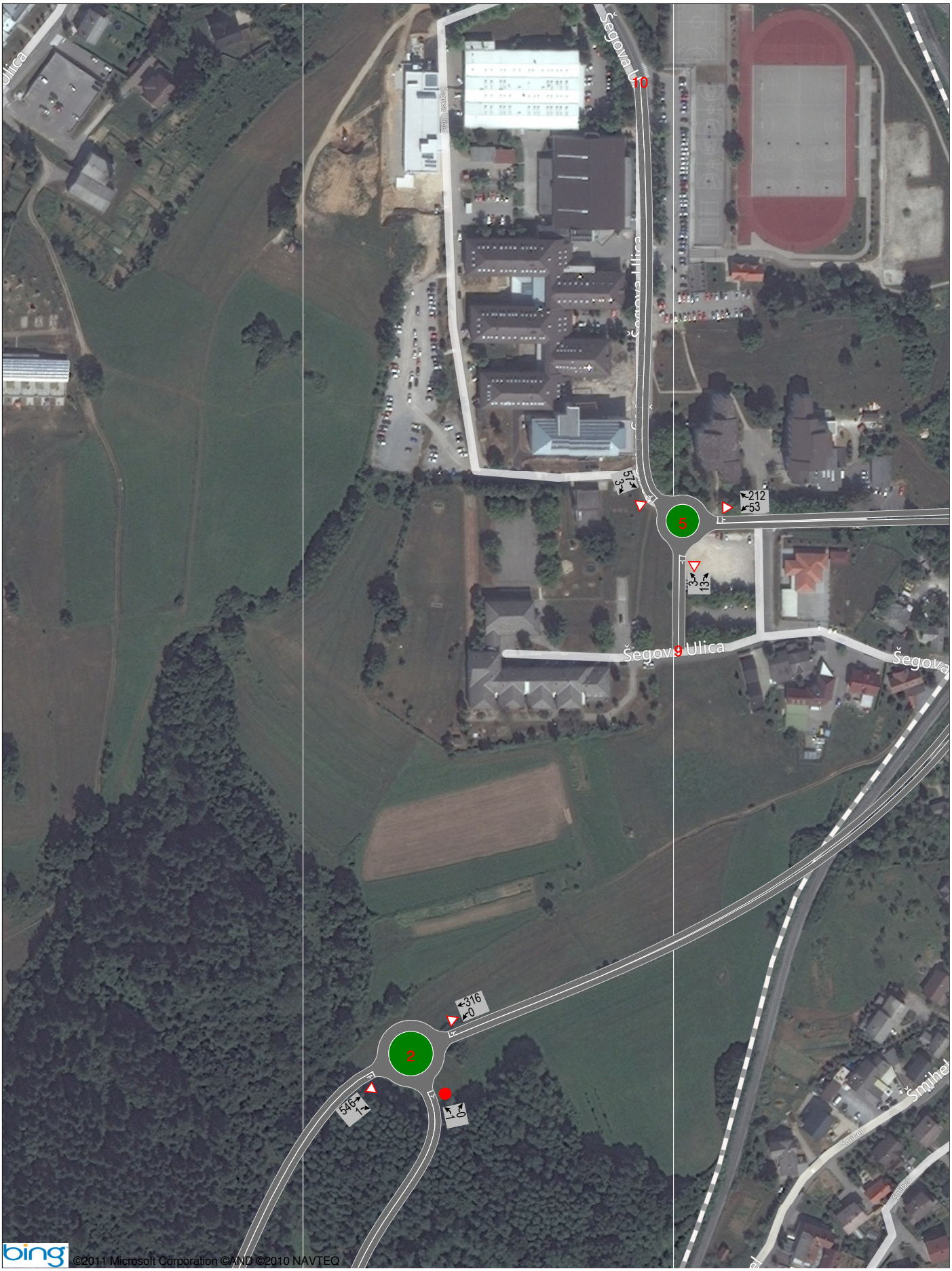
SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



Varianta 1 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



Varianta 1 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



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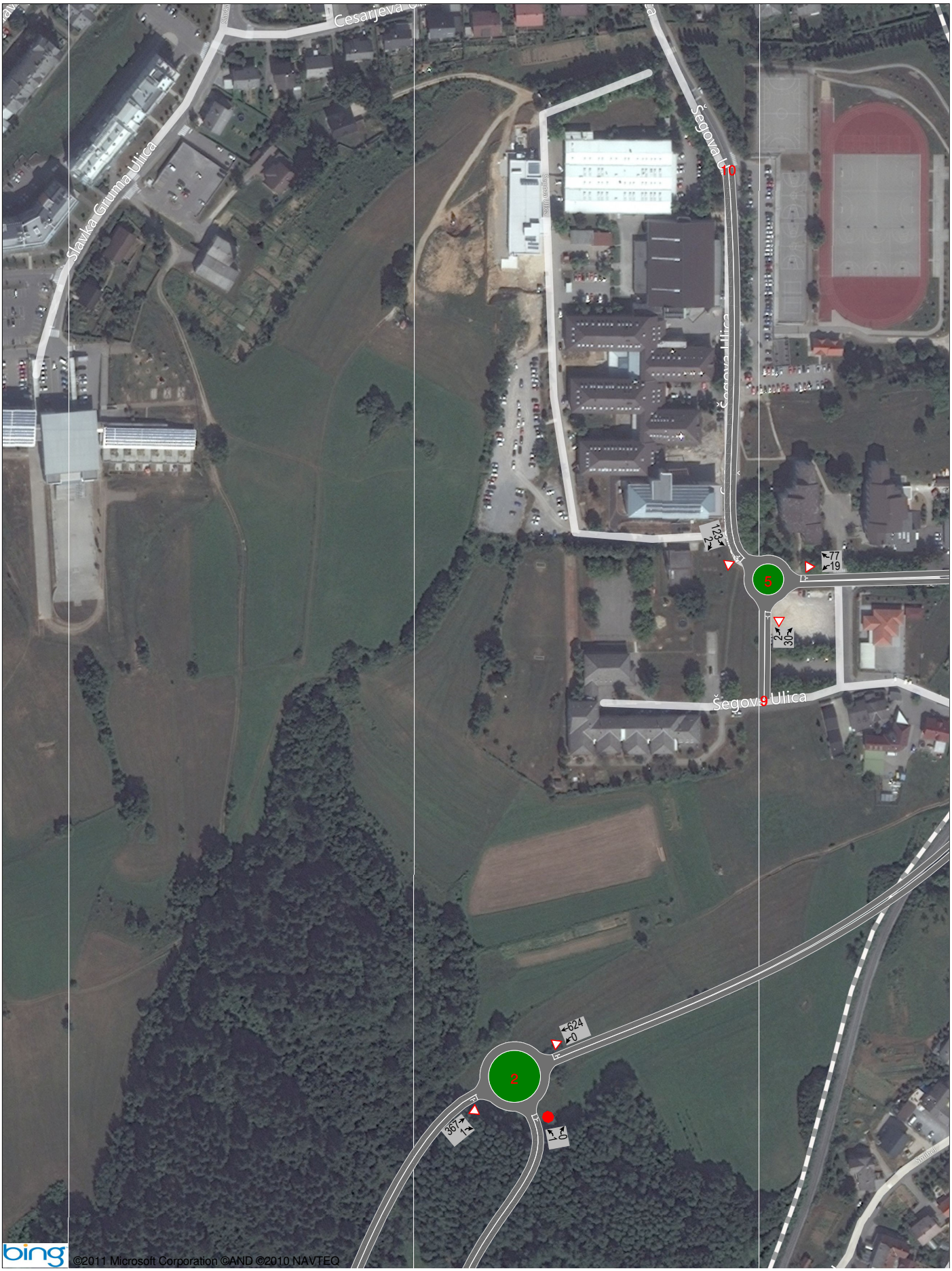
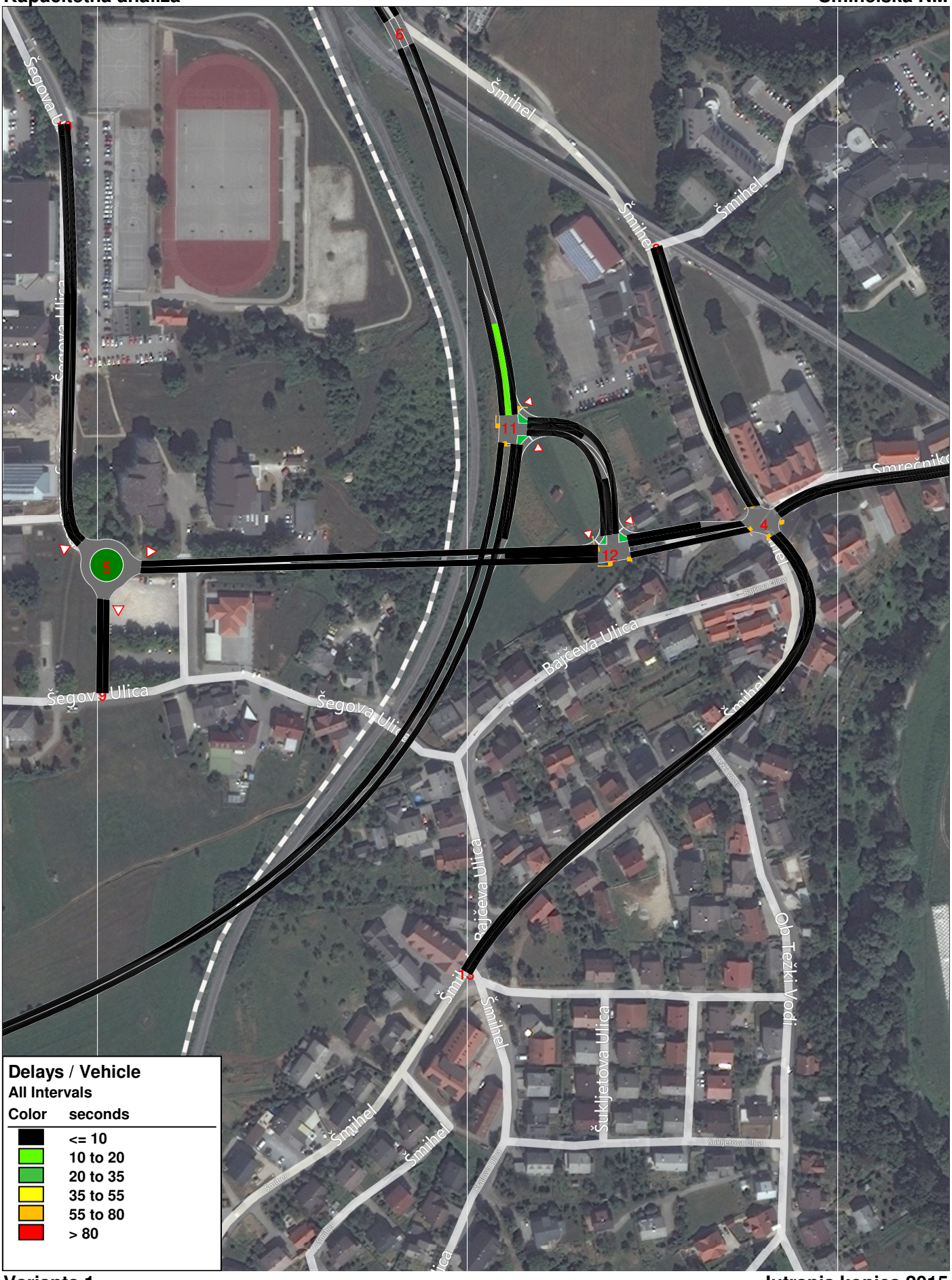
Varianta 1 **Popoldanska konica 2015**

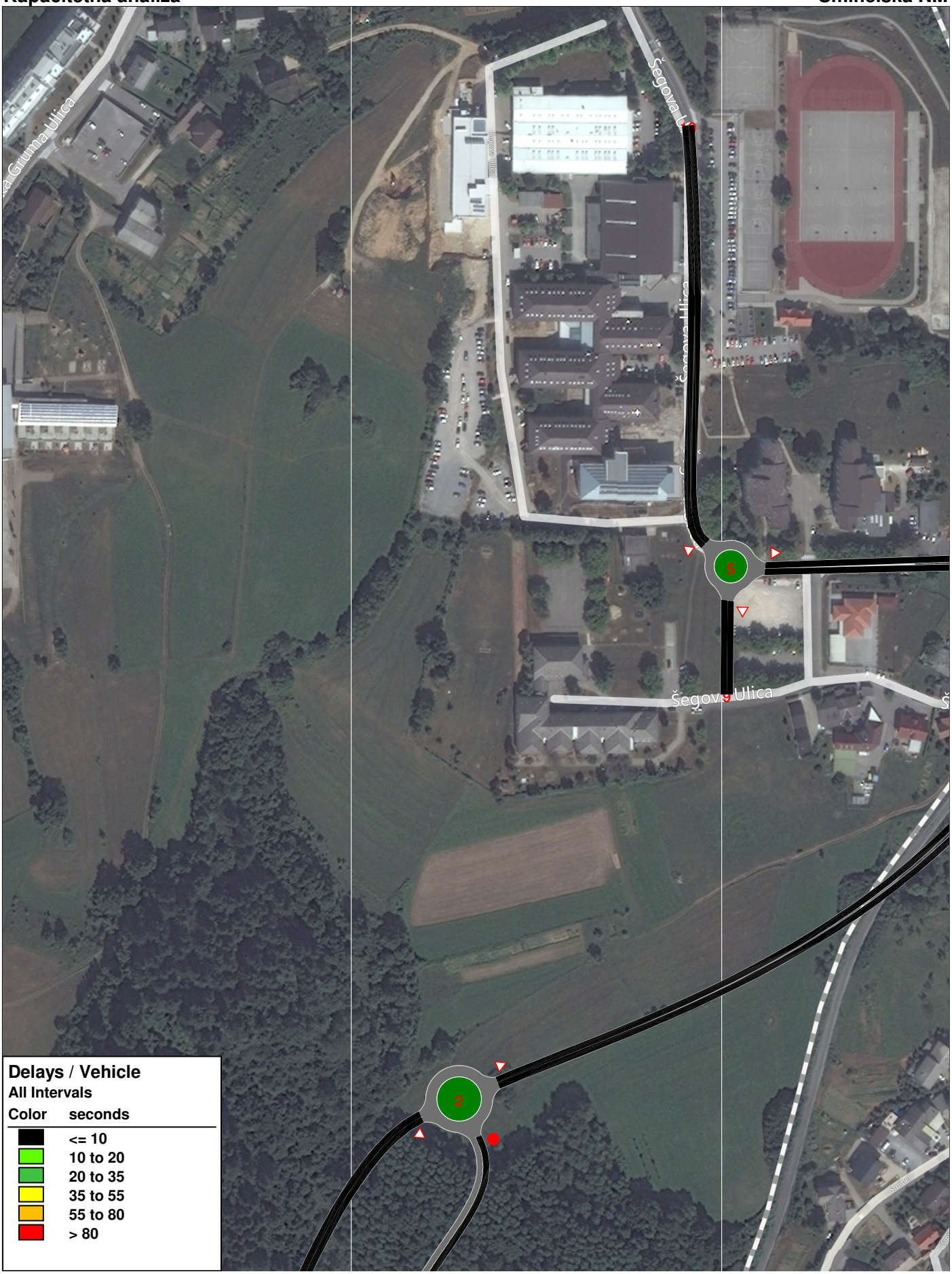
Prometne obremenitve **Smihelska NM**



Varianta 1 **Popoldanska konica 2015**

REZULTATI KAPACITETNE ANALIZE


Šegova Ulica
Šmihel
Bajčeva Ulica
Ob Težki Vodi
Šuklijetova Ulica
5
11
12
4
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šegova Ulica
Šegova Ulica
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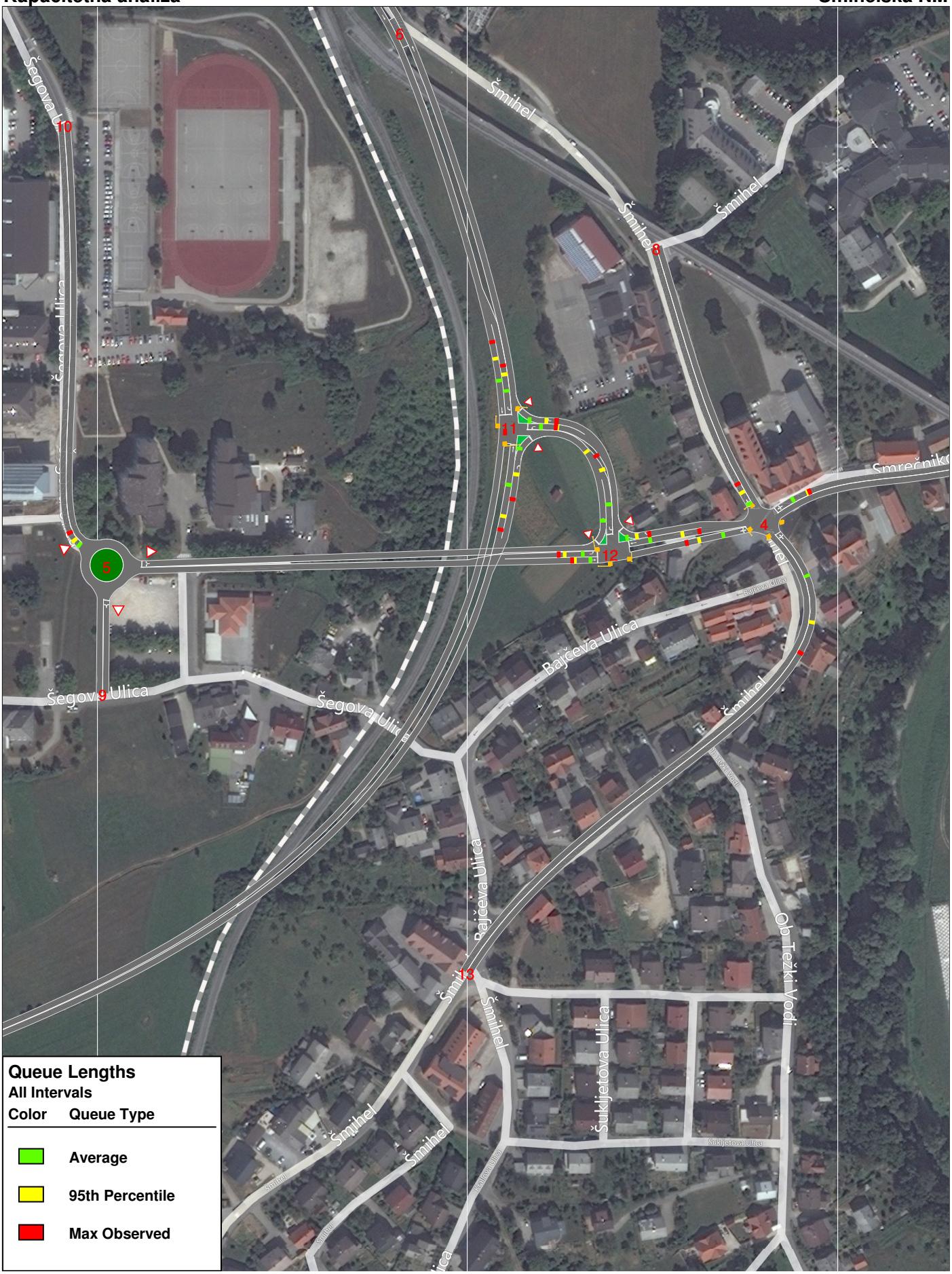
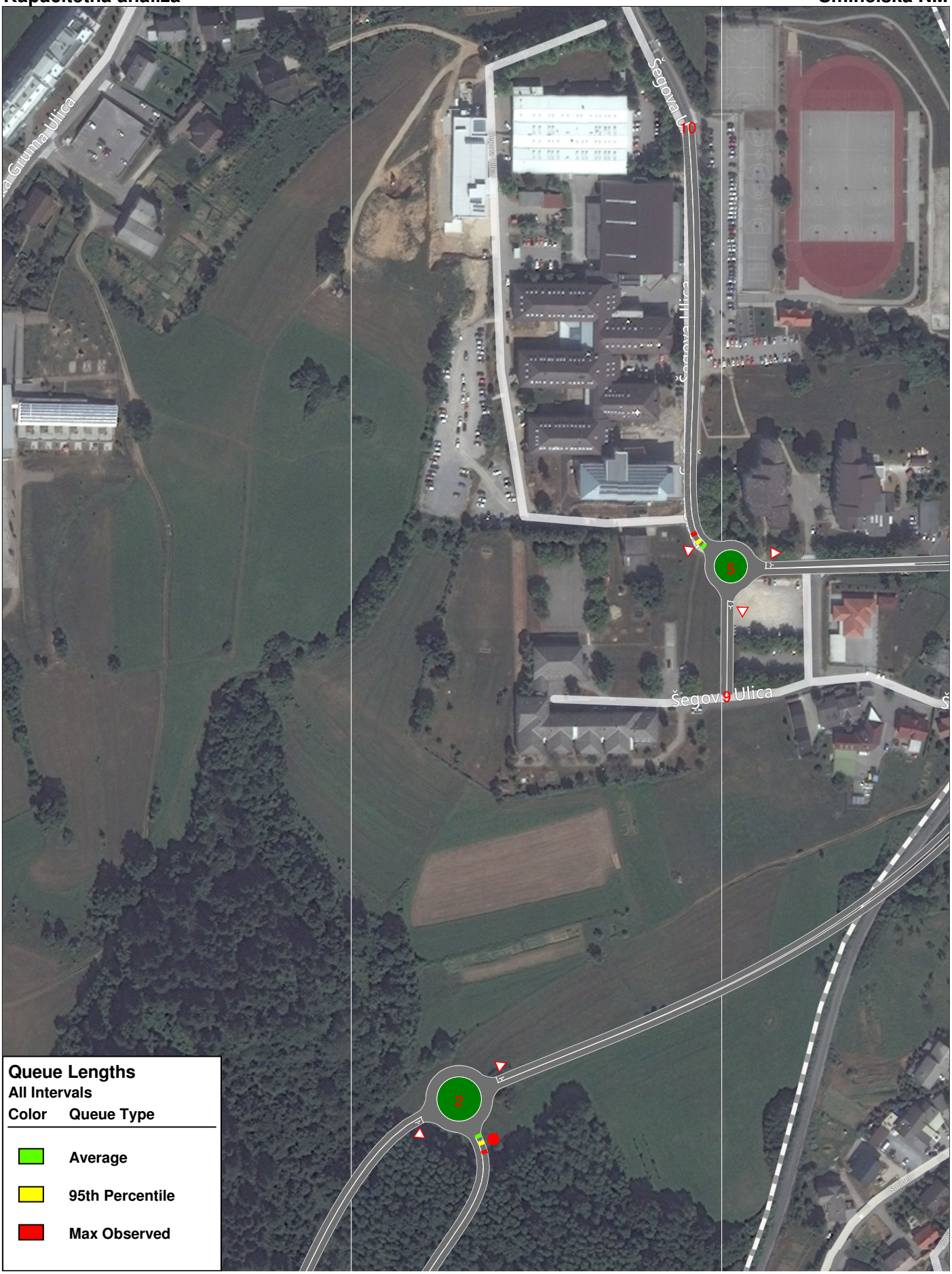
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šmihel
Bajčeva Ulica
Ob Težki Vodi
Šukljetova Ulica
10
6
8
11
4
12
5
9
13
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
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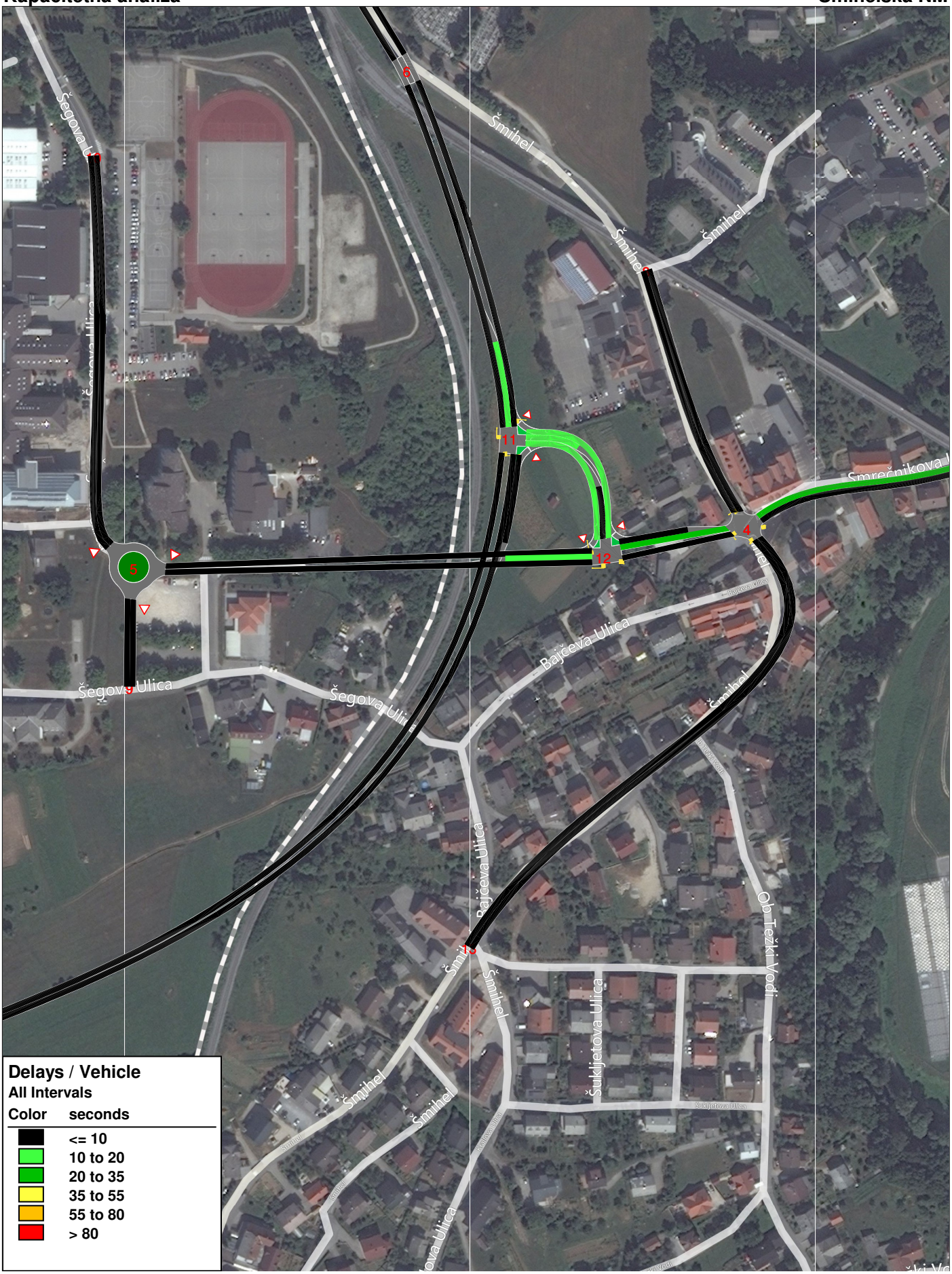
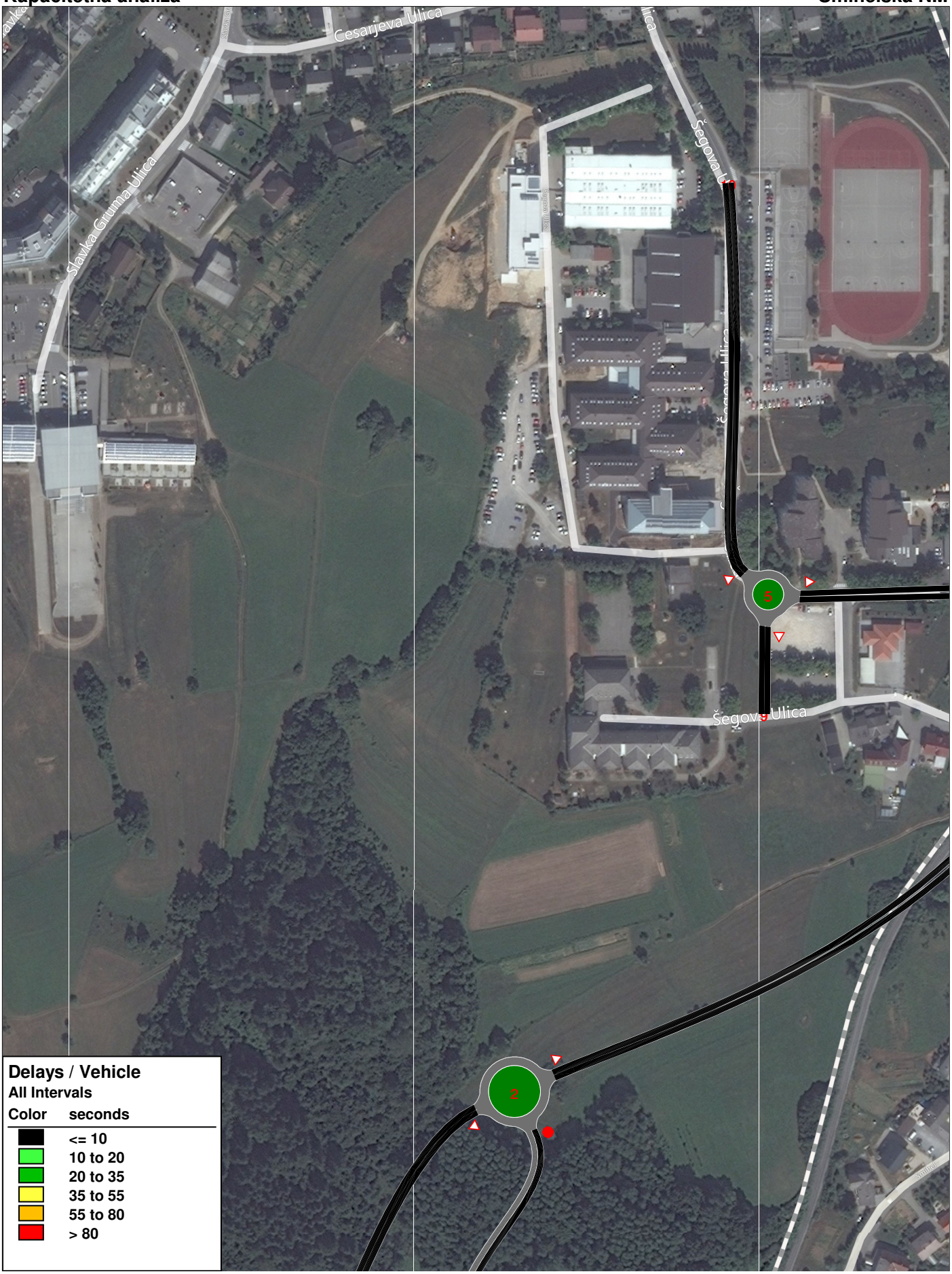
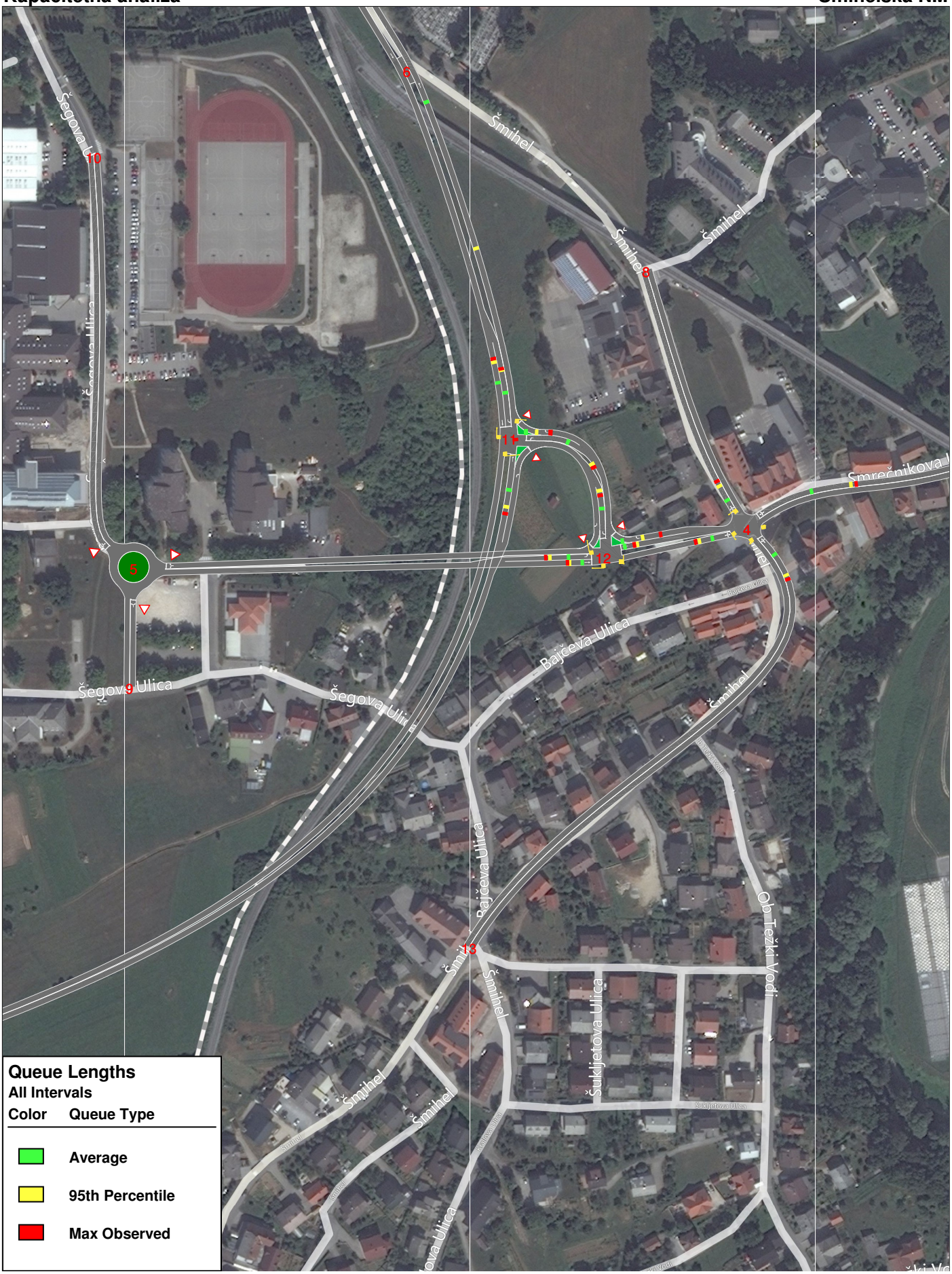
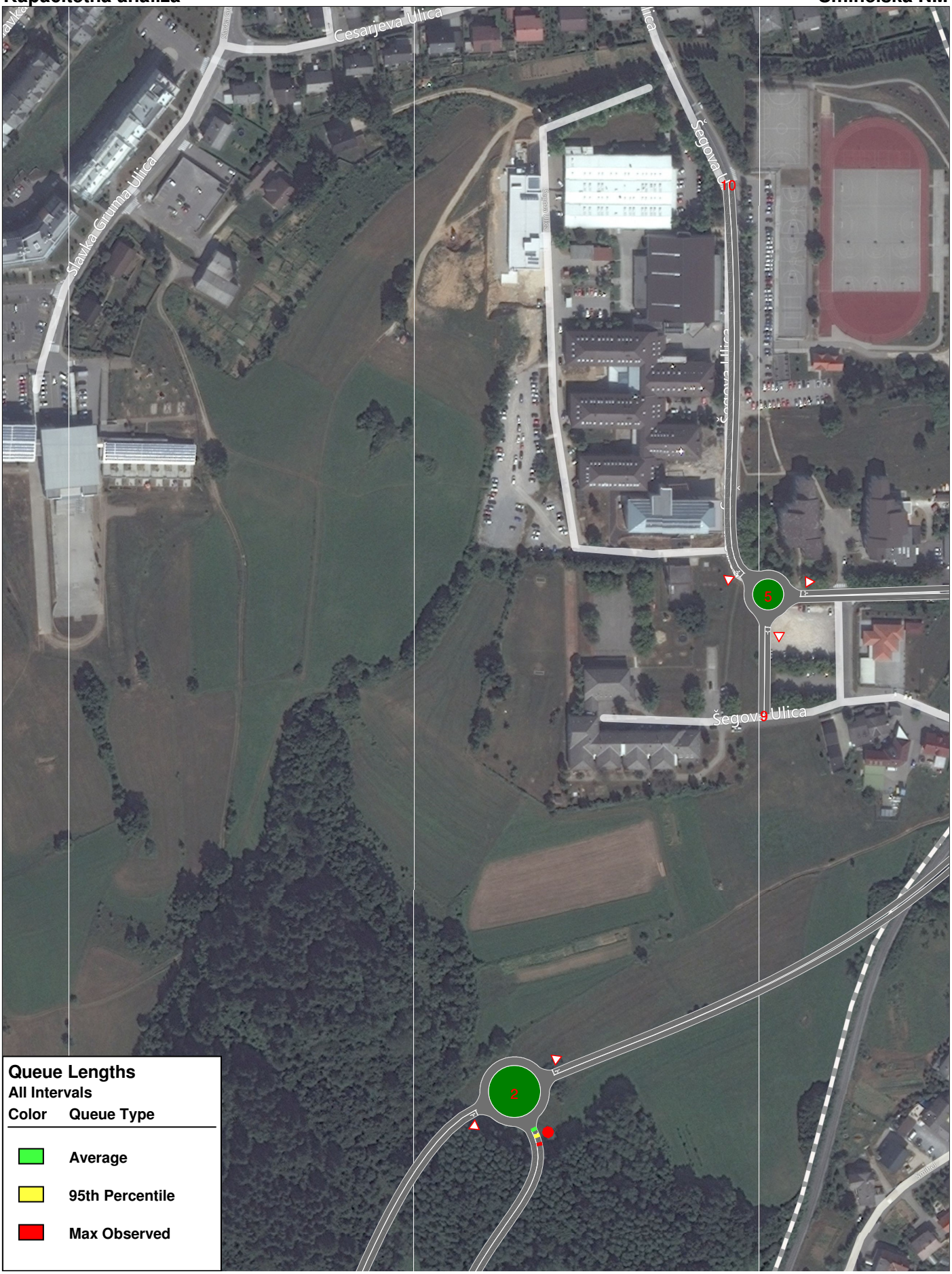
5
9
Šegova Ulica
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šmihel
Smrečnikova
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
5
6
11
12
4
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Cesarjeva Ulica
Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šegova Ulica
Šegova Ulica
Šmihel
Šmihel
Šmihel


Cesarjeva Ulica
Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
10
5
3
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

Kapacitetna analiza variante 1 je pokazala, da predvidene prometne obremenitve na novih in obstoječih križiščih v letu 2015 ne bodo povzročale problemov. Tako so zamude in kolone, izračunane s programskim orodjem Synchro/Simtraffic, dosti manjše od kritičnih vrednosti.

T.4.2 Kapacitetna analiza Variante 2, leto 2015

Varianta 1 predvideva ureditev križišča K1 (obvoznica Šmihela, cesta za Šmihel - nadvoz nad železnico do Šolskega centra NM, podaljšek Smrečnikove) v smislu dveh trikrakih križišč s povezovalno cesto (rampo) med njima. Križišče obvoznice Šmihela in povezovalne rampe se izvede kot trikrako krožno križišče z zunanjim radijem 18,0m. Križišče povezovalne rampe, ceste za Šmihel in podaljška Smrečnikove ulice pa se izvede kot trikrako semaforizirano križišče. Cesta za Šmihel (povezava do Šolskega centra) se izvede kot nadvoz.

Križišče K4 (obstoječa Šmihelska cesta, Smrečnikova ulica, podaljšek Smrečnikove) se semaforizira. Krmilni program semaforja se sinhronizira s semaforjem na križišču povezovalne rampe, ceste za Šmihel in podaljška Smrečnikove ulice.

Križišče K2 se predvidi kot štirikrako krožno križišče z zunanjim radijem 18,0m, s tem da četrti, severni krak do zgraditve ceste za Drsko (povezovalne lokalne ceste na zahodni strani Šolskega centra NM) do Ulice Slavka Gruma še ne bo v uporabi.

Križišče K5 se predvidi kot trikrako krožno križišče z zunanjim radijem 14,0m.

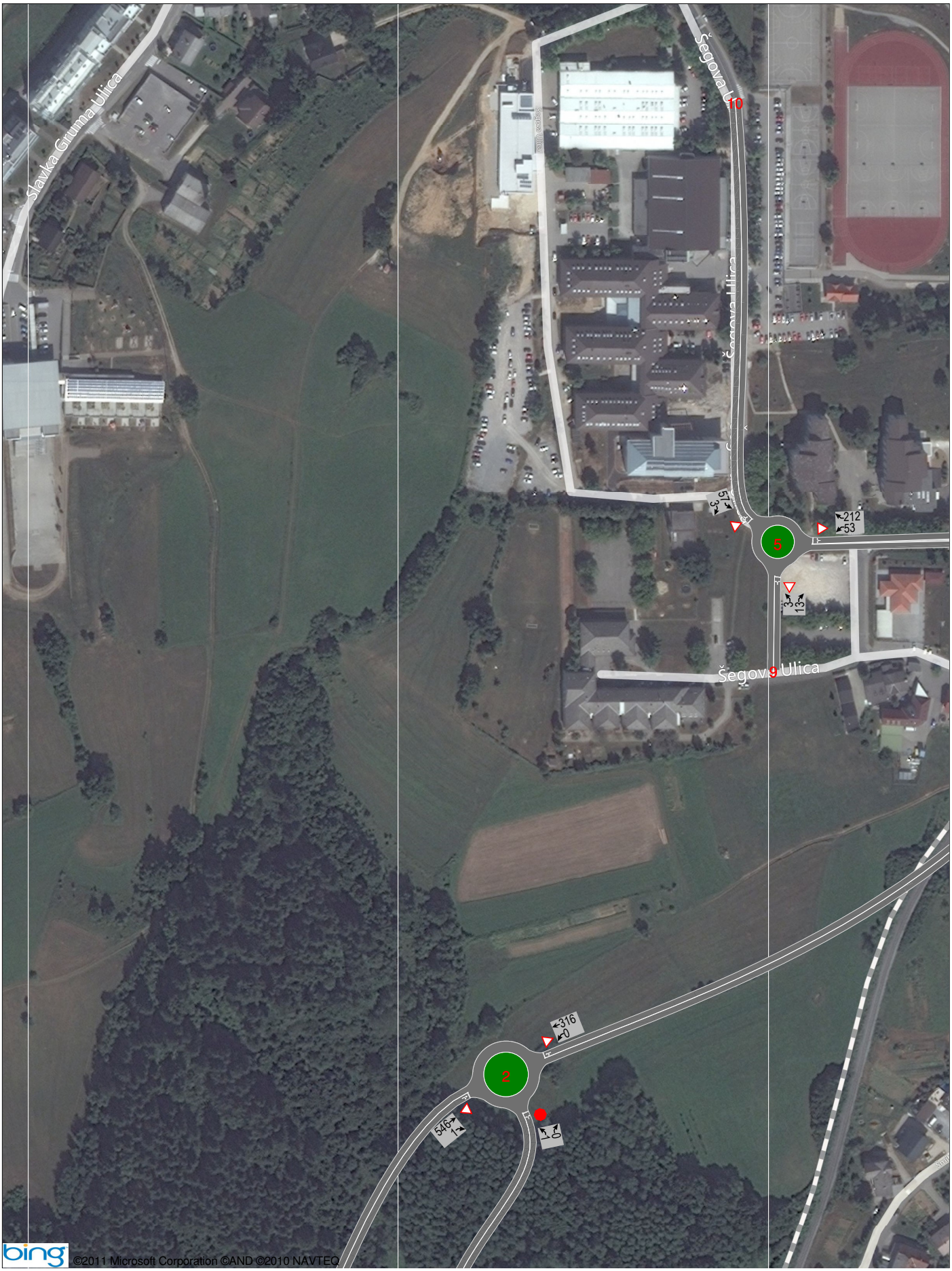
SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



Varianta 2 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



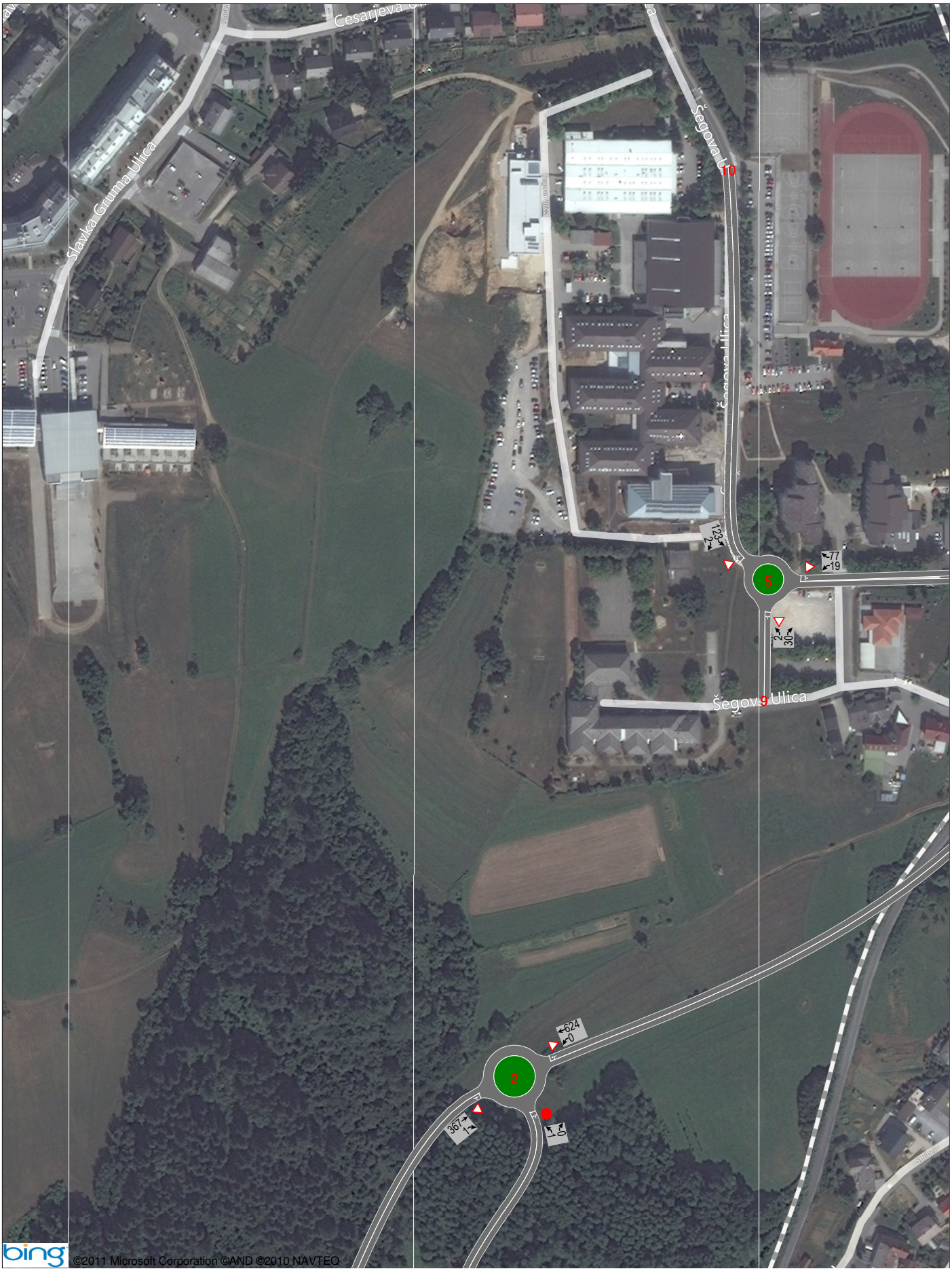
Varianta 2 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



