Idejni projekt lokalne ceste

Cvjetković, Toni

SVEUČILIŠTE U SPLITU

FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

ZAVRŠNI RAD

Toni Cvjetković

Split, 2020.

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FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

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Završni rad

Split, 2020

SVEUČILIŠTE U SPLITU

FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE

Split, Matice hrvatske 15

STUDIJ: **PREDDIPLOMSKI SVEUČILIŠNI STUDIJ GRAĐEVINARSTVA**

KANDIDAT: **Toni Cvjetković**

BROJ INDEKSA: **4561**

KATEDRA: **Katedra za prometnice**

PREDMET: **CESTE**

ZADATAK ZA ZAVRŠNI RAD

Tema: Idejni projekt dionice ceste

Opis zadatka: U programu CIVIL 3D 2016 Metric potrebno je izraditi idejni projekt dionice ceste između točaka A i B naznačenih na geodetskoj podlozi koja je korištena za izradu programskog zadatka iz kolgija Ceste.

<u>Idejni projekt treba sadržavati:</u>

1. Kopiju programskog zadatka

2. Tehnički opis

3. Građevinsku situaciju 1:1000

4. Uzdužni presjek 1:1000

5. Karakteristične poprečne presjeke 1:200

6. Računalne ispise točaka osi

7. Račun kota kolnika

8. Vertikalni tok trase

9. Proračun količina zemljanih radova

10. Proračun količina radova po presjecima

U Splitu, lipanj 2020

Voditelj Završnog rada: **Dr. sc. Dražen Cvitanić**

Idejni projekt lokalne ceste

Sažetak: Idejni projekt lokalne ceste izrađeno je na geodetskoj podlozi, prema zadatku iz kolegija Ceste, koristeći se programom Autodesk AutoCAD Civil 3D. Cesta je projektirana za godišnji dnevni promet (PGDP) od 950 vozila na dan, na brdovitom terenu. Projektna brzina ceste iznosi 40 km/h. Idejno rješenje izrađeno je prema Pravilniku o osnovnim uvjetima za projektiranje ceste s elementima koji zadovoljavaju vaţeće propise, kao i sigurnosne i estetske kriterije.

Ključne riječi:

Idejni projekt, lokalna cesta, projektna brzina, os ceste, niveleta, poprečni presjek

Conceptual project of local road

Abstract: A conceptual project of local road, on a geodetic ground according to the task from course „Roads“, is made using software Autodesk AutoCAD Civil 3D. The road is designed for the annual average daily traffic (AADT) of 950 vehicles per day, on the hilly terrain. Design speed for the road is 40 km/h. Preliminary design of local road was created according to the Regulations on the basic conditions for the design of public roads with the elements that meet the applicable rules, as well as safety and aesthetic criteria.

Keywords:

Conceptual project, local road, design speed, the road axis, profile, cross-section

Sadržaj

1.Programski zadatak 7
2. Tehnički opis 8
2.1. Općenito 8
2.2. Horizontalni elementi 9
2.3. Vertikalni elementi 9
2.4. Poprečni presjek 9
2.5. Kolnička konstrukcija 9
2.6. Odvodnja 9
2.7. Oprema ceste 9
3. GRAFIČKI PRILOZI 10
3.1. Situacija M 1:1000 10
3.2. Uzdužni presjek 1:1000/10 11
3.3. Normalni poprečni presjek 1:50 12
3.4. Karakteristični poprečni presjeci 1:200 13
4.Obrada na računalu 14
5. Izlazni podaci iz programa 15
5.1. Koordinatni račun glavnih točaka osi 15
5.2. Koordinatni račun detaljnih točaka osi 16
5.3. Račun kota kolnika 17
5.4. Vertikalni tok trase 18
6. Proračun količine zemljanih radova za troškovnik 19
7. Literatura 20

1.Programski zadatak

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE
I GEODEZIJE

Split, ak.god. 2018/2019.

Katedra za prometnice

Studij: Preddiplomski

Nastavni predmet: CESTE

Student/ica: Toni Cvjetković

ZADATAK

Treba izraditi idejni projekt dionice ceste između točaka A i B naznačenih na priloženoj geodetskoj podlozi u mjerilu 1:1000.