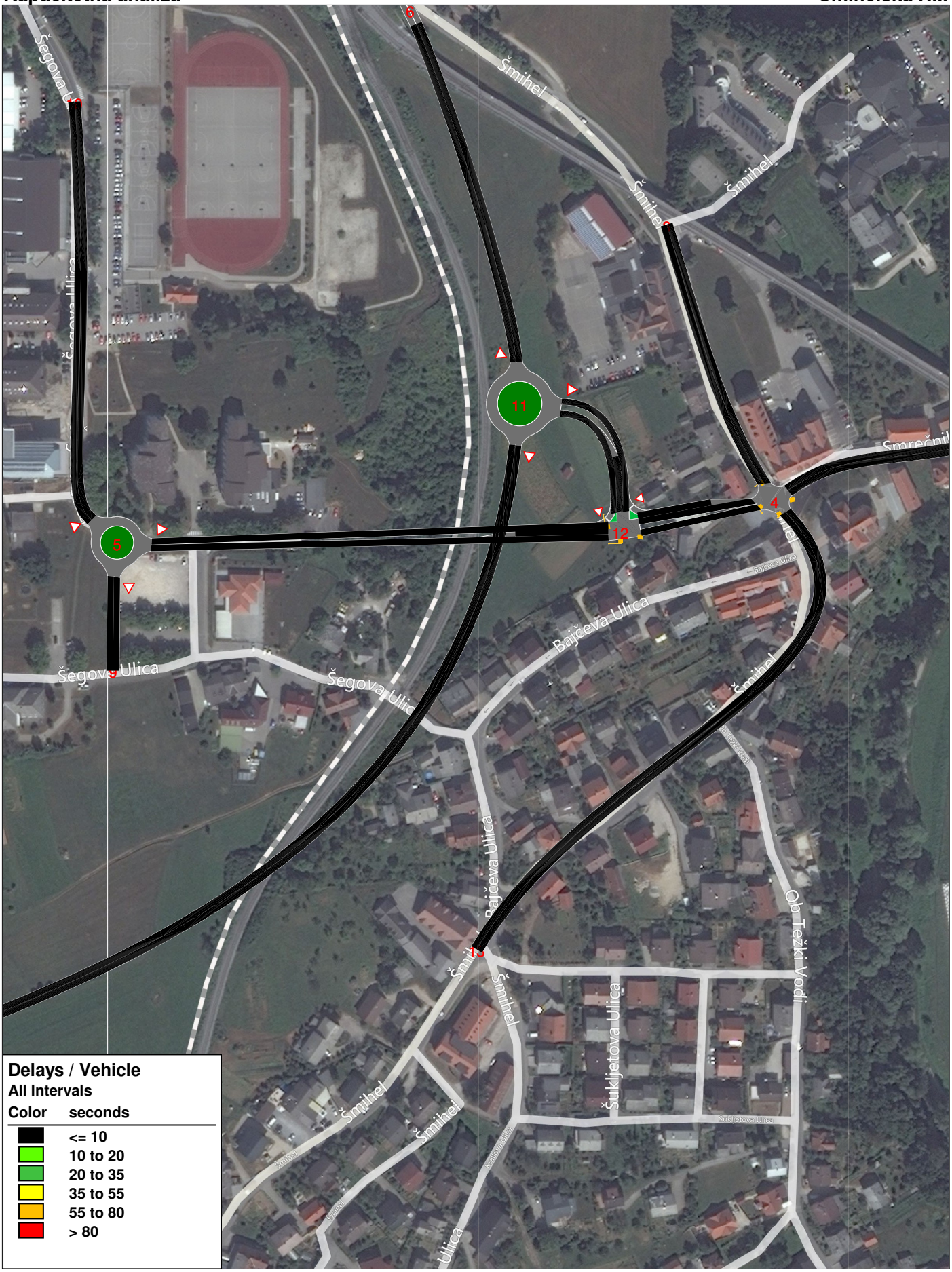
Varianta 2 **Popoldanska konica 2015**

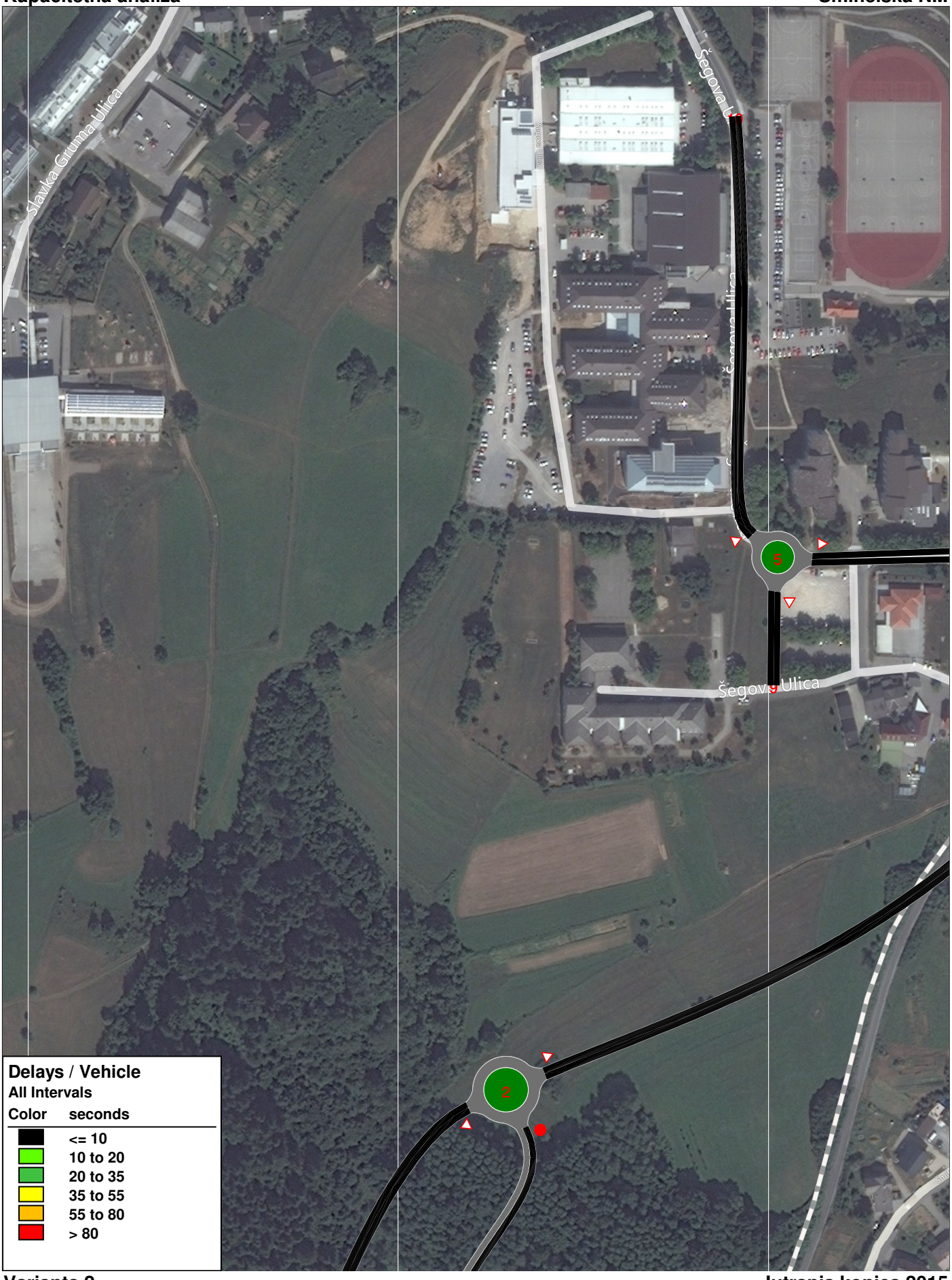
Prometne obremenitve **Smihelska NM**

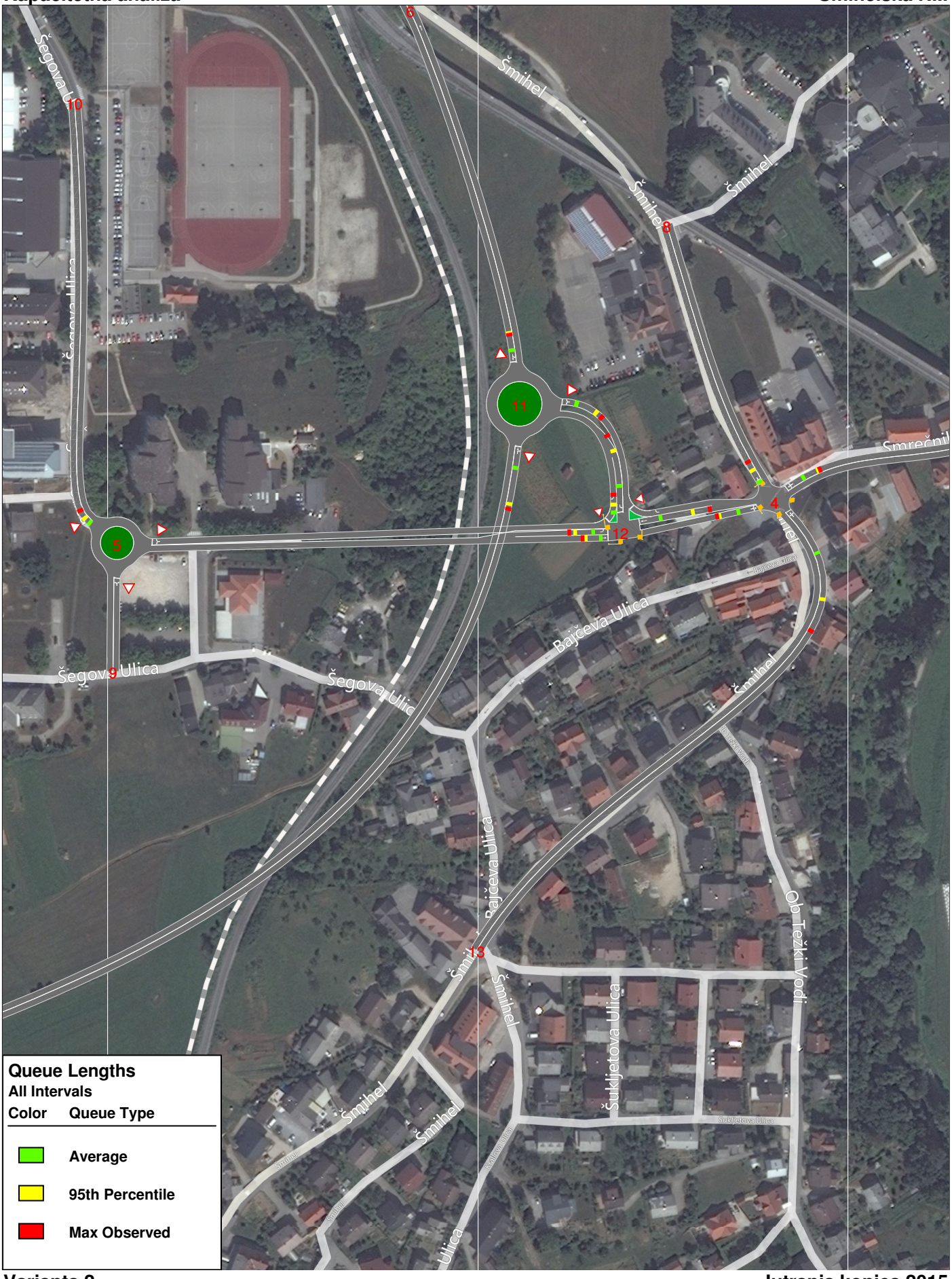


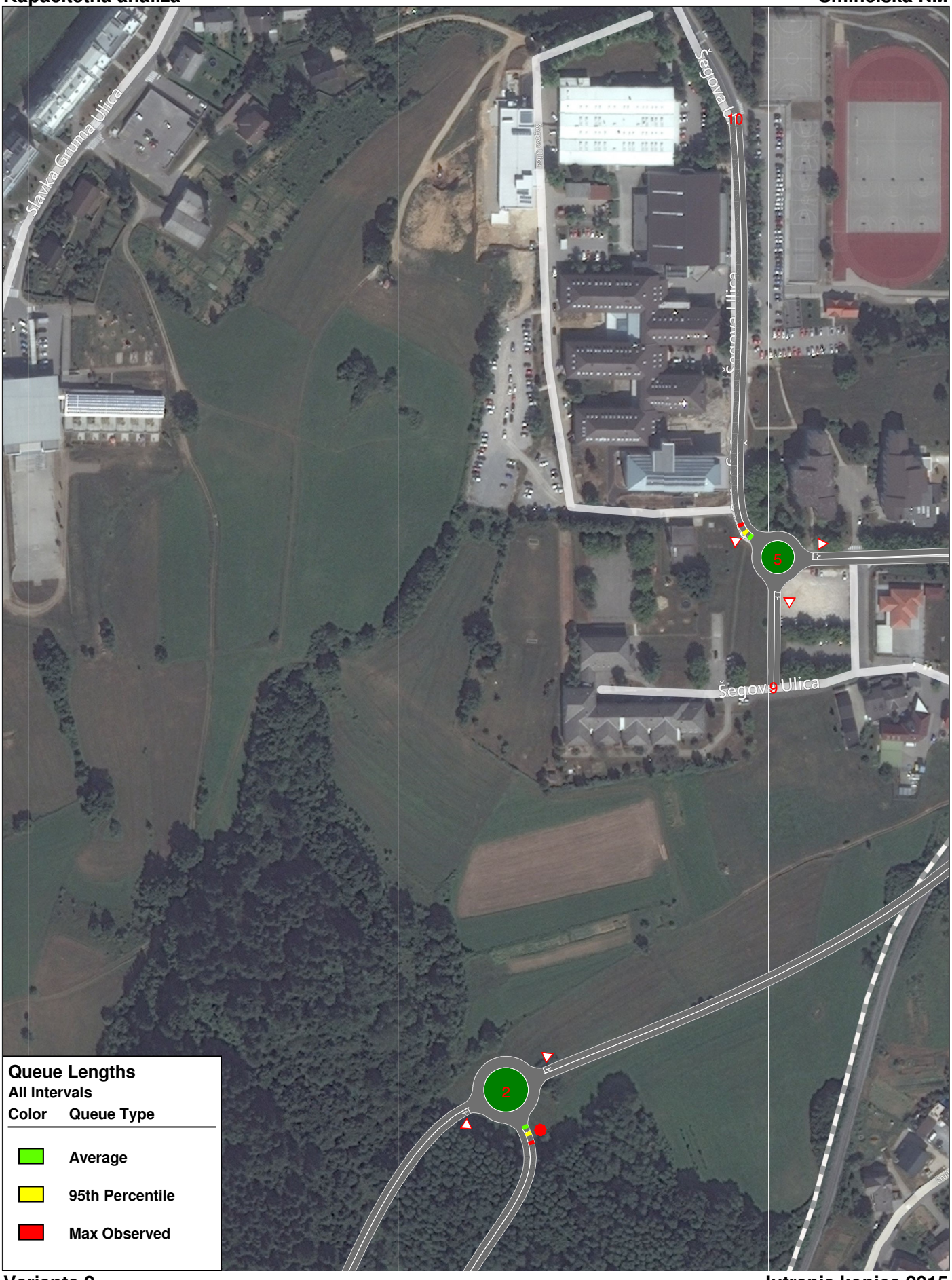
Varianta 2 **Popoldanska konica 2015**

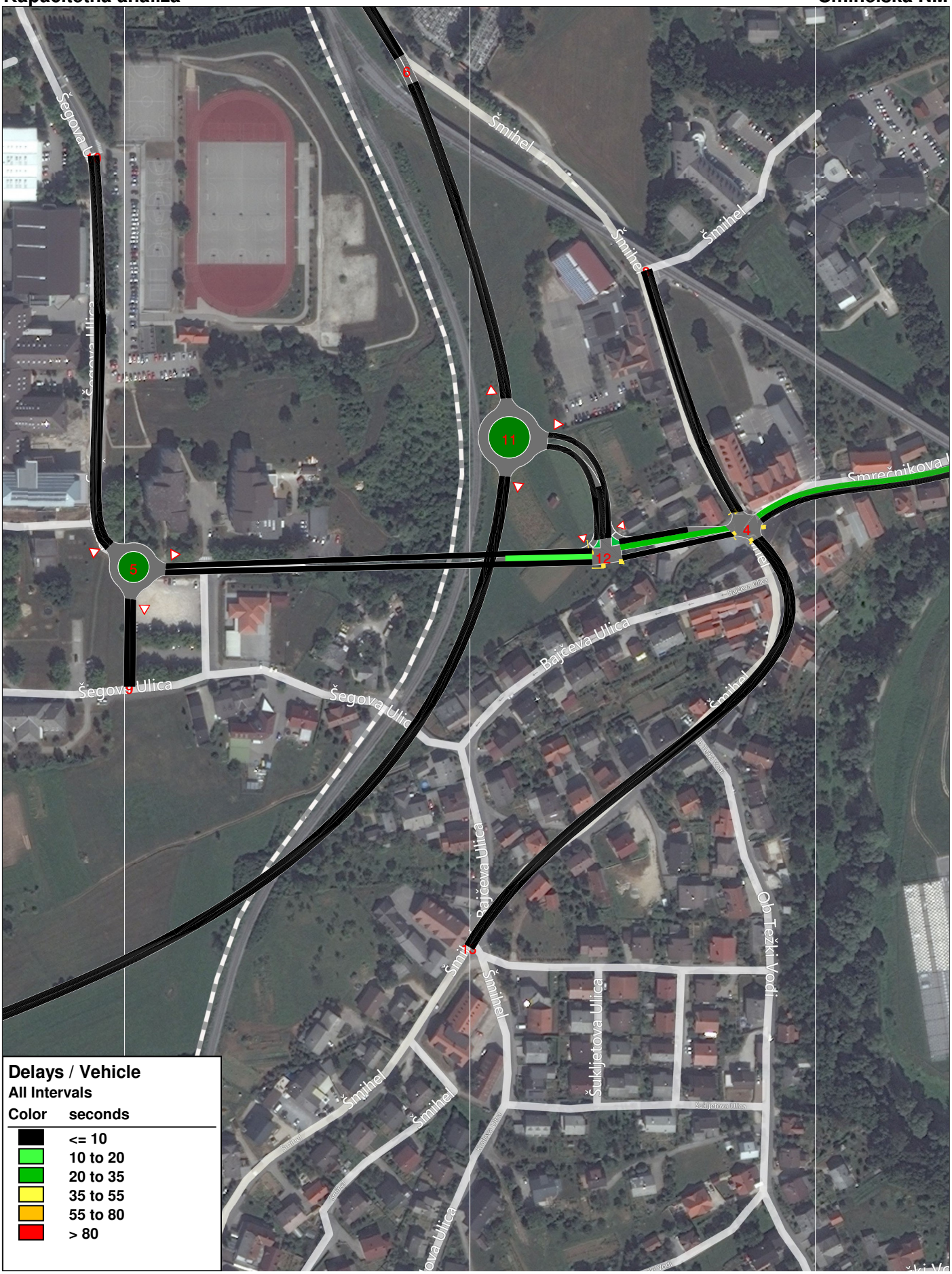
REZULTATI KAPACITETNE ANALIZE

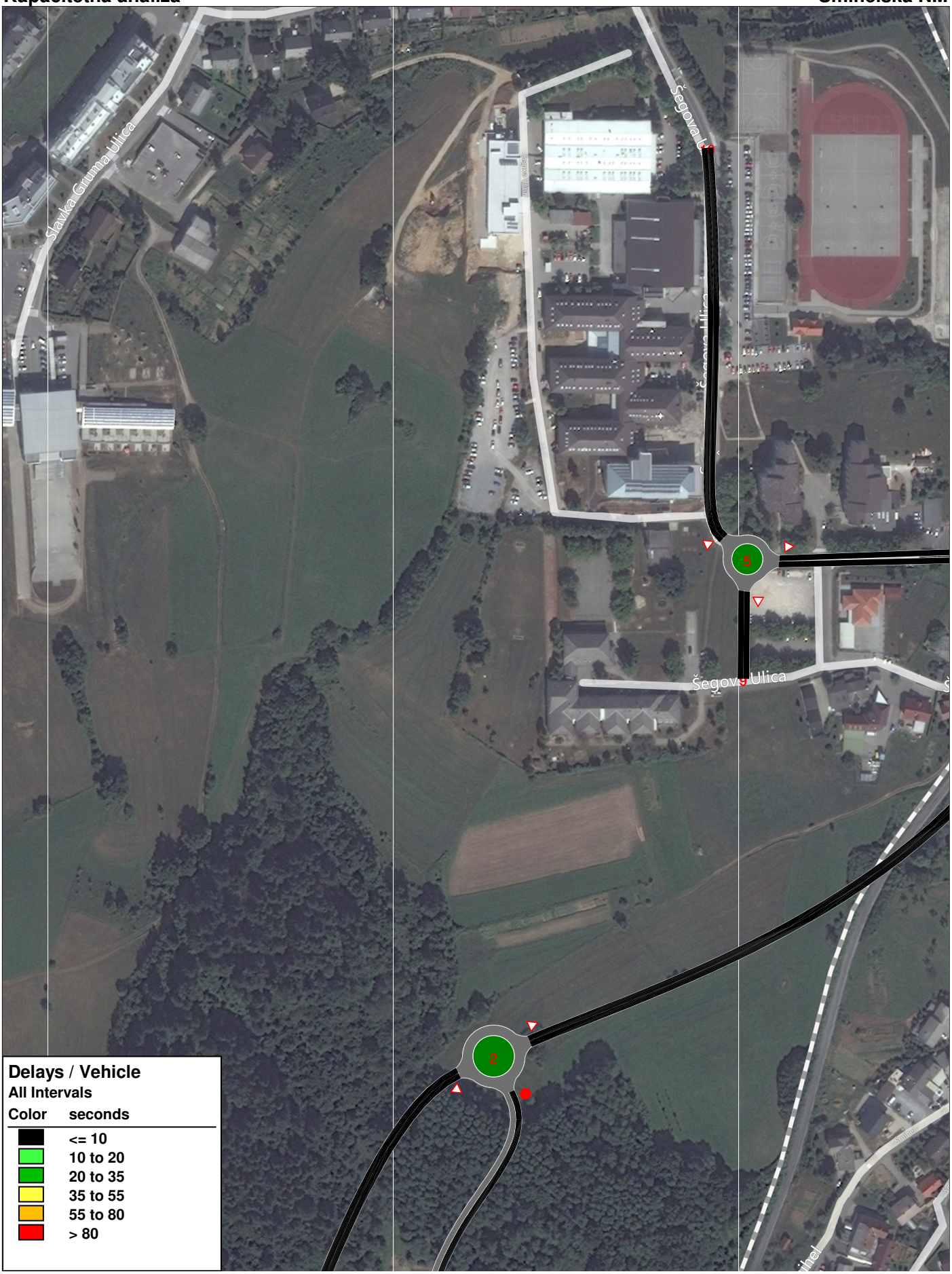

Šegova Ulica
Šmihel
Šmihel
Šmihel
Šegova Ulica
11
Smrečnik
4
12
5
Bajčeva Ulica
Bajčeva Ulica
Šegova Ulica
Šegova Ulica
Šmihel
Bajčeva Ulica
Ob Težki Vodi
Šmihel
Šmihel
Šuklijetova Ulica
Šmihel
Šmihel
Ulica
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80

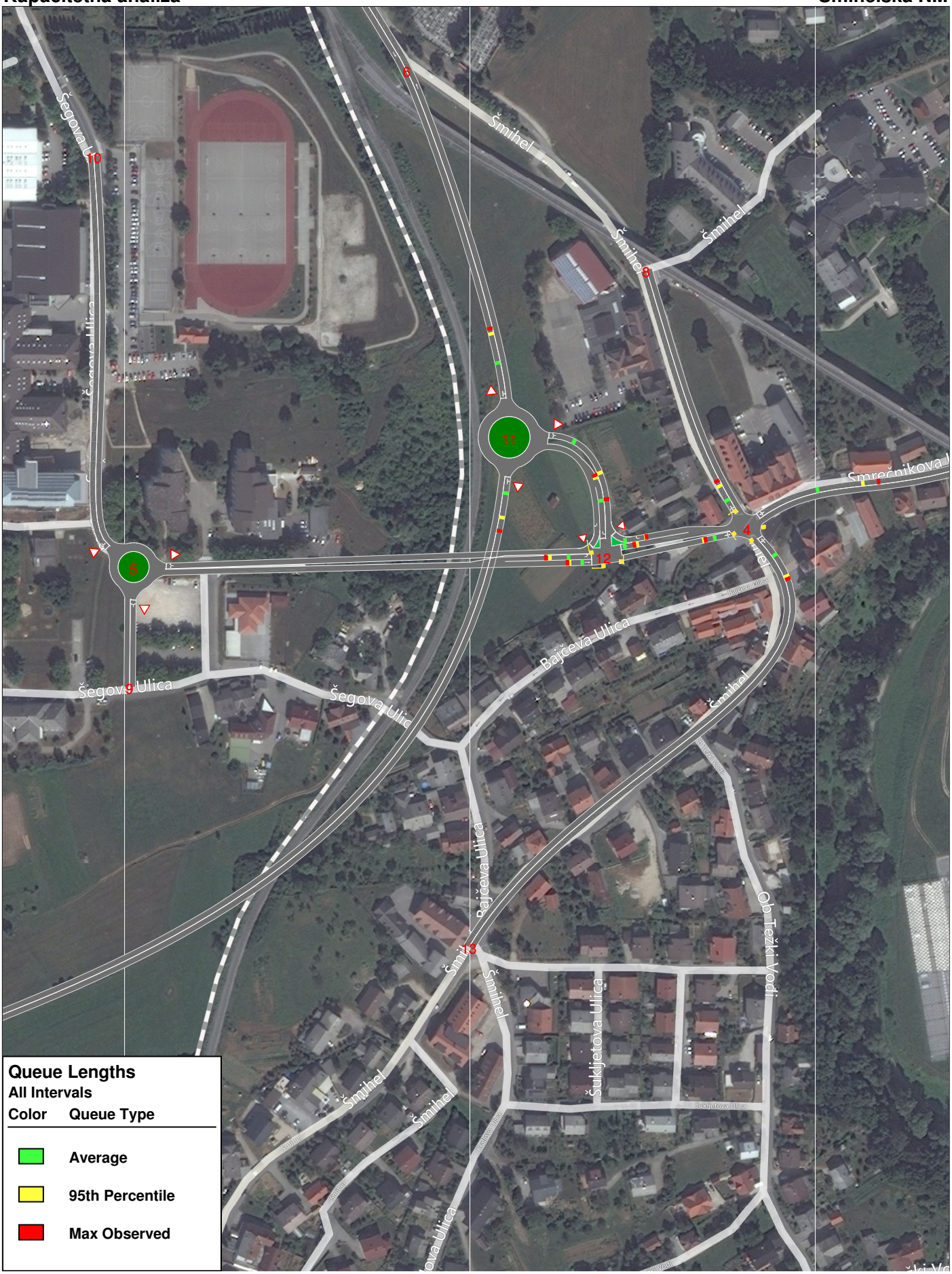

Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80

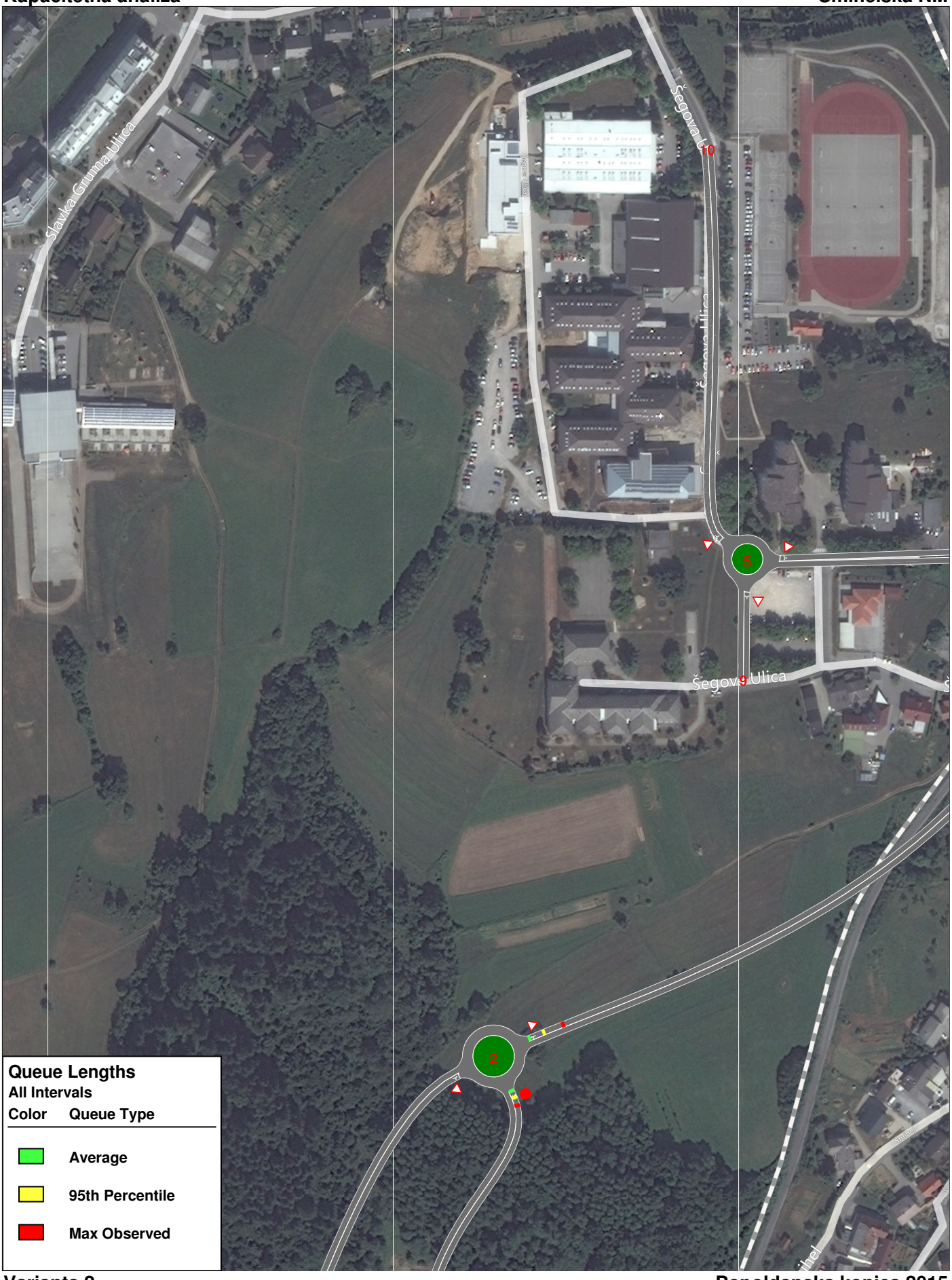

Šegova Ulica
10
6
Šmihel
Šmihel
Šmihel
8
11
Smrečnik
4
12
5
Šegova Ulica
9
Šegova Ulica
Bajčeva Ulica
Bajčeva Ulica
Šmihel
Ob Težki Vodi
Bajčeva Ulica
13
Šmihel
Šmihel
Šmihel
Šmihel
Šuklijetova Ulica
Šuklijetova Ulica
Ulica
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Slavka Gruma Ulica
Šegova Ulica
10
5
Šegova Ulica
9
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečnikova
11
5
4
12
6
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečnikova
10
6
11
8
4
12
5
9
13
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Slavka Gruma Ulica
Šegova Ulica
10
5
Šegova Ulica
9
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

Tudi kapacitetna analiza variante 2 je pokazala, da predvidene prometne obremenitve na novih in obstoječih križiščih v letu 2015 ne bodo povzročale problemov. Pri varianti 2 je stanje še boljše, saj ni izgube potovalnih časov zaradi semaforja na obvoznici Šmihela. Nekaj več zamud in manjših kolon se pojavi na križišču povezovalne rampe, ceste za Šmihel in podaljška Smrečnikove.

T.4.3 Kapacitetna analiza Variante 3, leto 2015

Varianta 3 predvideva ureditev križišča K1 (obvoznica Šmihela, cesta za Šmihel - nadvoz nad železnico do Šolskega centra NM, podaljšek Smrečnikove) v smislu dveh trikrakih križišč.

Varianta 3 se razlikuje od variante 2 v tem, da se s povezovalno rampo neposredno poveže krožno križišče obvoznice Šmihela in obstoječe križišče Šmihelske in Smrečnikove ulice. Cesta za Šmihel (do Šolskega centra NM) se na to povezavo priključi pravokotno. Križišče obvoznice Šmihela in povezovalne rampe se izvede kot trikrako krožno križišče z zunanjim radijem 18,0m. Križišče povezovalne rampe, ceste za Šmihel in podaljška Smrečnikove ulice pa se izvede kot trikrako semaforizirano križišče.

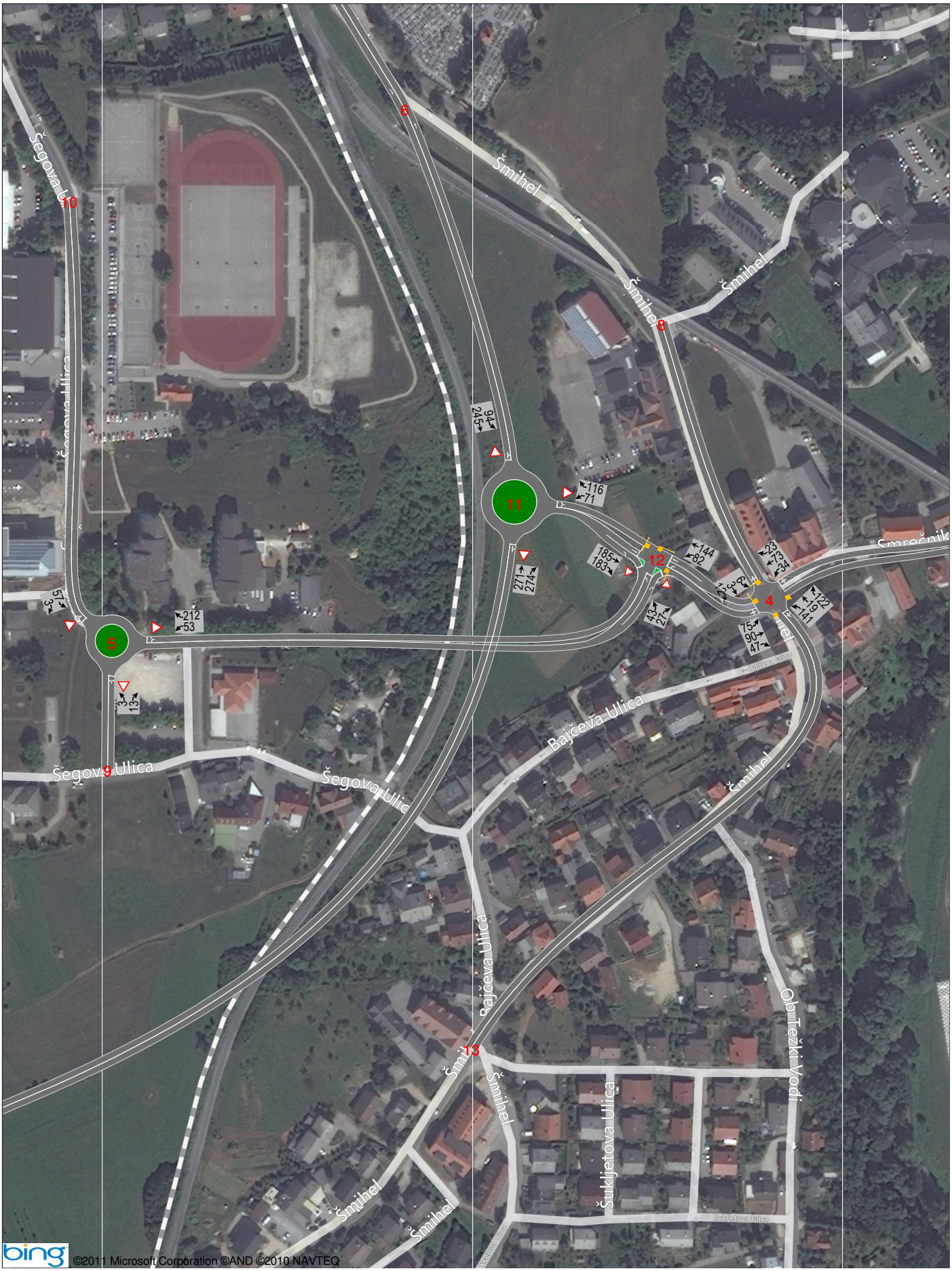
Križišče K4 (obstoječa Šmihelska cesta, Smrečnikova ulica, podaljšek Smrečnikove) se semaforizira. Krmilni program semaforja se sinhronizira s semaforjem na križišču povezovalne rampe, ceste za Šmihel in podaljška Smrečnikove ulice.

Križišče K2 se predvidi kot štirikrako krožno križišče z zunanjim radijem 18,0m, s tem da četrti, severni krak do zgraditve ceste za Drsko (povezovalne lokalne ceste na zahodni strani Šolskega centra NM) do Ulice Slavka Gruma še ne bo v uporabi.

Križišče K5 se predvidi kot trikrako krožno križišče z zunanjim radijem 14,0m.

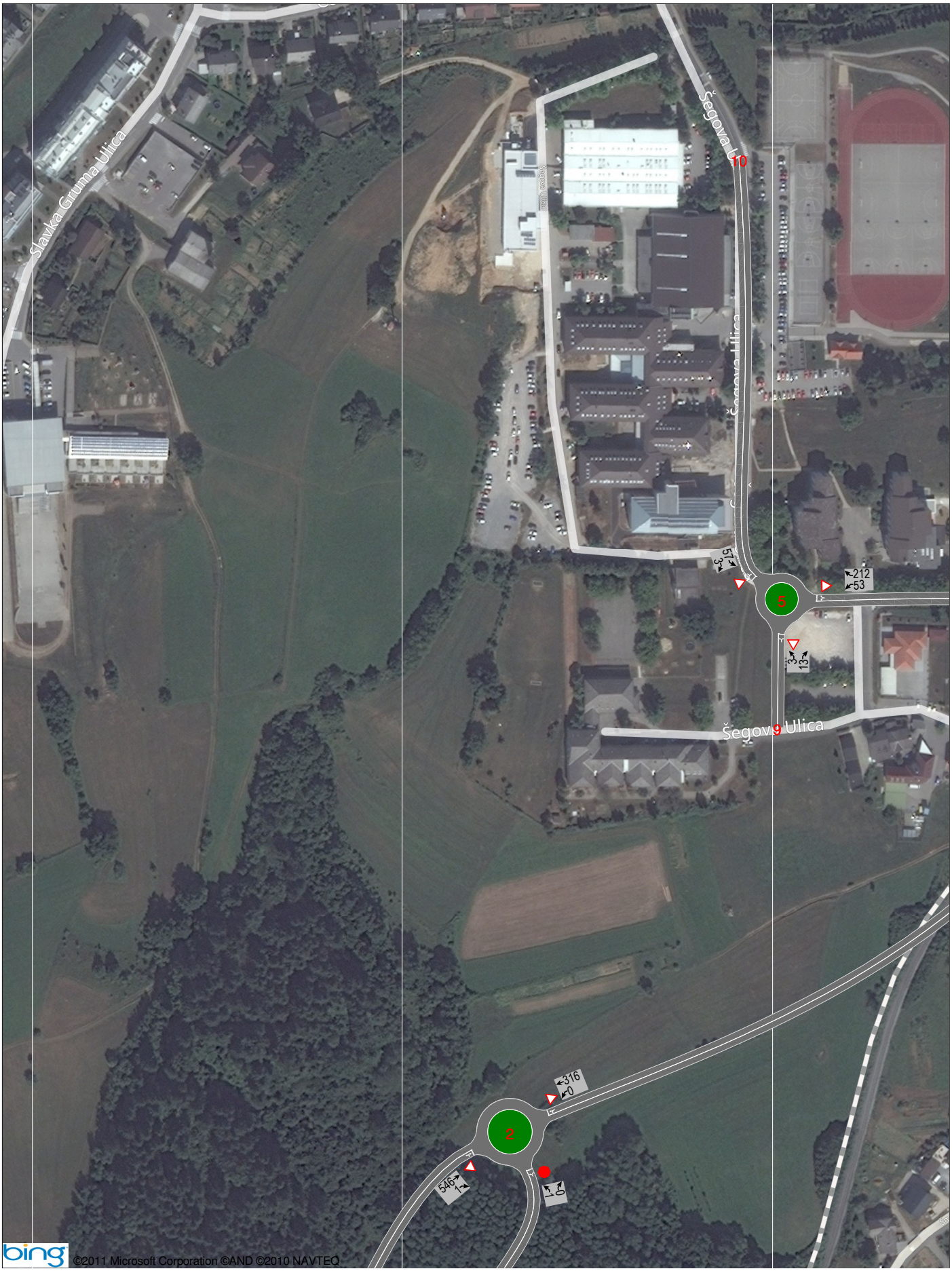
SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



Varianta 3 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



Varianta 3 **Jutranja konica 2015**

Prometne obremenitve **Smihelska NM**



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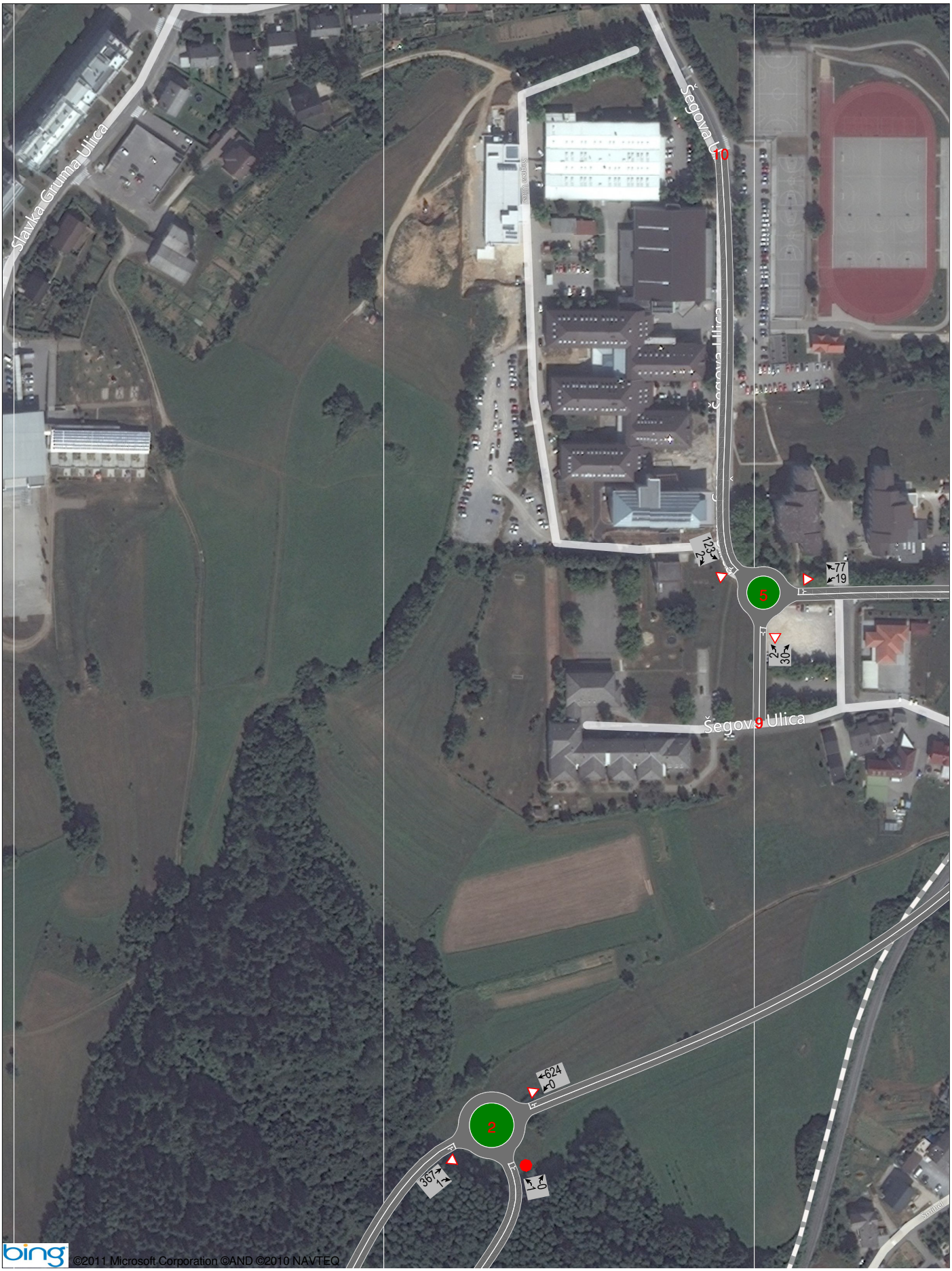
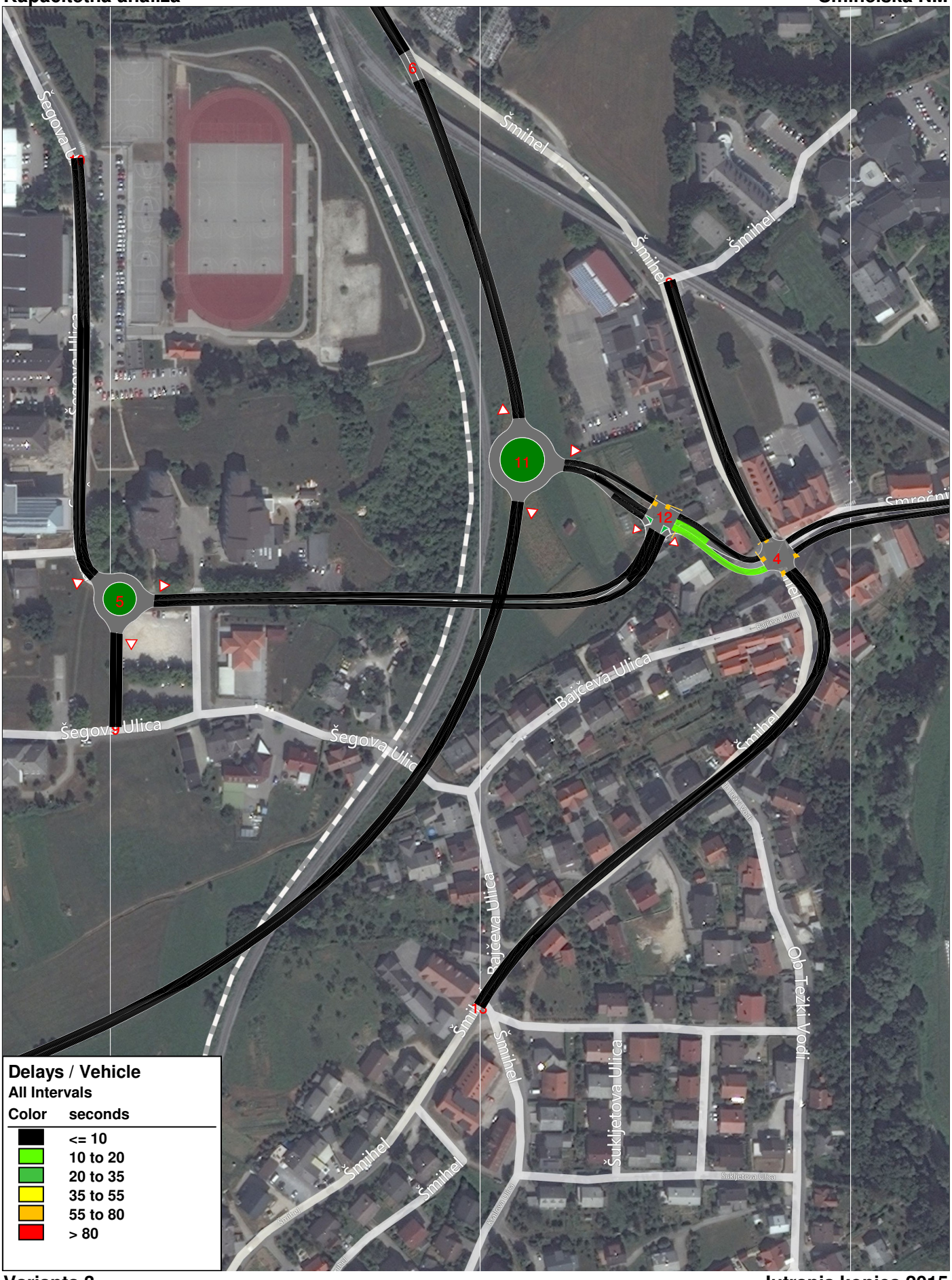
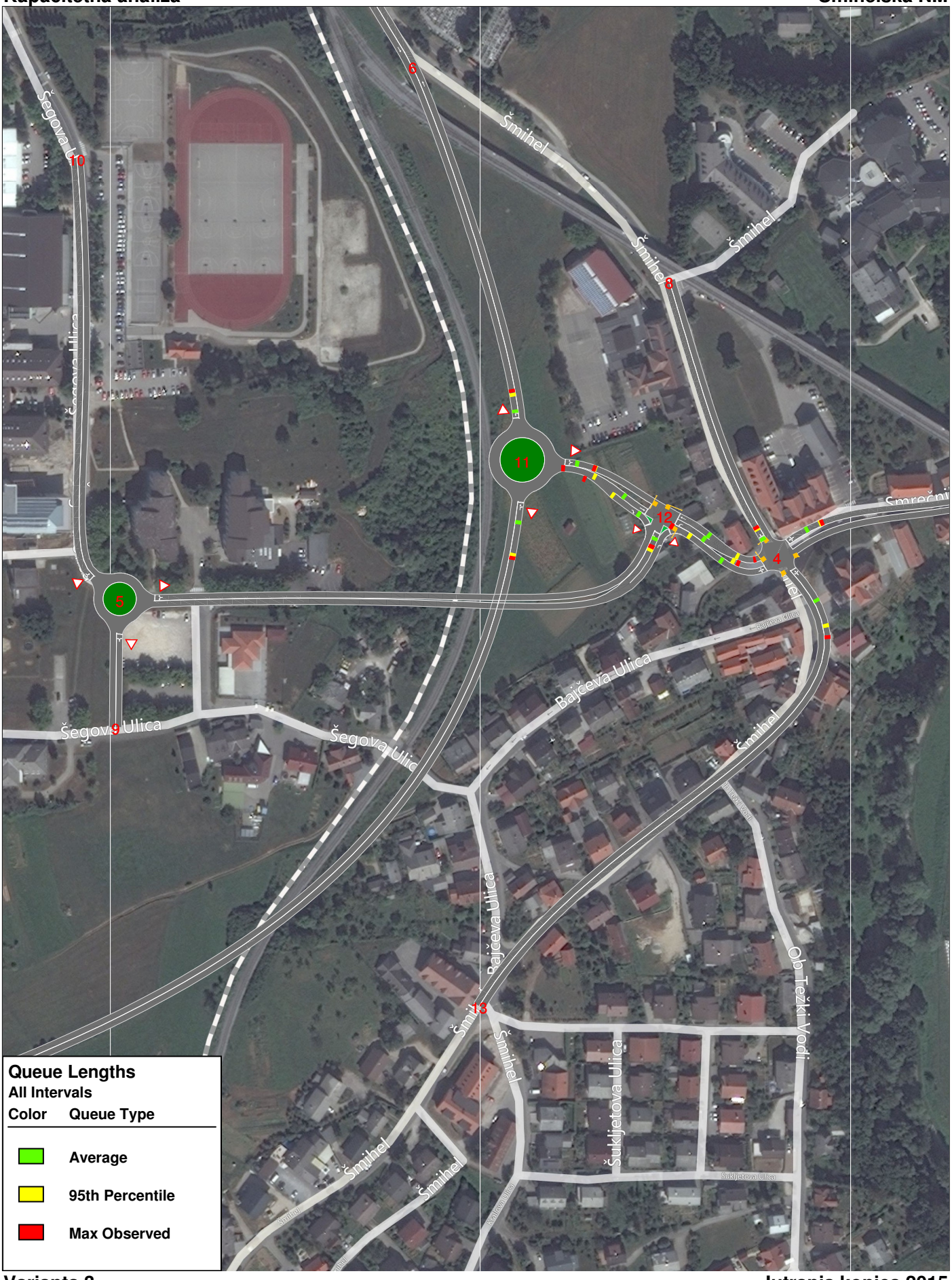
Varianta 3 **Popoldanska konica 2015**


Slavka Gruma Ulica
Šegova Ulica
10
Šegova Ulica
123
2
5
77
19
2
30
Šegova Ulica
9
624
0
2
367
1
0
1
bing
©2011 Microsoft Corporation ©AND ©2010 NAVTEQ

REZULTATI KAPACITETNE ANALIZE


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečni
6
11
12
4
5
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečni
10
6
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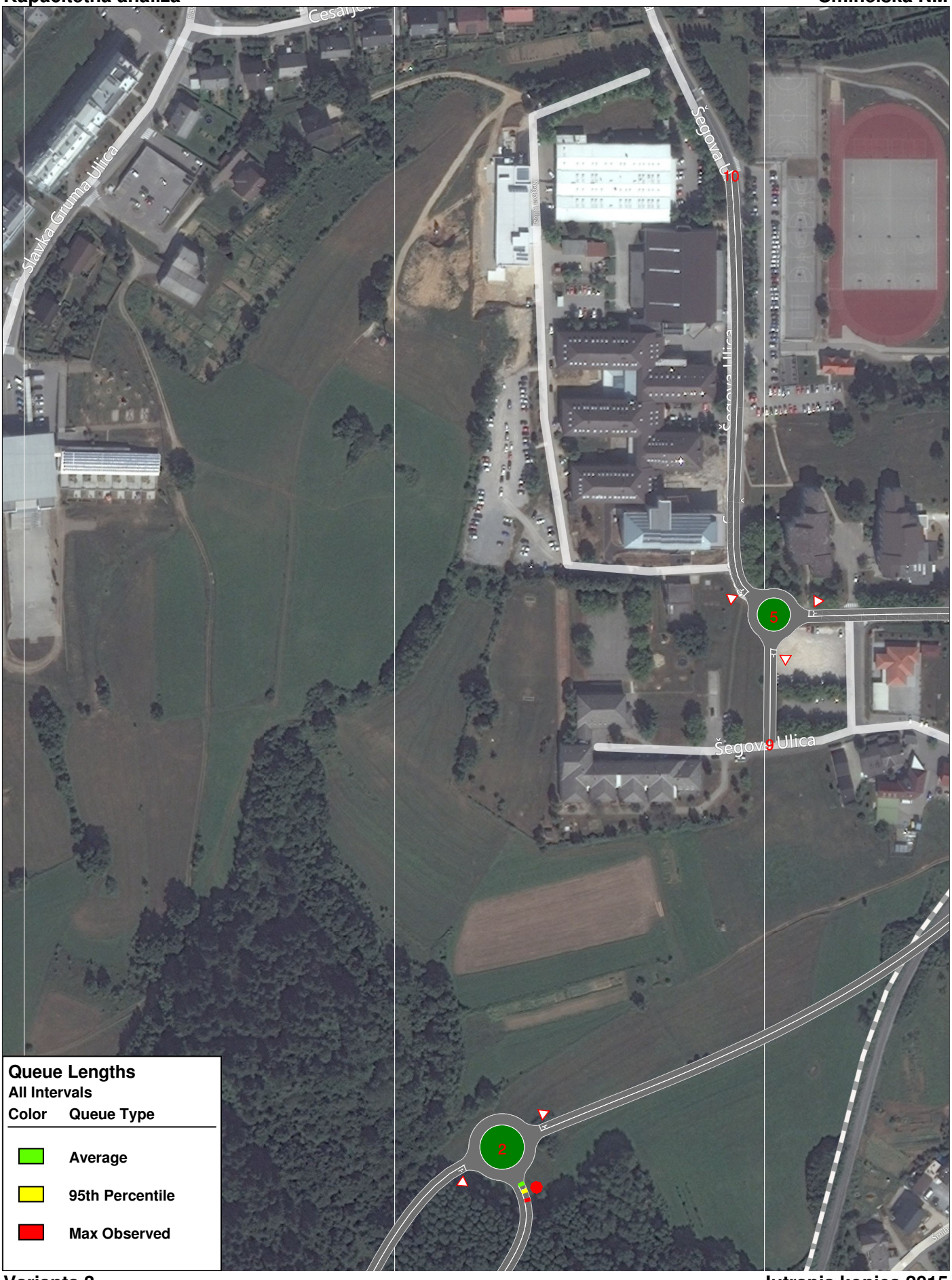
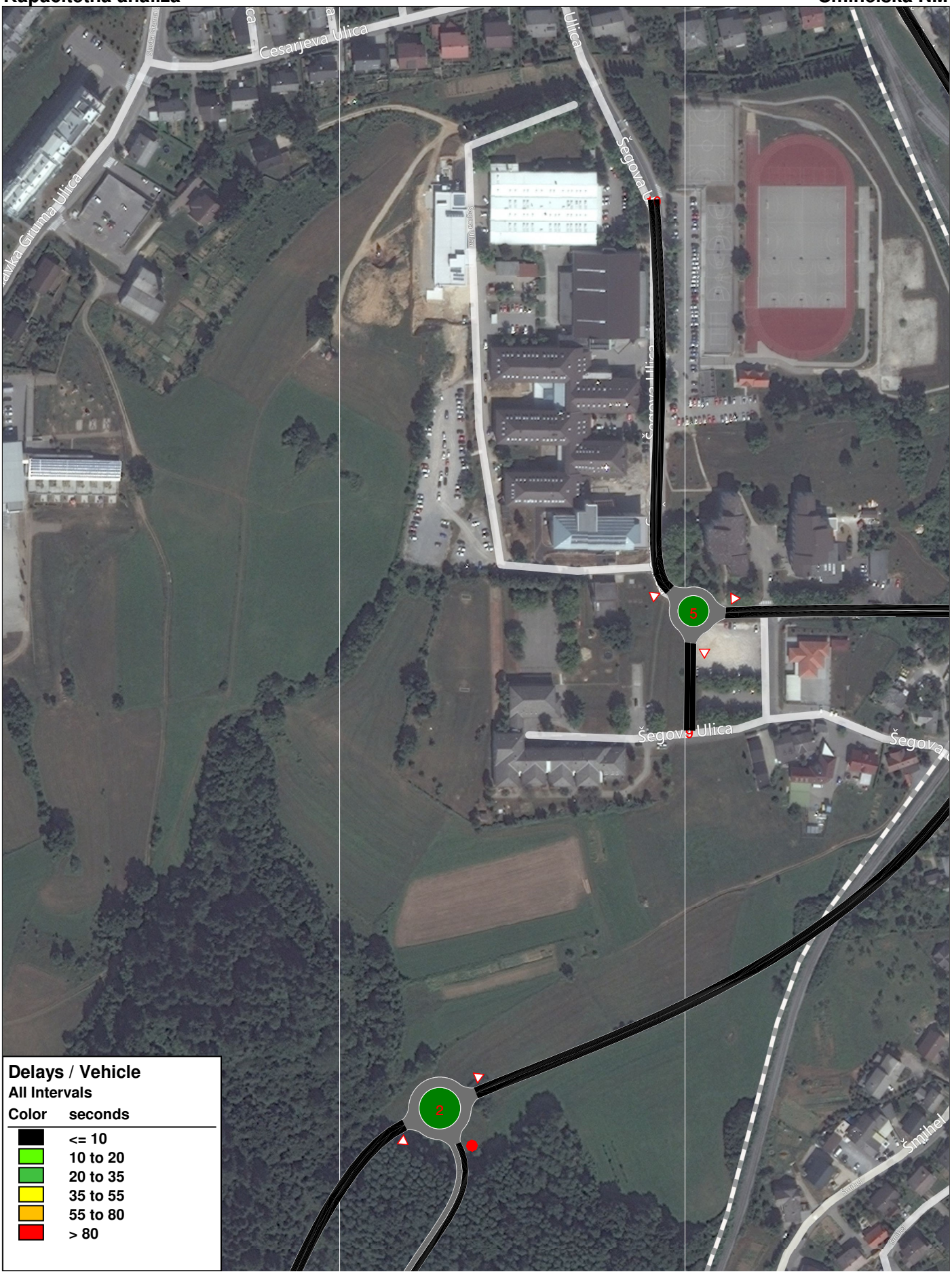
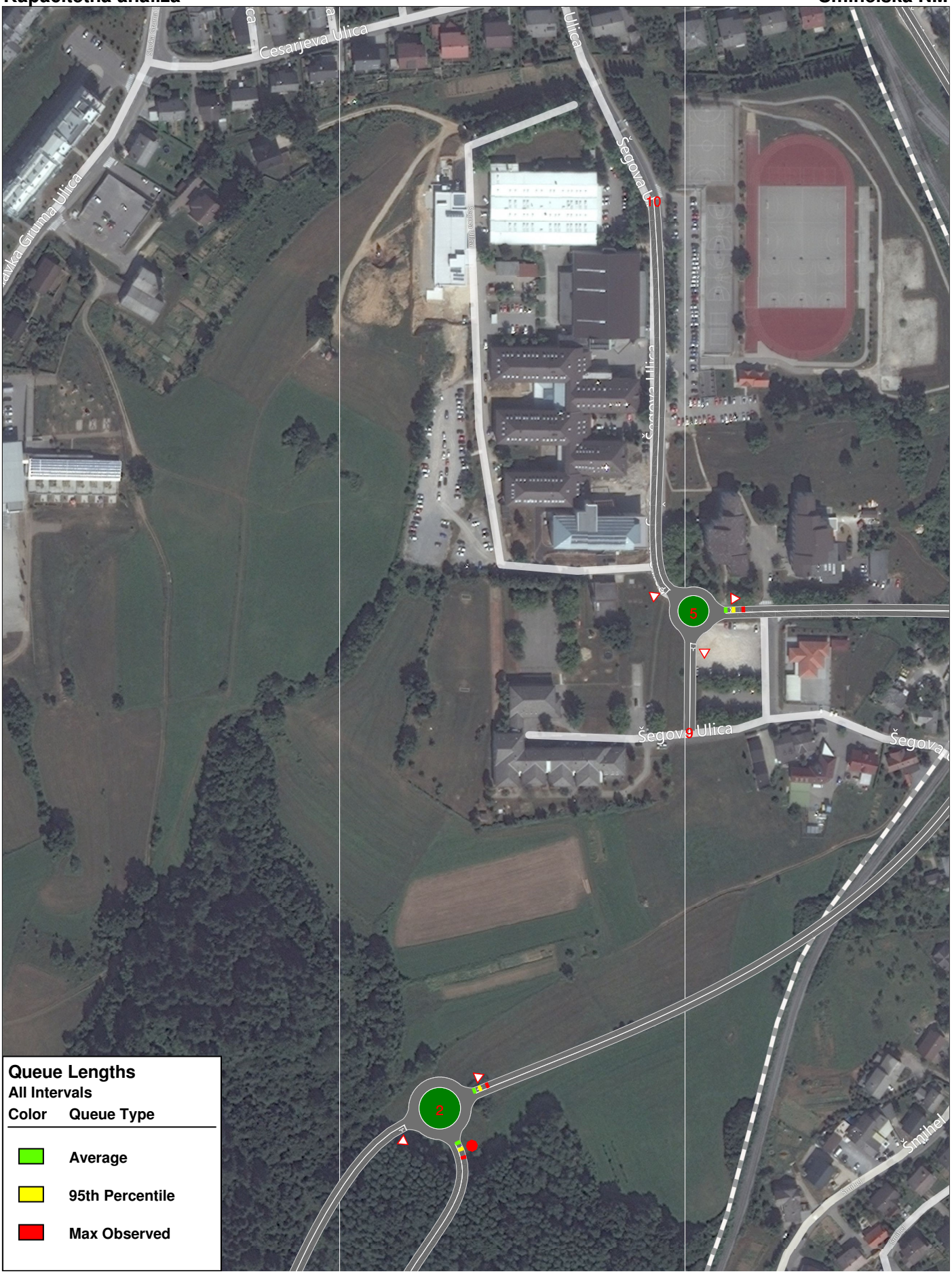
4
5
9
13
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed


Slavka Gruma Ulica
Šegova Ulica
10
5
9
Šegova Ulica
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šmihel
Smrečnikova
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
11
12
4
5
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Cesarjeva Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
Šegova
Smihel
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
10
6
Šmihel
Šmihel
Šmihel
8
11
12
4
Smrečnikova
5
Šegova Ulica
9
Šegova Ulica
Bajčeva Ulica
Šmihel
Bajčeva Ulica
13
Šmihel
Ob Težki Vodi
Šmihel
Šukljetova Ulica
Šmihel
Šmihel
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Cesarjeva Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
Šegova
Smihel
10
5
9
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

Kapacitetna analiza variante 3 je pokazala podobne rezultate kot varianta 2, vendar se izkaže kot slabša. Nekoliko večje zamude so verjetno posledica neugodnih geometrijskih elementov na križišču povezovalne rampe, podaljška Smrečnikove in ceste za Šmihel. Zamude in kolone, izračunane s programskim orodjem Synchro/Simtraffic, bi še vedno bile dosti manjše od kritičnih vrednosti.

T.4.4 Kapacitetna analiza Variante 4, leto 2015

Varianta 4 predvideva ureditev križišča K1 (obvoznica Šmihela, cesta za Šmihel - nadvoz nad železnico do Šolskega centra NM, podaljšek Smrečnikove) v smislu štirikrakega krožnega križišča z zunanjim radijem 18,0m. Povezava do ŠC se izvede kot podvoz pod železnico.

Križišče K4 (obstoječa Šmihelska cesta/Smrečnikova/podaljšek Smrečnikove) se semaforizira.

Križišče K2 se predvidi kot štirikrako krožno križišče z zunanjim radijem 18,0m, s tem da četrti, severni krak do zgraditve povezovalne lokalne ceste na zahodni strani ŠC do Ulice Slavka Gruma še ne bo v uporabi.

Križišče K5 se predvidi kot trikrako krožno križišče z zunanjim radijem 14,0m.

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]


Šegova Ulica
10
Šmihel
Šmihel
Šmihel
8
Šegova Ulica
5
1
4
Šegova Ulica
9
Šegova Ulica
Bajčeva Ulica
Šmihel
Bajčeva Ulica
Šmihel
13
Ob Težki Vodi
Šmihel
Šukljetova Ulica
Šmihel
Šmihel
Šmihel

Prometne obremenitve **Smihelska NM**



Varianta 4 **Jutranja konica 2015**

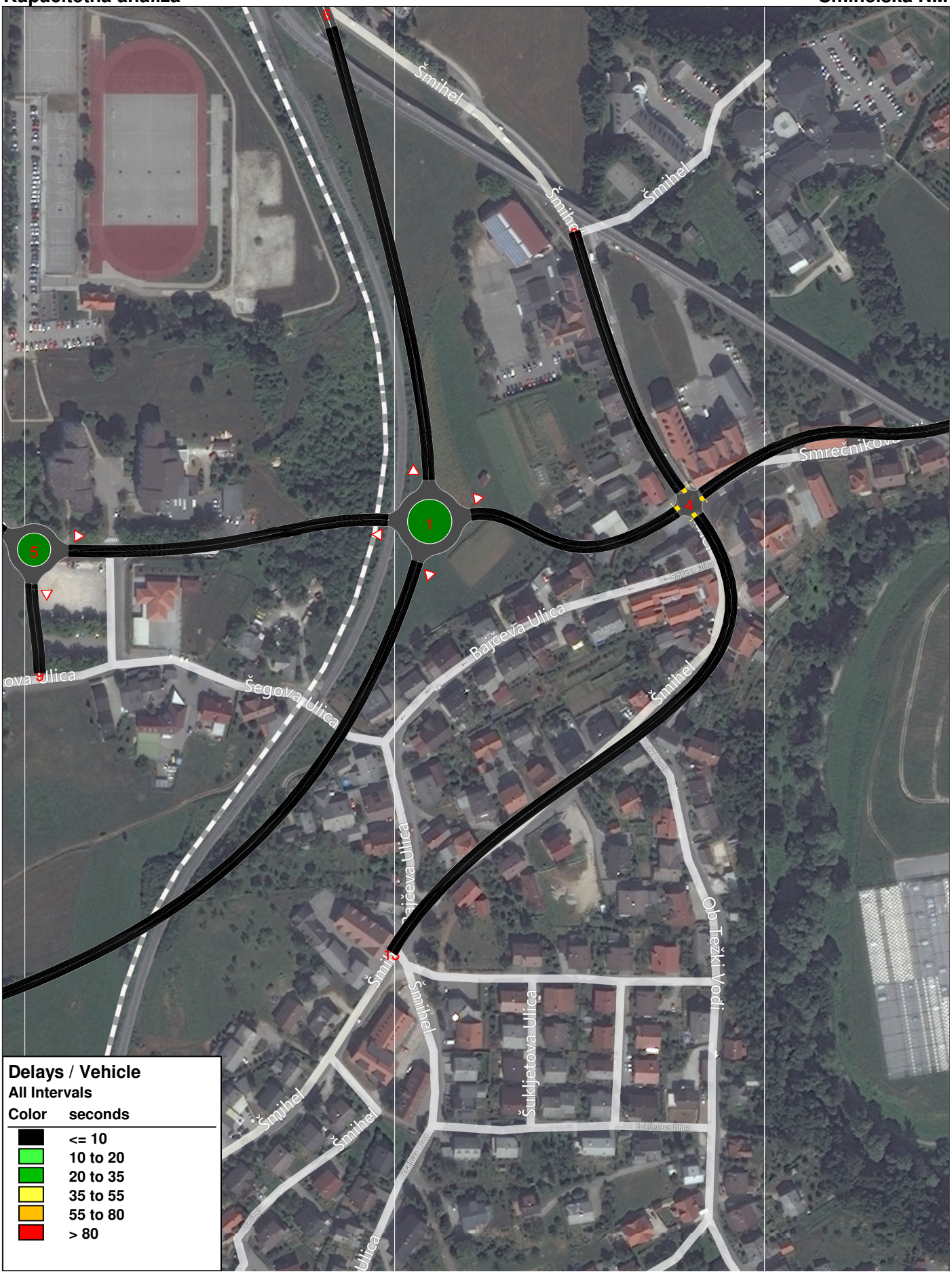
Prometne obremenitve **Smihelska NM**

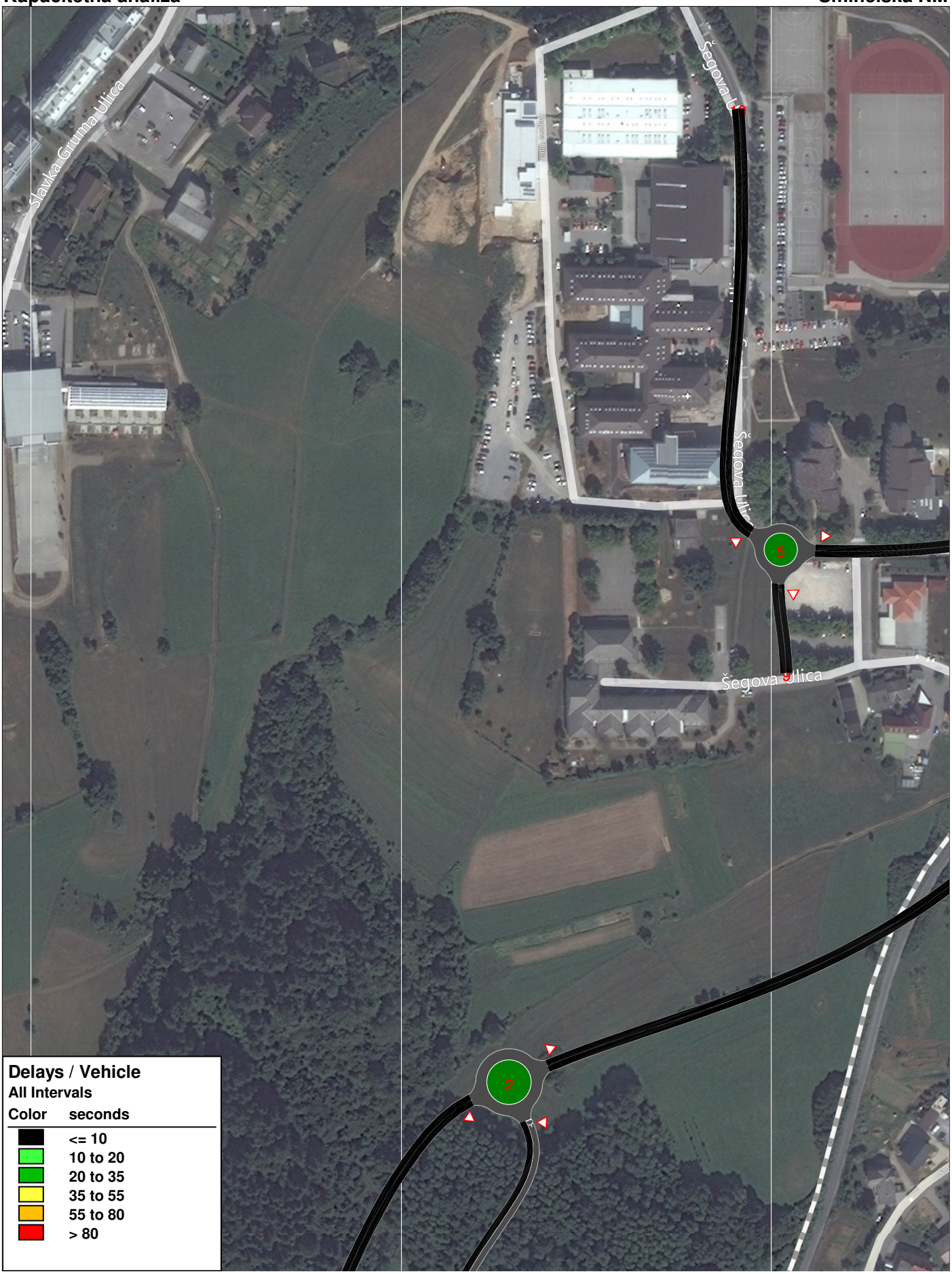


Varianta 4 **Popoldanska konica 2015**

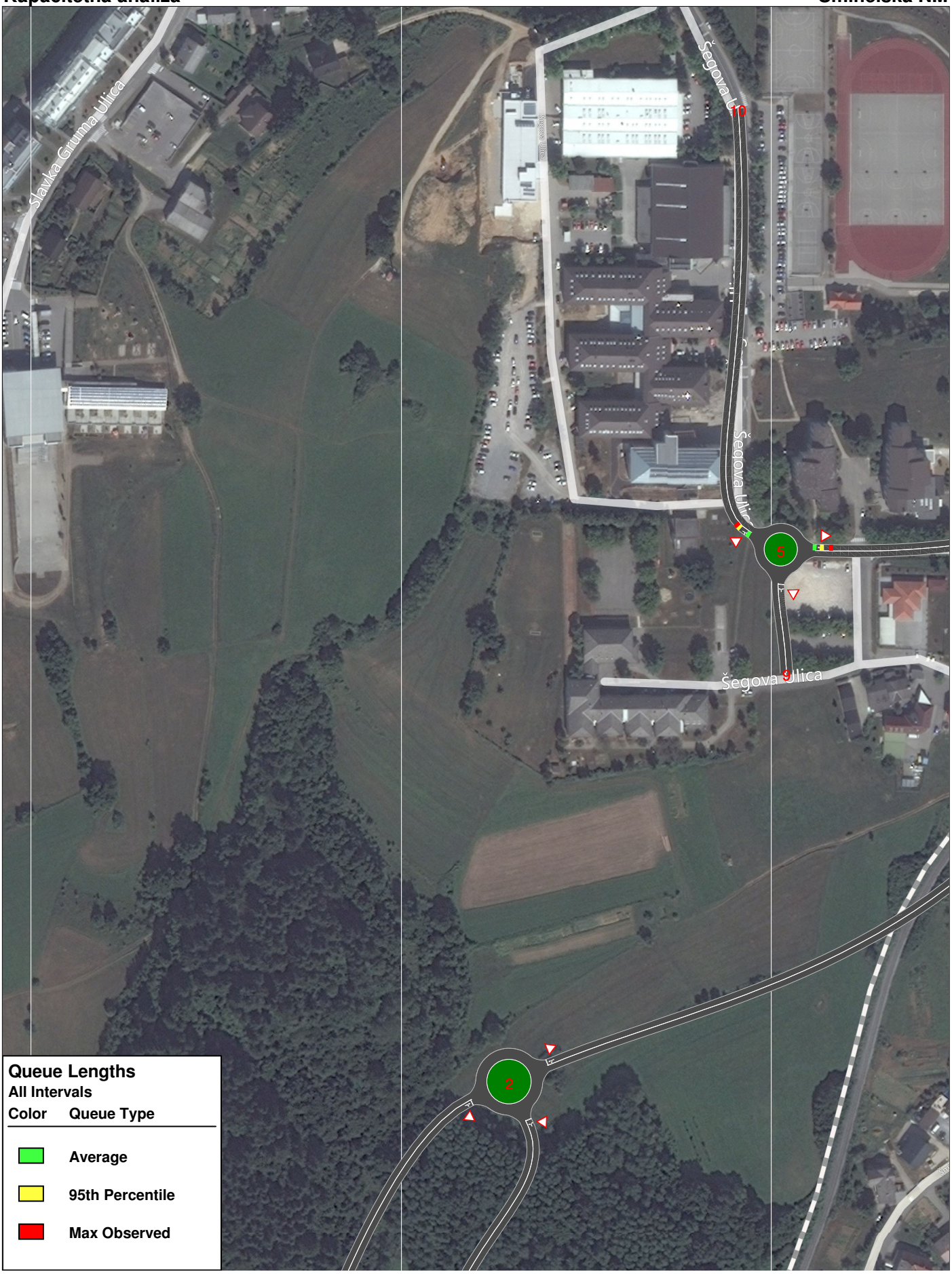

Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
10
9
5
2
123
2
77
19
30
2
624
0
367
1
0
1
©2011 Microsoft Corporation ©AND ©2010 NAVTEQ

REZULTATI KAPACITETNE ANALIZE

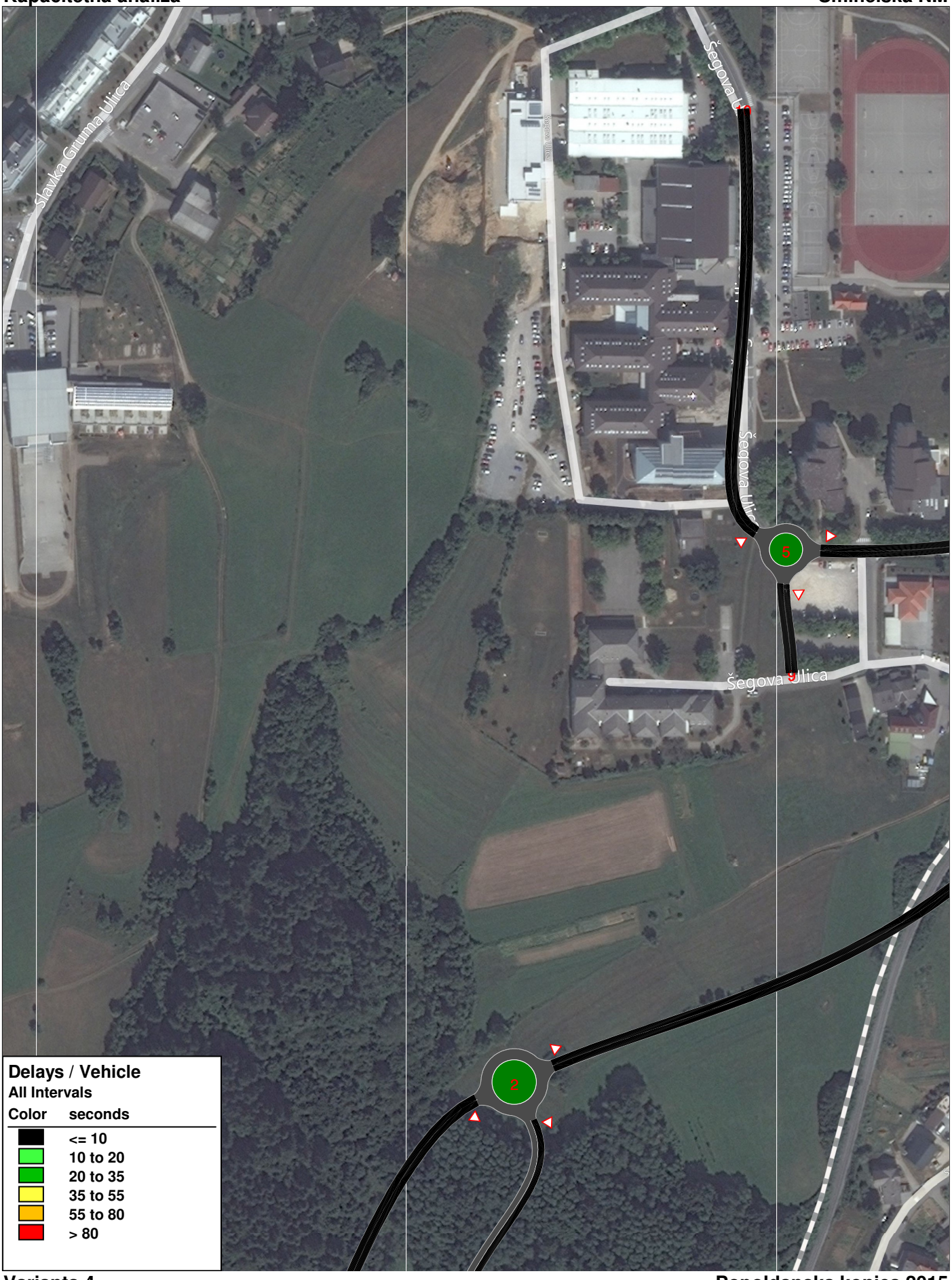

Šmihel
Šmihel
Šmihel
Smrečnikova
Bajčeva Ulica
Bajčeva Ulica
Šmihel
Šegova Ulica
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Ob Težki Vodi
Šukljetova Ulica
Šukljetova Ulica
1
4
5
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80

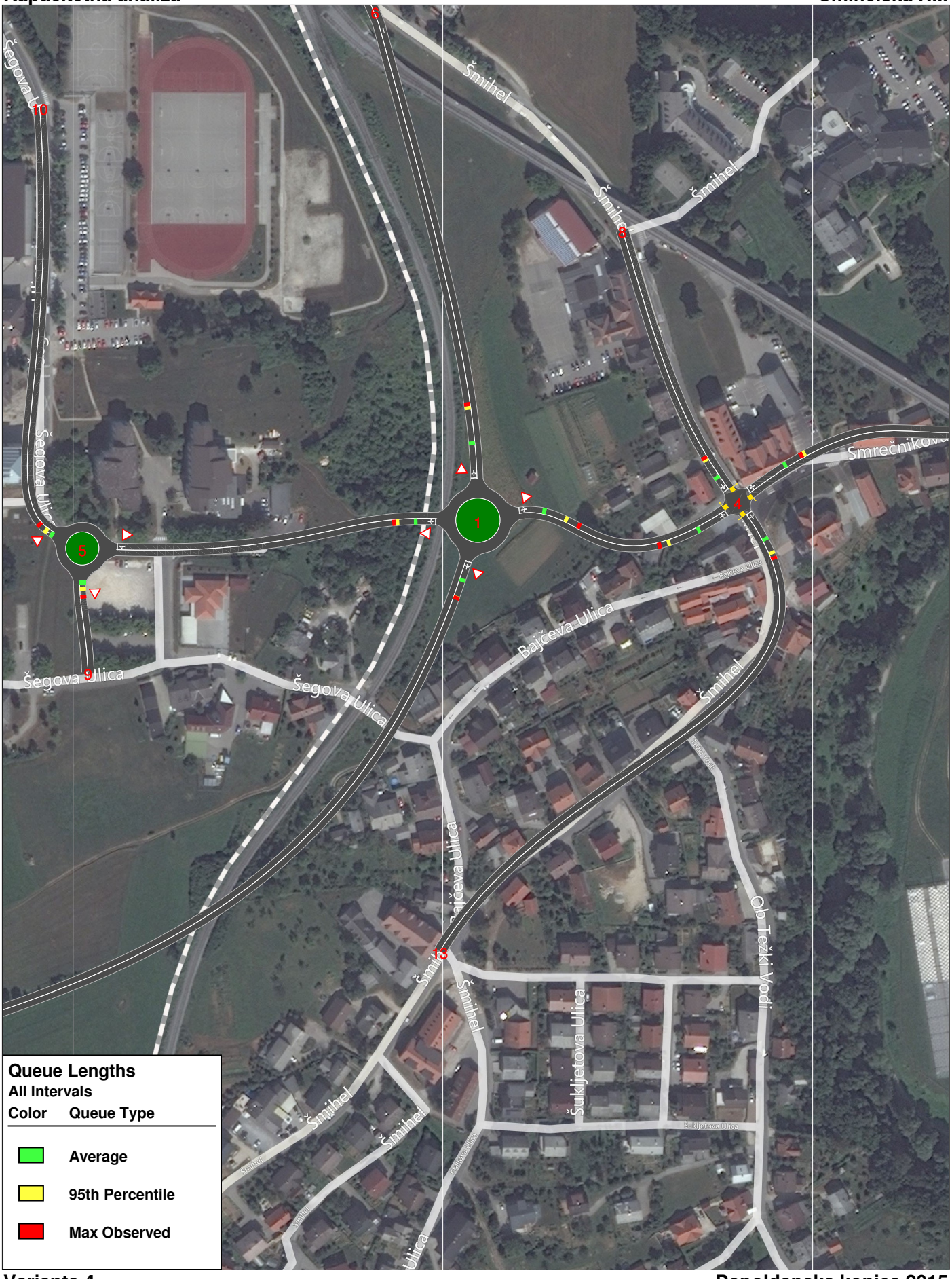

Slavka Gruma Ulica
Šegova ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šmihel
Šmihel
Šmihel
Smrečnikova
Bajčeva Ulica
Šegova Ulica
Šmihel
Bajčeva Ulica
Šmihel
Šmihel
Šmihel
Šmihel
Šukljetova Ulica
Ob Težki Vodi
Šukljetova Ulica
Ulica
1
2
3
4
5
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed


Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
10
5
9
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
Šmihel
Šmihel
Šmihel
Smrečnikova
Bajčeva Ulica
Bajčeva Ulica
Bajčeva Ulica
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šukljetova Ulica
Šukljetova Ulica
Ob Težki Vodi
Ulica
1
2
3
4
5
6
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
5
2
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šmihel
Smrečnikova
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
1
2
3
4
5
6
9
10
13
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


Slavka Gruma Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
10
5
9
2
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

Tudi kapacitetna analiza variante 4 je pokazala, da predvidene prometne obremenitve na novih in obstoječih križiščih v letu 2015 ne bodo povzročale problemov. Pri varianti 4 je stanje še boljše, saj ni izgube potovalnih časov zaradi semaforjev na križanju obvoznice Šmihela in ceste za Šmihel.

Nekaj več zamud in manjših kolon se pojavi na križišču K4, ki pa so posledica tega, da zdaj vozila iz smeri križišča K1 prihajajo prosto. Prej so prihajala v t.i. »paketih«, ki sta jih ustvarjala semaforja na obeh križiščih K1.

T.4.5 Kapacitetna analiza Variante 1, leto 2035

Varianta 1 v letu 2035 predvideva poleg ukrepov, ki so predvideni za leto 2015 še izgradnjo nove povezovalne lokalne ceste na zahodni strani ŠC do ulice Slavka Gruma – cesta za Drsko, kjer se predvideva trikrako nesemaforizirano križišče K3.

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



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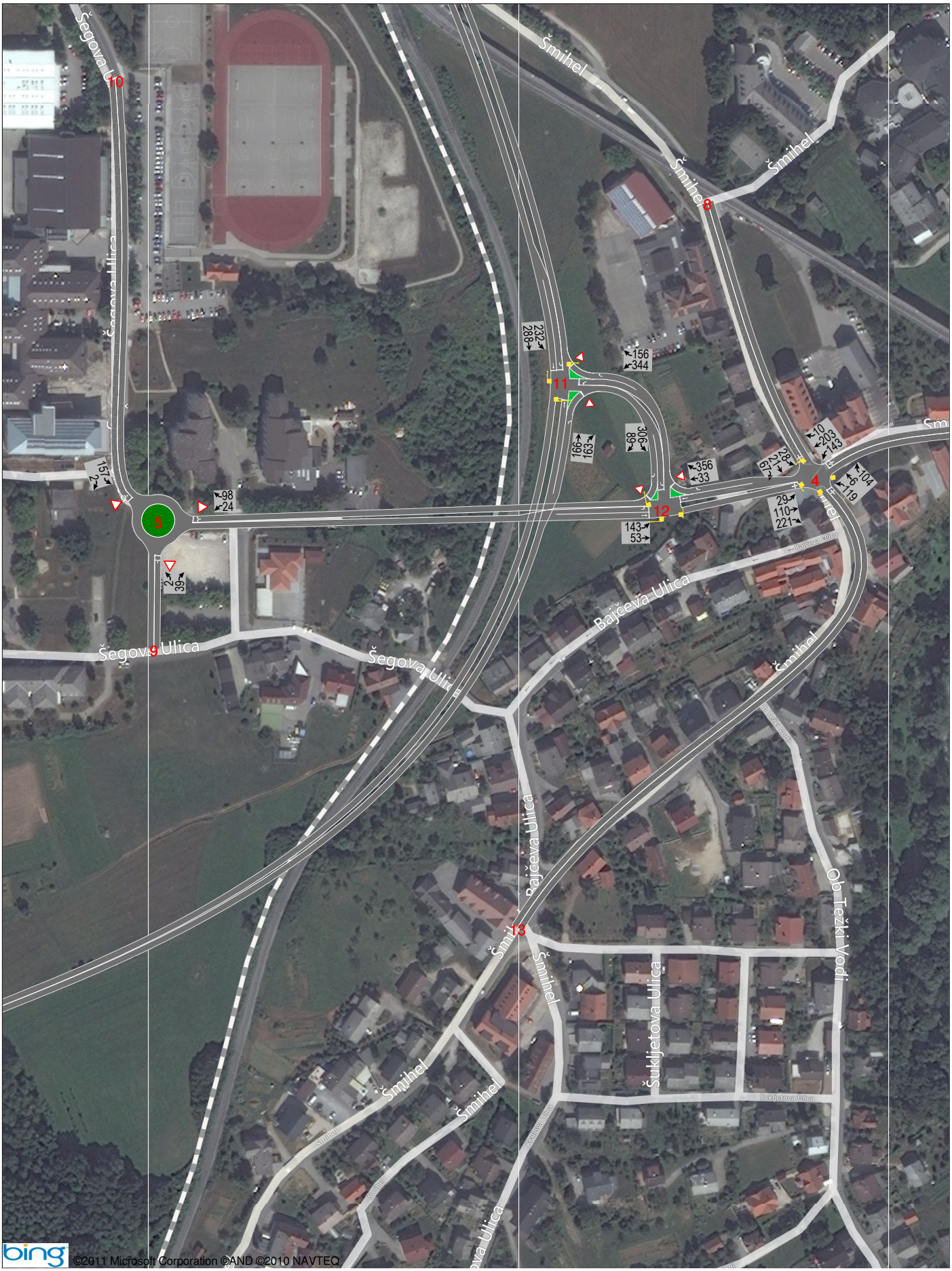
Varianta 1 **Jutranja konica 2035**


Cesarjeva
Šegova ulica
Šegova Ulica
Šegova Ulica
15
10
3
17
9
5
2
45
149
63
89
94
78
63
3
269
68
3
15
61
1
126
21
156
0
151
508
1
1
0
©2011 Microsoft Corporation ©AND ©2010 NAVTEQ

Prometne obremenitve **Smihelska NM**



Varianta 1 **Popoldanska konica 2035**

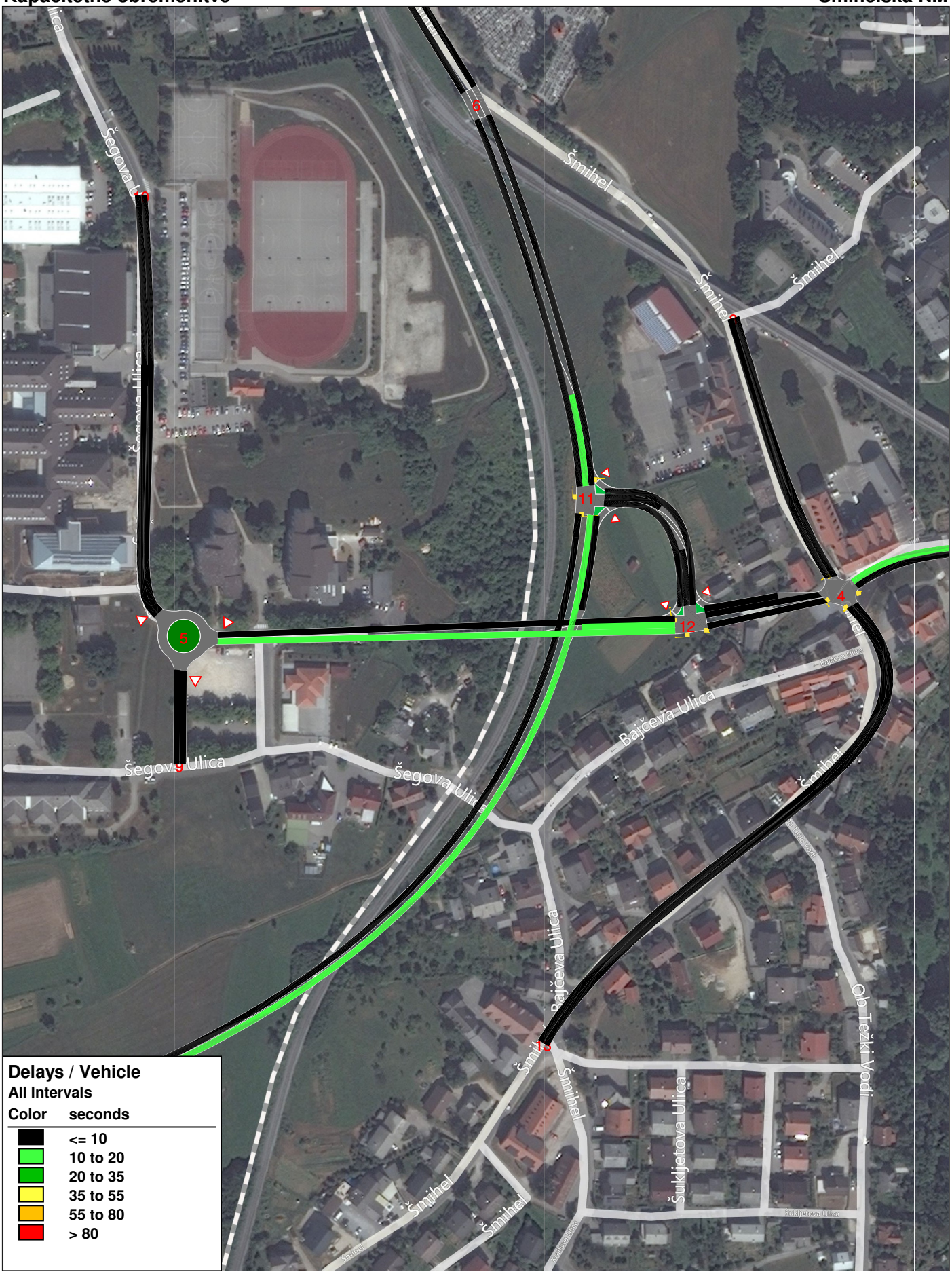
Prometne obremenitve **Smihelska NM**



Varianta 1 **Popoldanska konica 2035**

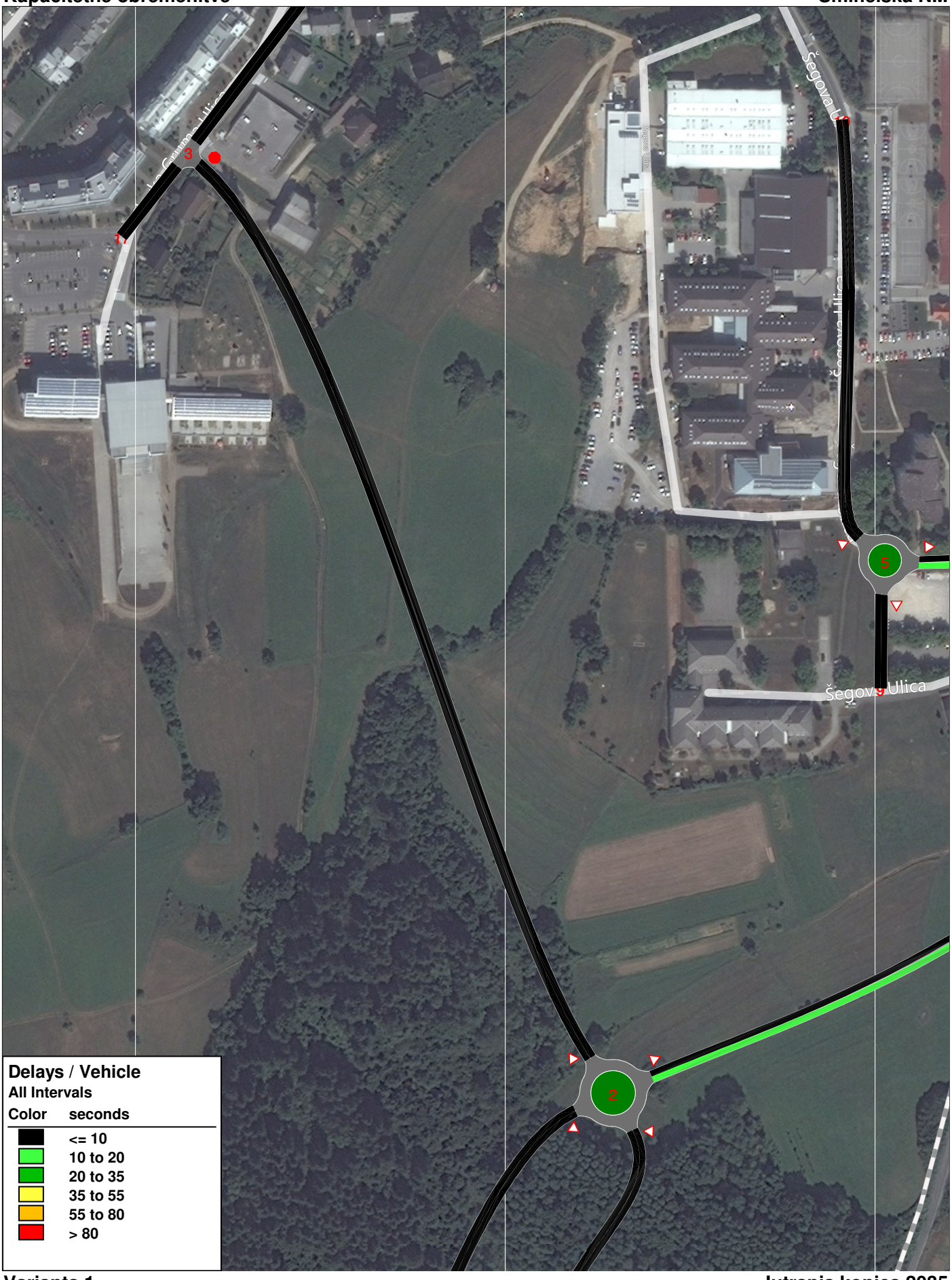
REZULTATI KAPACITETNE ANALIZE

Kapacitetne obremenitve **Smihelska NM**

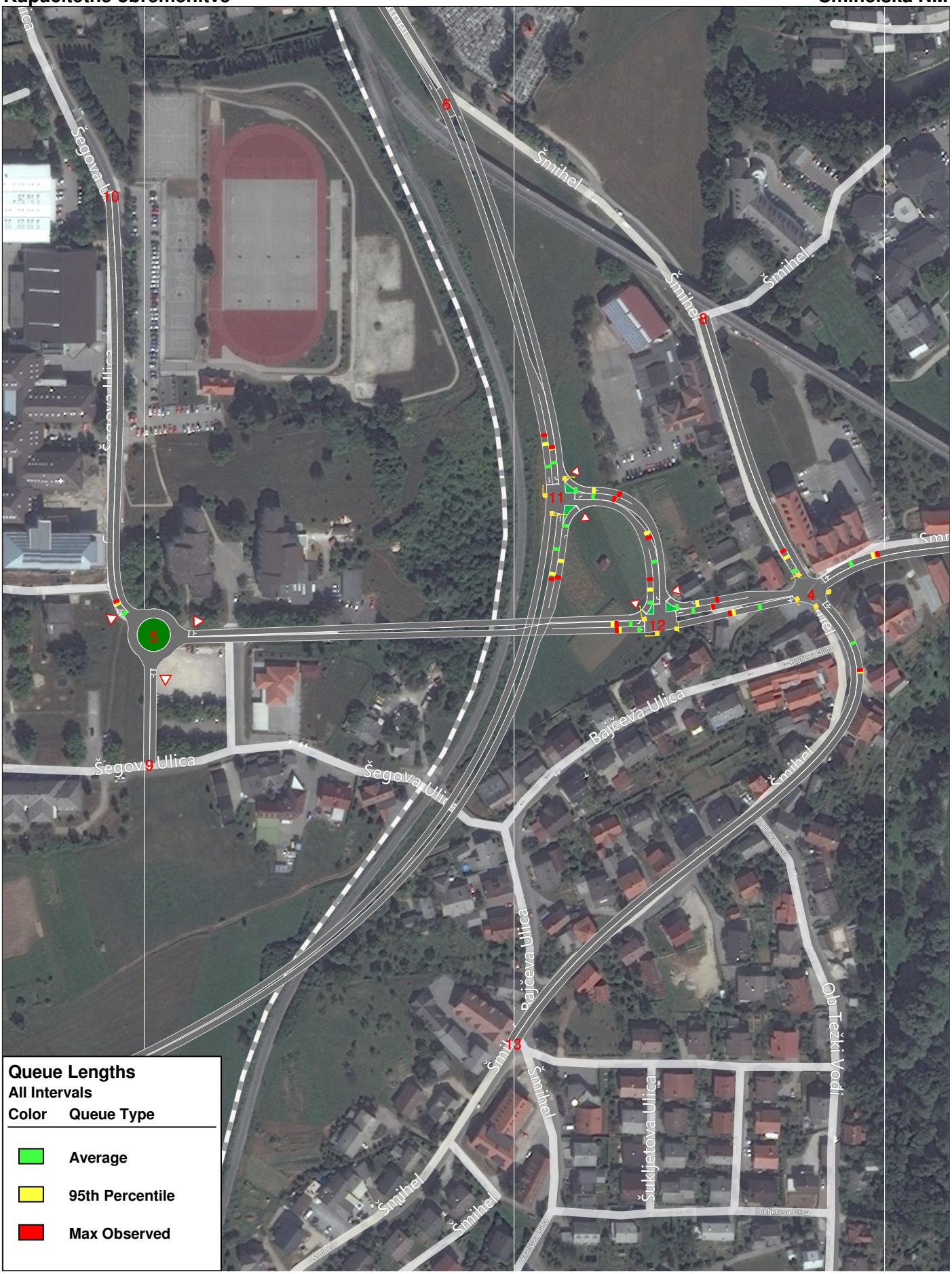


Varianta 1 **Jutranja konica 2035**

Kapacitetne obremenitve **Smihelska NM**



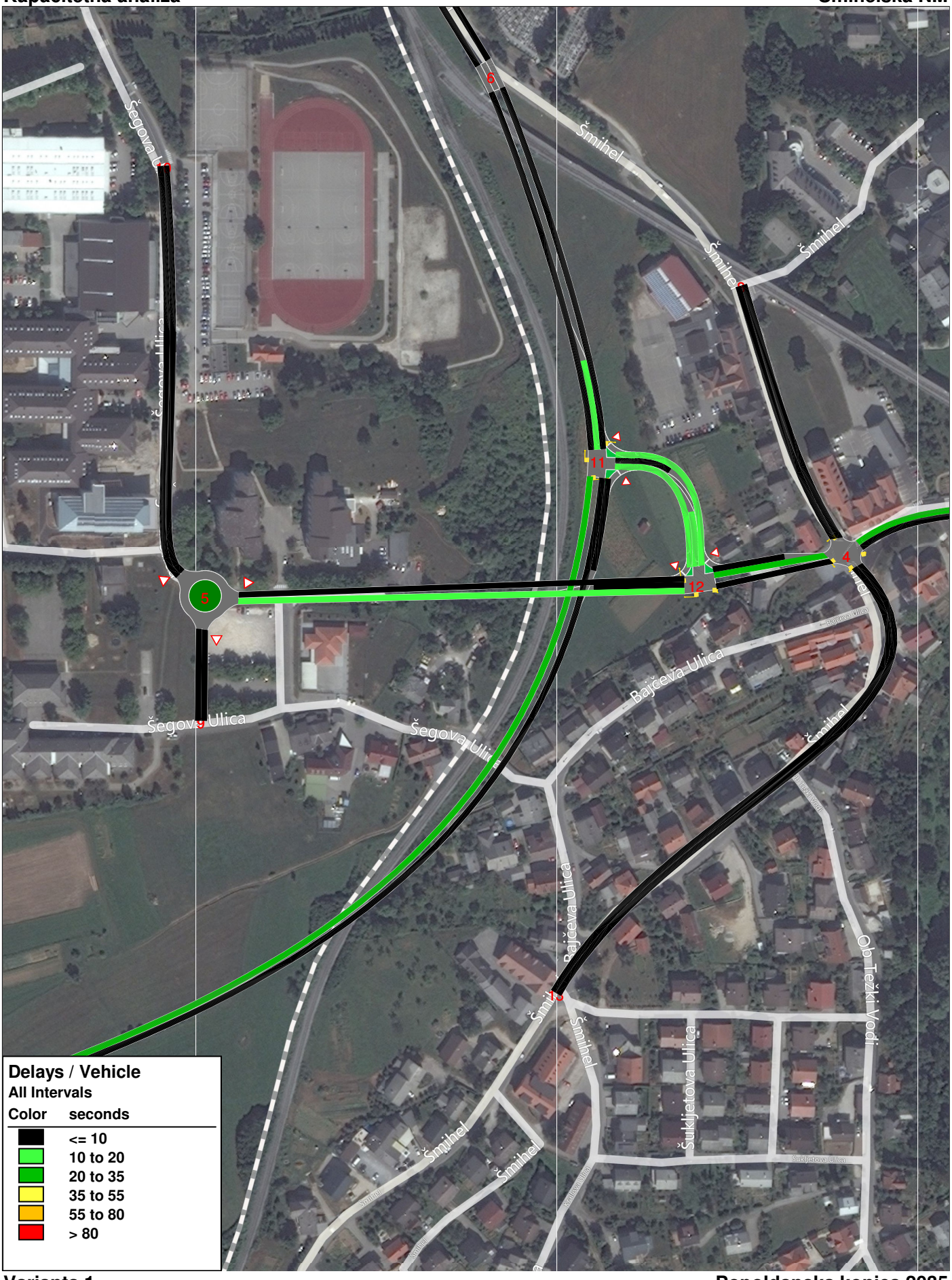
Varianta 1 **Jutranja konica 2035**


Šegova Ulica
Šmihel
Bajčeva Ulica
Obl. Težki Vodi
Šuklijetova Ulica
10
6
8
11
4
12
5
9
13
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed

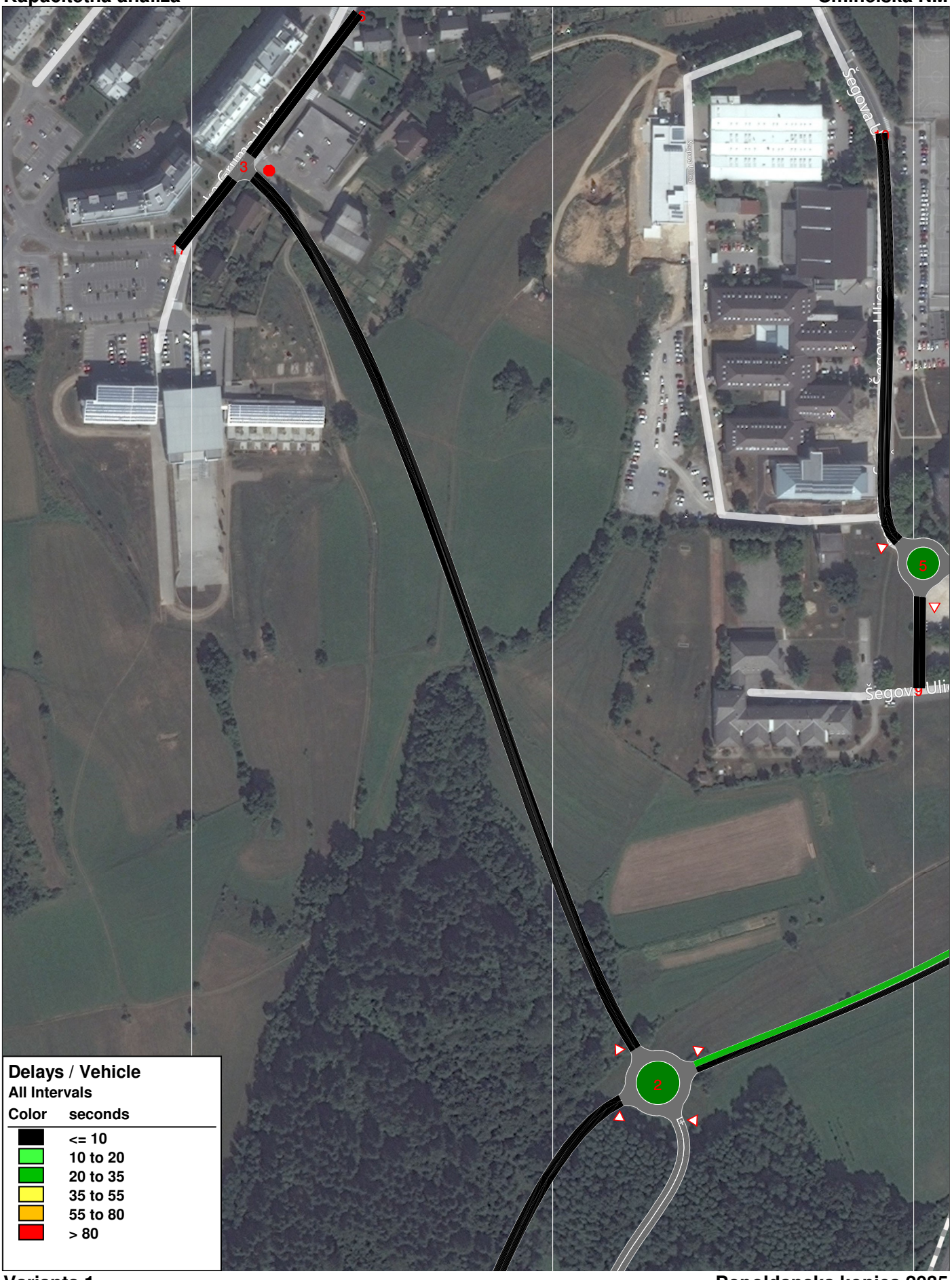
Kapacitetne obremenitve **Smihelska NM**



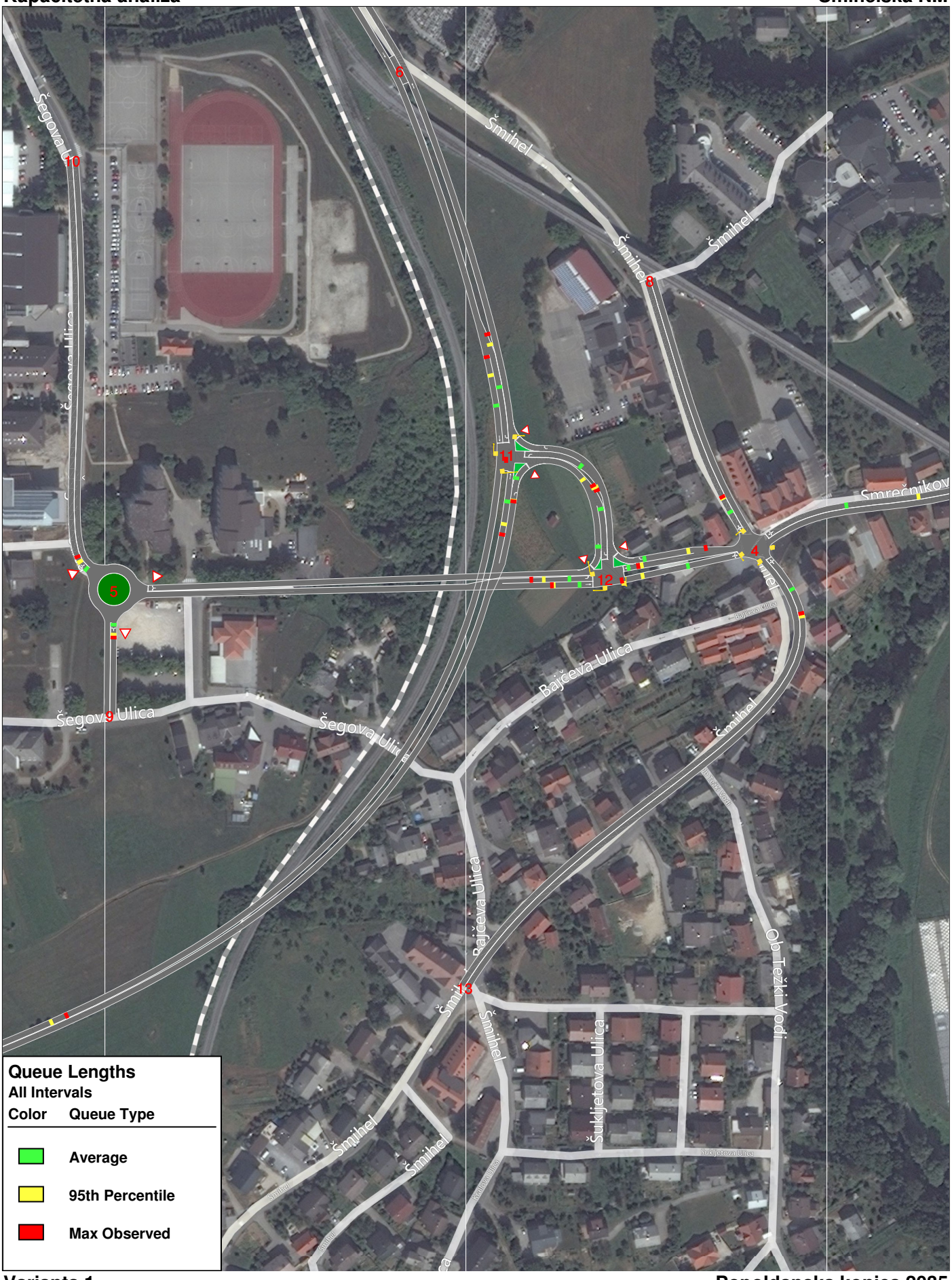
Varianta 1 **Jutranja konica 2035**


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
5
11
12
4
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80

Kapacitetna analiza **Smihelska NM**



Varianta 1 **Popoldanska konica 2035**


Šegova Ulica
10
5
Šmihel
Šmihel
Šmihel
8
11
Smrečnikova
4
12
5
Bajčeva Ulica
Bajčeva Ulica
Šegova Ulica
9
Šegova Ulica
Šmihel
Bajčeva Ulica
13
Šmihel
Šukljetova Ulica
Ob Težki Vodi
Šmihel
Šmihel
Queue Lengths
All Intervals
Color
Queue Type
Average
95th Percentile
Max Observed


15
3
17
10
5
9
2
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

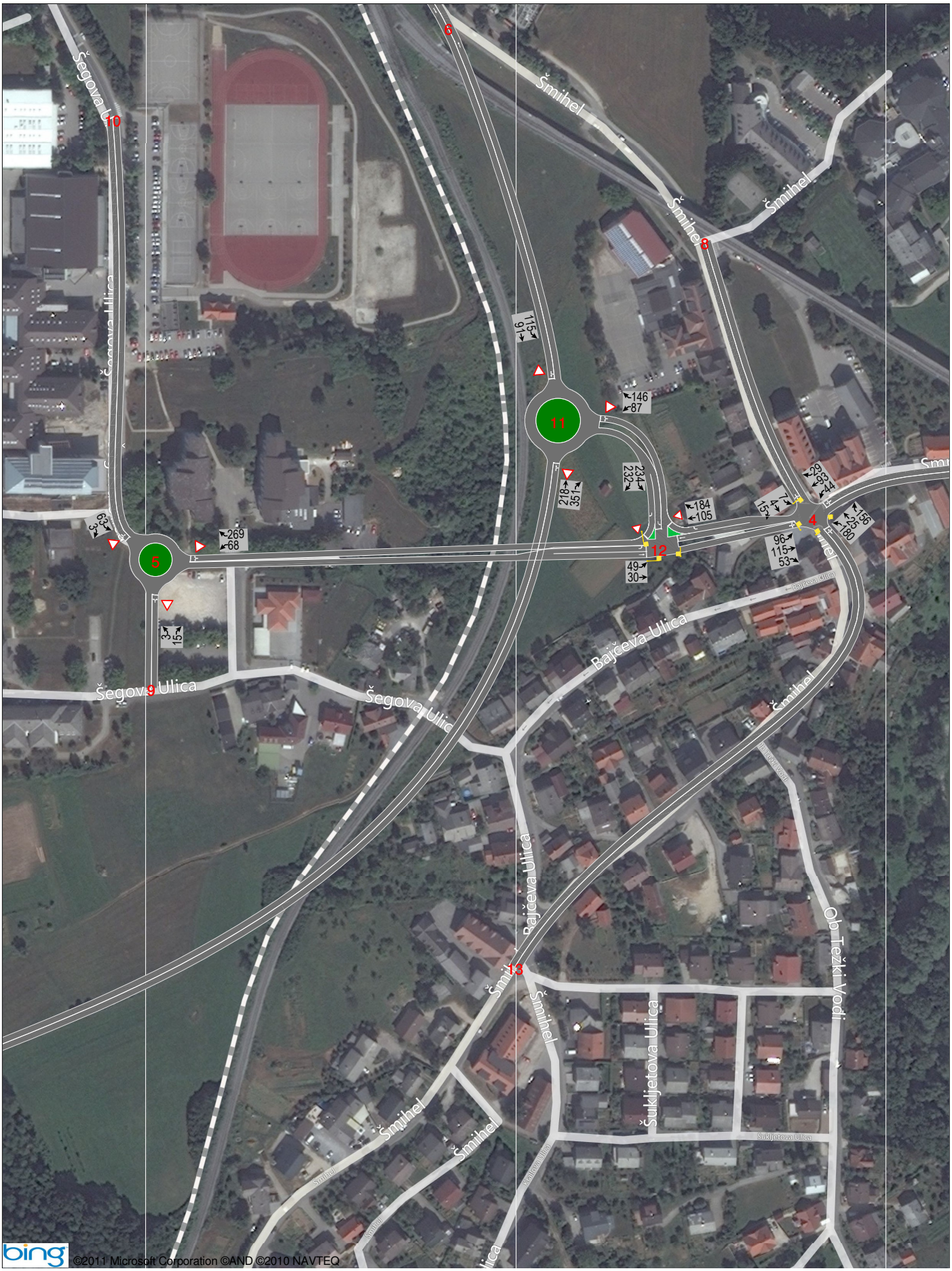
Rezultati kapacitetne analize križišč variante 1 v letu 2035 so podobni kot v letu 2015. Čeprav so prometne obremenitve večje, ne prihaja do omembe vrednih zamud in zastojev. Tako v jutranji kot popoldanski konici bo cestno omrežje v zadovoljivi meri servisiralo prometne zahteve.

T.4.6 Kapacitetna analiza Variante 2, leto 2035

Varianta 2 v letu 2035 predvideva poleg ukrepov, ki so predvideni za leto 2015 še izgradnjo nove povezovalne lokalne ceste na zahodni strani ŠC do ulice Slavka Gruma – cesta za Drsko, kjer se predvideva trikrako nesemaforizirano križišče K3.

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



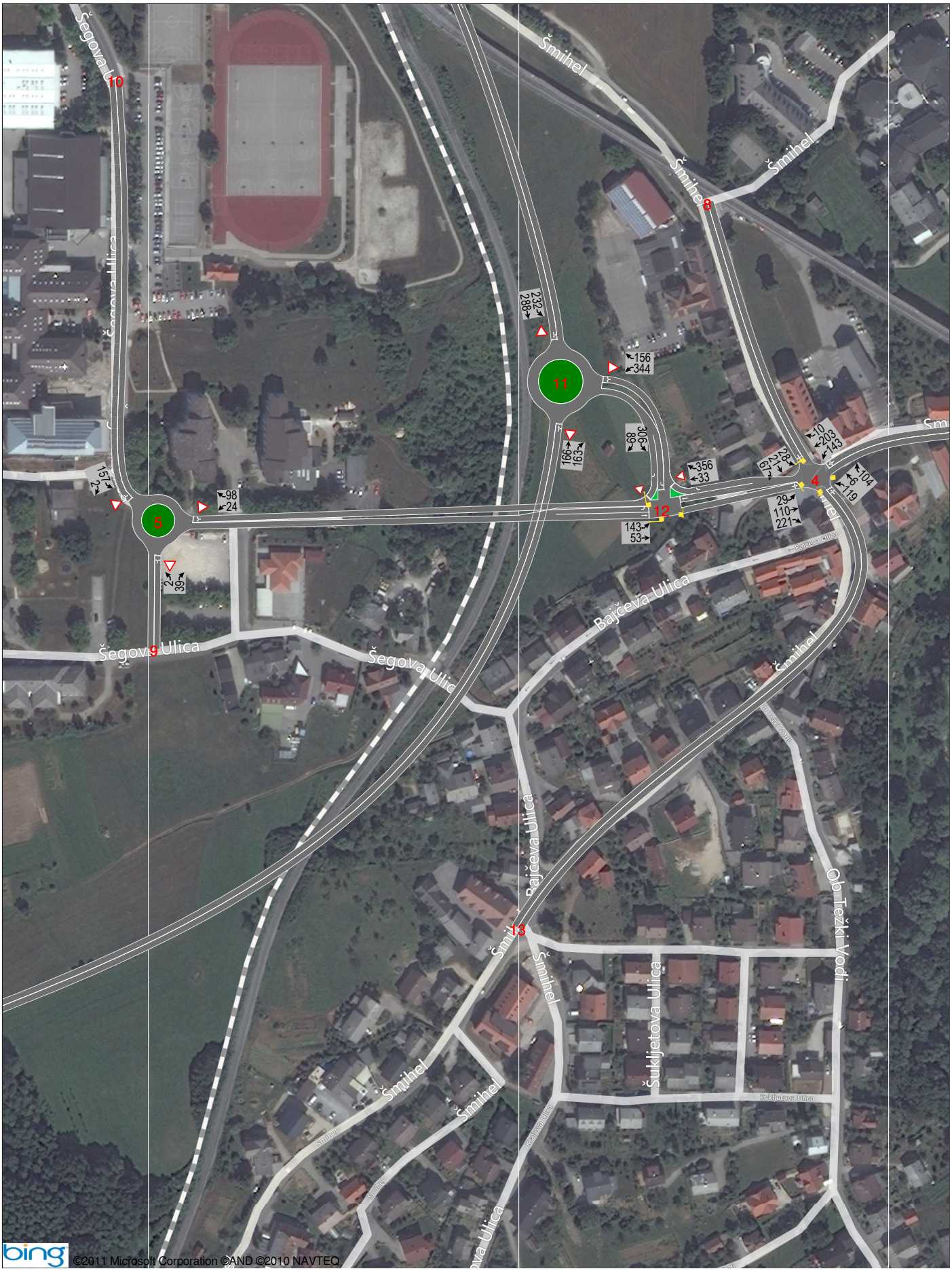
Varianta 2 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



Varianta 2 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



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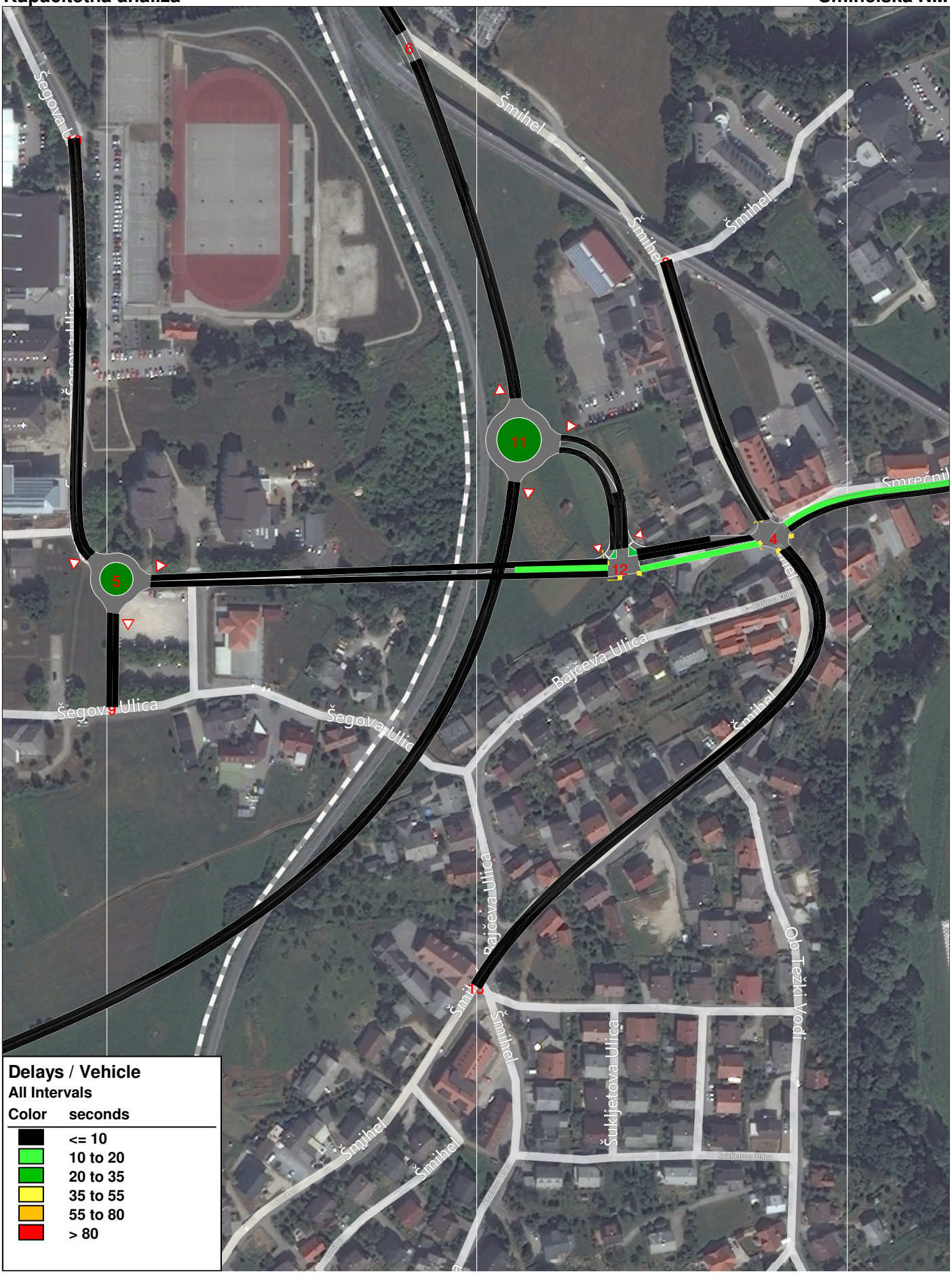
Varianta 2 **Popoldanska konica 2035**

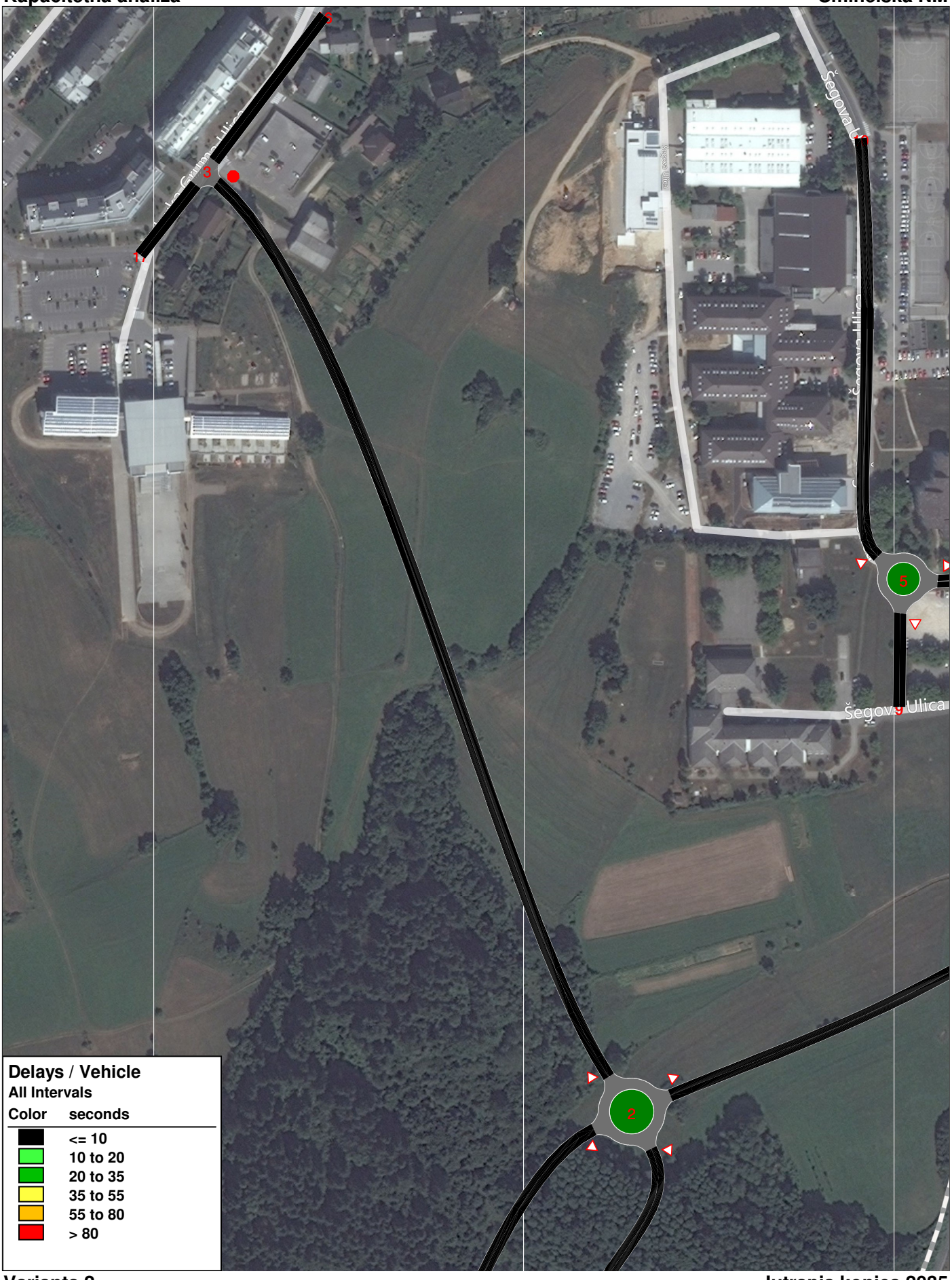
Prometne obremenitve **Smihelska NM**

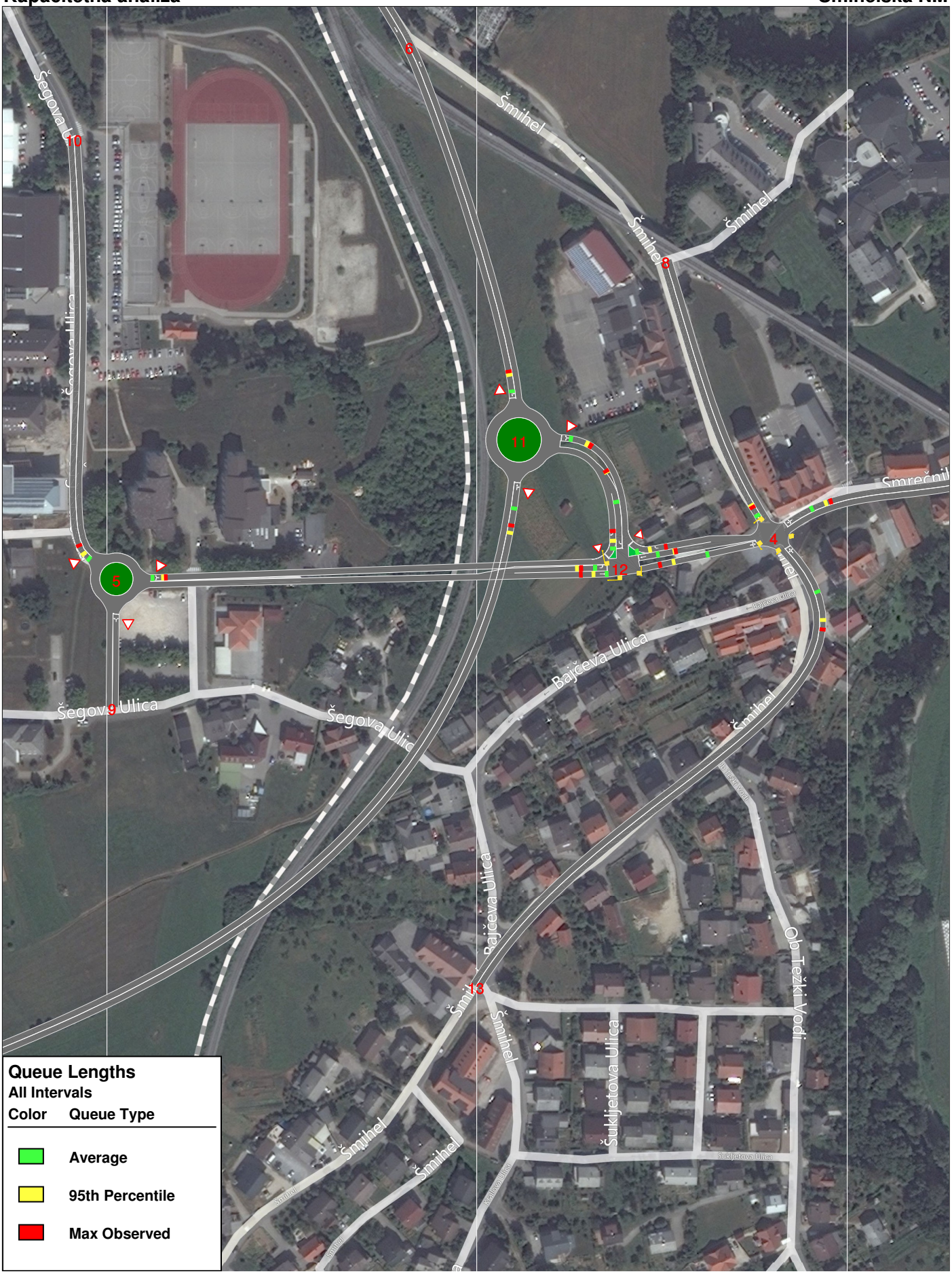


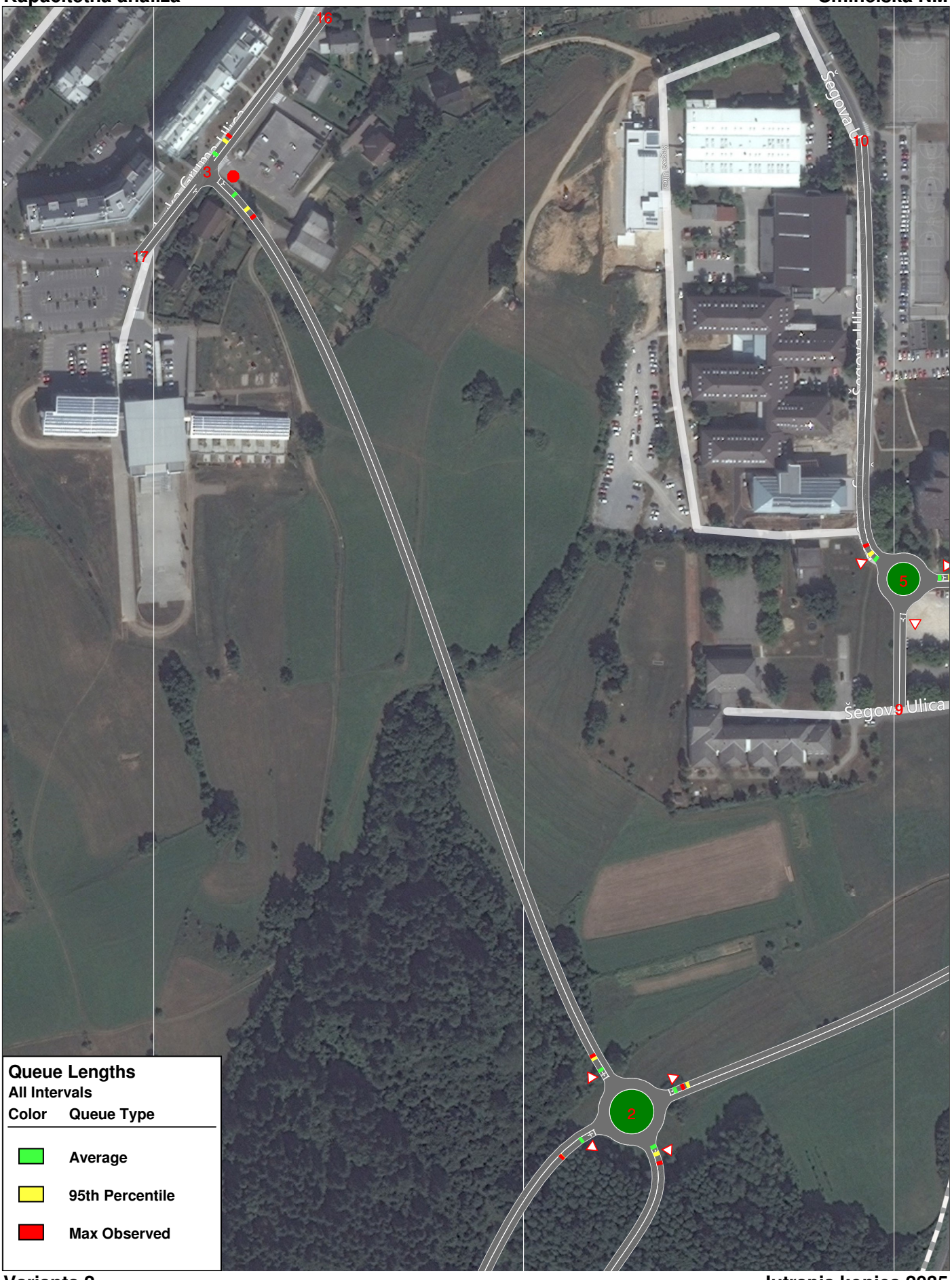
Varianta 2 **Popoldanska konica 2035**

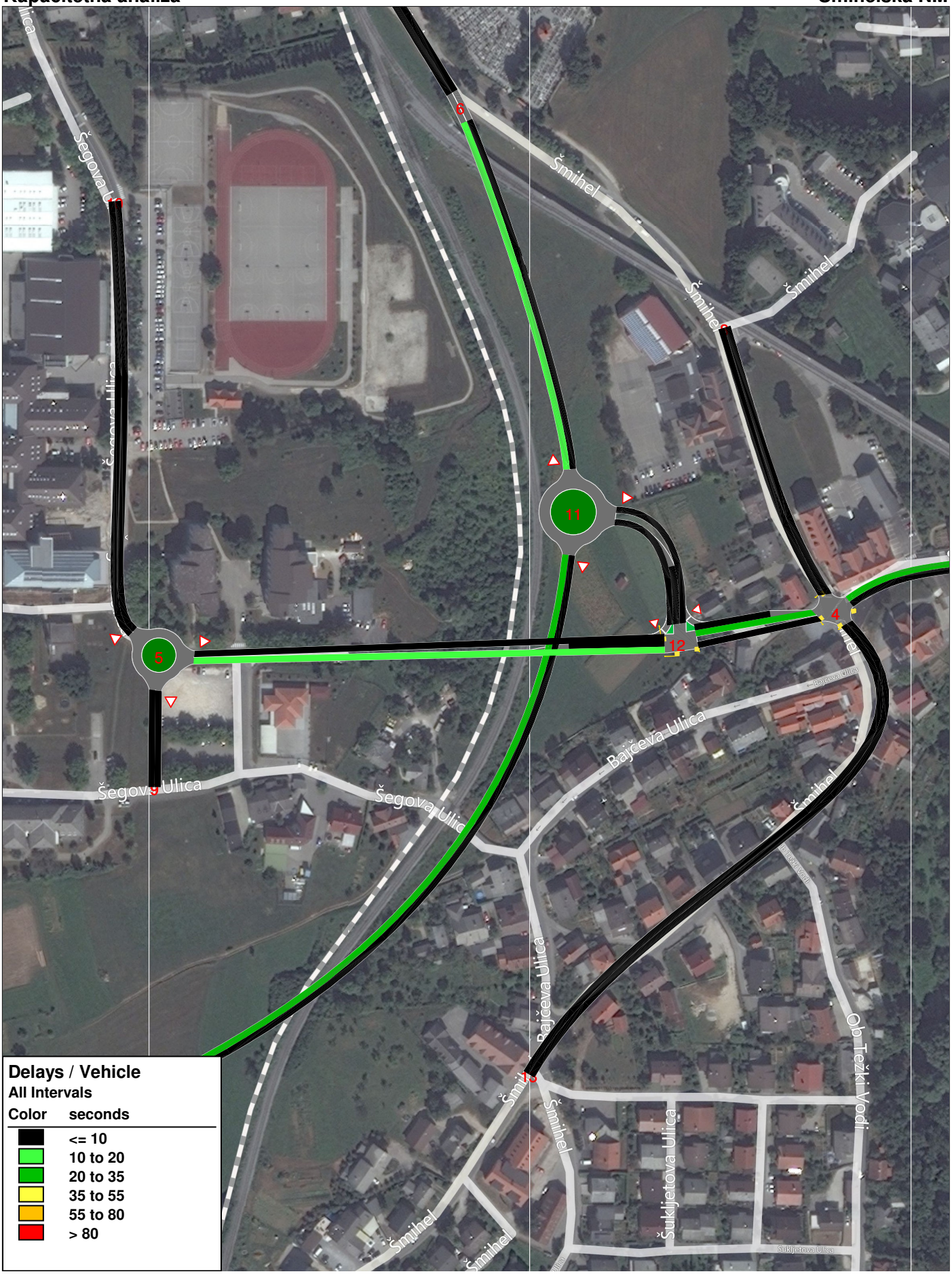
REZULTATI KAPACITETNE ANALIZE

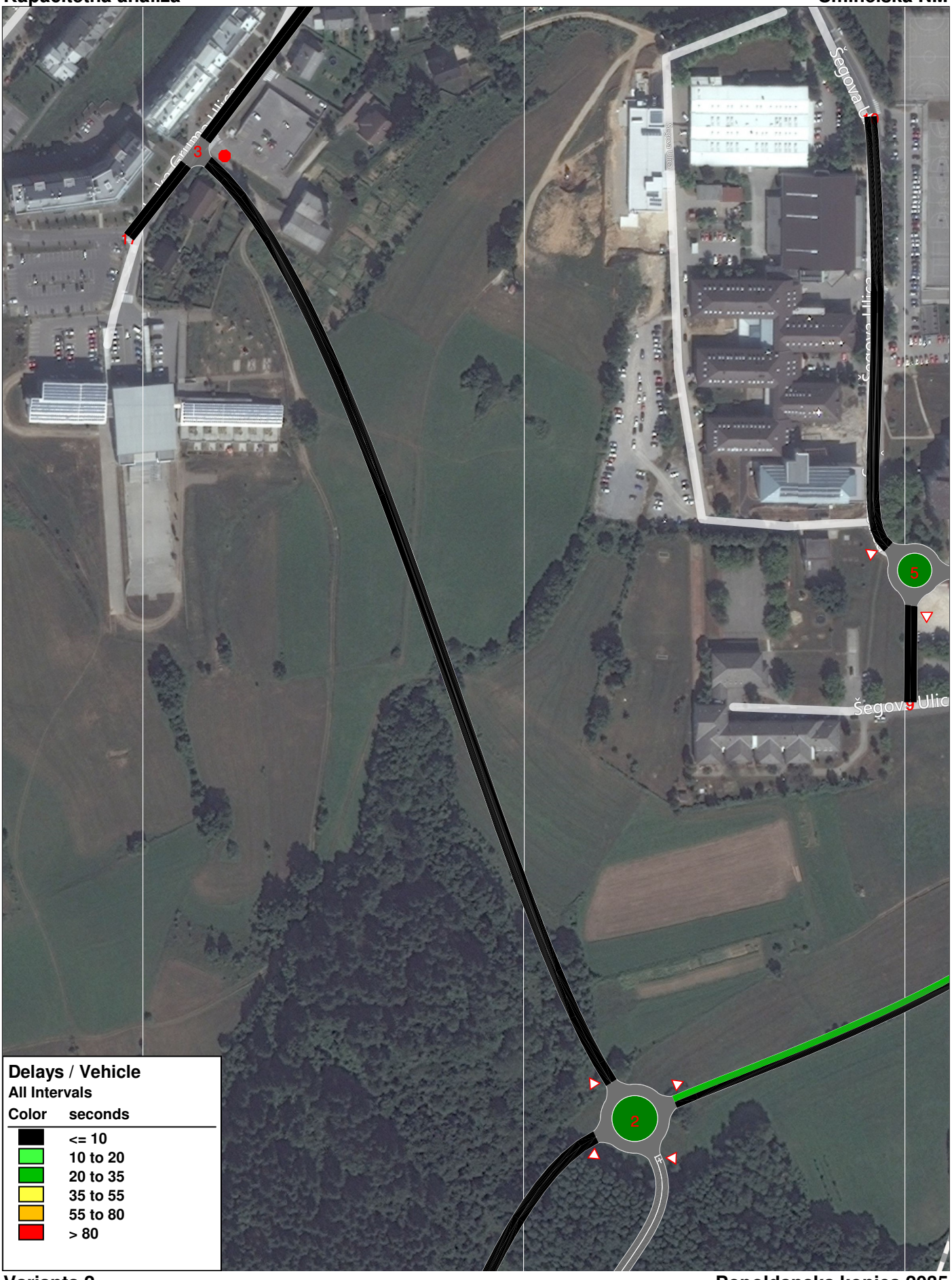

6
11
5
4
12
13
Šegova Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Šmihel
Bajčeva Ulica
Bajčeva Ulica
Bajčeva Ulica
Šukljetova Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečni
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80

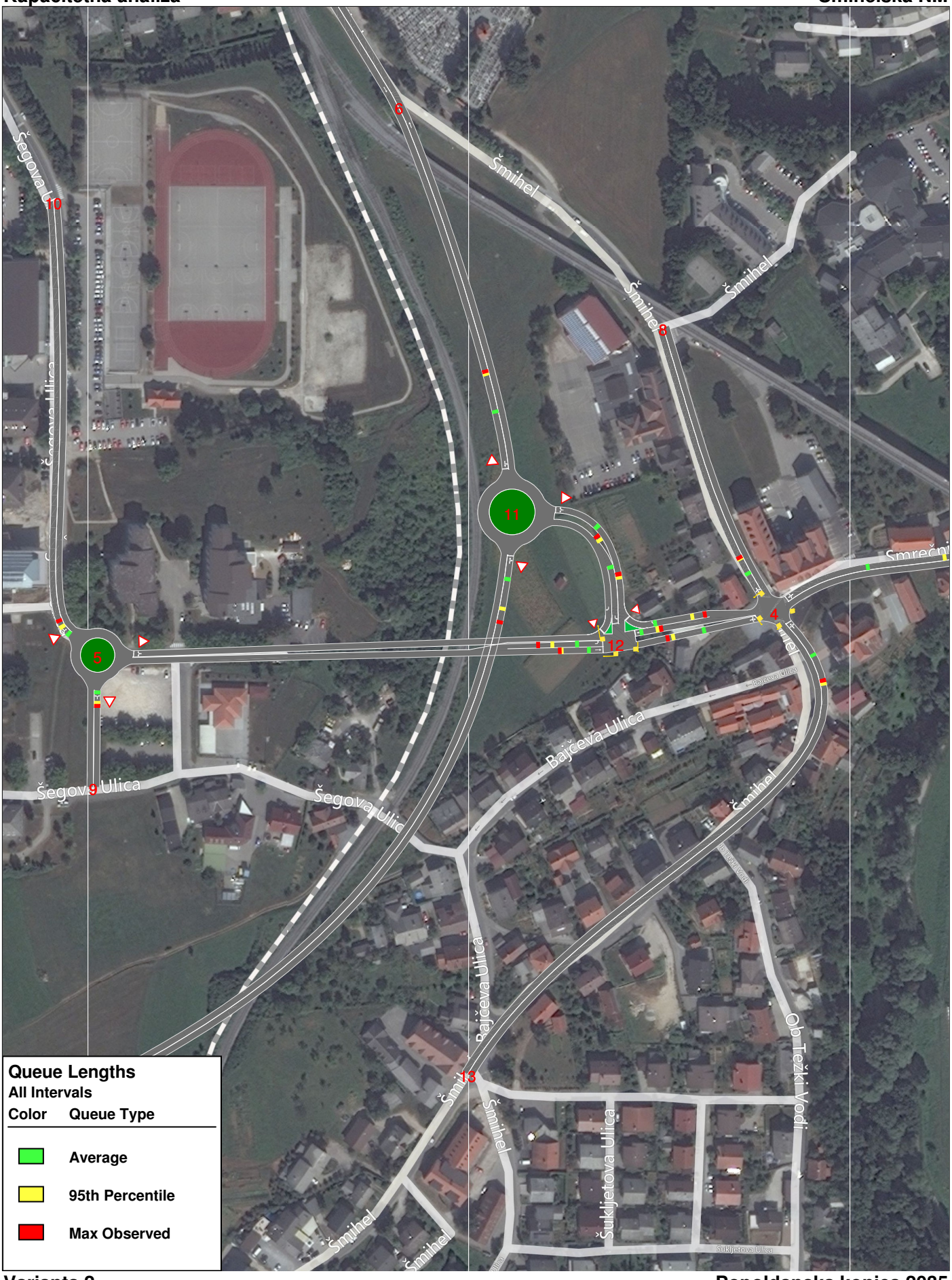

Šegova Ulica
Šegova Ulica
Šegova Ulica
5
2
3
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečnik
10
6
8
11
5
12
4
9
13
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed


16
3
17
10
5
9
2
Šegova Ulica
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
6
11
5
12
4
3
13
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80


Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
35 to 55
55 to 80
> 80
1
2
3
5
Šegova Ulica


Šegova Ulica
Šmihel
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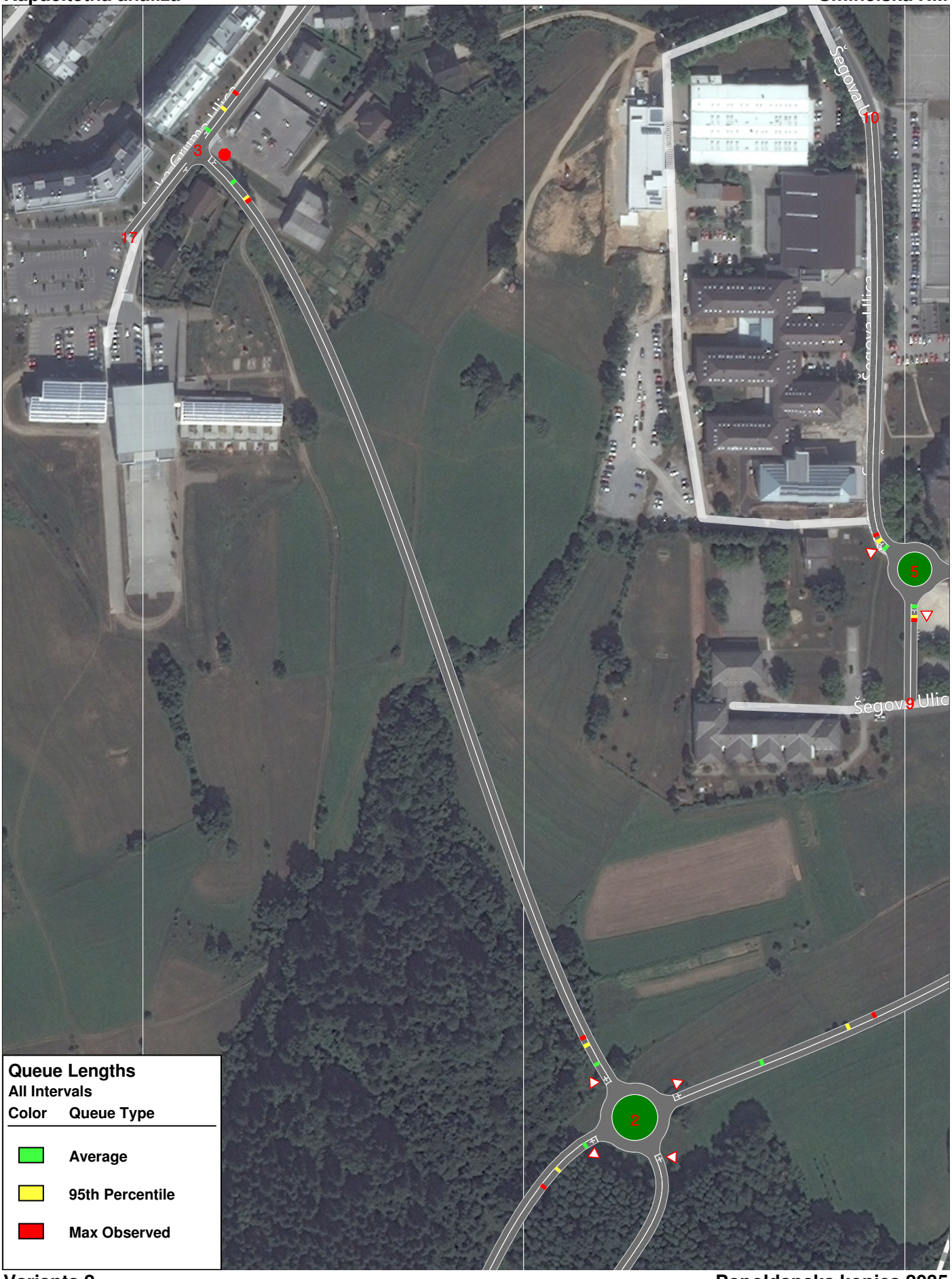
Šegova Ulica
Šegova Ulica
Bajčeva Ulica
Bajčeva Ulica
Bajčeva Ulica
Šukljetova Ulica
Šukljetova Ulica
Ob Težki Vodi
Smrečni
6
10
8
11
4
12
5
9
13
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed


Šegova Ulica
Šegova Ulica
Šegova Ulica
Šegova Ulica
1
2
3
5
10
Queue Lengths
All Intervals
Color Queue Type
Average
95th Percentile
Max Observed

Ugotovitve:

Tudi rezultati kapacitetne analize križišč variante 2 v planskem letu 2035 so podobni kot v letu 2015. Večje prometne obremenitve posledično povzročijo tudi nekaj zamud in zastojev, predvsem v popoldanski konici. Vendar bo tako v jutranji kot popoldanski konici cestno omrežje v zadovoljivi meri servisiralo prometne zahteve.

T.4.7 Kapacitetna analiza Variante 3, leto 2035

Varianta 3 v letu 2035 predvideva poleg ukrepov, ki so predvideni za leto 2015 še izgradnjo nove povezovalne lokalne ceste na zahodni strani ŠC do ulice Slavka Gruma – cesta za Drsko, kjer se predvideva trikrako nesemaforizirano križišče K3.

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
Šegova Ulica
Bajčeva Ulica
Šmihel
Šukljetova Ulica
Ob Težki Vodi
Šmihel
Šmihel
Šmihel

Prometne obremenitve **Smihelska NM**



Varianta 3 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



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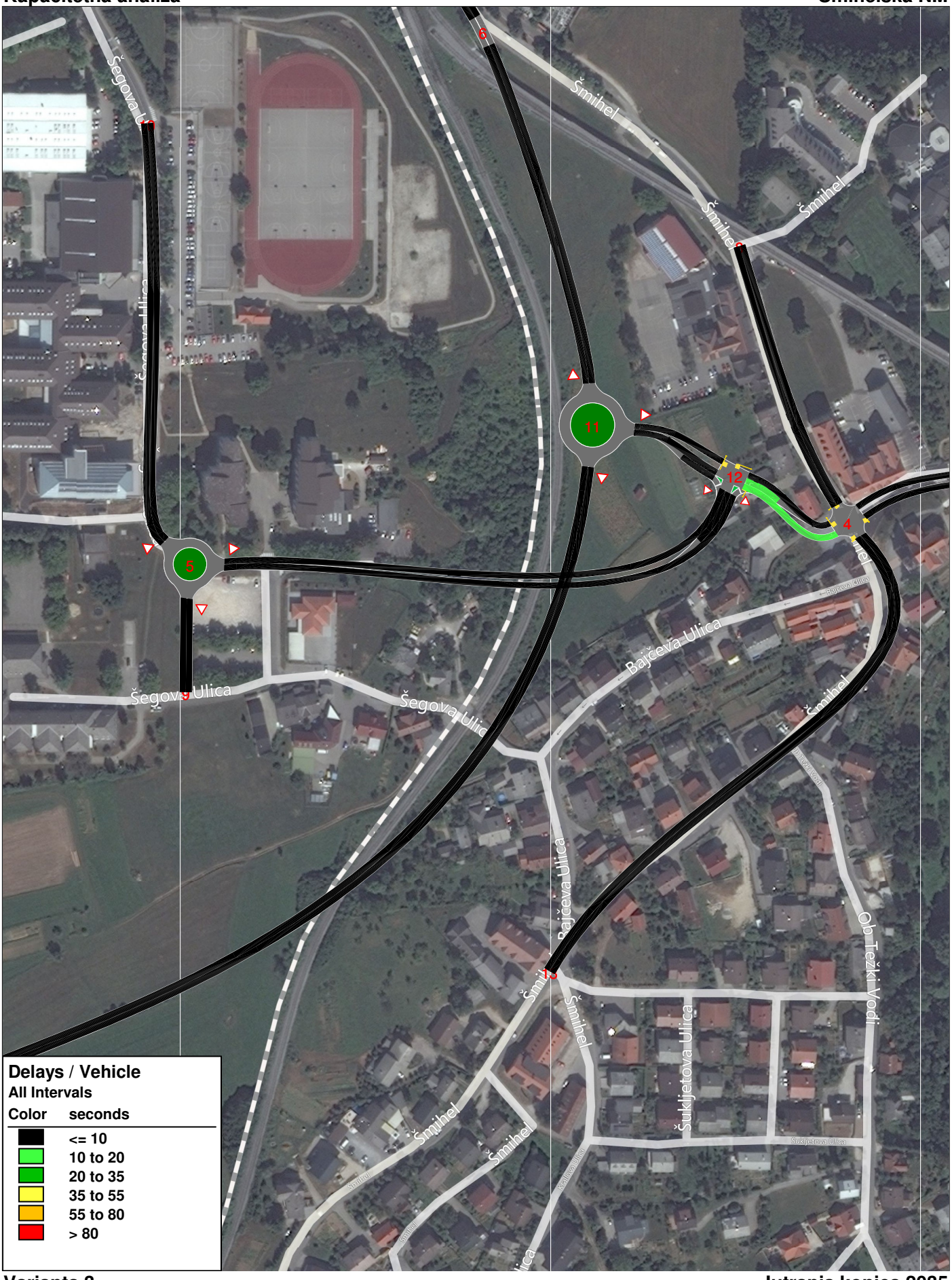
Varianta 3 **Popoldanska konica 2035**

Prometne obremenitve **Smihelska NM**



Varianta 3 **Popoldanska konica 2035**

REZULTATI KAPACITETNE ANALIZE


Šegova Ulica
Šmihel
Bajčeva Ulica
Šukljetova Ulica
Ob Težki Vodi
11
12
4
5
6
Delays / Vehicle
All Intervals
Color seconds
<= 10
10 to 20
20 to 35
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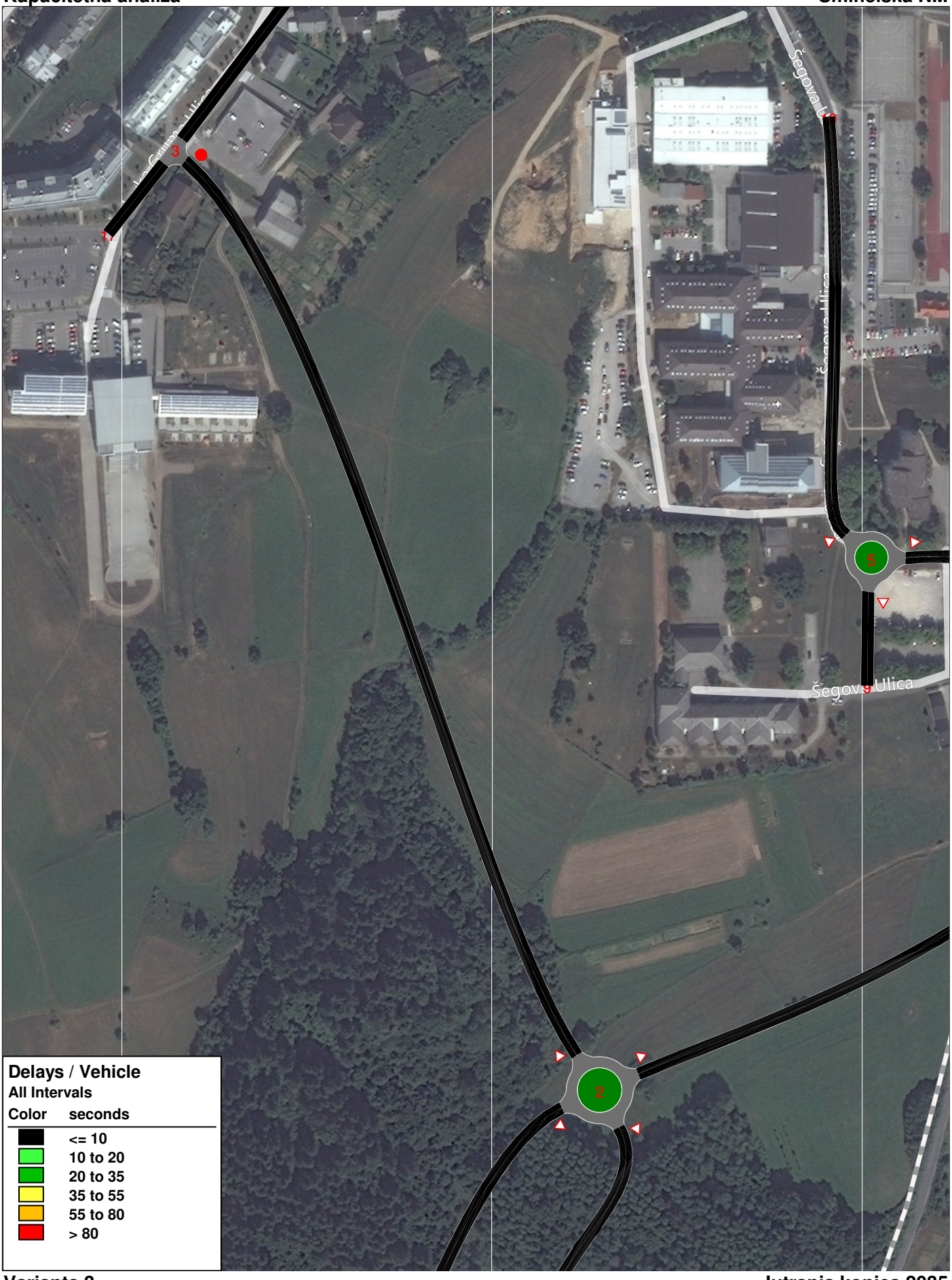
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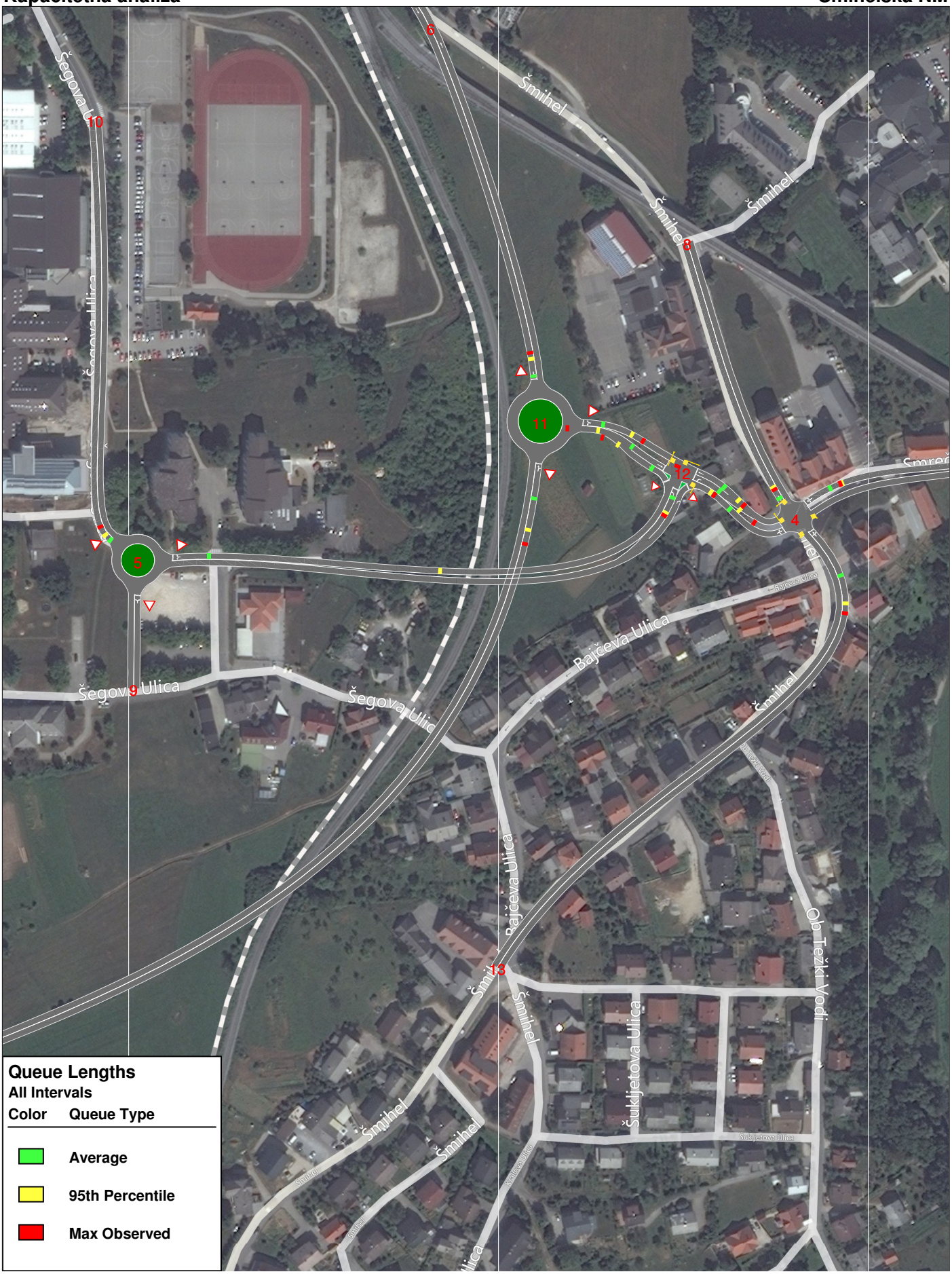
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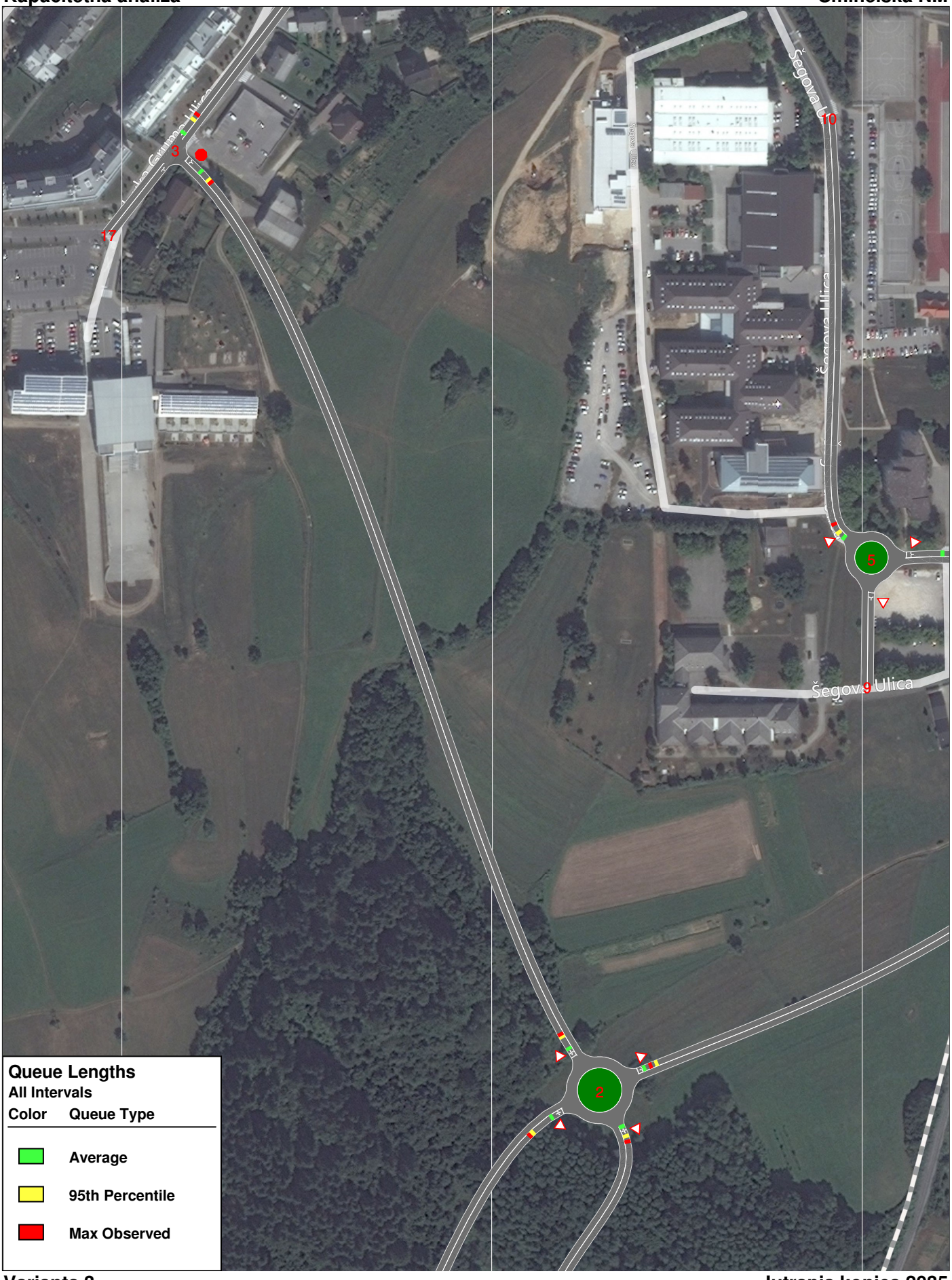
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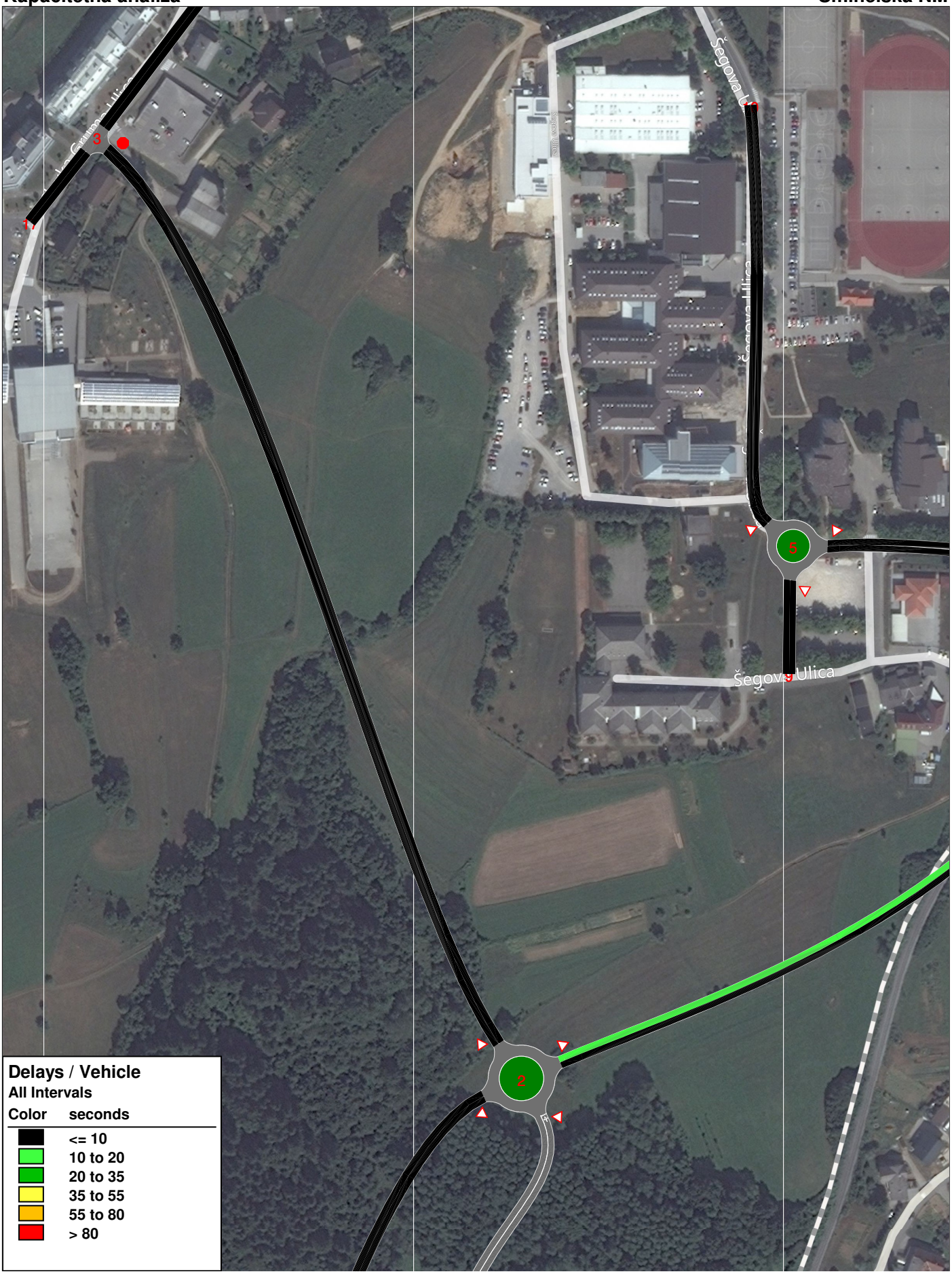
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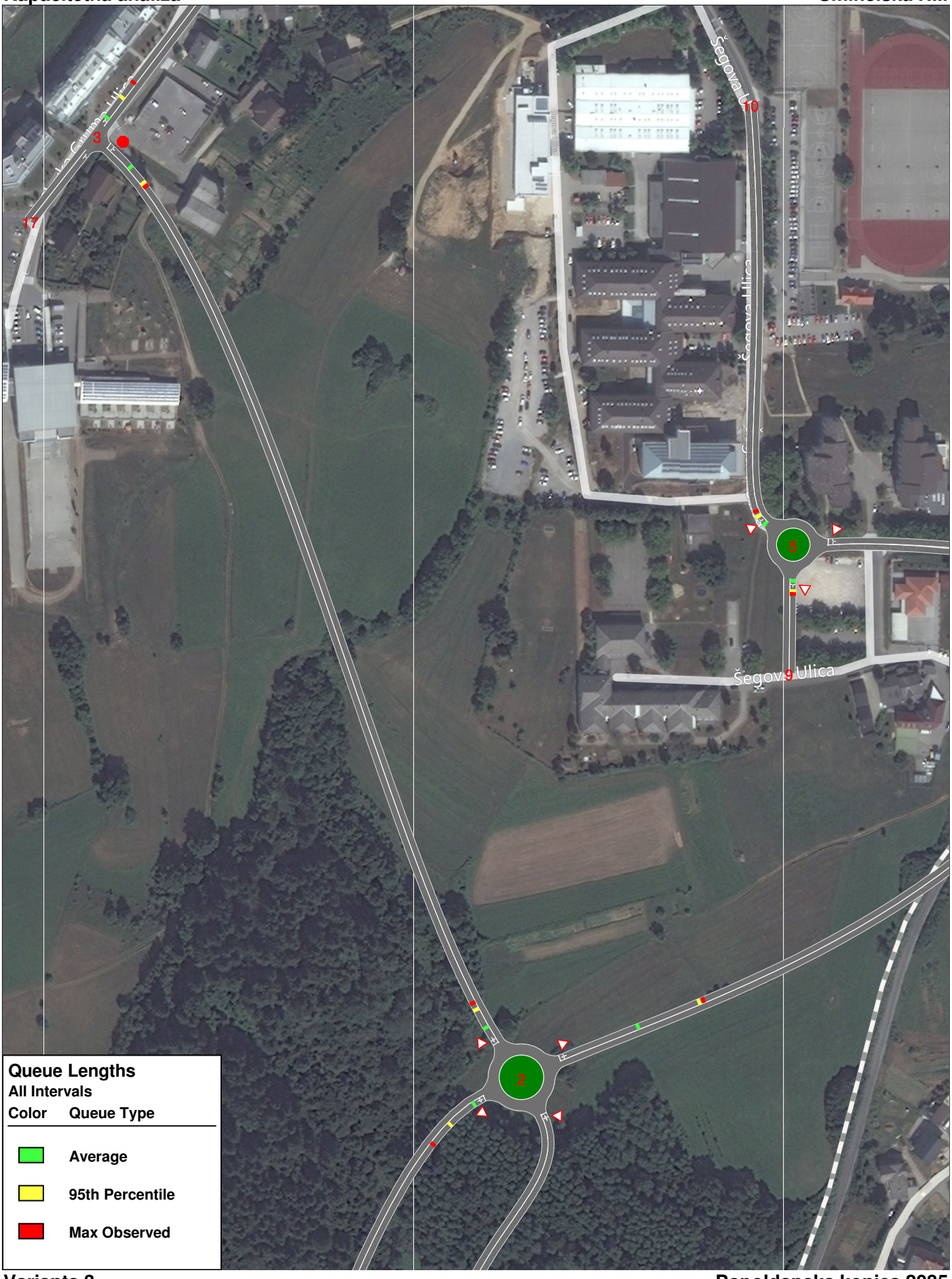
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Ugotovitve:

Tudi rezultati kapacitetne analize križišč variante 3 v planskem letu 2035 so podobni kot v letu 2015. Pojavi se nekaj več zamud in zastojev, predvsem v popoldanski konici. Vendar bo tako v jutranji kot popoldanski konici cestno omrežje v zadovoljivi meri servisiralo prometne zahteve.

T.4.8 Kapacitetna analiza Variante 4, leto 2035

Varianta 4 v letu 2035 predvideva poleg ukrepov, ki so predvideni za leto 2015 še izgradnjo nove povezovalne lokalne ceste na zahodni strani ŠC do ulice Slavka Gruma – cesta za Drsko, kjer se predvideva trikrako nesemaforizirano križišče K3.

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]

Prometne obremenitve **Smihelska NM**



Varianta 4 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



Varianta 4 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



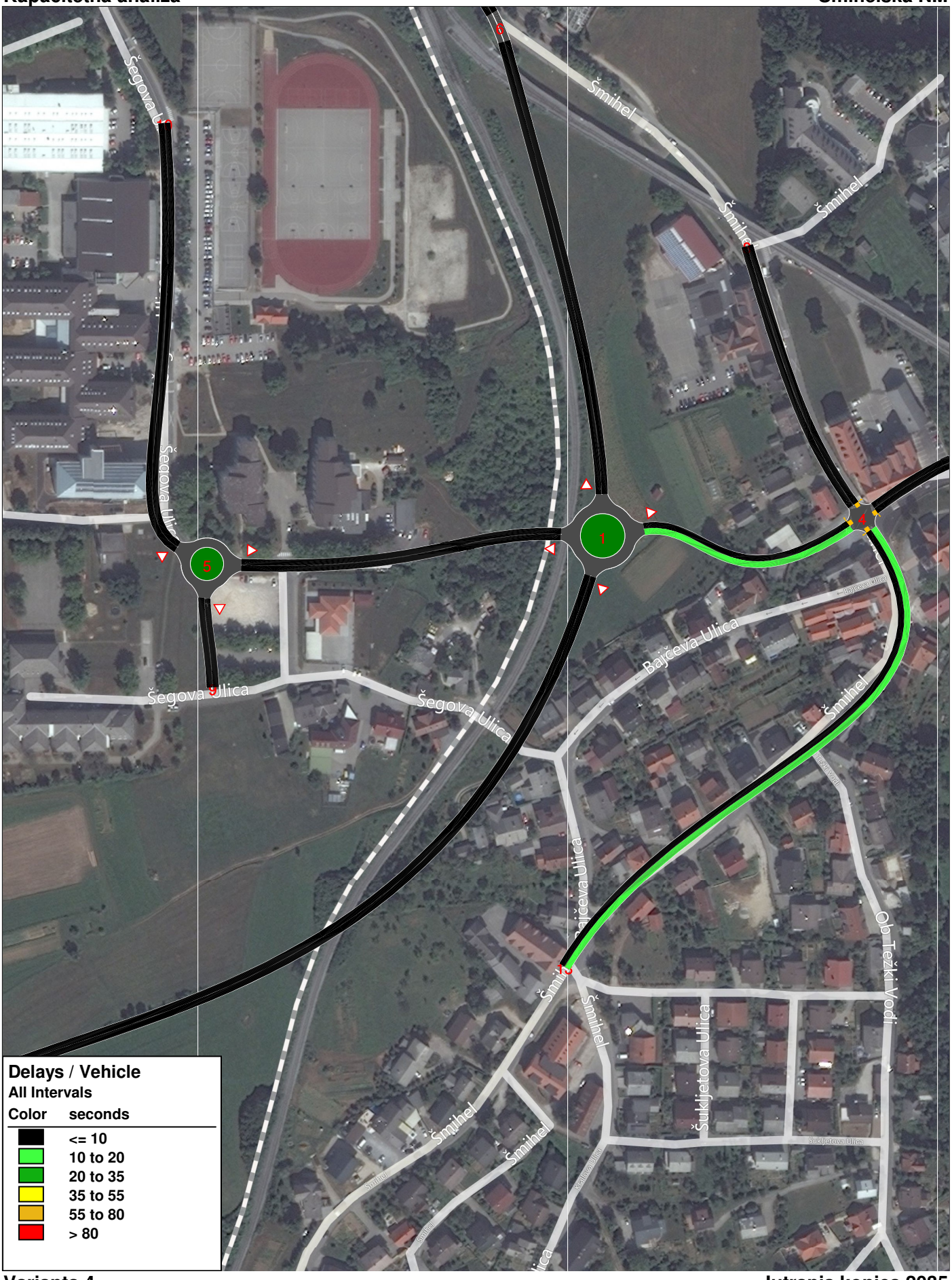
Varianta 4 **Popoldanska konica 2035**

Prometne obremenitve **Smihelska NM**



Varianta 4 **Popoldanska konica 2035**

REZULTATI KAPACITETNE ANALIZE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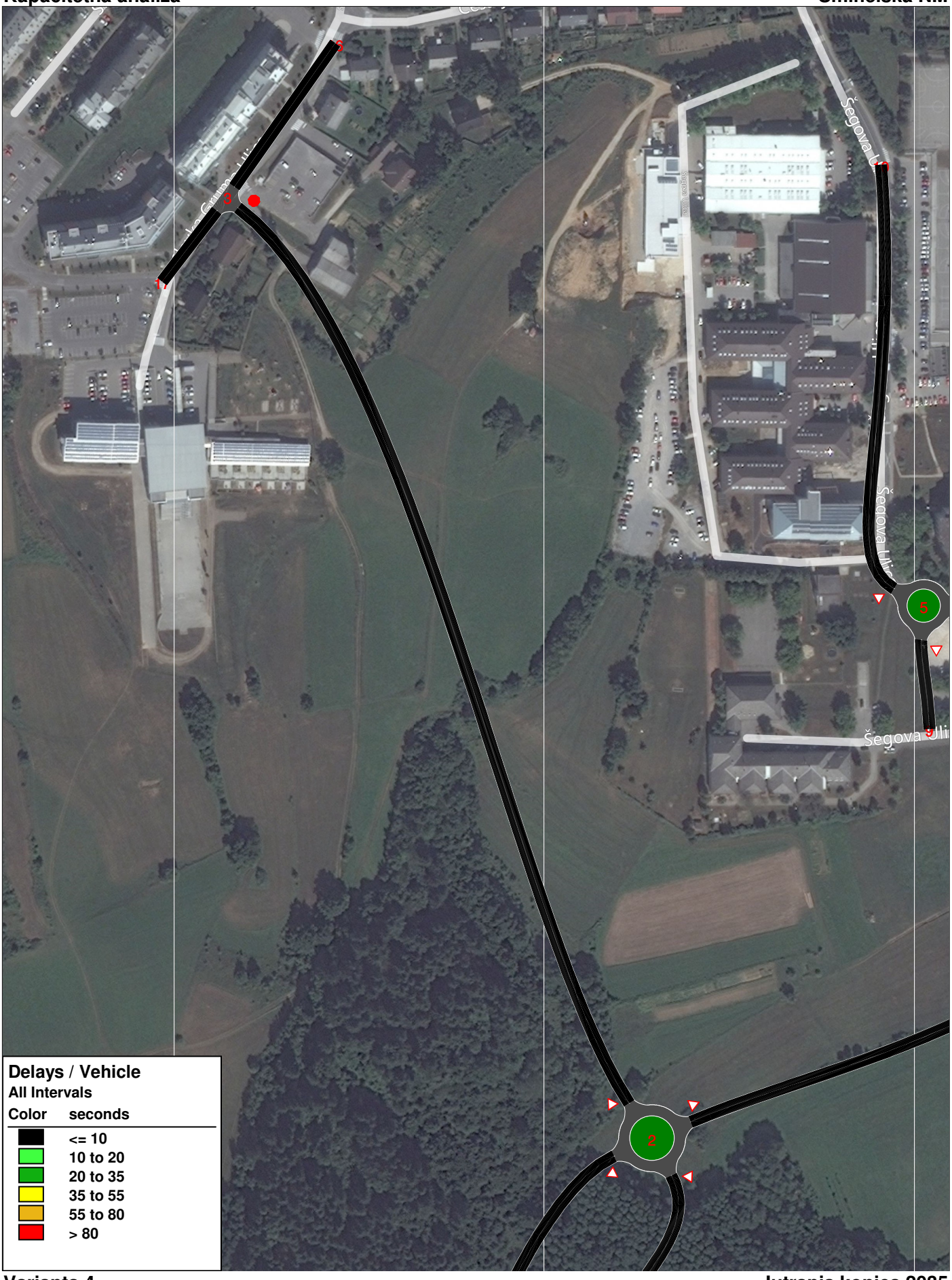
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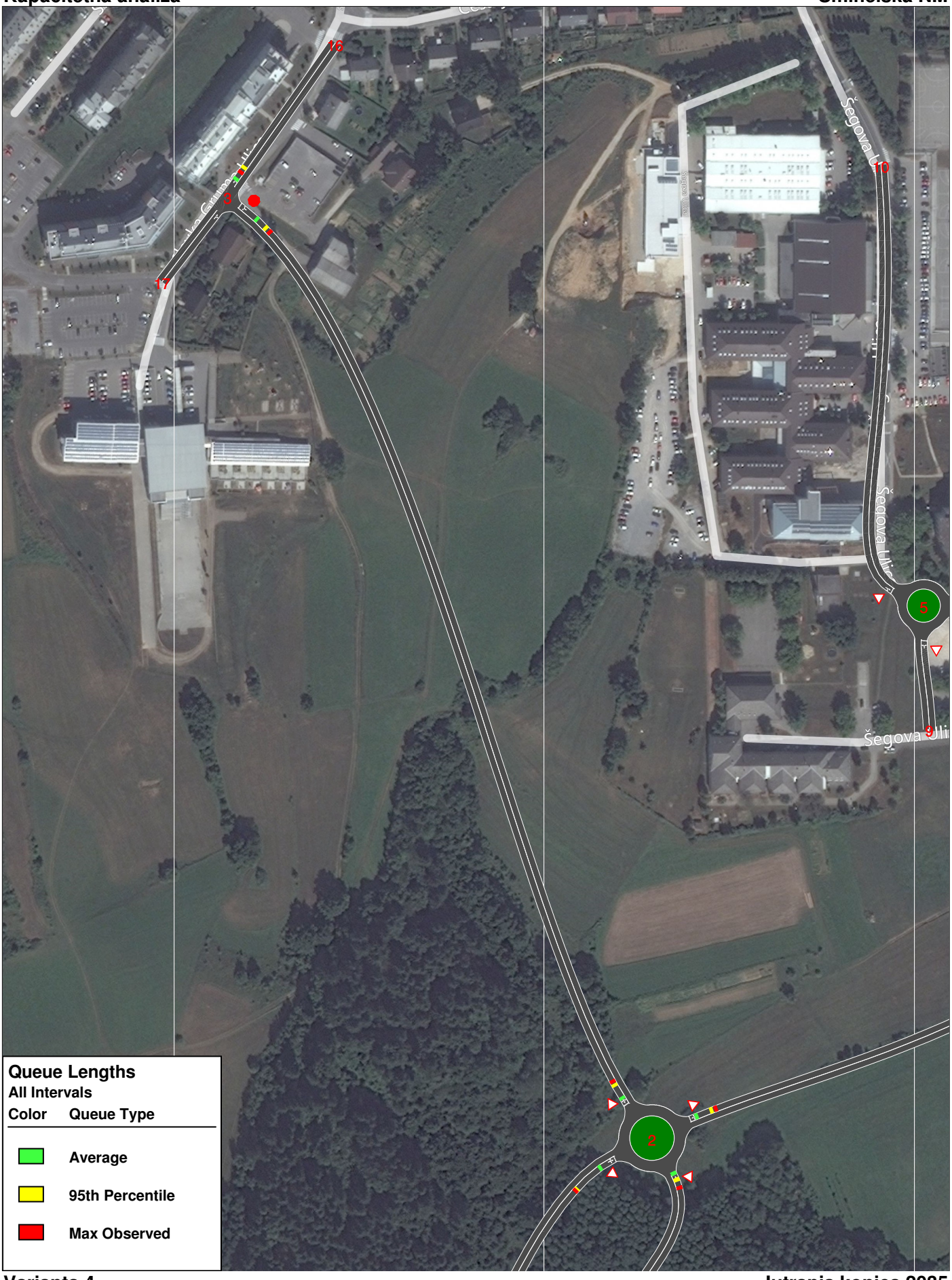
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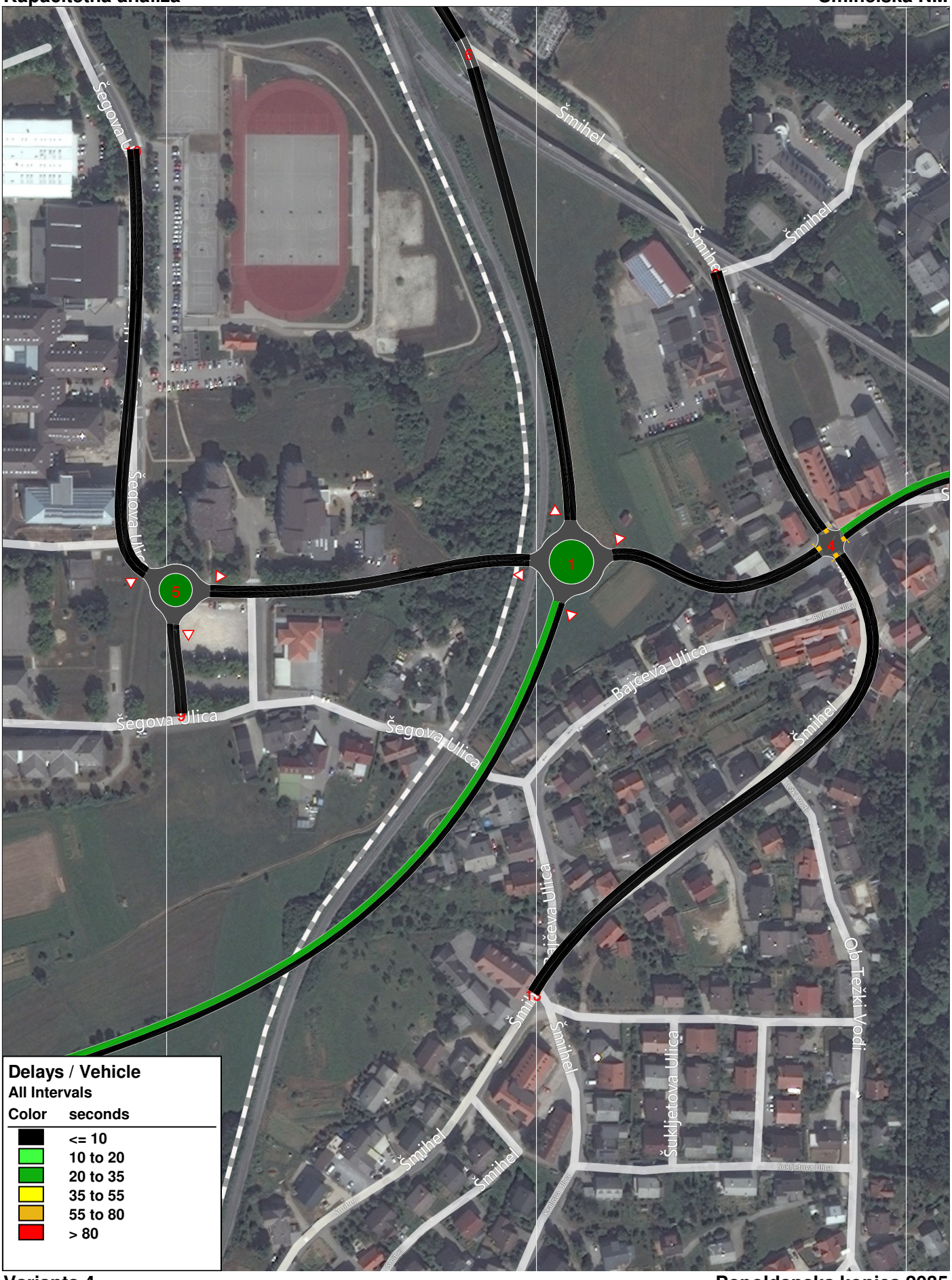
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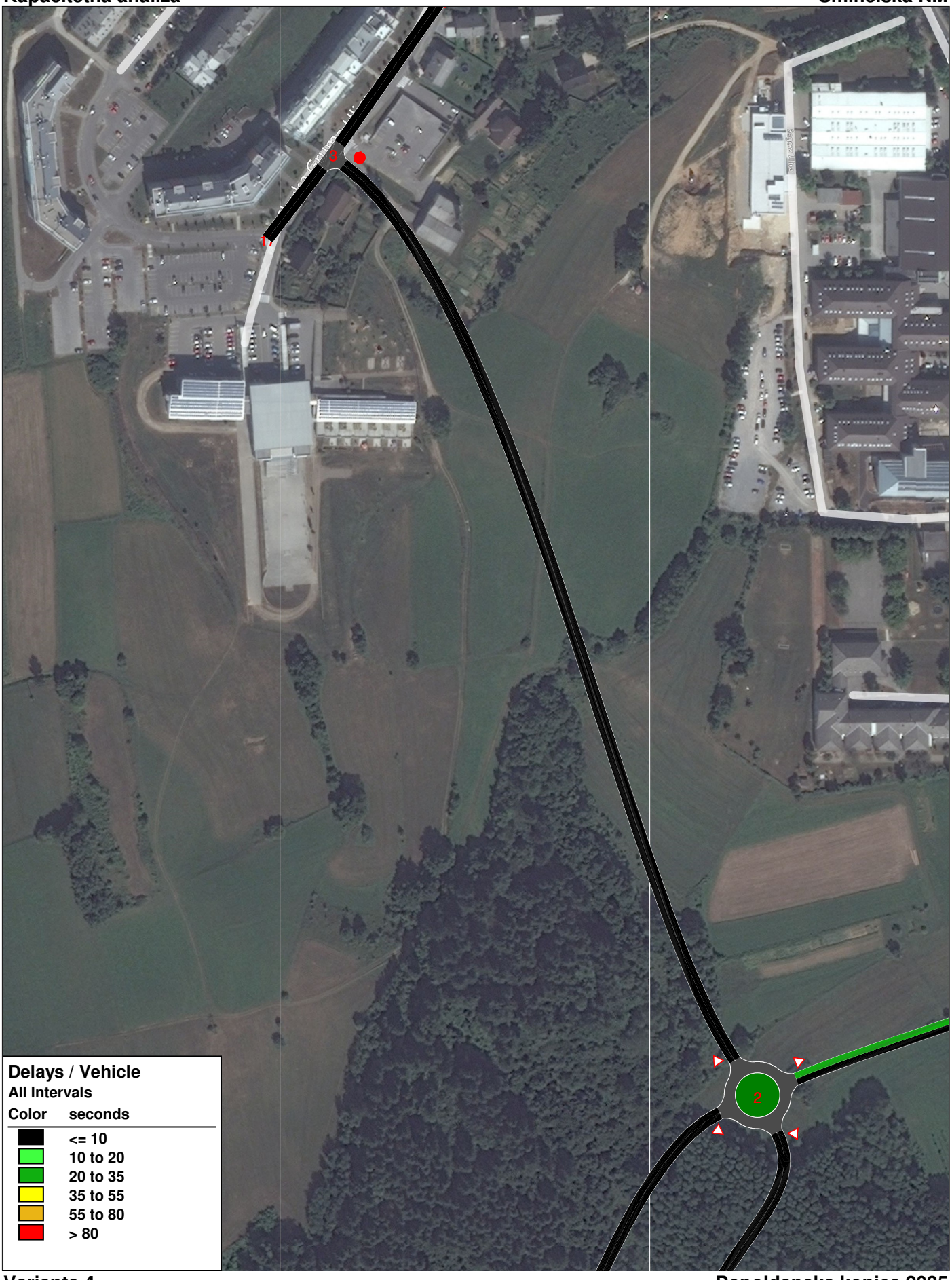
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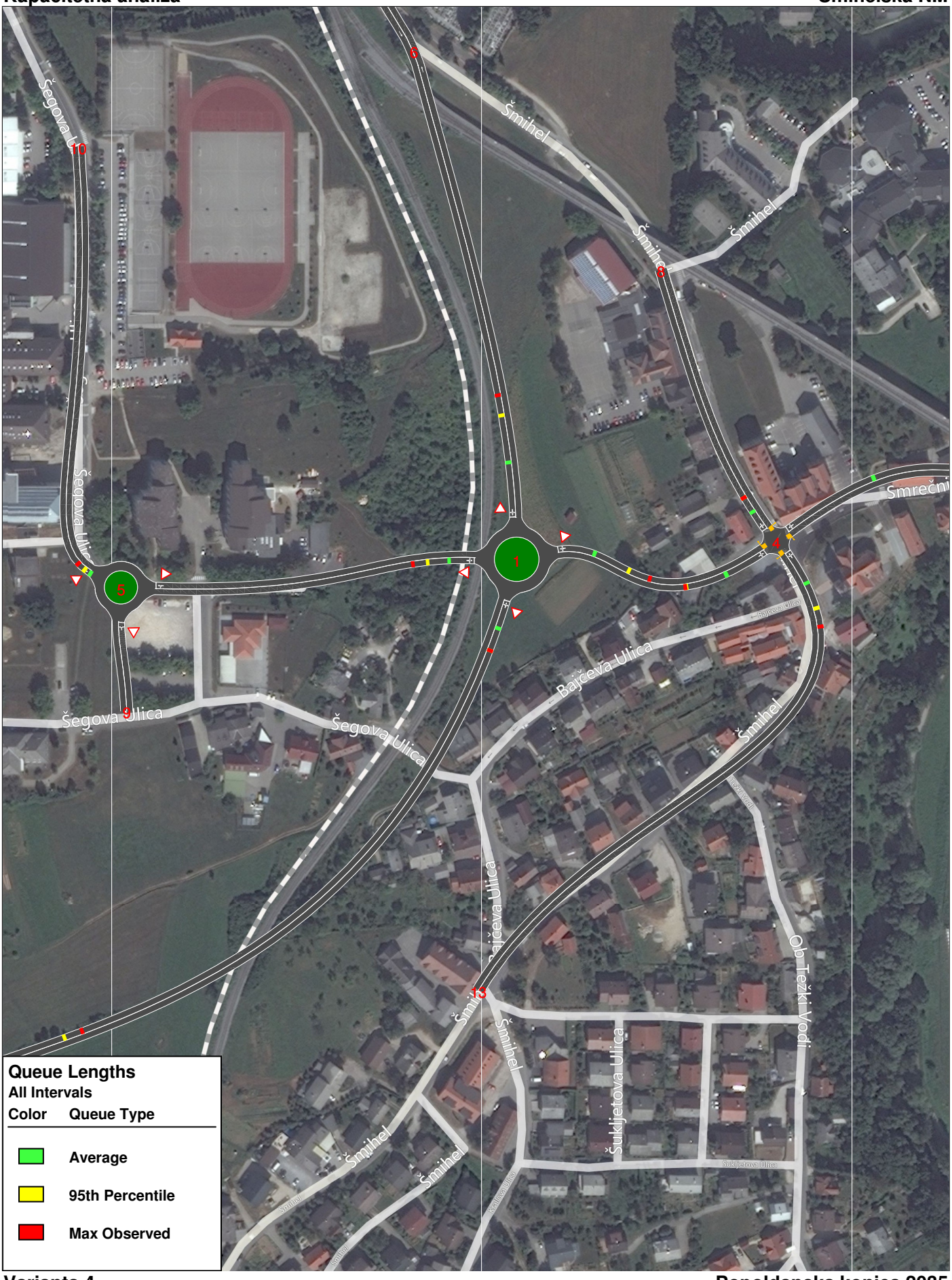
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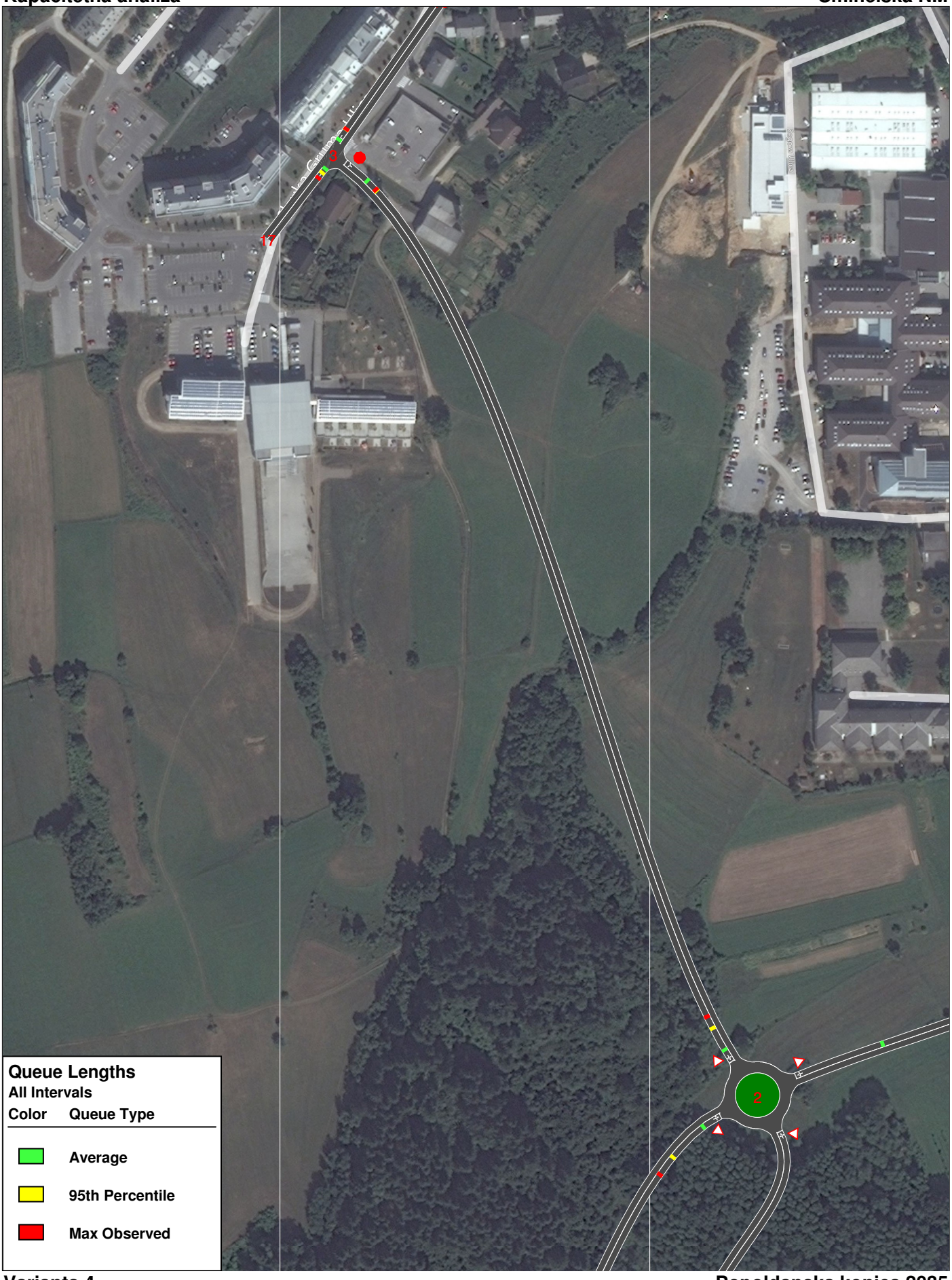
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Ugotovitve:

Kapacitetna analiza križišč variante 4 v planskem letu 2035 izkazuje še najboljše rezultate. Čeprav se tudi pri varianti 4 povečajo parametri glede na leto 2015.

Varianta 4 bo predvidoma tako v jutranji kot popoldanski konici najbolje servisirala prometne zahteve leta 2035.

T.4.9 Primerjava variant s komentarji

Za primerjavo vseh variant smo izbrali najbolj pomembne parametre, ki so našteti v Preglednicah 2 in 3. Primerjali smo vrednosti parametrov za celotno obravnavano območje v izhodiščnem letu 2015 in v planskem letu 2035.

Preglednica 2: Vrednosti primerjalnih parametrov v jutranji in popoldanski konici za leto 2015 (celotno obravnavano cestno omrežje, vsa vozila, 1 ura)

PRIMERJALNI PARAMETRI	2015							
	JK				PK			
	V1	V2	V3	V4	V1	V2	V3	V4
Skupna zamuda vseh vozil (ure)	4,2	3,4	3,7	3,4	5,7	5,1	5,0	3,6
Število ustavljanj na vozilo	0,74	0,49	0,57	0,52	0,80	0,66	0,74	0,56
Povprečna hitrost (km/h)	38	39	39	39	36	37	37	39
Skupno porabljen čas (ure)	24,8	24,4	24,6	24,4	28,8	28,7	28,4	25,3
Skupno prevožena pot (km)	939,2	944,7	944,2	954,7	1047,9	1058,1	1055,7	985,7
Porabljeno gorivo (L)	76,7	76,9	76,9	77,7	88,4	89,2	88,2	81,4

Preglednica 3: Vrednosti primerjalnih parametrov v jutranji in popoldanski konici za leto 2035 (celotno obravnavano cestno omrežje, vsa vozila, 1 ura)

PRIMERJALNI PARAMETRI	2035							
	JK				PK			
	V1	V2	V3	V4	V1	V2	V3	V4
Skupna zamuda vseh vozil (ure)	5,3	4,4	4,9	4,7	10,6	9,6	10,1	9,0
Število ustavljanj na vozilo	0,78	0,65	0,72	0,66	1,23	1,13	1,18	0,96
Povprečna hitrost (km/h)	37	38	37	38	33	34	34	35
Skupno porabljen čas (ure)	29,5	28,8	29,1	29,3	42,4	42,0	42,0	40,4
Skupno prevožena pot (km)	1073,4	1077,9	1078,4	1102,9	1413,5	1427,4	1420,4	1414,3
Porabljeno gorivo (L)	91,0	90,4	90,6	93,2	124,7	124,8	123,8	121,7

Primerjava parametrov kapacitetne analize za celotno obravnavano območje izkazuje sorazmerno majhne razlike med posameznimi variantami. Nekoliko v pozitivnem smislu odstopa le varianta 4. Hiter pregled nekaterih parametrov daje občutek, da se bo leta 2035 stanje nekoliko poslabšalo, vendar je potrebno upoštevati dejstvo, da je v letu 2035 cestno omrežje večje zaradi nove povezovalne lokalne ceste na zahodni strani ŠC

– cesta za Drsko in dodatnega križišča K3 na Ulici Slavka Gruma, kar pomeni tudi več vozil na obravnavani cestni mreži.

Varianta 4 pri vseh scenarijih izkazuje boljše rezultate od ostalih variant.

T.5 PREVERITEV DODATNEGA KRIŽIŠČA PR2

V okviru študije in usklajevanjem med naročnikom, glavnim izvajalcem in izdelovalcem te študije je prihajalo do različnih predlogov in mnenj.

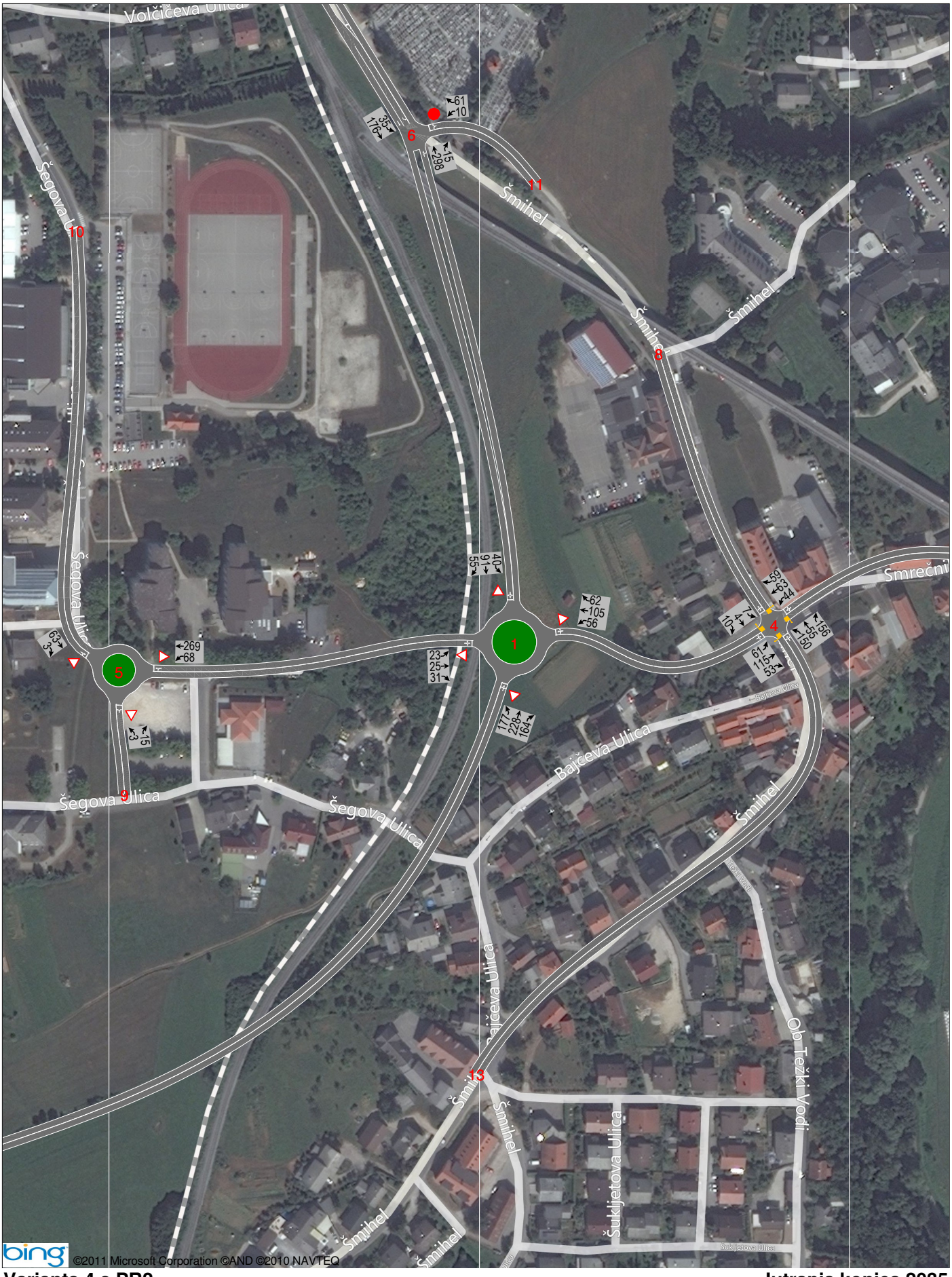
En izmed predlogov je bil tudi ukinitev navezave na staro Šmihelsko cesto v bližini pokopališča, ki je sicer bila predvidena v prvotnih projektih in študijah in s tem posledično tudi (nepotrebnega) križišča. Smiselno je namreč, da se na novi cesti, ki bo neke vrste vpadnica, ne umešča križišč prepogosto, če nimajo posebne prometne funkcije oziroma, da so ta na neki razumni medsebojni razdalji, če so že potrebna za prometno navezavo določenega območja.

Vse analize za obe varianti smo opravili brez priključka stare Šmihelske ceste in parkirišča v bližini pokopališča. Vendar smo naknadno vseeno še kapacitetno preverili varianto 4 s vključenim križiščem PR2 za jutranjo in popoldansko konico v letu 2035.



Slika 6: Lokacija morebitnega priključka »stare« Šmihelske – križišče/priključek PR2

SHEMA GEOMETRIJE in PROMETNE OBREMENITVE [vsa vozila]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Prometne obremenitve **Smihelska NM**



Varianta 4 s PR2 **Jutranja konica 2035**

Prometne obremenitve **Smihelska NM**



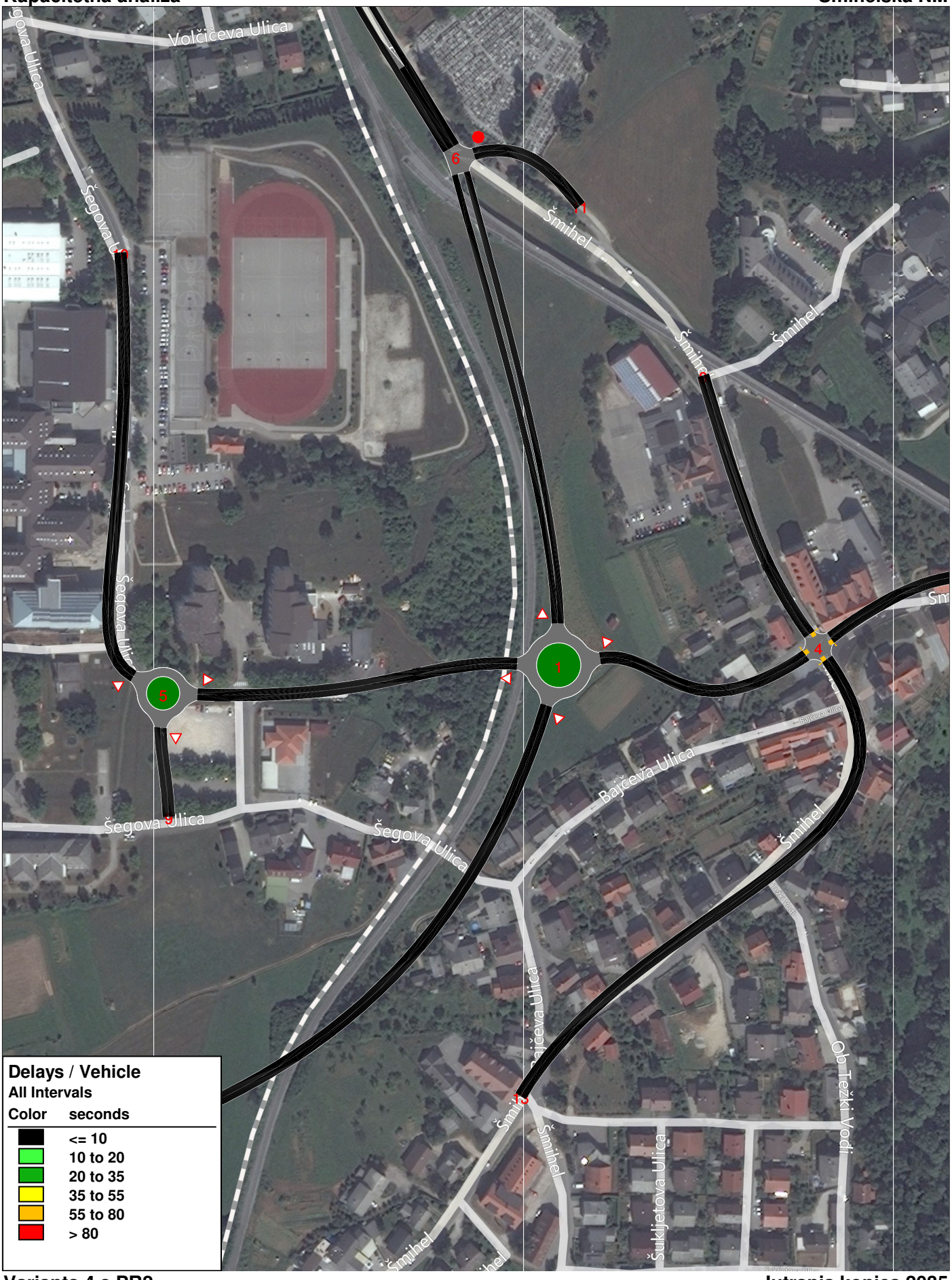
Varianta 4 s PR2 **Popoldanska konica 2035**

Prometne obremenitve **Smihelska NM**



Varianta 4 s PR2 **Popoldanska konica 2035**

REZULTATI KAPACITETNE ANALIZE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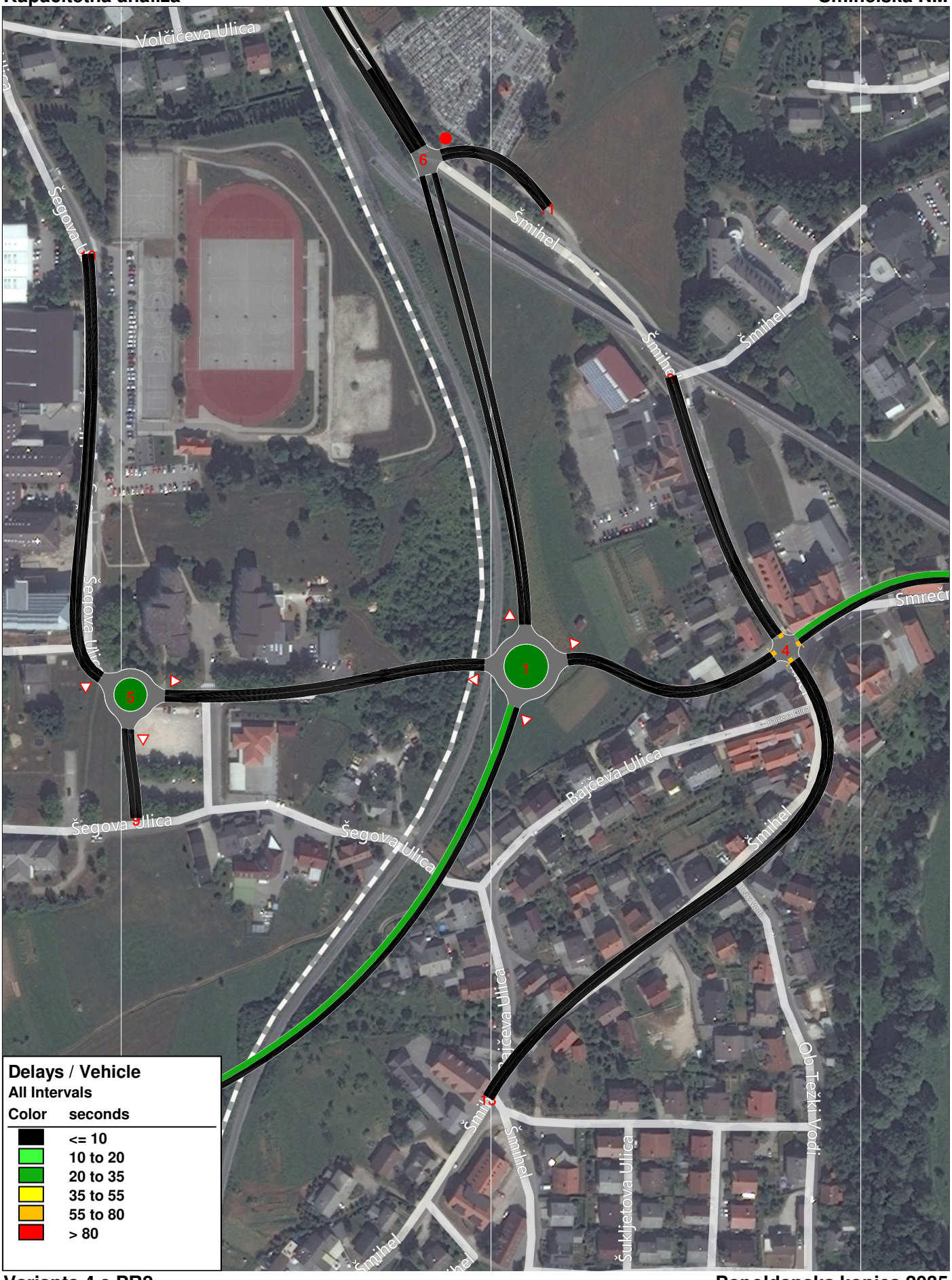
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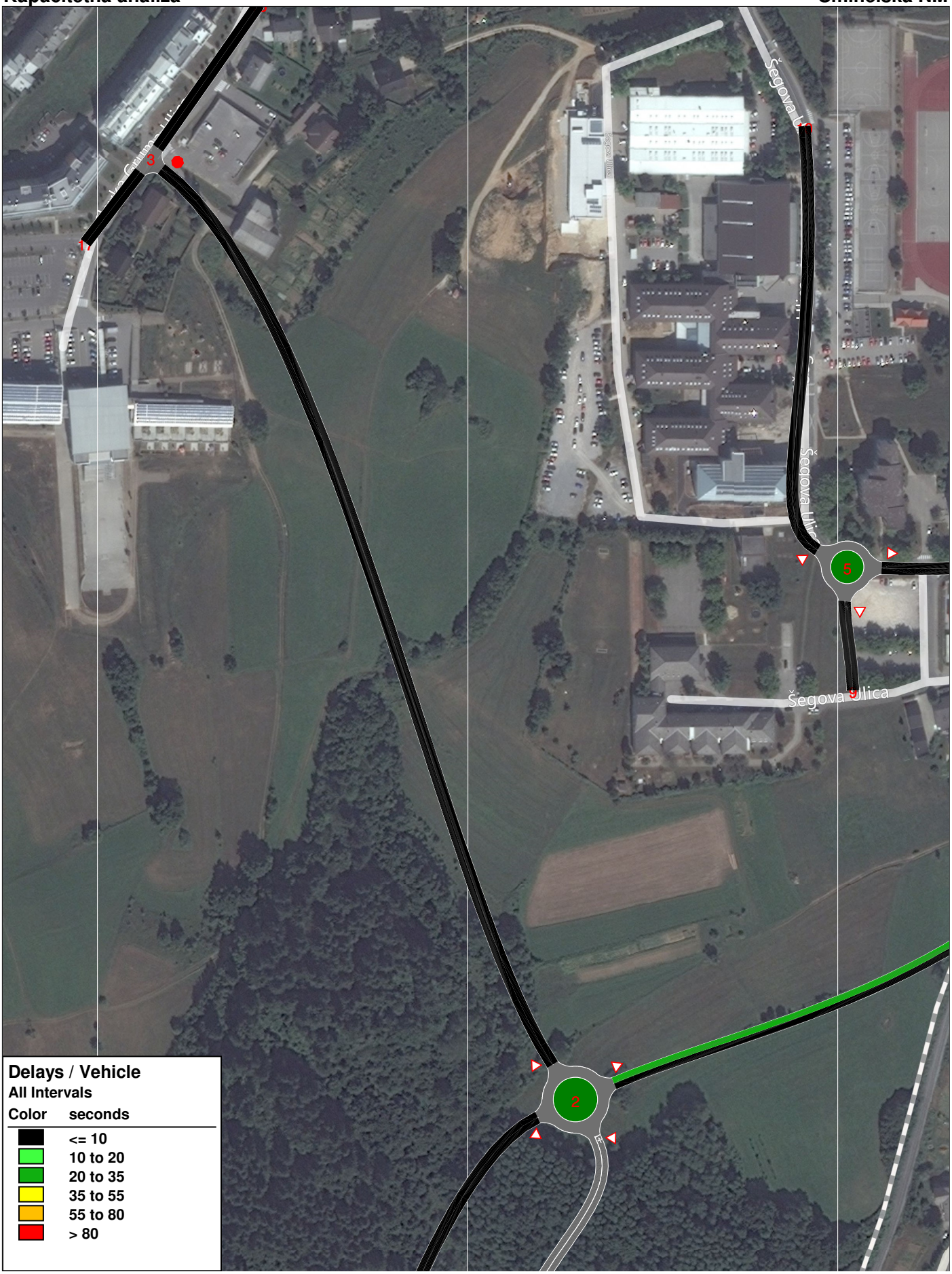
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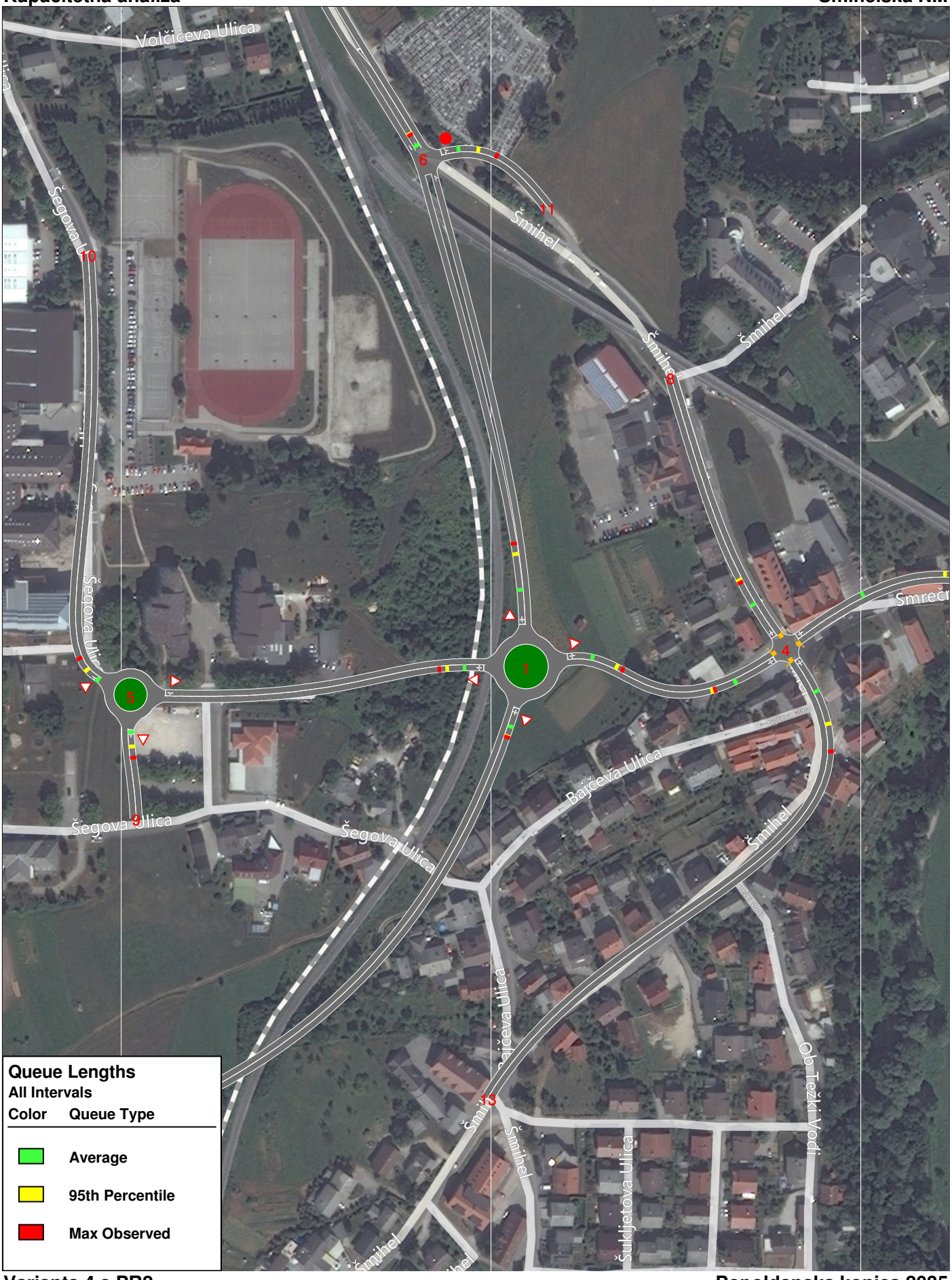
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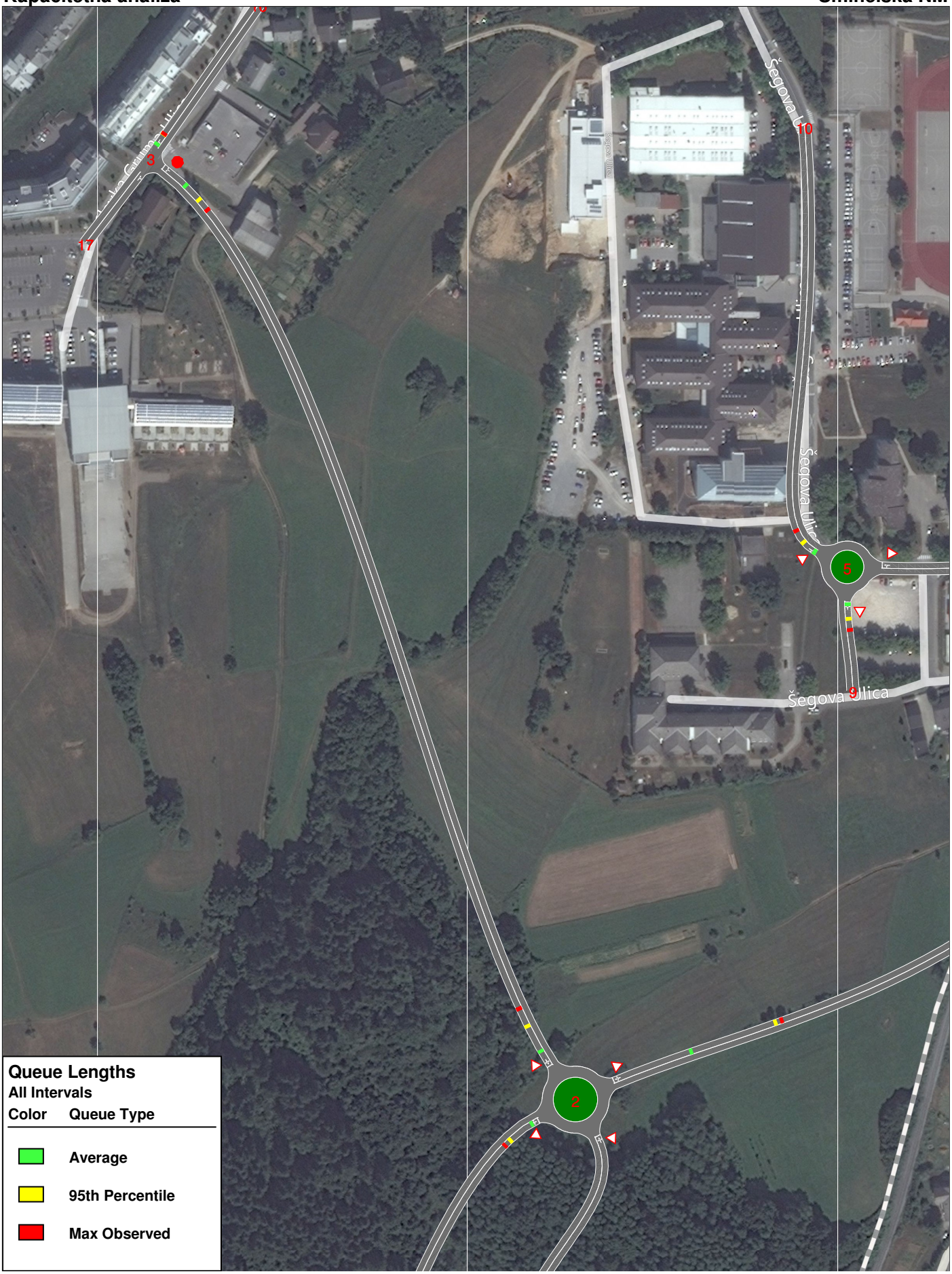
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Preglednica 4: Vrednosti primerjalnih parametrov v jutranji in popoldanski konici 2035 za varianto 4 z dodatnim križiščem (celotno obravnavano cestno omrežje, vsa vozila, 1 ura)

PRIMERJALNI PARAMETRI	2035			
	JK		PK	
	V4	V4 + PR2	V4	V4 + PR2
Skupna zamuda vseh vozil (ure)	4,7	3,5	9,0	7,7
Število ustavljanj na vozilo	0,66	0,52	0,96	0,90
Povprečna hitrost (km/h)	38	39	35	36
Skupno porabljen čas (ure)	29,3	26,2	40,4	36,9
Skupno prevožena pot (km)	1102,9	1012,0	1414,3	1309,0
Porabljeno gorivo (L)	93,2	84,9	121,7	114,0

Ugotovitve:

Rezultati kapacitetne analize križišč variante 4 z dodatnim križiščem (PR2) v bližini pokopališča (priključek stare Šmihelske ceste) v planskem letu 2035 so podobni kot v varianti brez dodatnega križišča. Pričakovali bi, da bo dodatno križišče posledično povzročilo tudi nekaj več zamud in zastojev, vendar se bodo skrajšale poti in potovalni časi nekaterim udeležencem, zato so primerjalni parametri za celotno obravnavano mrežo boljši. Razmere se še najbolj izboljšajo na križišču K4, ker se prometne obremenitve po smereh bolj enakomerno porazdelijo.

Vendar bo novo križišče na državno cesto definitivno imelo za posledico novo koncentrirano območje konfliktnih točk in poslabšano prometno varnost.

Križišče smo obravnavali kot nesemaforizirano, pri katerem je po navadi problematično vključevanje na glavno prometno smer v primeru velikih prometnih obremenitev na glavni smeri in levo zavijanje iz glavne prometne smeri na stransko cesto/ulico, kar pa se v tem primeru ni pokazalo kot kritično

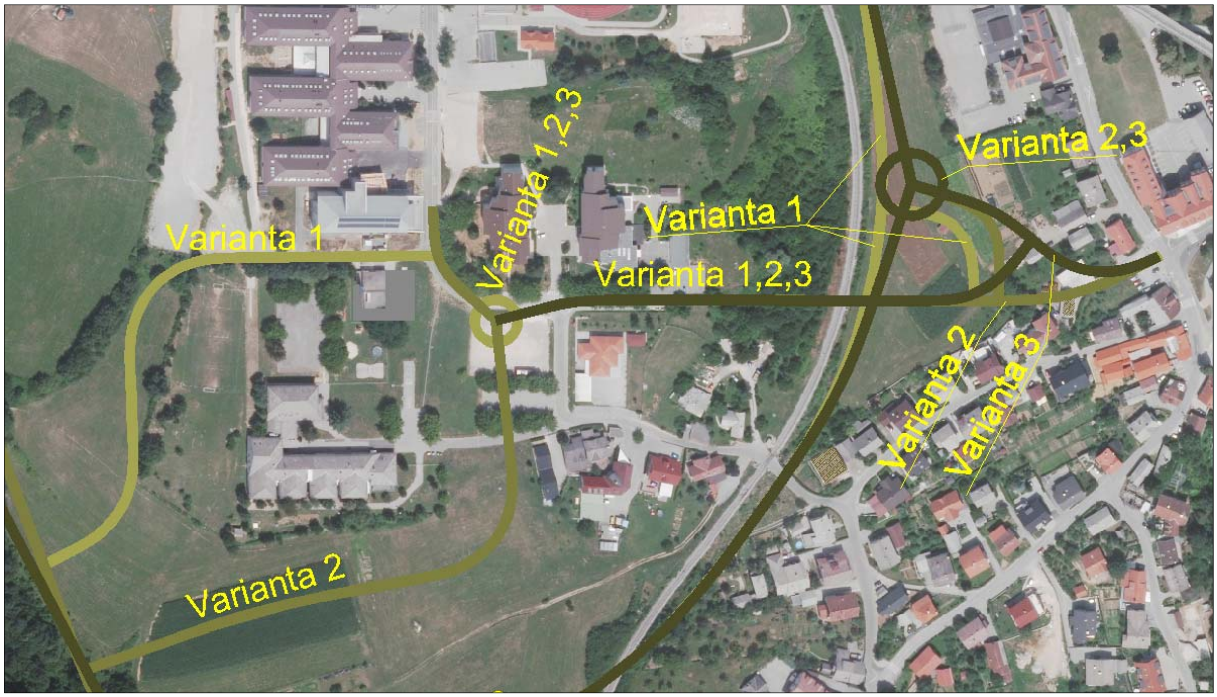
Zaradi posebnega dodatnega pasu za leve zavijalce na glavni prometni smeri iz smeri centra so teoretično eliminirane možnosti naleta na čakajoče vozilo, ki zavija levo iz glavne prometne smeri na staro Šmihelsko cesto oziroma h parkirišču.

Varnost izboljša dejstvo, da levih zavijalcev predvidoma ne bo prav veliko. Tako je na novem križišču za pričakovati večje število desnih zavijalcev, ki si bodo predvsem zjutraj krajšali pot iz smeri stare Šmihelske in Smrečnikove proti centru. Prav ti pa bodo po nepotrebnem obremenjevali sekundarno cestno omrežje in s tem negativno vplivali na prometno varnost.

T.6 CESTA ZA ŠOLSKI CENTER

Projektna naloga je predvidevala tudi proučitev variantnih rešitev dostopa do Šolskega centra Novo mesto z navezavo na Šegovo ulico iz načrtovane lokalne ceste na zahodni strani Šolskega centra NM – ceste na Drsko.

Variante cest za šolski center so bile izdelane na pobudo občine in na pobudo Šolskega centra Novo mesto. Izdelani sta bile dve varianti dostopa, kot je prikazano na sliki 7.



Slika 7 Prikaz obeh variant ceste za šolski center

Naštetih dveh možnosti dostopa oziroma priključevanja nismo posebej obravnavali pri kapacitetnih analizah osnovnih variant, saj smo mnenja, da ob ureditvi in izgradnji obvoznice Šmihela dodatni dostop do Šolskega centra sploh ni potreben.
V kolikor pa bo do gradnje dodatnega dostopa z zahodne strani prišlo, pa po naši strokovni oceni ni pričakovati težav z vidika odvijanja prometa. Namreč dodatni dostop/priključek bo še dodatno razbremenil in porazdelil prometne obremenitve po celotni cestni mreži obravnavanega območja. Obe možnosti/varianti dodatnega dostopa sta s prometnega stališča enakovredni.

T.7 ZAKLJUČKI IN PREDLOGI

V elaboratu »Kapacitetna analiza ključnih križišč za potrebe izdelave IDP rekonstrukcije in prestavitve dela Šmihelske ceste v Novem mestu« smo na podlagi predhodno izdelanih prometnih študij, pridobljenih prometnih obremenitvah, predvidenih planskih rešitvah in terenskega ogleda preverili ustreznost in predlagali najbolj optimalno geometrijsko obliko vseh križišč na obvoznici Šmihela, vseh križišč pri navezovanju na obstoječe lokalne ceste in vseh priključkov.

Kot osnova za napoved prometnih obremenitev v bodoče na novo predvidenem poteku dela Šmihelske ceste in priključnih cest je bil uporabljen modificiran prometni model, ki ga je v prometni študiji za državni prostorski načrt 3. razvojne osi uporabil Omega Consult d.o.o..

Izdelali smo kapacitetno analizo petih (šestih) križišč na spremenjenem poteku dela Šmihelske ceste in priključnih cest:

- K1 križišče obvoznice Šmihela s podaljškom Smrečnikove ulice in cesto za Šmihel (nadvoz/podvoz do Šolskega centra NM),
- K2 križišče obvoznice Šmihela s cesto za Drsko (novogradnja lokalne ceste ob zahodni strani Šolskega centra NM) do Ulice Slavka Gruma in priključkom do romskega naselja Šmihel,
- K3 križišče Ulice Slavka Gruma s cesto za Drsko (novo povezovalno lokalno cesto ob zahodni strani Šolskega centra NM),
- K4 križišče obstoječe Šmihelske ceste s Smrečnikovo ulico in novo povezovalno cesto do križišča K1 (podaljškom Smrečnikove ulice),
- K5 križišče ceste za Šmihel (predvidene nove dostopne ceste do Šolskega centra NM skozi podvoz/čez nadvoz) s priključkom iz parkirišča OŠ Dragotina Ketteja.
- (PR2) križišče obvoznice Šmihela in obstoječe Šmihelske ceste – možnost navezave stare Šmihelske ceste ter parkirišča pri pokopališču.

Križišča smo preverili v dveh časovnih obdobjih in sicer, takoj po predvidenem začetku obratovanja (2015) in po 20-letni planski dobi (2035).

Analizirali smo štiri variante, ki se razlikujejo le pri geometrijski rešitvi zasnove križanja obvoznice Šmihela, ceste za Šmihel in podaljška Smrečnikove ulice.

Predpostavili smo, da v letu 2015 (takoj po izgradnji), še ne bo zgrajen del celotnega projekta, povezovalna lokalna cesta ob zahodni strani Šolskega centra NM – cesta za Drsko.

Na koncu smo preverili še vpliv dodatnega križišča PR2 oziroma možnost navezave stare Šmihelske ceste ter parkirišča pri pokopališču.

Prav tako smo preverili še možnost ureditve križišča K4 (obstoječe Šmihelske ceste s Smrečnikovo ulico in podaljškom Smrečnikove ulice) kot štirikrakega nesemaforiziranega križišča. Namreč pri vseh štirih analiziranih variantah smo predpostavili, da je križišče K4 semaforizirano.

Ugotovitve in predlogi:

Kapacitetna analiza je pokazala, da praktično ni večjih razlik med variantami. Iz stališča primerjalnih parametrov je najboljša Varianta 4, ki predvideva ureditev križišča K1 kot štirikrako enopasovno krožno križišče z minimalnim zunanjim premerom 36,0 m.

Kapacitetnih problemov pri nobeni varianti, za prometne obremenitve, ki smo jih prejeli, ni za pričakovati niti ob koncu planske dobe.

Vse analizirane variante bodo predvidoma do konca planske dobe zmožne kapacitetno ustrezno in prometno varno servisirati pričakovane prometne obremenitve.

Izgradnja dodatnega nesemaforiziranega križišča PR2, s posebnim pasom za leve zavijalce iz smeri centra NM, ne bo bistveno vplivala na samo odvijanje prometnih tokov v celoti. Čeprav ni nujno potrebno iz prometno tehničnega stališča, pa nekoliko izboljša dostopnost do pokopališča in nekoliko skrajša potovalne čase za prebivalce obstoječe Šmihelske in Smrečnikove ceste. Dodatno nesemaforizirano križišče na odprti trasi pa je lahko prometno varnostno slabša rešitev, saj se poveča število konfliktnih točk.

Odločitev o izgradnji križišča PR2 pa prepuščamo naročniku, ki naj sam presodi ali ga je ob dodatnih stroških smiselno graditi.



Slika 8: Lokacija morebitnega križišča PR2

Kapacitetna analiza nesemaforiziranega križišča K4, kjer smo glavno smer predpostavili v smislu Smrečnikova ulica – podaljšek Smrečnikove, je pokazala, da bi križišče v primeru izgradnje variante 4, verjetno lahko iz kapacitetnega vidika delovalo tudi brez semaforja. Vendar opozarjamo na težave v zvezi z preglednostjo (objekti ob križišču), ki lahko odločilno vplivajo na prometno varnost. Z izgradnjo semaforja bi se v bodoče lahko tudi prilagajali večjim prometnih težnjam, ki bi nastale zaradi morebitne dodatne poselitve stanovanjskega območja Šmihela.
Vsekakor pa ob rekonstrukciji križišča K4 predlagamo vsaj predpripravo za kasnejšo postavitev semafornih naprav.

T.8 PRILOGE

T.8.1 Rezultati kapacitetne analize z računalniškim orodjem Synchro/Simtraffic

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.4	0.3	0.0	0.8
Total Del/Veh (s)	5.3	6.3	4.4	5.7
Total Stops	0	0	1	1
Stop/Veh	0.00	0.00	1.00	0.00
Travel Dist (km)	107.9	101.9	0.2	210.0
Travel Time (hr)	2.6	2.4	0.0	5.1
Avg Speed (kph)	42	42	32	42
Fuel Used (l)	7.1	7.7	0.0	14.8
Fuel Eff. (kpl)	15.2	13.3	16.4	14.2
HC Emissions (g)	21	16	0	37
CO Emissions (g)	468	450	0	919
NOx Emissions (g)	62	58	0	119
Vehicles Entered	270	194	1	465
Vehicles Exited	273	189	1	463
Hourly Exit Rate	546	378	2	926

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.2	0.2	0.5	0.0	0.9
Total Del/Veh (s)	9.2	8.7	9.7	5.2	9.2
Total Stops	38	41	106	7	192
Stop/Veh	0.40	0.53	0.61	0.54	0.53
Travel Dist (km)	7.6	14.3	54.3	1.9	78.1
Travel Time (hr)	0.5	0.5	1.7	0.1	2.7
Avg Speed (kph)	16	29	33	30	29
Fuel Used (l)	1.1	1.2	3.8	0.1	6.2
Fuel Eff. (kpl)	7.2	12.3	14.1	19.1	12.7
HC Emissions (g)	6	2	6	0	15
CO Emissions (g)	160	96	217	9	481
NOx Emissions (g)	18	8	20	0	47
Vehicles Entered	94	75	171	13	353
Vehicles Exited	94	78	173	13	358
Hourly Exit Rate	188	156	346	26	716

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.2	0.0	0.0	0.3
Total Del/Veh (s)	5.6	2.0	2.7	4.9
Total Stops	18	0	1	19
Stop/Veh	0.12	0.00	0.03	0.10
Travel Dist (km)	37.9	0.3	8.5	46.6
Travel Time (hr)	1.1	0.0	0.2	1.3
Avg Speed (kph)	34	27	41	35
Fuel Used (l)	3.8	0.0	0.6	4.4
Fuel Eff. (kpl)	10.0	11.4	14.8	10.6
HC Emissions (g)	12	0	2	14
CO Emissions (g)	432	2	43	477
NOx Emissions (g)	43	0	6	49
Vehicles Entered	147	5	38	190
Vehicles Exited	146	5	37	188
Hourly Exit Rate	292	10	74	376

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	WB	NB	NB	SB	SB	All
Movements Served	L	R	T	R	L	T	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.1	0.5	0.0	0.2	0.3	1.2
Total Del/Veh (s)	7.1	5.5	10.2	1.4	13.3	7.8	7.3
Total Stops	18	33	68	5	39	60	223
Stop/Veh	0.43	0.42	0.41	0.04	0.78	0.39	0.37
Travel Dist (km)	1.8	8.4	149.0	4.7	3.1	41.3	208.3
Travel Time (hr)	0.1	0.4	3.7	0.2	0.3	1.2	5.9
Avg Speed (kph)	14	21	40	25	12	36	35
Fuel Used (l)	0.2	1.2	11.6	0.2	0.3	2.7	16.2
Fuel Eff. (kpl)	9.9	7.1	12.9	21.5	9.9	15.2	12.9
HC Emissions (g)	0	2	37	1	1	6	46
CO Emissions (g)	11	101	1076	16	18	127	1349
NOx Emissions (g)	1	11	109	1	2	19	143
Vehicles Entered	0	120	273	0	0	199	592
Vehicles Exited	42	76	160	115	49	152	594
Hourly Exit Rate	84	152	320	230	98	304	1188

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.2	0.2	0.6
Total Del/Veh (s)	11.0	9.2	8.8	1.1	8.5	6.5	6.3
Total Stops	20	10	25	3	40	38	136
Stop/Veh	0.83	0.62	0.41	0.03	0.51	0.44	0.38
Travel Dist (km)	1.5	9.9	8.8	3.2	3.5	11.8	38.8
Travel Time (hr)	0.1	0.3	0.4	0.1	0.3	0.6	1.8
Avg Speed (kph)	13	36	22	24	12	21	22
Fuel Used (l)	0.1	1.0	1.4	0.2	0.4	1.7	4.7
Fuel Eff. (kpl)	12.4	10.0	6.4	21.3	9.1	7.0	8.2
HC Emissions (g)	0	4	3	0	2	7	16
CO Emissions (g)	4	149	155	5	45	211	570
NOx Emissions (g)	0	13	14	0	5	25	58
Vehicles Entered	0	39	156	0	0	164	359
Vehicles Exited	24	16	61	95	78	86	360
Hourly Exit Rate	48	32	122	190	156	172	720

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	4.2
Total Del/Veh (s)	18.7
Total Stops	599
Stop/Veh	0.74
Travel Dist (km)	939.2
Travel Time (hr)	24.8
Avg Speed (kph)	38
Fuel Used (l)	76.7
Fuel Eff. (kpl)	12.2
HC Emissions (g)	220
CO Emissions (g)	6765
NOx Emissions (g)	705
Vehicles Entered	773
Vehicles Exited	783
Hourly Exit Rate	1566
Input Volume	6205
% of Volume	25

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	NB
Directions Served	LR
Maximum Queue (m)	9.1
Average Queue (m)	0.6
95th Queue (m)	4.3
Link Distance (m)	159.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	31.5	21.2	70.3	14.3
Average Queue (m)	11.5	11.4	28.0	2.1
95th Queue (m)	24.6	20.3	53.0	9.2
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	SE
Directions Served	LR
Maximum Queue (m)	8.4
Average Queue (m)	0.6
95th Queue (m)	4.0
Link Distance (m)	223.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (m)	15.6	15.7	46.3	29.3	27.9	41.5
Average Queue (m)	8.1	2.1	22.3	3.1	14.1	20.4
95th Queue (m)	16.3	10.9	38.9	16.5	23.2	32.4
Link Distance (m)		81.9	512.9			205.6
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	30.0			50.0	50.0	
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	R	L	R
Maximum Queue (m)	22.1	15.0	39.8	13.0	41.3	94.0
Average Queue (m)	9.2	5.2	12.9	0.9	15.6	7.6
95th Queue (m)	18.9	13.6	30.5	6.2	33.5	46.1
Link Distance (m)		245.2	61.4			81.9
Upstream Blk Time (%)						0
Queuing Penalty (veh)						0
Storage Bay Dist (m)	50.0			40.0	30.0	
Storage Blk Time (%)			1		1	
Queuing Penalty (veh)			1		3	

Network Summary

Network wide Queuing Penalty: 4

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.2	0.8	0.0	1.0
Total Del/Veh (s)	4.5	7.8	6.3	6.6
Total Stops	0	0	2	2
Stop/Veh	0.00	0.00	1.00	0.00
Travel Dist (km)	77.6	179.0	0.3	256.9
Travel Time (hr)	1.8	4.5	0.0	6.3
Avg Speed (kph)	43	40	31	41
Fuel Used (l)	5.3	14.2	0.0	19.5
Fuel Eff. (kpl)	14.7	12.6	22.0	13.2
HC Emissions (g)	17	46	0	62
CO Emissions (g)	386	1106	0	1492
NOx Emissions (g)	50	150	0	200
Vehicles Entered	194	343	2	539
Vehicles Exited	196	341	2	539
Hourly Exit Rate	392	682	4	1078

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.1	1.0	0.2	0.1	1.3
Total Del/Veh (s)	3.4	21.3	7.8	5.8	11.2
Total Stops	33	124	38	26	221
Stop/Veh	0.23	0.77	0.50	0.55	0.51
Travel Dist (km)	11.9	29.9	23.9	7.0	72.7
Travel Time (hr)	0.5	1.6	0.7	0.2	3.1
Avg Speed (kph)	23	19	35	29	24
Fuel Used (l)	1.5	3.0	1.7	0.5	6.6
Fuel Eff. (kpl)	8.1	10.1	14.1	14.3	11.0
HC Emissions (g)	2	9	6	1	17
CO Emissions (g)	113	293	136	36	577
NOx Emissions (g)	12	27	16	3	57
Vehicles Entered	146	160	76	47	429
Vehicles Exited	146	155	76	47	424
Hourly Exit Rate	292	310	152	94	848

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	4.2	2.1	2.7	3.2
Total Stops	1	0	0	1
Stop/Veh	0.02	0.00	0.00	0.01
Travel Dist (km)	13.0	1.0	13.7	27.7
Travel Time (hr)	0.4	0.0	0.3	0.7
Avg Speed (kph)	35	27	41	37
Fuel Used (l)	1.3	0.1	0.9	2.4
Fuel Eff. (kpl)	9.7	12.7	14.5	11.7
HC Emissions (g)	6	0	1	7
CO Emissions (g)	206	8	58	272
NOx Emissions (g)	18	1	6	25
Vehicles Entered	52	20	60	132
Vehicles Exited	51	20	62	133
Hourly Exit Rate	102	40	124	266

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	WB	NB	NB	SB	SB	All
Movements Served	L	R	T	R	L	T	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.5	0.2	0.4	0.0	0.4	0.5	1.9
Total Del/Veh (s)	11.3	11.6	9.1	1.1	12.7	9.5	9.7
Total Stops	83	30	61	0	82	90	346
Stop/Veh	0.56	0.58	0.43	0.00	0.75	0.45	0.49
Travel Dist (km)	6.4	11.6	108.8	2.5	6.8	60.8	197.0
Travel Time (hr)	0.6	0.6	2.8	0.1	0.6	1.8	6.4
Avg Speed (kph)	10	21	39	26	12	35	31
Fuel Used (l)	0.8	1.8	8.8	0.1	0.8	4.0	16.3
Fuel Eff. (kpl)	7.9	6.3	12.4	21.8	9.1	15.2	12.1
HC Emissions (g)	1	7	29	0	1	12	49
CO Emissions (g)	37	207	837	8	33	236	1358
NOx Emissions (g)	3	25	88	1	3	35	156
Vehicles Entered	0	199	196	0	0	305	700
Vehicles Exited	147	51	137	63	105	196	699
Hourly Exit Rate	294	102	274	126	210	392	1398

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.2	0.1	0.1	0.0	0.3	0.1	0.8
Total Del/Veh (s)	11.1	10.6	21.3	1.2	7.4	11.2	6.8
Total Stops	38	11	6	7	49	27	138
Stop/Veh	0.62	0.52	0.50	0.05	0.39	0.64	0.34
Travel Dist (km)	3.9	19.8	6.4	4.6	5.6	10.3	50.5
Travel Time (hr)	0.3	0.5	0.3	0.2	0.4	0.5	2.2
Avg Speed (kph)	13	38	25	23	13	22	23
Fuel Used (l)	0.4	1.9	1.1	0.2	0.6	1.7	5.9
Fuel Eff. (kpl)	11.0	10.2	5.6	20.8	10.1	5.9	8.5
HC Emissions (g)	0	6	4	0	0	4	15
CO Emissions (g)	14	275	154	12	26	171	651
NOx Emissions (g)	1	19	17	1	2	19	60
Vehicles Entered	0	82	151	0	0	168	401
Vehicles Exited	61	21	12	137	125	40	396
Hourly Exit Rate	122	42	24	274	250	80	792

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	5.7
Total Del/Veh (s)	22.4
Total Stops	728
Stop/Veh	0.80
Travel Dist (km)	1047.9
Travel Time (hr)	28.8
Avg Speed (kph)	36
Fuel Used (l)	88.4
Fuel Eff. (kpl)	11.9
HC Emissions (g)	284
CO Emissions (g)	8120
NOx Emissions (g)	906
Vehicles Entered	869
Vehicles Exited	856
Hourly Exit Rate	1712
Input Volume	7284
% of Volume	24

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	NB
Directions Served	LR
Maximum Queue (m)	9.0
Average Queue (m)	0.6
95th Queue (m)	4.3
Link Distance (m)	158.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	19.2	60.5	29.4	20.9
Average Queue (m)	9.4	34.5	12.5	8.5
95th Queue (m)	17.0	57.4	26.6	17.8
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Bend

Movement	NB
Directions Served	T
Maximum Queue (m)	214.0
Average Queue (m)	14.3
95th Queue (m)	102.4
Link Distance (m)	205.6
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	T	L	T
Maximum Queue (m)	43.7	14.3	34.4	35.2	41.6
Average Queue (m)	24.1	1.0	21.0	21.2	27.3
95th Queue (m)	41.7	6.8	30.5	34.3	39.6
Link Distance (m)		81.9	510.8		205.6
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	30.0			50.0	
Storage Blk Time (%)	6				
Queuing Penalty (veh)	9				

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	L
Maximum Queue (m)	27.7	15.2	9.2	25.1	23.8
Average Queue (m)	14.5	6.7	3.6	2.8	16.7
95th Queue (m)	25.3	14.2	10.9	14.6	26.5
Link Distance (m)		245.2	61.4		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	50.0			40.0	30.0
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 9

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.4	0.3	0.0	0.7
Total Del/Veh (s)	5.3	4.9	4.4	5.1
Total Stops	0	0	1	1
Stop/Veh	0.00	0.00	1.00	0.00
Travel Dist (km)	107.9	107.8	0.2	215.9
Travel Time (hr)	2.6	2.6	0.0	5.2
Avg Speed (kph)	42	41	32	41
Fuel Used (l)	7.1	8.6	0.0	15.8
Fuel Eff. (kpl)	15.2	12.5	16.4	13.7
HC Emissions (g)	21	22	0	42
CO Emissions (g)	468	742	0	1211
NOx Emissions (g)	62	73	0	134
Vehicles Entered	270	194	1	465
Vehicles Exited	273	194	1	468
Hourly Exit Rate	546	388	2	936

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.2	0.2	0.5	0.0	0.9
Total Del/Veh (s)	7.0	8.7	9.6	5.3	8.6
Total Stops	32	42	105	7	186
Stop/Veh	0.34	0.54	0.60	0.54	0.52
Travel Dist (km)	7.6	14.3	54.3	1.9	78.1
Travel Time (hr)	0.4	0.5	1.7	0.1	2.6
Avg Speed (kph)	18	29	33	30	30
Fuel Used (l)	1.0	1.2	3.8	0.1	6.1
Fuel Eff. (kpl)	7.3	12.3	14.2	19.1	12.7
HC Emissions (g)	6	2	6	0	15
CO Emissions (g)	171	96	217	8	492
NOx Emissions (g)	19	8	20	0	48
Vehicles Entered	94	75	171	13	353
Vehicles Exited	94	78	173	13	358
Hourly Exit Rate	188	156	346	26	716

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.2	0.0	0.0	0.2
Total Del/Veh (s)	5.3	2.0	2.7	4.6
Total Stops	11	0	1	12
Stop/Veh	0.07	0.00	0.03	0.06
Travel Dist (km)	37.8	0.3	8.5	46.6
Travel Time (hr)	1.1	0.0	0.2	1.3
Avg Speed (kph)	35	27	41	36
Fuel Used (l)	3.8	0.0	0.6	4.4
Fuel Eff. (kpl)	10.0	11.4	14.7	10.6
HC Emissions (g)	12	0	2	14
CO Emissions (g)	438	2	43	483
NOx Emissions (g)	43	0	6	49
Vehicles Entered	147	5	38	190
Vehicles Exited	146	5	37	188
Hourly Exit Rate	292	10	74	376

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.2	0.5	0.3	0.9
Total Del/Veh (s)	4.5	6.6	4.6	5.5
Total Stops	25	52	24	101
Stop/Veh	0.21	0.19	0.12	0.17
Travel Dist (km)	9.4	151.1	41.1	201.6
Travel Time (hr)	0.5	3.8	1.1	5.4
Avg Speed (kph)	21	39	38	37
Fuel Used (l)	1.3	11.5	2.5	15.3
Fuel Eff. (kpl)	7.3	13.1	16.4	13.1
HC Emissions (g)	2	37	6	44
CO Emissions (g)	79	1068	123	1270
NOx Emissions (g)	11	111	20	142
Vehicles Entered	120	273	199	592
Vehicles Exited	118	276	201	595
Hourly Exit Rate	236	552	402	1190

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.0	0.1	0.0	0.1	0.0	0.5
Total Del/Veh (s)	10.9	9.2	8.8	1.0	6.9	1.8	4.8
Total Stops	20	10	25	0	37	1	93
Stop/Veh	0.83	0.62	0.41	0.00	0.47	0.01	0.26
Travel Dist (km)	1.5	9.9	8.8	3.2	3.4	14.5	41.5
Travel Time (hr)	0.1	0.3	0.4	0.1	0.2	0.5	1.7
Avg Speed (kph)	13	36	22	24	14	29	25
Fuel Used (l)	0.1	1.0	1.4	0.1	0.3	1.5	4.5
Fuel Eff. (kpl)	12.4	10.0	6.3	22.1	10.0	9.5	9.1
HC Emissions (g)	0	4	3	0	2	7	17
CO Emissions (g)	5	149	163	5	41	221	583
NOx Emissions (g)	0	13	15	0	5	24	57
Vehicles Entered	0	39	156	0	0	164	359
Vehicles Exited	24	16	61	95	78	86	360
Hourly Exit Rate	48	32	122	190	156	172	720

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	3.4
Total Del/Veh (s)	15.3
Total Stops	393
Stop/Veh	0.49
Travel Dist (km)	944.7
Travel Time (hr)	24.4
Avg Speed (kph)	39
Fuel Used (l)	76.9
Fuel Eff. (kpl)	12.3
HC Emissions (g)	224
CO Emissions (g)	7115
NOx Emissions (g)	716
Vehicles Entered	773
Vehicles Exited	780
Hourly Exit Rate	1560
Input Volume	6205
% of Volume	25

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	NB
Directions Served	LR
Maximum Queue (m)	9.1
Average Queue (m)	0.6
95th Queue (m)	4.3
Link Distance (m)	159.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	20.5	21.2	70.3	14.3
Average Queue (m)	8.8	11.4	27.5	2.1
95th Queue (m)	19.2	20.2	52.5	9.2
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	SE
Directions Served	LR
Maximum Queue (m)	8.4
Average Queue (m)	0.6
95th Queue (m)	4.0
Link Distance (m)	223.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	21.6	34.1	16.4
Average Queue (m)	8.0	12.3	8.1
95th Queue (m)	18.2	31.4	17.4
Link Distance (m)	69.0	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	SB	SB
Directions Served	L	T	T	L	R
Maximum Queue (m)	22.0	15.0	39.8	40.4	9.4
Average Queue (m)	9.2	5.2	12.9	13.8	0.6
95th Queue (m)	18.9	13.5	30.5	31.9	4.5
Link Distance (m)		245.2	61.4		69.0
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	50.0			30.0	
Storage Blk Time (%)			1	1	
Queuing Penalty (veh)			1	2	

Network Summary

Network wide Queuing Penalty: 3

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.3	0.7	0.0	0.9
Total Del/Veh (s)	4.6	6.8	5.9	6.0
Total Stops	0	10	2	12
Stop/Veh	0.00	0.03	1.00	0.02
Travel Dist (km)	78.0	191.7	0.3	270.0
Travel Time (hr)	1.8	4.9	0.0	6.7
Avg Speed (kph)	43	39	32	40
Fuel Used (l)	5.3	16.0	0.0	21.3
Fuel Eff. (kpl)	14.7	12.0	22.2	12.7
HC Emissions (g)	17	58	0	75
CO Emissions (g)	387	1566	0	1954
NOx Emissions (g)	50	188	0	238
Vehicles Entered	194	346	2	542
Vehicles Exited	196	341	2	539
Hourly Exit Rate	392	682	4	1078

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.1	1.2	0.2	0.1	1.6
Total Del/Veh (s)	3.6	27.2	7.9	5.9	13.5
Total Stops	31	123	39	26	219
Stop/Veh	0.21	0.76	0.51	0.55	0.51
Travel Dist (km)	11.8	29.9	23.9	7.0	72.6
Travel Time (hr)	0.5	1.9	0.7	0.2	3.4
Avg Speed (kph)	22	16	35	28	22
Fuel Used (l)	1.4	3.2	1.7	0.5	6.8
Fuel Eff. (kpl)	8.4	9.3	14.1	14.2	10.7
HC Emissions (g)	2	8	6	1	17
CO Emissions (g)	104	296	136	37	572
NOx Emissions (g)	11	26	16	3	56
Vehicles Entered	145	160	76	47	428
Vehicles Exited	145	155	76	47	423
Hourly Exit Rate	290	310	152	94	846

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	4.2	2.1	2.7	3.2
Total Stops	1	0	0	1
Stop/Veh	0.02	0.00	0.00	0.01
Travel Dist (km)	13.0	1.0	13.7	27.7
Travel Time (hr)	0.4	0.0	0.3	0.7
Avg Speed (kph)	35	27	41	37
Fuel Used (l)	1.3	0.1	0.9	2.4
Fuel Eff. (kpl)	9.7	12.7	14.5	11.7
HC Emissions (g)	6	0	1	7
CO Emissions (g)	208	8	58	273
NOx Emissions (g)	18	1	6	25
Vehicles Entered	53	20	60	133
Vehicles Exited	53	20	62	135
Hourly Exit Rate	106	40	124	270

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.3	0.3	0.7	1.4
Total Del/Veh (s)	5.8	5.4	8.6	6.9
Total Stops	71	37	137	245
Stop/Veh	0.36	0.18	0.44	0.35
Travel Dist (km)	16.0	108.4	62.6	187.0
Travel Time (hr)	0.8	2.7	2.0	5.6
Avg Speed (kph)	19	40	31	34
Fuel Used (l)	2.2	8.5	3.7	14.5
Fuel Eff. (kpl)	7.3	12.7	16.8	12.9
HC Emissions (g)	7	28	9	44
CO Emissions (g)	184	825	175	1184
NOx Emissions (g)	26	88	26	140
Vehicles Entered	199	196	305	700
Vehicles Exited	198	197	306	701
Hourly Exit Rate	396	394	612	1402

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.2	0.1	0.1	0.0	0.3	0.1	0.7
Total Del/Veh (s)	11.1	10.5	21.2	1.3	7.6	4.1	6.1
Total Stops	39	11	6	5	64	0	125
Stop/Veh	0.64	0.52	0.50	0.04	0.50	0.00	0.31
Travel Dist (km)	3.9	19.8	6.3	4.6	5.6	15.7	56.0
Travel Time (hr)	0.3	0.5	0.3	0.2	0.4	0.5	2.2
Avg Speed (kph)	13	38	25	23	13	29	25
Fuel Used (l)	0.4	1.9	1.1	0.2	0.6	1.9	6.1
Fuel Eff. (kpl)	11.1	10.2	5.5	21.1	9.7	8.3	9.1
HC Emissions (g)	0	6	5	0	0	4	16
CO Emissions (g)	13	275	171	12	24	168	663
NOx Emissions (g)	1	19	20	1	2	17	60
Vehicles Entered	0	82	151	0	0	170	403
Vehicles Exited	61	21	12	137	124	41	396
Hourly Exit Rate	122	42	24	274	248	82	792

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	5.1
Total Del/Veh (s)	20.1
Total Stops	603
Stop/Veh	0.66
Travel Dist (km)	1058.1
Travel Time (hr)	28.7
Avg Speed (kph)	37
Fuel Used (l)	89.2
Fuel Eff. (kpl)	11.9
HC Emissions (g)	293
CO Emissions (g)	8589
NOx Emissions (g)	935
Vehicles Entered	869
Vehicles Exited	852
Hourly Exit Rate	1704
Input Volume	7284
% of Volume	23

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	22.9	9.0
Average Queue (m)	1.5	0.6
95th Queue (m)	11.0	4.3
Link Distance (m)	499.7	159.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	13.5	73.4	29.1	20.9
Average Queue (m)	8.1	38.0	12.8	8.5
95th Queue (m)	14.4	64.4	27.1	17.8
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	49.6	31.5	42.4
Average Queue (m)	14.4	10.1	22.3
95th Queue (m)	35.5	23.8	39.3
Link Distance (m)	69.0	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	L
Maximum Queue (m)	27.7	15.2	9.2	16.8	35.2
Average Queue (m)	14.5	6.7	3.6	4.4	21.0
95th Queue (m)	25.3	14.2	10.8	16.5	33.8
Link Distance (m)		245.2	61.4		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	50.0			40.0	30.0
Storage Blk Time (%)					1
Queuing Penalty (veh)					1

Network Summary

Network wide Queuing Penalty: 1

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.4	0.3	0.0	0.7
Total Del/Veh (s)	5.3	4.9	4.3	5.2
Total Stops	0	0	1	1
Stop/Veh	0.00	0.00	1.00	0.00
Travel Dist (km)	107.9	107.3	0.2	215.3
Travel Time (hr)	2.6	2.6	0.0	5.2
Avg Speed (kph)	42	41	32	41
Fuel Used (l)	7.1	8.6	0.0	15.7
Fuel Eff. (kpl)	15.2	12.5	16.4	13.7
HC Emissions (g)	21	21	0	42
CO Emissions (g)	468	730	0	1198
NOx Emissions (g)	62	72	0	133
Vehicles Entered	270	192	1	463
Vehicles Exited	273	193	1	467
Hourly Exit Rate	546	386	2	934

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.3	0.2	0.4	0.0	0.9
Total Del/Veh (s)	11.3	9.0	9.2	3.9	9.5
Total Stops	70	40	87	4	201
Stop/Veh	0.74	0.52	0.50	0.31	0.56
Travel Dist (km)	6.3	14.2	54.0	1.9	76.5
Travel Time (hr)	0.5	0.5	1.6	0.1	2.7
Avg Speed (kph)	14	29	33	33	29
Fuel Used (l)	0.8	1.1	3.7	0.1	5.7
Fuel Eff. (kpl)	7.6	12.6	14.7	19.0	13.3
HC Emissions (g)	4	2	6	0	12
CO Emissions (g)	100	92	195	4	391
NOx Emissions (g)	12	8	19	0	38
Vehicles Entered	93	75	171	13	352
Vehicles Exited	94	77	172	13	356
Hourly Exit Rate	188	154	344	26	712

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.2	0.0	0.0	0.2
Total Del/Veh (s)	4.9	2.1	2.5	4.4
Total Stops	16	0	0	16
Stop/Veh	0.11	0.00	0.00	0.08
Travel Dist (km)	43.5	0.3	8.5	52.3
Travel Time (hr)	1.2	0.0	0.2	1.4
Avg Speed (kph)	35	27	41	36
Fuel Used (l)	4.5	0.0	0.6	5.1
Fuel Eff. (kpl)	9.6	11.7	15.2	10.3
HC Emissions (g)	14	0	2	16
CO Emissions (g)	520	2	40	561
NOx Emissions (g)	50	0	6	56
Vehicles Entered	147	5	38	190
Vehicles Exited	146	5	37	188
Hourly Exit Rate	292	10	74	376

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.1	0.5	0.2	0.9
Total Del/Veh (s)	4.1	6.4	4.4	5.3
Total Stops	21	50	9	80
Stop/Veh	0.18	0.18	0.04	0.13
Travel Dist (km)	8.0	151.1	41.1	200.2
Travel Time (hr)	0.3	3.8	1.1	5.3
Avg Speed (kph)	24	39	38	38
Fuel Used (l)	1.0	11.5	2.5	15.1
Fuel Eff. (kpl)	7.9	13.1	16.2	13.3
HC Emissions (g)	2	37	6	45
CO Emissions (g)	73	1072	127	1272
NOx Emissions (g)	10	112	20	142
Vehicles Entered	120	273	199	592
Vehicles Exited	118	276	201	595
Hourly Exit Rate	236	552	402	1190

12: cesta za Šmihel & rampa med 2križišči/podaljšek Smrečnikove Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.2	0.0	0.2	0.3	0.0	0.0	0.8
Total Del/Veh (s)	8.7	0.5	14.1	10.9	3.6	1.3	7.6
Total Stops	43	2	44	63	8	0	160
Stop/Veh	0.55	0.02	0.72	0.66	0.33	0.00	0.44
Travel Dist (km)	13.6	1.7	2.1	8.9	1.1	11.9	39.1
Travel Time (hr)	0.6	0.1	0.3	0.5	0.1	0.3	1.8
Avg Speed (kph)	23	21	7	17	20	41	21
Fuel Used (l)	1.5	0.1	0.4	1.3	0.1	1.1	4.4
Fuel Eff. (kpl)	8.9	17.5	5.7	6.7	17.3	11.1	8.8
HC Emissions (g)	8	0	0	2	0	4	15
CO Emissions (g)	207	4	14	100	3	147	474
NOx Emissions (g)	24	0	2	11	0	13	50
Vehicles Entered	164	0	0	155	0	39	358
Vehicles Exited	77	86	61	95	24	16	359
Hourly Exit Rate	154	172	122	190	48	32	718

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	3.7
Total Del/Veh (s)	16.5
Total Stops	458
Stop/Veh	0.57
Travel Dist (km)	944.2
Travel Time (hr)	24.6
Avg Speed (kph)	39
Fuel Used (l)	76.9
Fuel Eff. (kpl)	12.3
HC Emissions (g)	223
CO Emissions (g)	7047
NOx Emissions (g)	713
Vehicles Entered	773
Vehicles Exited	781
Hourly Exit Rate	1562
Input Volume	6205
% of Volume	25

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	NB
Directions Served	LR
Maximum Queue (m)	9.1
Average Queue (m)	0.6
95th Queue (m)	4.3
Link Distance (m)	159.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	53.2	21.6	41.3	9.1
Average Queue (m)	22.3	12.7	20.5	2.2
95th Queue (m)	42.7	20.8	35.2	8.2
Link Distance (m)	51.5	187.0	312.9	149.1
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	2			
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	16.8	30.4	16.3
Average Queue (m)	7.4	11.4	5.3
95th Queue (m)	17.1	28.6	14.0
Link Distance (m)	51.6	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel & rampa med 2križišèi/podaljšek Smreènikove

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	L	T	L
Maximum Queue (m)	53.4	39.9	39.3	49.6	8.9
Average Queue (m)	15.6	4.1	17.6	18.5	4.6
95th Queue (m)	35.0	20.9	36.4	37.2	10.5
Link Distance (m)	51.6			51.5	
Upstream Blk Time (%)	0			0	
Queuing Penalty (veh)	1			0	
Storage Bay Dist (m)		20.0	20.0		30.0
Storage Blk Time (%)	2		5	3	
Queuing Penalty (veh)	4		8	3	

Network Summary

Network wide Queuing Penalty: 18

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.2	0.7	0.0	0.9
Total Del/Veh (s)	4.5	6.8	5.9	6.0
Total Stops	0	6	2	8
Stop/Veh	0.00	0.02	1.00	0.01
Travel Dist (km)	78.0	192.0	0.3	270.3
Travel Time (hr)	1.8	4.9	0.0	6.7
Avg Speed (kph)	43	39	32	40
Fuel Used (l)	5.3	15.9	0.0	21.2
Fuel Eff. (kpl)	14.7	12.1	22.2	12.7
HC Emissions (g)	17	57	0	74
CO Emissions (g)	386	1532	0	1919
NOx Emissions (g)	50	185	0	235
Vehicles Entered	194	346	2	542
Vehicles Exited	196	340	2	538
Hourly Exit Rate	392	680	4	1076

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.4	0.9	0.1	0.1	1.5
Total Del/Veh (s)	9.7	20.2	6.2	4.4	12.4
Total Stops	101	126	32	19	278
Stop/Veh	0.68	0.79	0.42	0.40	0.65
Travel Dist (km)	10.0	29.8	23.8	7.0	70.7
Travel Time (hr)	0.7	1.5	0.7	0.2	3.1
Avg Speed (kph)	14	19	37	31	23
Fuel Used (l)	1.2	3.0	1.6	0.5	6.3
Fuel Eff. (kpl)	8.2	10.1	14.6	14.7	11.2
HC Emissions (g)	1	9	6	1	17
CO Emissions (g)	62	308	133	38	541
NOx Emissions (g)	7	28	16	3	55
Vehicles Entered	148	160	76	47	431
Vehicles Exited	147	155	76	47	425
Hourly Exit Rate	294	310	152	94	850

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.0	0.1
Total Del/Veh (s)	4.1	2.1	2.7	3.2
Total Stops	4	0	0	4
Stop/Veh	0.07	0.00	0.00	0.03
Travel Dist (km)	15.1	1.0	13.7	29.7
Travel Time (hr)	0.4	0.0	0.3	0.8
Avg Speed (kph)	36	27	41	38
Fuel Used (l)	1.5	0.1	0.9	2.5
Fuel Eff. (kpl)	9.9	12.7	14.5	11.7
HC Emissions (g)	6	0	1	8
CO Emissions (g)	226	8	58	292
NOx Emissions (g)	20	1	6	26
Vehicles Entered	53	20	60	133
Vehicles Exited	53	20	62	135
Hourly Exit Rate	106	40	124	270

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.3	0.3	0.6	1.2
Total Del/Veh (s)	5.6	5.6	7.3	6.3
Total Stops	55	45	97	197
Stop/Veh	0.28	0.22	0.31	0.28
Travel Dist (km)	13.5	108.4	62.7	184.6
Travel Time (hr)	0.7	2.7	1.9	5.3
Avg Speed (kph)	20	40	33	35
Fuel Used (l)	1.7	8.5	3.8	14.0
Fuel Eff. (kpl)	8.2	12.7	16.6	13.2
HC Emissions (g)	5	28	9	42
CO Emissions (g)	133	817	176	1125
NOx Emissions (g)	20	86	27	133
Vehicles Entered	200	196	305	701
Vehicles Exited	199	197	306	702
Hourly Exit Rate	398	394	612	1404

12: cesta za Šmihel & rampa med 2križišči/podaljšek Smrečnikove Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.3	0.0	0.0	0.4	0.1	0.0	0.9
Total Del/Veh (s)	8.5	0.5	11.9	9.8	6.9	2.8	7.7
Total Stops	65	1	7	78	34	1	186
Stop/Veh	0.50	0.02	0.70	0.55	0.56	0.05	0.46
Travel Dist (km)	17.7	0.8	0.3	9.9	2.7	24.1	55.5
Travel Time (hr)	0.8	0.0	0.0	0.6	0.2	0.6	2.3
Avg Speed (kph)	21	21	8	15	14	42	24
Fuel Used (l)	2.1	0.0	0.0	1.5	0.2	2.1	6.0
Fuel Eff. (kpl)	8.5	16.8	6.8	6.5	12.4	11.4	9.2
HC Emissions (g)	3	0	0	5	0	6	14
CO Emissions (g)	135	6	1	148	7	272	567
NOx Emissions (g)	14	1	0	19	1	20	54
Vehicles Entered	170	0	0	151	0	82	403
Vehicles Exited	127	41	10	140	61	21	400
Hourly Exit Rate	254	82	20	280	122	42	800

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	5.0
Total Del/Veh (s)	19.8
Total Stops	673
Stop/Veh	0.74
Travel Dist (km)	1055.7
Travel Time (hr)	28.4
Avg Speed (kph)	37
Fuel Used (l)	88.2
Fuel Eff. (kpl)	12.0
HC Emissions (g)	290
CO Emissions (g)	8412
NOx Emissions (g)	922
Vehicles Entered	869
Vehicles Exited	850
Hourly Exit Rate	1700
Input Volume	7284
% of Volume	23

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (m)	9.2	9.0
Average Queue (m)	0.6	0.6
95th Queue (m)	4.4	4.3
Link Distance (m)	499.7	159.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	41.1	70.0	28.4	15.8
Average Queue (m)	23.1	34.3	11.1	6.1
95th Queue (m)	36.0	59.1	23.1	15.1
Link Distance (m)	51.5	187.0	312.9	149.1
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	WB
Directions Served	LR
Maximum Queue (m)	10.1
Average Queue (m)	0.7
95th Queue (m)	4.8
Link Distance (m)	284.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	43.7	32.2	43.3
Average Queue (m)	15.6	13.8	20.4
95th Queue (m)	35.9	28.4	36.2
Link Distance (m)	51.6	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel & rampa med 2križišèi/podaljšek Smreènikove

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	R	L	T	L	R
Maximum Queue (m)	34.4	16.8	9.3	51.5	21.3	14.8
Average Queue (m)	17.0	1.1	3.6	25.7	12.1	1.0
95th Queue (m)	30.6	8.0	10.9	48.5	20.0	7.1
Link Distance (m)	51.6			51.5		284.2
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (m)		20.0	20.0		30.0	
Storage Blk Time (%)	5	0		8		
Queuing Penalty (veh)	3	0		2		

Network Summary

Network wide Queuing Penalty: 6

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.0	0.3	0.7	0.3	1.3
Total Del/Veh (s)	3.6	7.1	7.2	5.6	6.6
Total Stops	6	69	88	49	212
Stop/Veh	0.19	0.52	0.27	0.24	0.30
Travel Dist (km)	6.5	17.3	161.1	53.6	238.6
Travel Time (hr)	0.2	0.7	4.2	1.4	6.5
Avg Speed (kph)	34	25	38	38	36
Fuel Used (l)	0.6	2.0	12.5	3.3	18.4
Fuel Eff. (kpl)	10.4	8.9	12.9	16.3	13.0
HC Emissions (g)	2	5	41	6	54
CO Emissions (g)	96	221	1239	114	1670
NOx Emissions (g)	7	22	128	19	176
Vehicles Entered	32	132	321	203	688
Vehicles Exited	32	132	325	202	691
Hourly Exit Rate	64	264	650	404	1382

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	All
Movements Served	TR	LT	
Denied Delay (hr)			0.0
Denied Del/Veh (s)			0.3
Total Delay (hr)	0.5	0.2	0.7
Total Del/Veh (s)	5.5	4.8	5.2
Total Stops	0	2	2
Stop/Veh	0.00	0.01	0.00
Travel Dist (km)	128.0	85.1	213.0
Travel Time (hr)	3.1	2.1	5.2
Avg Speed (kph)	42	41	41
Fuel Used (l)	8.4	7.2	15.6
Fuel Eff. (kpl)	15.3	11.8	13.6
HC Emissions (g)	25	22	47
CO Emissions (g)	550	690	1241
NOx Emissions (g)	77	70	148
Vehicles Entered	317	170	487
Vehicles Exited	324	167	491
Hourly Exit Rate	648	334	982

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.4	0.1	0.0	0.4	0.9
Total Del/Veh (s)	9.7	7.7	3.2	8.0	8.3
Total Stops	79	39	11	85	214
Stop/Veh	0.59	0.60	0.69	0.54	0.58
Travel Dist (km)	22.6	12.4	2.4	48.8	86.2
Travel Time (hr)	1.0	0.4	0.1	1.4	2.9
Avg Speed (kph)	23	31	33	34	30
Fuel Used (l)	2.6	0.9	0.2	3.3	7.0
Fuel Eff. (kpl)	8.6	13.4	15.8	14.7	12.2
HC Emissions (g)	11	4	0	4	19
CO Emissions (g)	351	92	7	172	622
NOx Emissions (g)	34	10	1	14	59
Vehicles Entered	132	65	16	156	369
Vehicles Exited	132	64	16	151	363
Hourly Exit Rate	264	128	32	302	726

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.0	0.2	0.0	0.2
Total Del/Veh (s)	3.7	4.5	1.9	4.4
Total Stops	3	2	0	5
Stop/Veh	0.10	0.01	0.00	0.02
Travel Dist (km)	6.4	39.7	0.2	46.4
Travel Time (hr)	0.2	1.2	0.0	1.4
Avg Speed (kph)	40	33	27	34
Fuel Used (l)	0.5	4.2	0.0	4.6
Fuel Eff. (kpl)	14.2	9.5	11.2	10.0
HC Emissions (g)	1	10	0	11
CO Emissions (g)	29	486	1	516
NOx Emissions (g)	3	39	0	42
Vehicles Entered	28	165	4	197
Vehicles Exited	29	165	4	198
Hourly Exit Rate	58	330	8	396

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	3.4
Total Del/Veh (s)	14.5
Total Stops	436
Stop/Veh	0.52
Travel Dist (km)	954.7
Travel Time (hr)	24.4
Avg Speed (kph)	39
Fuel Used (l)	77.7
Fuel Eff. (kpl)	12.3
HC Emissions (g)	220
CO Emissions (g)	7122
NOx Emissions (g)	712
Vehicles Entered	792
Vehicles Exited	798
Hourly Exit Rate	1596
Input Volume	5600
% of Volume	28

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	9.2	34.6	35.0	26.8
Average Queue (m)	3.9	13.7	15.4	11.7
95th Queue (m)	11.1	26.8	31.0	22.4
Link Distance (m)	173.4	116.3	448.4	248.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	28.9	40.4	9.3	41.0
Average Queue (m)	19.6	14.1	5.5	22.6
95th Queue (m)	30.0	31.0	12.1	33.5
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	EB	WB
Directions Served	TR	LT
Maximum Queue (m)	9.1	9.1
Average Queue (m)	1.7	0.6
95th Queue (m)	7.5	4.3
Link Distance (m)	228.2	173.4
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.1	0.3	0.3	0.6	1.2
Total Del/Veh (s)	5.1	5.7	5.4	7.6	6.3
Total Stops	36	48	41	93	218
Stop/Veh	0.41	0.30	0.24	0.32	0.31
Travel Dist (km)	19.0	21.0	84.1	76.1	200.2
Travel Time (hr)	0.6	0.8	2.1	2.2	5.7
Avg Speed (kph)	32	27	39	35	35
Fuel Used (l)	1.9	2.5	6.7	4.7	15.7
Fuel Eff. (kpl)	10.2	8.4	12.6	16.3	12.8
HC Emissions (g)	9	8	10	13	39
CO Emissions (g)	311	293	460	233	1297
NOx Emissions (g)	27	31	37	37	132
Vehicles Entered	88	161	166	287	702
Vehicles Exited	87	160	169	288	704
Hourly Exit Rate	174	320	338	576	1408

2: cesta za romsko naselje & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.2	0.6	0.0	0.8
Total Del/Veh (s)	4.3	6.5	2.8	5.7
Total Stops	0	4	0	4
Stop/Veh	0.00	0.01	0.00	0.01
Travel Dist (km)	65.5	168.5	0.3	234.3
Travel Time (hr)	1.5	4.3	0.0	5.9
Avg Speed (kph)	42	39	36	40
Fuel Used (l)	4.5	14.5	0.0	19.0
Fuel Eff. (kpl)	14.7	11.6	14.8	12.4
HC Emissions (g)	6	61	0	67
CO Emissions (g)	192	1594	1	1787
NOx Emissions (g)	22	191	0	213
Vehicles Entered	165	337	2	504
Vehicles Exited	166	338	2	506
Hourly Exit Rate	332	676	4	1012

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.1
Total Delay (hr)	0.3	0.5	0.1	0.2	1.1
Total Del/Veh (s)	6.4	12.6	7.8	7.6	9.0
Total Stops	80	107	24	51	262
Stop/Veh	0.52	0.70	0.69	0.57	0.61
Travel Dist (km)	27.8	28.9	5.3	28.1	90.1
Travel Time (hr)	1.1	1.2	0.2	0.8	3.2
Avg Speed (kph)	26	25	26	35	28
Fuel Used (l)	3.0	2.5	0.3	1.9	7.7
Fuel Eff. (kpl)	9.2	11.8	15.8	15.0	11.7
HC Emissions (g)	4	4	1	2	12
CO Emissions (g)	269	221	27	76	593
NOx Emissions (g)	21	15	3	8	46
Vehicles Entered	153	151	35	89	428
Vehicles Exited	154	150	34	88	426
Hourly Exit Rate	308	300	68	176	852

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	3.8	3.9	2.1	3.6
Total Stops	1	0	1	2
Stop/Veh	0.01	0.00	0.06	0.01
Travel Dist (km)	17.1	10.4	0.8	28.3
Travel Time (hr)	0.4	0.3	0.0	0.8
Avg Speed (kph)	40	34	27	37
Fuel Used (l)	1.3	1.1	0.1	2.4
Fuel Eff. (kpl)	13.5	9.5	11.2	11.6
HC Emissions (g)	4	5	0	9
CO Emissions (g)	132	182	7	322
NOx Emissions (g)	14	15	1	30
Vehicles Entered	75	46	16	137
Vehicles Exited	74	47	16	137
Hourly Exit Rate	148	94	32	274

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	3.6
Total Del/Veh (s)	15.1
Total Stops	486
Stop/Veh	0.56
Travel Dist (km)	985.7
Travel Time (hr)	25.3
Avg Speed (kph)	39
Fuel Used (l)	81.4
Fuel Eff. (kpl)	12.1
HC Emissions (g)	237
CO Emissions (g)	7466
NOx Emissions (g)	758
Vehicles Entered	822
Vehicles Exited	830
Hourly Exit Rate	1660
Input Volume	6511
% of Volume	25

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.8	33.6	20.7	41.3
Average Queue (m)	11.9	13.9	11.0	20.2
95th Queue (m)	21.9	26.1	20.6	39.3
Link Distance (m)	173.4	116.3	448.4	248.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje & prikljuèek 3.os/obvoznica Šmihela

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	39.8	34.6	22.1	28.0
Average Queue (m)	17.6	24.3	9.6	16.4
95th Queue (m)	34.6	36.2	20.9	24.7
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (m)	8.5	8.3
Average Queue (m)	0.6	0.6
95th Queue (m)	4.1	4.0
Link Distance (m)	228.2	47.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.3
Total Delay (hr)	0.6	0.2	0.0	0.1	0.9
Total Del/Veh (s)	6.3	6.1	8.5	3.5	5.7
Total Stops	38	24	2	9	73
Stop/Veh	0.10	0.24	1.00	0.08	0.13
Travel Dist (km)	144.3	51.8	0.3	55.6	252.1
Travel Time (hr)	3.6	1.2	0.0	1.3	6.2
Avg Speed (kph)	40	42	29	42	41
Fuel Used (l)	9.4	4.0	0.0	4.4	17.9
Fuel Eff. (kpl)	15.4	12.9	19.6	12.5	14.1
HC Emissions (g)	30	8	0	11	50
CO Emissions (g)	637	277	0	397	1312
NOx Emissions (g)	89	31	0	38	158
Vehicles Entered	361	100	2	103	566
Vehicles Exited	367	99	2	103	571
Hourly Exit Rate	734	198	4	206	1142

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.2	0.0	0.1	0.2
Total Del/Veh (s)	5.6	0.6	2.4	3.2
Total Stops	96	0	9	105
Stop/Veh	0.95	0.00	0.09	0.39
Travel Dist (km)	56.9	3.2	9.9	70.0
Travel Time (hr)	1.5	0.1	0.3	1.9
Avg Speed (kph)	39	36	32	38
Fuel Used (l)	4.4	0.4	0.7	5.5
Fuel Eff. (kpl)	12.9	7.5	14.3	12.7
HC Emissions (g)	15	1	2	17
CO Emissions (g)	430	65	57	552
NOx Emissions (g)	44	4	6	54
Vehicles Entered	95	66	101	262
Vehicles Exited	97	66	100	263
Hourly Exit Rate	194	132	200	526

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.4	0.4	0.5	0.0	1.3
Total Del/Veh (s)	10.7	13.8	8.0	5.0	9.9
Total Stops	62	68	104	8	242
Stop/Veh	0.44	0.73	0.51	0.50	0.53
Travel Dist (km)	11.3	17.4	62.8	2.4	93.9
Travel Time (hr)	0.8	0.7	1.8	0.1	3.4
Avg Speed (kph)	15	24	34	30	28
Fuel Used (l)	1.6	1.6	4.2	0.2	7.5
Fuel Eff. (kpl)	7.3	11.1	15.0	15.3	12.6
HC Emissions (g)	5	2	10	0	18
CO Emissions (g)	147	134	272	7	560
NOx Emissions (g)	18	9	31	1	59
Vehicles Entered	139	93	198	16	446
Vehicles Exited	139	93	203	16	451
Hourly Exit Rate	278	186	406	32	902

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.3	0.0	0.0	0.3
Total Del/Veh (s)	5.4	2.1	2.9	4.9
Total Stops	11	0	3	14
Stop/Veh	0.06	0.00	0.08	0.06
Travel Dist (km)	46.7	0.3	8.1	55.1
Travel Time (hr)	1.4	0.0	0.2	1.6
Avg Speed (kph)	34	27	41	35
Fuel Used (l)	4.7	0.0	0.6	5.3
Fuel Eff. (kpl)	9.9	11.9	14.7	10.4
HC Emissions (g)	12	0	1	13
CO Emissions (g)	526	1	33	560
NOx Emissions (g)	46	0	3	50
Vehicles Entered	181	5	36	222
Vehicles Exited	180	5	36	221
Hourly Exit Rate	360	10	72	442

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	WB	NB	NB	SB	SB	All
Movements Served	L	R	T	R	L	T	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.1	0.5	0.1	0.2	0.1	1.2
Total Del/Veh (s)	10.5	5.4	13.3	1.8	13.3	8.4	7.6
Total Stops	25	30	59	12	42	28	196
Stop/Veh	0.56	0.34	0.43	0.06	0.71	0.49	0.34
Travel Dist (km)	1.9	9.3	173.2	7.9	3.6	21.5	217.5
Travel Time (hr)	0.2	0.4	4.3	0.3	0.3	0.6	6.2
Avg Speed (kph)	10	21	40	23	12	38	35
Fuel Used (l)	0.2	1.3	13.9	0.4	0.4	1.4	17.5
Fuel Eff. (kpl)	8.2	7.2	12.5	21.5	10.2	15.3	12.4
HC Emissions (g)	0	3	45	1	1	2	51
CO Emissions (g)	14	115	1312	18	20	57	1536
NOx Emissions (g)	1	13	138	1	2	8	164
Vehicles Entered	0	130	321	0	0	113	564
Vehicles Exited	45	83	127	192	57	55	559
Hourly Exit Rate	90	166	254	384	114	110	1118

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.1	0.2	0.0	0.3	0.3	0.9
Total Del/Veh (s)	13.7	12.0	9.9	1.2	8.4	8.4	7.3
Total Stops	19	7	30	6	65	47	174
Stop/Veh	0.76	0.47	0.53	0.06	0.52	0.38	0.38
Travel Dist (km)	1.6	10.0	8.8	3.6	5.5	17.8	47.2
Travel Time (hr)	0.1	0.3	0.4	0.2	0.5	0.9	2.4
Avg Speed (kph)	11	36	21	23	12	19	20
Fuel Used (l)	0.1	1.0	1.4	0.2	0.6	2.6	5.9
Fuel Eff. (kpl)	11.1	10.2	6.3	20.9	8.6	6.9	8.0
HC Emissions (g)	0	2	3	0	1	8	15
CO Emissions (g)	4	110	149	6	43	265	576
NOx Emissions (g)	0	6	14	0	4	33	58
Vehicles Entered	0	40	161	3	0	249	453
Vehicles Exited	24	15	57	106	124	124	450
Hourly Exit Rate	48	30	114	212	248	248	900

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	5.3
Total Del/Veh (s)	17.9
Total Stops	827
Stop/Veh	0.78
Travel Dist (km)	1073.4
Travel Time (hr)	29.5
Avg Speed (kph)	37
Fuel Used (l)	91.0
Fuel Eff. (kpl)	11.8
HC Emissions (g)	247
CO Emissions (g)	8265
NOx Emissions (g)	823
Vehicles Entered	995
Vehicles Exited	1003
Hourly Exit Rate	2006
Input Volume	7554
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	31.2	22.2	9.2	16.3
Average Queue (m)	11.7	8.7	1.2	4.1
95th Queue (m)	26.1	20.6	6.3	12.8
Link Distance (m)	397.5	512.9	160.2	525.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	22.3	16.4
Average Queue (m)	12.6	4.1
95th Queue (m)	21.2	13.0
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	33.6	33.1	41.2	16.0
Average Queue (m)	17.2	18.1	26.5	3.8
95th Queue (m)	31.5	30.6	42.1	12.1
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	SE
Directions Served	LR
Maximum Queue (m)	9.0
Average Queue (m)	1.8
95th Queue (m)	7.7
Link Distance (m)	223.9
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (m)	21.4	23.1	35.3	33.8	21.5	28.5
Average Queue (m)	10.8	1.5	19.6	7.2	12.8	11.0
95th Queue (m)	21.5	11.0	32.5	25.2	21.0	23.8
Link Distance (m)		81.9	512.9			205.6
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	30.0			50.0	50.0	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	R	L	R
Maximum Queue (m)	16.3	16.3	21.6	24.4	34.5	13.2
Average Queue (m)	8.8	4.3	10.7	2.5	21.9	1.5
95th Queue (m)	18.6	14.7	21.3	13.5	37.0	7.9
Link Distance (m)		245.2	61.4			81.9
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	50.0			40.0	30.0	
Storage Blk Time (%)					2	
Queuing Penalty (veh)					5	

Network Summary

Network wide Queuing Penalty: 5

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	SB	All
Movements Served	LTR	LTR	LTR	
Denied Delay (hr)				0.1
Denied Del/Veh (s)				0.3
Total Delay (hr)	0.7	2.2	0.1	3.0
Total Del/Veh (s)	6.5	22.7	6.0	13.4
Total Stops	30	280	39	349
Stop/Veh	0.08	0.81	0.45	0.44
Travel Dist (km)	141.9	176.9	46.5	365.3
Travel Time (hr)	3.6	5.9	1.2	10.7
Avg Speed (kph)	40	30	40	34
Fuel Used (l)	9.3	14.5	3.8	27.6
Fuel Eff. (kpl)	15.3	12.2	12.2	13.2
HC Emissions (g)	20	22	10	52
CO Emissions (g)	473	742	316	1533
NOx Emissions (g)	61	87	32	181
Vehicles Entered	358	339	85	782
Vehicles Exited	356	332	86	774
Hourly Exit Rate	712	664	172	1548

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.4	0.0	0.1	0.5
Total Del/Veh (s)	7.2	0.7	2.3	4.9
Total Stops	195	0	13	208
Stop/Veh	0.96	0.00	0.14	0.60
Travel Dist (km)	116.5	2.4	9.4	128.4
Travel Time (hr)	3.1	0.1	0.3	3.5
Avg Speed (kph)	37	31	34	37
Fuel Used (l)	9.2	0.2	0.7	10.1
Fuel Eff. (kpl)	12.6	10.8	14.1	12.7
HC Emissions (g)	19	0	3	22
CO Emissions (g)	670	28	84	782
NOx Emissions (g)	63	2	10	74
Vehicles Entered	198	50	96	344
Vehicles Exited	194	50	96	340
Hourly Exit Rate	388	100	192	680

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.5	1.6	0.4	0.1	2.5
Total Del/Veh (s)	8.2	27.7	9.7	6.8	15.0
Total Stops	113	173	78	38	402
Stop/Veh	0.56	0.85	0.58	0.61	0.67
Travel Dist (km)	16.3	38.2	41.5	8.8	104.9
Travel Time (hr)	1.0	2.4	1.3	0.3	5.0
Avg Speed (kph)	16	16	32	27	21
Fuel Used (l)	2.1	4.0	2.9	0.7	9.7
Fuel Eff. (kpl)	7.8	9.5	14.1	13.5	10.8
HC Emissions (g)	6	6	7	1	20
CO Emissions (g)	173	291	208	43	714
NOx Emissions (g)	22	22	23	3	70
Vehicles Entered	200	203	132	59	594
Vehicles Exited	200	200	132	60	592
Hourly Exit Rate	400	400	264	120	1184

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.1	0.2
Total Del/Veh (s)	5.0	2.4	3.0	3.8
Total Stops	5	3	2	10
Stop/Veh	0.07	0.16	0.03	0.06
Travel Dist (km)	19.5	1.0	17.2	37.6
Travel Time (hr)	0.6	0.0	0.4	1.0
Avg Speed (kph)	34	26	40	36
Fuel Used (l)	2.1	0.1	1.2	3.5
Fuel Eff. (kpl)	9.2	10.9	13.7	10.9
HC Emissions (g)	6	0	2	8
CO Emissions (g)	258	8	85	351
NOx Emissions (g)	23	1	7	32
Vehicles Entered	76	19	76	171
Vehicles Exited	76	19	77	172
Hourly Exit Rate	152	38	154	344

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	WB	NB	NB	SB	SB	All
Movements Served	L	R	T	R	L	T	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.5	0.3	0.3	0.0	0.8	0.4	2.4
Total Del/Veh (s)	9.6	11.2	10.6	1.2	19.3	10.3	10.8
Total Stops	118	40	52	4	127	75	416
Stop/Veh	0.63	0.44	0.45	0.04	0.90	0.48	0.53
Travel Dist (km)	8.2	16.5	110.0	3.8	8.9	55.8	203.4
Travel Time (hr)	0.7	0.9	2.8	0.1	1.0	1.6	7.1
Avg Speed (kph)	11	19	40	25	9	36	29
Fuel Used (l)	1.1	2.5	9.0	0.2	1.2	3.7	17.7
Fuel Eff. (kpl)	7.7	6.6	12.2	22.4	7.3	15.2	11.5
HC Emissions (g)	1	5	21	0	2	9	38
CO Emissions (g)	40	187	728	9	58	189	1211
NOx Emissions (g)	4	25	70	1	6	27	132
Vehicles Entered	0	273	205	0	0	292	770
Vehicles Exited	187	90	106	93	140	152	768
Hourly Exit Rate	374	180	212	186	280	304	1536

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.2	0.1	0.1	0.1	0.6	0.2	1.3
Total Del/Veh (s)	10.7	11.1	24.3	2.3	11.6	12.7	8.6
Total Stops	41	17	11	29	115	42	255
Stop/Veh	0.58	0.63	0.65	0.14	0.66	0.70	0.46
Travel Dist (km)	4.4	22.7	9.1	6.9	7.7	14.5	65.4
Travel Time (hr)	0.3	0.6	0.4	0.4	0.8	0.7	3.2
Avg Speed (kph)	13	37	24	19	10	21	21
Fuel Used (l)	0.4	2.3	1.6	0.4	1.0	2.3	8.1
Fuel Eff. (kpl)	10.0	9.8	5.8	16.8	7.6	6.2	8.1
HC Emissions (g)	0	6	4	0	1	9	21
CO Emissions (g)	18	270	164	13	43	266	773
NOx Emissions (g)	2	21	19	1	4	36	82
Vehicles Entered	0	95	218	0	0	234	547
Vehicles Exited	70	24	16	201	175	60	546
Hourly Exit Rate	140	48	32	402	350	120	1092

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.4
Total Delay (hr)	10.6
Total Del/Veh (s)	28.1
Total Stops	1668
Stop/Veh	1.23
Travel Dist (km)	1413.5
Travel Time (hr)	42.4
Avg Speed (kph)	33
Fuel Used (l)	124.7
Fuel Eff. (kpl)	11.3
HC Emissions (g)	305
CO Emissions (g)	10129
NOx Emissions (g)	1043
Vehicles Entered	1286
Vehicles Exited	1271
Hourly Exit Rate	2542
Input Volume	9583
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	40.2	108.8	27.2
Average Queue (m)	7.5	54.7	12.2
95th Queue (m)	28.1	99.7	24.6
Link Distance (m)	397.5	512.9	525.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	33.0	29.5
Average Queue (m)	19.3	5.5
95th Queue (m)	30.6	19.2
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	64.1	112.2	35.5	22.6
Average Queue (m)	26.9	47.8	21.1	13.3
95th Queue (m)	52.4	87.9	37.1	21.9
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	1			
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	NB	SE
Directions Served	LR	LR
Maximum Queue (m)	8.7	9.0
Average Queue (m)	1.6	1.2
95th Queue (m)	7.1	6.2
Link Distance (m)	49.9	223.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T
Maximum Queue (m)	46.4	35.0	16.7	61.8	49.9
Average Queue (m)	31.6	17.2	4.4	32.3	22.5
95th Queue (m)	44.8	29.3	16.4	56.2	39.5
Link Distance (m)		512.9			205.6
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	30.0		50.0	50.0	
Storage Blk Time (%)	7			2	0
Queuing Penalty (veh)	12			6	0

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	R	L	R
Maximum Queue (m)	35.1	23.8	9.6	47.9	39.6	92.1
Average Queue (m)	14.1	8.6	4.2	13.7	26.7	7.3
95th Queue (m)	28.2	22.8	11.6	38.2	38.4	45.3
Link Distance (m)		245.2	61.4			81.9
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	50.0			40.0	30.0	
Storage Blk Time (%)				1	4	
Queuing Penalty (veh)				0	4	

Network Summary

Network wide Queuing Penalty: 23

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.3
Total Delay (hr)	0.6	0.1	0.0	0.1	0.9
Total Del/Veh (s)	6.2	4.6	5.5	3.8	5.5
Total Stops	39	15	1	18	73
Stop/Veh	0.11	0.15	0.50	0.17	0.13
Travel Dist (km)	144.3	55.4	0.3	55.6	255.7
Travel Time (hr)	3.6	1.3	0.0	1.3	6.3
Avg Speed (kph)	40	41	35	42	41
Fuel Used (l)	9.4	4.4	0.0	4.4	18.2
Fuel Eff. (kpl)	15.4	12.7	18.8	12.6	14.0
HC Emissions (g)	30	9	0	11	51
CO Emissions (g)	634	353	0	395	1383
NOx Emissions (g)	89	33	0	37	159
Vehicles Entered	361	99	2	103	565
Vehicles Exited	367	97	2	103	569
Hourly Exit Rate	734	194	4	206	1138

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.2	0.0	0.1	0.2
Total Del/Veh (s)	5.4	0.6	2.4	3.1
Total Stops	96	0	9	105
Stop/Veh	0.95	0.00	0.09	0.39
Travel Dist (km)	56.9	3.2	9.9	70.0
Travel Time (hr)	1.5	0.1	0.3	1.9
Avg Speed (kph)	39	36	33	38
Fuel Used (l)	4.4	0.4	0.7	5.5
Fuel Eff. (kpl)	13.0	7.5	14.3	12.7
HC Emissions (g)	15	1	2	18
CO Emissions (g)	439	65	57	561
NOx Emissions (g)	45	4	6	55
Vehicles Entered	95	66	101	262
Vehicles Exited	97	66	100	263
Hourly Exit Rate	194	132	200	526

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.5	0.3	0.5	0.0	1.3
Total Del/Veh (s)	11.7	10.9	9.4	3.1	10.2
Total Stops	95	52	113	8	268
Stop/Veh	0.68	0.56	0.56	0.50	0.59
Travel Dist (km)	11.4	17.5	62.7	2.4	94.0
Travel Time (hr)	0.8	0.7	1.9	0.1	3.5
Avg Speed (kph)	14	26	33	33	27
Fuel Used (l)	1.5	1.5	4.2	0.1	7.4
Fuel Eff. (kpl)	7.4	11.8	14.9	16.8	12.7
HC Emissions (g)	5	2	10	0	17
CO Emissions (g)	134	109	271	7	521
NOx Emissions (g)	17	8	30	1	55
Vehicles Entered	139	93	198	16	446
Vehicles Exited	139	93	201	16	449
Hourly Exit Rate	278	186	402	32	898

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.3	0.0	0.0	0.3
Total Del/Veh (s)	5.6	2.1	2.7	5.0
Total Stops	21	0	1	22
Stop/Veh	0.11	0.00	0.03	0.10
Travel Dist (km)	46.4	0.3	8.1	54.7
Travel Time (hr)	1.4	0.0	0.2	1.6
Avg Speed (kph)	34	27	41	35
Fuel Used (l)	4.8	0.0	0.6	5.4
Fuel Eff. (kpl)	9.7	12.1	14.5	10.2
HC Emissions (g)	12	0	1	13
CO Emissions (g)	542	1	33	577
NOx Emissions (g)	48	0	3	52
Vehicles Entered	180	5	36	221
Vehicles Exited	181	5	36	222
Hourly Exit Rate	362	10	72	444

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.1	0.6	0.1	0.9
Total Del/Veh (s)	4.1	6.4	3.8	5.4
Total Stops	22	63	10	95
Stop/Veh	0.17	0.19	0.09	0.17
Travel Dist (km)	10.3	178.7	23.3	212.2
Travel Time (hr)	0.5	4.5	0.6	5.6
Avg Speed (kph)	21	39	38	38
Fuel Used (l)	1.4	14.1	1.4	16.9
Fuel Eff. (kpl)	7.3	12.7	16.1	12.5
HC Emissions (g)	3	44	3	50
CO Emissions (g)	96	1300	62	1457
NOx Emissions (g)	13	141	10	164
Vehicles Entered	129	321	113	563
Vehicles Exited	126	321	112	559
Hourly Exit Rate	252	642	224	1118

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.1	0.0	0.2	0.0	0.3	0.1	0.6
Total Del/Veh (s)	11.1	3.6	10.2	1.0	7.5	2.0	4.9
Total Stops	18	4	31	1	68	2	124
Stop/Veh	0.72	0.27	0.53	0.01	0.54	0.02	0.27
Travel Dist (km)	1.6	10.0	8.7	3.5	5.5	21.2	50.4
Travel Time (hr)	0.1	0.2	0.4	0.1	0.4	0.7	2.1
Avg Speed (kph)	13	41	21	24	13	29	24
Fuel Used (l)	0.1	1.0	1.4	0.2	0.6	2.2	5.4
Fuel Eff. (kpl)	12.1	10.4	6.3	21.3	9.3	9.6	9.3
HC Emissions (g)	0	2	3	0	2	7	13
CO Emissions (g)	4	111	144	6	44	231	539
NOx Emissions (g)	0	6	14	0	5	25	51
Vehicles Entered	0	40	159	3	0	249	451
Vehicles Exited	24	15	57	105	124	123	448
Hourly Exit Rate	48	30	114	210	248	246	896

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	4.4
Total Del/Veh (s)	15.1
Total Stops	687
Stop/Veh	0.65
Travel Dist (km)	1077.9
Travel Time (hr)	28.8
Avg Speed (kph)	38
Fuel Used (l)	90.4
Fuel Eff. (kpl)	11.9
HC Emissions (g)	247
CO Emissions (g)	8343
NOx Emissions (g)	819
Vehicles Entered	995
Vehicles Exited	1002
Hourly Exit Rate	2004
Input Volume	7554
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	24.1	9.4	9.2	16.2
Average Queue (m)	10.4	4.9	0.6	7.0
95th Queue (m)	23.9	12.4	4.4	14.6
Link Distance (m)	397.5	499.7	160.2	525.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	28.3	16.4
Average Queue (m)	13.1	4.1
95th Queue (m)	23.3	13.0
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	51.5	27.8	49.3	8.6
Average Queue (m)	25.4	17.0	29.2	3.5
95th Queue (m)	44.0	25.1	44.2	9.7
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	WB	SE
Directions Served	LR	LR
Maximum Queue (m)	8.8	9.0
Average Queue (m)	1.7	0.6
95th Queue (m)	7.3	4.3
Link Distance (m)	245.2	223.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	15.6	23.5	16.0
Average Queue (m)	5.6	14.6	5.3
95th Queue (m)	13.7	27.5	14.0
Link Distance (m)	69.0	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB	SB
Directions Served	L	T	T	R	L	R
Maximum Queue (m)	15.2	15.6	21.6	16.8	40.7	9.3
Average Queue (m)	7.7	1.6	11.8	1.1	24.0	0.6
95th Queue (m)	17.5	8.7	20.9	8.0	40.3	4.5
Link Distance (m)		245.2	61.4			69.0
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	50.0			40.0	30.0	
Storage Blk Time (%)					2	
Queuing Penalty (veh)					5	

Network Summary

Network wide Queuing Penalty: 5

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	SB	All
Movements Served	LTR	LTR	LTR	
Denied Delay (hr)				0.1
Denied Del/Veh (s)				0.3
Total Delay (hr)	0.7	2.1	0.1	2.9
Total Del/Veh (s)	6.4	21.9	5.9	13.1
Total Stops	33	255	38	326
Stop/Veh	0.09	0.73	0.44	0.41
Travel Dist (km)	141.9	189.8	46.5	378.2
Travel Time (hr)	3.6	6.3	1.2	11.1
Avg Speed (kph)	40	30	40	34
Fuel Used (l)	9.3	16.4	3.8	29.5
Fuel Eff. (kpl)	15.3	11.6	12.3	12.8
HC Emissions (g)	20	28	10	58
CO Emissions (g)	473	1068	316	1858
NOx Emissions (g)	61	106	32	199
Vehicles Entered	358	339	85	782
Vehicles Exited	356	334	86	776
Hourly Exit Rate	712	668	172	1552

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.4	0.0	0.1	0.5
Total Del/Veh (s)	7.2	0.6	2.3	4.9
Total Stops	194	0	13	207
Stop/Veh	0.96	0.00	0.14	0.59
Travel Dist (km)	116.5	2.4	9.4	128.3
Travel Time (hr)	3.1	0.1	0.3	3.5
Avg Speed (kph)	37	32	34	37
Fuel Used (l)	9.3	0.2	0.7	10.2
Fuel Eff. (kpl)	12.6	10.8	14.1	12.6
HC Emissions (g)	19	1	3	22
CO Emissions (g)	669	29	83	781
NOx Emissions (g)	63	2	10	75
Vehicles Entered	198	50	96	344
Vehicles Exited	194	50	96	340
Hourly Exit Rate	388	100	192	680

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.4	1.5	0.4	0.1	2.4
Total Del/Veh (s)	7.9	26.2	9.5	6.7	14.3
Total Stops	115	166	77	38	396
Stop/Veh	0.58	0.81	0.57	0.61	0.66
Travel Dist (km)	16.3	38.2	41.5	8.8	104.9
Travel Time (hr)	1.0	2.3	1.3	0.3	4.9
Avg Speed (kph)	17	17	33	27	22
Fuel Used (l)	2.0	4.0	2.9	0.7	9.6
Fuel Eff. (kpl)	8.0	9.6	14.1	13.6	10.9
HC Emissions (g)	6	6	7	1	21
CO Emissions (g)	172	293	208	42	714
NOx Emissions (g)	21	23	23	3	70
Vehicles Entered	200	203	132	59	594
Vehicles Exited	200	202	132	60	594
Hourly Exit Rate	400	404	264	120	1188

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.1	0.2
Total Del/Veh (s)	4.7	2.4	3.1	3.7
Total Stops	1	3	3	7
Stop/Veh	0.01	0.16	0.04	0.04
Travel Dist (km)	19.5	1.0	17.2	37.6
Travel Time (hr)	0.6	0.0	0.4	1.0
Avg Speed (kph)	35	26	40	37
Fuel Used (l)	2.1	0.1	1.2	3.4
Fuel Eff. (kpl)	9.3	11.0	13.8	10.9
HC Emissions (g)	6	0	2	8
CO Emissions (g)	260	7	85	352
NOx Emissions (g)	23	1	7	32
Vehicles Entered	76	19	76	171
Vehicles Exited	76	19	77	172
Hourly Exit Rate	152	38	154	344

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.7	0.4	0.9	2.0
Total Del/Veh (s)	8.6	6.1	11.5	9.0
Total Stops	149	50	188	387
Stop/Veh	0.54	0.24	0.64	0.50
Travel Dist (km)	22.1	112.0	60.0	194.0
Travel Time (hr)	1.4	2.8	2.2	6.4
Avg Speed (kph)	16	40	27	30
Fuel Used (l)	3.1	9.0	3.6	15.7
Fuel Eff. (kpl)	7.2	12.4	16.7	12.4
HC Emissions (g)	4	21	7	32
CO Emissions (g)	158	714	138	1011
NOx Emissions (g)	24	71	18	112
Vehicles Entered	274	205	292	771
Vehicles Exited	276	199	292	767
Hourly Exit Rate	552	398	584	1534

12: cesta za Šmihel/podaljšek Smrečnikove & rampa med 2križišči Performance by lane

Lane	EB	EB	WB	WB	SB	SB	All
Movements Served	L	T	T	R	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.2	0.1	0.1	0.1	0.5	0.1	1.1
Total Del/Veh (s)	10.5	11.1	24.3	2.0	9.3	6.0	7.0
Total Stops	42	17	11	17	106	1	194
Stop/Veh	0.59	0.63	0.65	0.08	0.61	0.02	0.35
Travel Dist (km)	4.4	22.7	9.1	6.9	7.7	21.5	72.4
Travel Time (hr)	0.3	0.6	0.4	0.3	0.7	0.8	3.1
Avg Speed (kph)	14	37	24	20	11	28	23
Fuel Used (l)	0.4	2.3	1.6	0.4	0.9	2.7	8.3
Fuel Eff. (kpl)	10.1	9.8	5.9	17.7	8.4	8.0	8.7
HC Emissions (g)	0	6	4	0	2	10	23
CO Emissions (g)	17	270	162	14	53	301	818
NOx Emissions (g)	2	21	18	1	6	37	85
Vehicles Entered	0	95	218	0	0	234	547
Vehicles Exited	70	24	16	202	175	60	547
Hourly Exit Rate	140	48	32	404	350	120	1094

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.4
Total Delay (hr)	9.6
Total Del/Veh (s)	25.5
Total Stops	1526
Stop/Veh	1.13
Travel Dist (km)	1427.4
Travel Time (hr)	42.0
Avg Speed (kph)	34
Fuel Used (l)	124.8
Fuel Eff. (kpl)	11.4
HC Emissions (g)	307
CO Emissions (g)	10363
NOx Emissions (g)	1046
Vehicles Entered	1286
Vehicles Exited	1273
Hourly Exit Rate	2546
Input Volume	9583
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	40.2	113.6	29.0
Average Queue (m)	8.9	50.8	13.9
95th Queue (m)	28.2	99.0	25.0
Link Distance (m)	397.5	499.7	525.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	31.0	29.5
Average Queue (m)	19.0	5.5
95th Queue (m)	29.5	19.2
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	45.9	112.2	35.5	22.6
Average Queue (m)	26.5	46.3	21.1	13.3
95th Queue (m)	43.0	86.9	37.1	21.9
Link Distance (m)	61.4	187.2	314.6	148.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	NB	SE
Directions Served	LR	LR
Maximum Queue (m)	8.7	9.0
Average Queue (m)	1.6	1.1
95th Queue (m)	7.1	5.7
Link Distance (m)	49.9	223.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	46.8	35.2	53.4
Average Queue (m)	22.2	12.9	31.8
95th Queue (m)	48.3	28.1	51.9
Link Distance (m)	69.0	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel/podaljšek Smreènikove & rampa med 2križišèi

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	L
Maximum Queue (m)	35.0	23.8	15.1	38.8	45.2
Average Queue (m)	14.7	8.6	4.6	12.5	28.3
95th Queue (m)	27.6	22.8	13.2	32.2	42.8
Link Distance (m)		245.2	61.4		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	50.0			40.0	30.0
Storage Blk Time (%)				0	3
Queuing Penalty (veh)				0	3

Network Summary

Network wide Queuing Penalty: 3

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.3
Total Delay (hr)	0.6	0.1	0.0	0.1	0.9
Total Del/Veh (s)	6.1	4.6	8.6	3.8	5.4
Total Stops	32	13	2	16	63
Stop/Veh	0.09	0.13	1.00	0.15	0.11
Travel Dist (km)	144.3	55.8	0.3	55.6	256.0
Travel Time (hr)	3.6	1.4	0.0	1.3	6.3
Avg Speed (kph)	40	41	29	42	41
Fuel Used (l)	9.4	4.4	0.0	4.4	18.3
Fuel Eff. (kpl)	15.4	12.6	19.5	12.6	14.0
HC Emissions (g)	30	10	0	11	51
CO Emissions (g)	636	354	0	395	1386
NOx Emissions (g)	89	34	0	37	161
Vehicles Entered	361	100	2	103	566
Vehicles Exited	367	97	2	103	569
Hourly Exit Rate	734	194	4	206	1138

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.2
Total Delay (hr)	0.2	0.0	0.1	0.2
Total Del/Veh (s)	5.4	0.6	2.4	3.1
Total Stops	96	0	9	105
Stop/Veh	0.95	0.00	0.09	0.39
Travel Dist (km)	56.9	3.2	9.9	70.0
Travel Time (hr)	1.5	0.1	0.3	1.9
Avg Speed (kph)	39	36	33	38
Fuel Used (l)	4.4	0.4	0.7	5.5
Fuel Eff. (kpl)	13.0	7.4	14.3	12.7
HC Emissions (g)	15	1	2	17
CO Emissions (g)	436	66	57	559
NOx Emissions (g)	45	4	6	55
Vehicles Entered	95	66	101	262
Vehicles Exited	97	66	100	263
Hourly Exit Rate	194	132	200	526

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.6	0.2	0.5	0.0	1.4
Total Del/Veh (s)	15.8	9.6	9.5	3.1	11.3
Total Stops	103	49	113	8	273
Stop/Veh	0.73	0.53	0.56	0.50	0.60
Travel Dist (km)	9.8	17.4	62.4	2.4	92.0
Travel Time (hr)	0.9	0.6	1.9	0.1	3.5
Avg Speed (kph)	11	28	33	33	26
Fuel Used (l)	1.4	1.4	4.2	0.1	7.2
Fuel Eff. (kpl)	6.9	12.0	14.9	16.8	12.8
HC Emissions (g)	4	2	10	0	16
CO Emissions (g)	110	110	269	7	496
NOx Emissions (g)	13	8	29	1	51
Vehicles Entered	139	93	198	16	446
Vehicles Exited	141	93	201	16	451
Hourly Exit Rate	282	186	402	32	902

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.3	0.0	0.0	0.3
Total Del/Veh (s)	5.2	2.3	2.8	4.7
Total Stops	27	0	1	28
Stop/Veh	0.15	0.00	0.03	0.12
Travel Dist (km)	53.5	0.3	8.1	61.9
Travel Time (hr)	1.5	0.0	0.2	1.7
Avg Speed (kph)	35	27	41	36
Fuel Used (l)	5.4	0.0	0.6	6.0
Fuel Eff. (kpl)	9.8	12.1	14.6	10.3
HC Emissions (g)	14	0	1	14
CO Emissions (g)	594	1	32	627
NOx Emissions (g)	53	0	3	56
Vehicles Entered	181	5	36	222
Vehicles Exited	181	5	36	222
Hourly Exit Rate	362	10	72	444

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.2	0.6	0.1	0.9
Total Del/Veh (s)	4.2	6.7	3.7	5.5
Total Stops	22	69	6	97
Stop/Veh	0.17	0.21	0.05	0.17
Travel Dist (km)	8.6	178.7	23.3	210.6
Travel Time (hr)	0.4	4.6	0.6	5.5
Avg Speed (kph)	23	39	39	38
Fuel Used (l)	1.1	14.0	1.4	16.6
Fuel Eff. (kpl)	8.0	12.7	16.1	12.7
HC Emissions (g)	2	44	3	49
CO Emissions (g)	74	1295	61	1430
NOx Emissions (g)	10	140	10	161
Vehicles Entered	129	321	113	563
Vehicles Exited	128	321	112	561
Hourly Exit Rate	256	642	224	1122

12: cesta za Šmihel & rampa med 2križišči/podaljšek Smrečnikove Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.3	0.0	0.2	0.3	0.0	0.0	0.9
Total Del/Veh (s)	9.9	0.6	15.5	8.9	6.6	2.0	7.4
Total Stops	73	2	45	58	12	0	190
Stop/Veh	0.58	0.02	0.79	0.55	0.48	0.00	0.42
Travel Dist (km)	19.9	2.6	1.9	9.6	1.1	12.0	47.0
Travel Time (hr)	0.9	0.1	0.3	0.5	0.1	0.3	2.3
Avg Speed (kph)	21	20	6	18	14	41	21
Fuel Used (l)	2.3	0.2	0.3	1.4	0.1	1.0	5.3
Fuel Eff. (kpl)	8.8	14.9	5.6	6.9	13.0	11.5	8.9
HC Emissions (g)	7	0	0	3	0	2	12
CO Emissions (g)	203	9	9	109	3	109	442
NOx Emissions (g)	24	1	1	13	0	7	47
Vehicles Entered	249	0	0	162	0	40	451
Vehicles Exited	124	124	57	105	24	15	449
Hourly Exit Rate	248	248	114	210	48	30	898

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.3
Total Delay (hr)	4.9
Total Del/Veh (s)	16.7
Total Stops	757
Stop/Veh	0.72
Travel Dist (km)	1078.4
Travel Time (hr)	29.1
Avg Speed (kph)	37
Fuel Used (l)	90.6
Fuel Eff. (kpl)	11.9
HC Emissions (g)	247
CO Emissions (g)	8261
NOx Emissions (g)	817
Vehicles Entered	995
Vehicles Exited	1002
Hourly Exit Rate	2004
Input Volume	7554
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	24.1	9.2	9.2	16.3
Average Queue (m)	8.9	5.4	1.2	7.1
95th Queue (m)	22.0	12.7	6.3	14.7
Link Distance (m)	397.5	499.7	160.2	525.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	19.8	16.4
Average Queue (m)	11.7	4.1
95th Queue (m)	18.1	13.0
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	41.0	21.8	49.2	9.1
Average Queue (m)	30.2	16.0	29.2	3.8
95th Queue (m)	43.3	22.8	43.9	10.5
Link Distance (m)	53.7	187.0	312.9	149.4
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	WB	SE
Directions Served	LR	LR
Maximum Queue (m)	296.9	8.9
Average Queue (m)	20.3	0.6
95th Queue (m)	142.3	4.3
Link Distance (m)	284.4	223.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	34.5	43.9	15.8
Average Queue (m)	11.7	19.2	3.2
95th Queue (m)	27.7	36.2	12.5
Link Distance (m)	50.9	499.7	189.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel & rampa med 2križišèi/podaljšek Smreènikove

Movement	EB	EB	WB	WB	NB
Directions Served	T	R	L	T	L
Maximum Queue (m)	60.1	40.0	39.4	29.2	16.1
Average Queue (m)	21.9	6.8	15.6	16.1	6.0
95th Queue (m)	43.4	29.1	29.3	25.4	14.5
Link Distance (m)	50.9			53.7	
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	3				
Storage Bay Dist (m)		20.0	20.0		30.0
Storage Blk Time (%)	6		4	3	
Queuing Penalty (veh)	16		8	3	

Network Summary

Network wide Queuing Penalty: 30

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	SB	All
Movements Served	LTR	LTR	LTR	
Denied Delay (hr)				0.1
Denied Del/Veh (s)				0.3
Total Delay (hr)	0.6	1.9	0.1	2.6
Total Del/Veh (s)	6.2	19.4	5.2	11.8
Total Stops	22	248	35	305
Stop/Veh	0.06	0.71	0.40	0.38
Travel Dist (km)	141.5	189.2	47.0	377.7
Travel Time (hr)	3.5	6.1	1.2	10.8
Avg Speed (kph)	40	31	40	35
Fuel Used (l)	9.3	16.2	3.8	29.4
Fuel Eff. (kpl)	15.2	11.7	12.3	12.9
HC Emissions (g)	20	28	10	58
CO Emissions (g)	468	1064	318	1851
NOx Emissions (g)	61	107	32	200
Vehicles Entered	357	338	86	781
Vehicles Exited	355	331	87	773
Hourly Exit Rate	710	662	174	1546

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.4	0.0	0.1	0.5
Total Del/Veh (s)	6.9	0.6	2.3	4.7
Total Stops	195	0	13	208
Stop/Veh	0.96	0.00	0.14	0.59
Travel Dist (km)	116.7	2.4	9.4	128.6
Travel Time (hr)	3.1	0.1	0.3	3.5
Avg Speed (kph)	37	31	34	37
Fuel Used (l)	9.2	0.2	0.7	10.1
Fuel Eff. (kpl)	12.7	10.8	14.1	12.7
HC Emissions (g)	19	1	3	22
CO Emissions (g)	669	30	83	782
NOx Emissions (g)	62	2	10	74
Vehicles Entered	199	50	96	345
Vehicles Exited	195	50	96	341
Hourly Exit Rate	390	100	192	682

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.6	1.7	0.5	0.1	2.9
Total Del/Veh (s)	10.9	29.7	11.9	7.3	17.1
Total Stops	127	180	86	39	432
Stop/Veh	0.64	0.89	0.63	0.63	0.72
Travel Dist (km)	13.9	38.0	42.2	8.9	103.0
Travel Time (hr)	1.0	2.5	1.4	0.3	5.3
Avg Speed (kph)	14	15	30	26	20
Fuel Used (l)	1.7	4.1	3.1	0.7	9.5
Fuel Eff. (kpl)	8.0	9.4	13.8	13.3	10.8
HC Emissions (g)	5	6	7	1	20
CO Emissions (g)	139	285	214	43	682
NOx Emissions (g)	17	22	23	3	65
Vehicles Entered	199	202	135	59	595
Vehicles Exited	199	202	135	60	596
Hourly Exit Rate	398	404	270	120	1192

5: parkirišče OŠ & cesta za Šmihel & Šegova ulica Performance by lane

Lane	WB	NB	SE	All
Movements Served	LR	LR	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.1	0.2
Total Del/Veh (s)	4.2	2.3	3.1	3.5
Total Stops	2	3	4	9
Stop/Veh	0.03	0.16	0.05	0.05
Travel Dist (km)	21.9	1.0	17.2	40.0
Travel Time (hr)	0.6	0.0	0.4	1.1
Avg Speed (kph)	36	26	40	37
Fuel Used (l)	2.3	0.1	1.2	3.6
Fuel Eff. (kpl)	9.5	10.9	13.8	11.0
HC Emissions (g)	7	0	2	9
CO Emissions (g)	277	8	85	370
NOx Emissions (g)	25	1	7	33
Vehicles Entered	74	19	76	169
Vehicles Exited	74	19	77	170
Hourly Exit Rate	148	38	154	340

11: obvoznica Šmihela & rampa med 2križišči Performance by lane

Lane	WB	NB	SB	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.6	0.4	0.9	1.9
Total Del/Veh (s)	8.4	6.3	11.1	8.9
Total Stops	132	57	175	364
Stop/Veh	0.48	0.28	0.60	0.47
Travel Dist (km)	18.4	110.9	60.0	189.2
Travel Time (hr)	1.1	2.8	2.2	6.1
Avg Speed (kph)	16	39	28	31
Fuel Used (l)	2.3	8.9	3.6	14.8
Fuel Eff. (kpl)	8.0	12.5	16.6	12.8
HC Emissions (g)	4	21	7	32
CO Emissions (g)	119	703	145	968
NOx Emissions (g)	18	70	20	107
Vehicles Entered	276	203	292	771
Vehicles Exited	276	197	293	766
Hourly Exit Rate	552	394	586	1532

12: cesta za Šmihel & rampa med 2križišči/podaljšek Smrečnikove Performance by lane

Lane	EB	EB	WB	WB	NB	NB	All
Movements Served	T	R	L	T	L	R	
Denied Delay (hr)							0.0
Denied Del/Veh (s)							0.0
Total Delay (hr)	0.5	0.0	0.1	0.7	0.1	0.0	1.4
Total Del/Veh (s)	10.0	0.5	17.5	11.9	7.4	4.0	9.3
Total Stops	96	0	12	116	41	2	267
Stop/Veh	0.55	0.00	0.71	0.57	0.57	0.07	0.48
Travel Dist (km)	23.8	1.2	0.6	14.9	3.0	27.8	71.2
Travel Time (hr)	1.2	0.1	0.1	1.0	0.2	0.7	3.3
Avg Speed (kph)	20	21	6	14	13	40	22
Fuel Used (l)	3.0	0.1	0.1	2.2	0.3	2.5	8.2
Fuel Eff. (kpl)	8.0	13.8	5.2	6.7	10.4	10.9	8.7
HC Emissions (g)	9	0	0	4	0	6	20
CO Emissions (g)	254	4	3	138	10	272	682
NOx Emissions (g)	33	1	0	18	1	22	75
Vehicles Entered	231	0	0	219	0	95	545
Vehicles Exited	173	58	16	202	72	25	546
Hourly Exit Rate	346	116	32	404	144	50	1092

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.4
Total Delay (hr)	10.1
Total Del/Veh (s)	26.8
Total Stops	1592
Stop/Veh	1.18
Travel Dist (km)	1420.4
Travel Time (hr)	42.0
Avg Speed (kph)	34
Fuel Used (l)	123.8
Fuel Eff. (kpl)	11.5
HC Emissions (g)	304
CO Emissions (g)	10161
NOx Emissions (g)	1027
Vehicles Entered	1287
Vehicles Exited	1273
Hourly Exit Rate	2546
Input Volume	9583
% of Volume	27

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	40.1	84.2	27.2
Average Queue (m)	8.5	46.7	12.3
95th Queue (m)	25.4	81.6	23.4
Link Distance (m)	397.5	499.7	525.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	30.7	29.2
Average Queue (m)	18.2	5.5
95th Queue (m)	28.8	19.1
Link Distance (m)	525.2	97.8
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	52.0	100.2	41.7	23.0
Average Queue (m)	29.5	46.9	23.2	13.9
95th Queue (m)	47.7	89.5	41.4	22.4
Link Distance (m)	53.7	187.0	312.9	149.4
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & cesta za Šmihel & Šegova ulica

Movement	NB	SE
Directions Served	LR	LR
Maximum Queue (m)	8.7	9.0
Average Queue (m)	1.6	1.2
95th Queue (m)	7.1	6.2
Link Distance (m)	49.9	223.9
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: obvoznica Šmihela & rampa med 2križišèi

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (m)	50.9	29.8	57.2
Average Queue (m)	28.5	13.6	29.3
95th Queue (m)	54.7	29.6	59.0
Link Distance (m)	50.9	499.7	189.0
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	3		
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: cesta za Šmihel & rampa med 2križišèi/podaljšek Smreènikove

Movement	EB	WB	WB	NB	NB
Directions Served	T	L	T	L	R
Maximum Queue (m)	47.2	39.8	54.1	26.7	11.4
Average Queue (m)	24.0	9.4	29.5	15.5	1.4
95th Queue (m)	39.3	30.1	50.5	25.7	7.2
Link Distance (m)	50.9		53.7		284.4
Upstream Blk Time (%)	0		0		
Queuing Penalty (veh)	0		2		
Storage Bay Dist (m)		20.0		30.0	
Storage Blk Time (%)	9		17	0	
Queuing Penalty (veh)	9		6	0	

Network Summary

Network wide Queuing Penalty: 20

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.0	0.4	0.6	0.2	1.2
Total Del/Veh (s)	3.6	7.6	6.3	5.5	6.4
Total Stops	5	92	64	48	209
Stop/Veh	0.13	0.47	0.19	0.39	0.30
Travel Dist (km)	7.9	25.7	161.6	32.5	227.8
Travel Time (hr)	0.2	1.1	4.2	0.9	6.3
Avg Speed (kph)	34	24	39	37	36
Fuel Used (l)	0.8	2.9	13.1	2.0	18.8
Fuel Eff. (kpl)	9.8	8.8	12.3	16.6	12.1
HC Emissions (g)	2	12	38	3	54
CO Emissions (g)	105	366	1191	62	1725
NOx Emissions (g)	7	42	123	11	183
Vehicles Entered	38	195	323	123	679
Vehicles Exited	38	197	320	122	677
Hourly Exit Rate	76	394	640	244	1354

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.1
Denied Del/Veh (s)					0.4
Total Delay (hr)	0.7	0.1	0.0	0.1	1.0
Total Del/Veh (s)	6.8	5.2	3.9	3.9	6.0
Total Stops	42	14	1	17	74
Stop/Veh	0.11	0.15	0.33	0.17	0.13
Travel Dist (km)	148.2	46.9	0.5	52.7	248.3
Travel Time (hr)	3.7	1.2	0.0	1.2	6.2
Avg Speed (kph)	40	40	36	42	40
Fuel Used (l)	9.7	3.8	0.0	4.3	18.0
Fuel Eff. (kpl)	15.2	12.3	17.7	12.1	13.8
HC Emissions (g)	29	14	0	7	50
CO Emissions (g)	644	402	1	314	1362
NOx Emissions (g)	89	46	0	26	162
Vehicles Entered	373	93	3	95	564
Vehicles Exited	371	94	3	100	568
Hourly Exit Rate	742	188	6	200	1136

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.0	0.1	0.2
Total Del/Veh (s)	5.3	0.5	2.4	3.1
Total Stops	100	0	8	108
Stop/Veh	0.98	0.00	0.08	0.42
Travel Dist (km)	58.8	2.5	9.7	71.0
Travel Time (hr)	1.5	0.1	0.3	1.9
Avg Speed (kph)	39	36	33	38
Fuel Used (l)	4.6	0.3	0.8	5.7
Fuel Eff. (kpl)	12.8	7.9	12.6	12.5
HC Emissions (g)	24	1	2	27
CO Emissions (g)	583	60	84	727
NOx Emissions (g)	71	3	9	83
Vehicles Entered	97	52	102	251
Vehicles Exited	100	53	103	256
Hourly Exit Rate	200	106	206	512

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.3
Total Delay (hr)	0.5	0.3	0.0	0.8	1.6
Total Del/Veh (s)	11.3	9.6	4.4	12.3	11.2
Total Stops	108	67	5	156	336
Stop/Veh	0.69	0.56	0.38	0.67	0.64
Travel Dist (km)	25.4	22.4	2.0	73.6	123.4
Travel Time (hr)	1.2	0.8	0.1	2.4	4.5
Avg Speed (kph)	21	28	32	31	28
Fuel Used (l)	2.9	1.8	0.1	5.1	9.9
Fuel Eff. (kpl)	8.9	12.4	14.8	14.5	12.5
HC Emissions (g)	9	7	0	13	29
CO Emissions (g)	335	211	9	345	900
NOx Emissions (g)	31	19	1	38	89
Vehicles Entered	154	118	13	230	515
Vehicles Exited	154	116	13	230	513
Hourly Exit Rate	308	232	26	460	1026

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.0	0.3	0.0	0.3
Total Del/Veh (s)	3.3	4.8	2.0	4.5
Total Stops	0	4	0	4
Stop/Veh	0.00	0.02	0.00	0.02
Travel Dist (km)	6.2	49.9	0.6	56.7
Travel Time (hr)	0.2	1.5	0.0	1.7
Avg Speed (kph)	41	33	27	34
Fuel Used (l)	0.4	5.4	0.1	5.9
Fuel Eff. (kpl)	15.4	9.2	10.6	9.6
HC Emissions (g)	1	17	0	18
CO Emissions (g)	14	673	3	690
NOx Emissions (g)	2	62	0	64
Vehicles Entered	28	215	12	255
Vehicles Exited	27	211	12	250
Hourly Exit Rate	54	422	24	500

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	4.7
Total Del/Veh (s)	15.1
Total Stops	733
Stop/Veh	0.66
Travel Dist (km)	1102.9
Travel Time (hr)	29.3
Avg Speed (kph)	38
Fuel Used (l)	93.2
Fuel Eff. (kpl)	11.8
HC Emissions (g)	298
CO Emissions (g)	9426
NOx Emissions (g)	964
Vehicles Entered	1053
Vehicles Exited	1061
Hourly Exit Rate	2122
Input Volume	6794
% of Volume	31

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	9.2	29.3	29.5	23.4
Average Queue (m)	3.0	17.6	14.2	11.7
95th Queue (m)	10.1	28.5	26.5	22.6
Link Distance (m)	173.4	116.3	448.4	248.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	29.7	16.5	8.2	16.7
Average Queue (m)	11.4	5.2	0.5	5.9
95th Queue (m)	28.6	13.9	3.9	14.5
Link Distance (m)	397.5	448.4	160.2	527.5
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	23.5	9.3
Average Queue (m)	13.6	4.9
95th Queue (m)	20.4	12.4
Link Distance (m)	527.5	94.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	52.6	46.2	9.3	66.3
Average Queue (m)	23.1	18.2	2.6	31.8
95th Queue (m)	41.5	33.1	8.8	53.4
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	WB
Directions Served	LT
Maximum Queue (m)	8.4
Average Queue (m)	0.6
95th Queue (m)	4.0
Link Distance (m)	173.4
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.3	0.4	0.4	0.8	1.9
Total Del/Veh (s)	7.6	7.3	6.6	10.1	8.2
Total Stops	71	90	68	148	377
Stop/Veh	0.56	0.42	0.33	0.51	0.45
Travel Dist (km)	27.1	27.8	101.0	75.1	231.1
Travel Time (hr)	0.9	1.1	2.6	2.4	7.0
Avg Speed (kph)	29	25	39	32	33
Fuel Used (l)	2.7	3.3	8.2	4.5	18.7
Fuel Eff. (kpl)	10.2	8.4	12.3	16.8	12.4
HC Emissions (g)	7	9	21	9	46
CO Emissions (g)	331	345	785	172	1634
NOx Emissions (g)	23	36	70	26	155
Vehicles Entered	125	215	200	283	823
Vehicles Exited	123	211	202	285	821
Hourly Exit Rate	246	422	404	570	1642

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.6	2.2	0.0	0.2	2.9
Total Del/Veh (s)	6.3	21.7	2.6	5.7	13.1
Total Stops	38	242	0	34	314
Stop/Veh	0.11	0.68	0.00	0.36	0.39
Travel Dist (km)	133.7	168.7	0.2	49.9	352.4
Travel Time (hr)	3.3	5.9	0.0	1.2	10.5
Avg Speed (kph)	40	29	36	41	34
Fuel Used (l)	8.7	14.7	0.0	4.2	27.6
Fuel Eff. (kpl)	15.3	11.5	13.5	12.0	12.8
HC Emissions (g)	23	39	0	10	72
CO Emissions (g)	516	1226	0	358	2101
NOx Emissions (g)	71	131	0	34	235
Vehicles Entered	333	338	1	94	766
Vehicles Exited	340	347	1	93	781
Hourly Exit Rate	680	694	2	186	1562

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.4	0.0	0.1	0.5
Total Del/Veh (s)	7.2	0.6	1.8	4.7
Total Stops	203	1	7	211
Stop/Veh	1.00	0.02	0.07	0.59
Travel Dist (km)	117.0	2.8	9.3	129.1
Travel Time (hr)	3.1	0.1	0.3	3.5
Avg Speed (kph)	38	31	36	37
Fuel Used (l)	9.2	0.3	0.7	10.2
Fuel Eff. (kpl)	12.7	10.8	13.4	12.7
HC Emissions (g)	31	1	2	33
CO Emissions (g)	872	32	54	958
NOx Emissions (g)	99	2	6	107
Vehicles Entered	194	56	98	348
Vehicles Exited	200	57	99	356
Hourly Exit Rate	400	114	198	712

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.6	1.8	0.1	0.3	2.9
Total Del/Veh (s)	10.2	29.8	8.4	10.4	17.1
Total Stops	131	187	37	74	429
Stop/Veh	0.63	0.86	0.61	0.61	0.71
Travel Dist (km)	36.6	41.2	9.0	37.1	124.0
Travel Time (hr)	1.6	2.7	0.4	1.2	5.9
Avg Speed (kph)	23	15	25	32	21
Fuel Used (l)	4.1	4.6	0.7	2.7	12.1
Fuel Eff. (kpl)	8.9	9.0	12.7	13.7	10.2
HC Emissions (g)	7	9	1	5	22
CO Emissions (g)	363	366	58	164	952
NOx Emissions (g)	33	31	4	15	83
Vehicles Entered	203	215	60	115	593
Vehicles Exited	204	212	60	118	594
Hourly Exit Rate	408	424	120	236	1188

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.1	0.0	0.2
Total Del/Veh (s)	3.9	4.4	2.1	3.9
Total Stops	1	0	0	1
Stop/Veh	0.01	0.00	0.00	0.00
Travel Dist (km)	24.7	17.7	1.0	43.4
Travel Time (hr)	0.6	0.5	0.0	1.2
Avg Speed (kph)	40	33	27	36
Fuel Used (l)	1.8	2.1	0.1	3.9
Fuel Eff. (kpl)	13.8	8.6	11.2	11.0
HC Emissions (g)	4	8	0	12
CO Emissions (g)	124	298	6	428
NOx Emissions (g)	14	28	1	43
Vehicles Entered	107	76	22	205
Vehicles Exited	108	75	21	204
Hourly Exit Rate	216	150	42	408

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	9.0
Total Del/Veh (s)	23.1
Total Stops	1335
Stop/Veh	0.96
Travel Dist (km)	1414.3
Travel Time (hr)	40.4
Avg Speed (kph)	35
Fuel Used (l)	121.7
Fuel Eff. (kpl)	11.6
HC Emissions (g)	318
CO Emissions (g)	10881
NOx Emissions (g)	1067
Vehicles Entered	1293
Vehicles Exited	1320
Hourly Exit Rate	2640
Input Volume	8606
% of Volume	31

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	34.7	52.4	28.3	67.5
Average Queue (m)	14.9	20.2	16.0	31.0
95th Queue (m)	26.6	40.2	28.3	56.6
Link Distance (m)	173.4	116.3	448.4	248.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	48.1	111.7	29.5
Average Queue (m)	13.2	51.0	9.4
95th Queue (m)	36.8	101.8	23.0
Link Distance (m)	397.5	448.4	527.5
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	NE	SW
Directions Served	LR	TR	LT
Maximum Queue (m)	23.8	6.6	9.4
Average Queue (m)	17.3	0.4	2.5
95th Queue (m)	24.3	3.2	9.2
Link Distance (m)	527.5	48.0	94.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	46.4	111.3	21.6	44.4
Average Queue (m)	24.2	54.8	12.6	19.5
95th Queue (m)	45.9	106.5	21.5	34.9
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	EB
Directions Served	TR
Maximum Queue (m)	8.5
Average Queue (m)	0.6
95th Queue (m)	4.1
Link Distance (m)	228.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.0	0.2	0.5	0.1	0.8
Total Del/Veh (s)	3.2	5.3	5.7	4.1	5.1
Total Stops	4	34	42	20	100
Stop/Veh	0.09	0.28	0.13	0.19	0.17
Travel Dist (km)	9.4	15.8	152.8	26.3	204.4
Travel Time (hr)	0.3	0.6	3.9	0.7	5.4
Avg Speed (kph)	35	28	39	40	38
Fuel Used (l)	0.9	1.8	12.4	1.6	16.7
Fuel Eff. (kpl)	10.5	8.6	12.3	16.2	12.2
HC Emissions (g)	2	7	47	6	61
CO Emissions (g)	107	266	1281	104	1758
NOx Emissions (g)	7	26	147	17	196
Vehicles Entered	44	120	304	102	570
Vehicles Exited	44	120	305	99	568
Hourly Exit Rate	88	240	610	198	1136

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	SB	All
Movements Served	LTR	LTR	LTR	
Denied Delay (hr)				0.1
Denied Del/Veh (s)				0.3
Total Delay (hr)	0.7	0.1	0.1	0.9
Total Del/Veh (s)	6.4	4.8	3.6	5.7
Total Stops	36	18	11	65
Stop/Veh	0.10	0.19	0.11	0.11
Travel Dist (km)	145.1	46.1	52.3	243.4
Travel Time (hr)	3.6	1.1	1.3	6.1
Avg Speed (kph)	40	41	42	41
Fuel Used (l)	9.6	3.7	4.3	17.6
Fuel Eff. (kpl)	15.1	12.4	12.3	13.8
HC Emissions (g)	31	20	11	62
CO Emissions (g)	659	529	368	1558
NOx Emissions (g)	93	60	37	190
Vehicles Entered	365	93	96	554
Vehicles Exited	367	92	99	558
Hourly Exit Rate	734	184	198	1116

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.2	0.0	0.1	0.2
Total Del/Veh (s)	6.6	0.4	2.3	3.6
Total Stops	95	0	10	105
Stop/Veh	0.98	0.00	0.10	0.42
Travel Dist (km)	56.7	2.6	9.5	68.7
Travel Time (hr)	1.5	0.1	0.3	1.8
Avg Speed (kph)	38	35	33	37
Fuel Used (l)	4.4	0.3	0.7	5.4
Fuel Eff. (kpl)	12.8	8.5	13.2	12.6
HC Emissions (g)	6	1	2	9
CO Emissions (g)	300	51	61	412
NOx Emissions (g)	23	3	7	32
Vehicles Entered	93	53	100	246
Vehicles Exited	95	53	100	248
Hourly Exit Rate	190	106	200	496

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.3	0.2	0.0	0.5	1.0
Total Del/Veh (s)	8.4	8.5	3.0	9.4	8.7
Total Stops	67	55	7	110	239
Stop/Veh	0.51	0.56	0.54	0.60	0.56
Travel Dist (km)	21.2	18.6	2.0	58.0	99.7
Travel Time (hr)	0.9	0.6	0.1	1.7	3.3
Avg Speed (kph)	24	29	33	33	30
Fuel Used (l)	2.3	1.5	0.1	3.9	7.8
Fuel Eff. (kpl)	9.3	12.5	17.0	14.8	12.8
HC Emissions (g)	9	5	0	8	22
CO Emissions (g)	326	145	4	257	733
NOx Emissions (g)	31	15	0	26	72
Vehicles Entered	131	97	13	183	424
Vehicles Exited	131	96	13	178	418
Hourly Exit Rate	262	192	26	356	836

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.0
Total Delay (hr)	0.0	0.2	0.0	0.2
Total Del/Veh (s)	3.5	4.1	2.0	3.9
Total Stops	2	1	0	3
Stop/Veh	0.05	0.01	0.00	0.01
Travel Dist (km)	8.4	38.8	0.5	47.6
Travel Time (hr)	0.2	1.2	0.0	1.4
Avg Speed (kph)	40	34	27	35
Fuel Used (l)	0.5	4.1	0.0	4.7
Fuel Eff. (kpl)	16.2	9.4	11.5	10.1
HC Emissions (g)	1	7	0	8
CO Emissions (g)	23	425	3	451
NOx Emissions (g)	3	32	0	35
Vehicles Entered	36	165	10	211
Vehicles Exited	37	165	10	212
Hourly Exit Rate	74	330	20	424

6: obvoznica Šmihela & pokopališče, stara Šmihelska Performance by lane

Lane	WB	NB	SB	SB	All
Movements Served	LR	TR	L	T	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.4
Total Delay (hr)	0.0	0.1	0.0	0.0	0.1
Total Del/Veh (s)	4.0	1.1	2.6	0.3	1.3
Total Stops	35	0	8	0	43
Stop/Veh	1.00	0.00	0.33	0.00	0.13
Travel Dist (km)	2.4	54.1	1.5	37.4	95.4
Travel Time (hr)	0.1	1.3	0.1	0.8	2.3
Avg Speed (kph)	21	41	26	49	42
Fuel Used (l)	0.1	5.2	0.1	2.6	8.0
Fuel Eff. (kpl)	18.1	10.5	18.1	14.5	12.0
HC Emissions (g)	0	22	0	10	32
CO Emissions (g)	6	688	4	215	913
NOx Emissions (g)	0	68	0	29	98
Vehicles Entered	35	180	0	122	337
Vehicles Exited	35	180	24	100	339
Hourly Exit Rate	70	360	48	200	678

Total Network Performance

Denied Delay (hr)	0.1
Denied Del/Veh (s)	0.4
Total Delay (hr)	3.5
Total Del/Veh (s)	12.0
Total Stops	555
Stop/Veh	0.52
Travel Dist (km)	1012.0
Travel Time (hr)	26.2
Avg Speed (kph)	39
Fuel Used (l)	84.9
Fuel Eff. (kpl)	11.9
HC Emissions (g)	270
CO Emissions (g)	8650
NOx Emissions (g)	877
Vehicles Entered	1017
Vehicles Exited	1018
Hourly Exit Rate	2036
Input Volume	6758
% of Volume	30

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	9.2	15.6	29.5	15.6
Average Queue (m)	2.4	9.5	12.9	7.7
95th Queue (m)	8.8	17.0	26.0	14.6
Link Distance (m)	173.4	116.3	448.4	247.4
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	29.3	22.8	16.6
Average Queue (m)	9.0	8.8	3.9
95th Queue (m)	26.5	20.5	13.8
Link Distance (m)	397.5	448.4	527.5
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	23.0	16.2
Average Queue (m)	13.7	4.5
95th Queue (m)	22.4	14.3
Link Distance (m)	527.5	94.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	39.6	22.2	15.7	48.0
Average Queue (m)	17.8	14.9	4.2	26.9
95th Queue (m)	32.2	24.9	13.1	42.7
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	EB
Directions Served	TR
Maximum Queue (m)	9.2
Average Queue (m)	1.1
95th Queue (m)	5.8
Link Distance (m)	228.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: obvoznica Šmihela & pokopališèe, stara Šmihelska

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (m)	23.6	9.2
Average Queue (m)	9.2	4.2
95th Queue (m)	18.0	11.5
Link Distance (m)	68.3	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		50.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smrečnikove Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.0
Total Delay (hr)	0.2	0.3	0.3	0.7	1.4
Total Del/Veh (s)	6.9	6.7	5.3	8.9	7.2
Total Stops	57	58	39	118	272
Stop/Veh	0.54	0.34	0.22	0.45	0.38
Travel Dist (km)	22.4	22.4	88.7	68.0	201.5
Travel Time (hr)	0.8	0.9	2.3	2.1	5.9
Avg Speed (kph)	30	25	39	33	34
Fuel Used (l)	2.3	2.7	7.3	4.2	16.6
Fuel Eff. (kpl)	9.8	8.2	12.2	16.0	12.2
HC Emissions (g)	6	10	24	7	46
CO Emissions (g)	299	345	698	150	1493
NOx Emissions (g)	20	39	75	22	156
Vehicles Entered	104	170	175	262	711
Vehicles Exited	106	170	178	259	713
Hourly Exit Rate	212	340	356	518	1426

2: cesta za romsko naselje/cesta za Drsko & priključek 3.os/obvoznica Šmihela Performance by lane

Lane	EB	WB	SB	All
Movements Served	LTR	LTR	LTR	
Denied Delay (hr)				0.1
Denied Del/Veh (s)				0.3
Total Delay (hr)	0.5	2.0	0.1	2.6
Total Del/Veh (s)	5.7	21.2	6.1	12.9
Total Stops	23	244	26	293
Stop/Veh	0.07	0.72	0.33	0.40
Travel Dist (km)	127.0	165.3	39.5	331.8
Travel Time (hr)	3.1	5.6	1.0	9.8
Avg Speed (kph)	41	29	39	34
Fuel Used (l)	8.4	14.5	3.3	26.2
Fuel Eff. (kpl)	15.1	11.4	12.1	12.7
HC Emissions (g)	19	41	18	78
CO Emissions (g)	443	1232	427	2103
NOx Emissions (g)	59	136	54	249
Vehicles Entered	319	333	76	728
Vehicles Exited	315	329	75	719
Hourly Exit Rate	630	658	150	1438

3: Ulica Slavka Gruma & cesta za Drsko Performance by lane

Lane	NW	NE	SW	All
Movements Served	LR	TR	LT	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.4	0.0	0.0	0.4
Total Del/Veh (s)	7.2	0.5	1.7	4.7
Total Stops	192	0	4	196
Stop/Veh	1.00	0.00	0.05	0.60
Travel Dist (km)	112.3	2.6	7.8	122.6
Travel Time (hr)	3.0	0.1	0.2	3.3
Avg Speed (kph)	38	34	36	38
Fuel Used (l)	8.9	0.3	0.5	9.7
Fuel Eff. (kpl)	12.6	9.3	14.6	12.6
HC Emissions (g)	19	1	2	21
CO Emissions (g)	668	47	54	768
NOx Emissions (g)	62	3	7	71
Vehicles Entered	188	53	82	323
Vehicles Exited	188	53	82	323
Hourly Exit Rate	376	106	164	646

4: Šmihelska stara & podaljšek Smrečnikove/Smrečnikova ulica Performance by lane

Lane	EB	WB	SE	NW	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Delay (hr)					0.0
Denied Del/Veh (s)					0.2
Total Delay (hr)	0.5	1.3	0.3	0.3	2.3
Total Del/Veh (s)	10.0	24.6	10.3	7.9	14.5
Total Stops	110	172	57	67	406
Stop/Veh	0.66	0.90	0.62	0.56	0.71
Travel Dist (km)	29.0	36.4	13.7	36.6	115.7
Travel Time (hr)	1.3	2.1	0.6	1.1	5.1
Avg Speed (kph)	22	17	23	34	23
Fuel Used (l)	3.4	3.7	1.1	2.6	10.8
Fuel Eff. (kpl)	8.6	9.7	12.5	14.2	10.7
HC Emissions (g)	6	7	3	11	28
CO Emissions (g)	312	307	97	259	975
NOx Emissions (g)	27	24	9	32	92
Vehicles Entered	164	190	91	117	562
Vehicles Exited	164	190	90	115	559
Hourly Exit Rate	328	380	180	230	1118

5: parkirišče OŠ & Šegova ulica/cesta za Šmihel Performance by lane

Lane	EB	WB	NB	All
Movements Served	TR	LT	LR	
Denied Delay (hr)				0.0
Denied Del/Veh (s)				0.1
Total Delay (hr)	0.1	0.1	0.0	0.2
Total Del/Veh (s)	4.2	4.3	2.2	4.0
Total Stops	3	1	3	7
Stop/Veh	0.04	0.02	0.12	0.04
Travel Dist (km)	18.7	15.1	1.2	35.0
Travel Time (hr)	0.5	0.4	0.0	1.0
Avg Speed (kph)	40	34	26	36
Fuel Used (l)	1.4	1.6	0.1	3.2
Fuel Eff. (kpl)	13.2	9.2	11.8	11.1
HC Emissions (g)	4	3	0	7
CO Emissions (g)	123	186	6	315
NOx Emissions (g)	12	13	1	26
Vehicles Entered	82	65	25	172
Vehicles Exited	82	64	26	172
Hourly Exit Rate	164	128	52	344

6: obvoznica Šmihela & pokopališče, stara Šmihelska Performance by lane

Lane	WB	NB	SB	SB	All
Movements Served	LR	TR	L	T	
Denied Delay (hr)					0.1
Denied Del/Veh (s)					0.5
Total Delay (hr)	0.1	0.1	0.0	0.1	0.2
Total Del/Veh (s)	7.9	1.3	2.7	1.1	1.8
Total Stops	39	0	7	0	46
Stop/Veh	1.00	0.00	0.25	0.00	0.10
Travel Dist (km)	2.7	47.5	1.8	86.2	138.1
Travel Time (hr)	0.2	1.2	0.1	1.8	3.3
Avg Speed (kph)	16	41	26	48	43
Fuel Used (l)	0.2	4.7	0.1	5.9	11.0
Fuel Eff. (kpl)	14.2	10.2	14.9	14.5	12.6
HC Emissions (g)	0	17	0	12	29
CO Emissions (g)	6	572	6	291	875
NOx Emissions (g)	1	54	1	35	90
Vehicles Entered	39	156	0	280	475
Vehicles Exited	39	156	28	252	475
Hourly Exit Rate	78	312	56	504	950

Total Network Performance

Denied Delay (hr)	0.2
Denied Del/Veh (s)	0.5
Total Delay (hr)	7.7
Total Del/Veh (s)	20.4
Total Stops	1223
Stop/Veh	0.90
Travel Dist (km)	1309.0
Travel Time (hr)	36.9
Avg Speed (kph)	36
Fuel Used (l)	114.0
Fuel Eff. (kpl)	11.5
HC Emissions (g)	337
CO Emissions (g)	10837
NOx Emissions (g)	1098
Vehicles Entered	1290
Vehicles Exited	1284
Hourly Exit Rate	2568
Input Volume	8635
% of Volume	30

Intersection: 1: obvoznica Šmihela & cesta za Šmihel/podaljšek Smreènikove

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	25.4	30.8	16.9	45.2
Average Queue (m)	11.6	14.0	11.0	20.0
95th Queue (m)	21.1	27.4	16.3	39.5
Link Distance (m)	173.4	116.3	448.4	247.4
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: cesta za romsko naselje/cesta za Drsko & prikljuèek 3.os/obvoznica Šmihela

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	24.5	96.8	36.2
Average Queue (m)	5.9	45.7	11.5
95th Queue (m)	20.6	93.3	26.6
Link Distance (m)	397.5	448.4	527.5
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Ulica Slavka Gruma & cesta za Drsko

Movement	NW	SW
Directions Served	LR	LT
Maximum Queue (m)	34.5	9.1
Average Queue (m)	17.6	2.4
95th Queue (m)	27.8	8.8
Link Distance (m)	527.5	94.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Šmihelska stara & podaljšek Smreènikove/Smreènikova ulica

Movement	EB	WB	SE	NW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	35.8	116.1	35.4	53.9
Average Queue (m)	24.4	42.3	21.8	19.9
95th Queue (m)	37.5	88.7	36.9	39.1
Link Distance (m)	116.3	191.4	151.2	317.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: parkirišèe OŠ & Šegova ulica/cesta za Šmihel

Movement	EB	NB
Directions Served	TR	LR
Maximum Queue (m)	16.3	16.3
Average Queue (m)	1.7	2.3
95th Queue (m)	9.2	10.2
Link Distance (m)	228.2	47.7
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: obvoznica Šmihela & pokopališèe, stara Šmihelska

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (m)	30.8	9.3
Average Queue (m)	10.4	3.0
95th Queue (m)	20.7	9.9
Link Distance (m)	68.3	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		50.0
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0