Zadano je:

- PGDP - prosječni godišnji dnevni promet: **950 voz/dan**
- vrsta terena: **brdoviti.**

Idejni projekt treba sadržavati:

1. Tehnički opis
2. Proračun horizontalne geometrije
3. Proračun proširenja kolnika u krivini
4. Proračun vertikalne geometrije i kota nivelete
5. Proračun vitoperenja kolnika
6. Građevinska situacija M. 1:1000
7. Uzdužni presjek M. 1:1000/100
8. Normalni poprečni presjek M. 1:50
9. Karakteristični poprečni presjeci M. 1:100
10. Predmjer radova
11. Aproksimativni troškovnik

Predmetna nastavnica:

izv.prof.dr.sc. Deana Breški, dipl.ing.grad.

2. Tehnički opis

2.1. Općenito

Predmet projekta je dionica ceste od točke A(249) do točke B(271) (naznačenih na geodetskoj situaciji,u mjerilu 1:1000). PGDP ceste je 950 voz/dan, tj. Cesta je V. kategorije, i to na brdovitom terenu.Predviđena projektna brzina je V_p = 40 km/h, a duljina trase je 383,50 m.

Kategorija ceste	Društ. gospod. značenje (1.1.1.)	Vrsta prometa (1.1.2.)	Veličina prometa (1.1.3.)	Zadaća povezivanja (1.1.4.)	Srednja duljina putovanja (km)
AC	Državna	Prom. mot. vozila	>14000	Međudržavno i državno	>100
1. kat.	Državna	Prom. mot. vozila	>12000	Međudržavno i državno-regionalno	50-100
2. kat.	Državna	Prom. mot. v. mješoviti prom.	7000-12000	Državno i županijsko	20-50
3. kat.	Državna; županijska	Mješoviti promet	3000-7000	Međuopćinsko	5-50
4. kat.	Županijska; lokalna	Mješoviti promet	1000-3000	Općinsko	5-20
5. kat.	Lokalna	Mješoviti promet	<1000	Općinsko-lokalno	<5

Tabl. 1.3.1. Projektne brzine i najveći nagibi nivelete

PROMETNO -TEHNIČKO RAZVRSTAVANJE		PROJEKTNA BRZINA V_p (km/h) / NAGIB s_{max} (%)							
KAT.	Razina usluge	120 a.	100 b.	90 c.	80 d.	70 e.	60 f.	50 g.	40 h.
AC	C/D	≥120/4°	100/5*	90/5.5**	80/6***				
1. kat.	D		100/5.5°	90/5.5*	80/6**	70/7***			
2. kat.	D		100/5.5°	90/5.5*	80/6*	70/7**	60/8***		
3. kat.	E				80/7*	70/7*	60/8**	50/9***	
4. kat.	E					70/8*	60/9*	50/10**	40/11***
5. kat.	E						60/10*	50/11*	40/12** 40(30)/12***

OZNAKE:

°	BEZ OGRANIČENJA	BO
*	UMJERENA OGRANIČENJA	UO
**	ZNATNA OGRANIČENJA	ZO
***	VELIKA OGRANIČENJA	VO

Vrijednost u zagradi primjenjuje se iznimno

2.2. Horizontalni elementi

Za projektnu brzinu V_p = 40 km/h prema pravilniku minimalni radijus horizontalne krivine iznosi R_{min} = 45 m,a prijelaznice 30 m.Trasa se sastoji od četiri pravca i tri krivine.
Primijenjeni radijusi i prijelaznice su:
za prvu krivinu R = 140 m, L = 40 m
za drugu krivinu R =45m, L = 30 m
za treću krivinu R = 50 m, L = 40 m
Krivine su konstruirane uz pomoć dvije prijelazne krivine oblika klotoide i jednog kružnog luka. Proširenje kružnih lukova za promet teretnih vozila sa priključkom u prvoj krivini iznosi 0,6 m, u drugoj 1,866 m, u trećoj 1,68m.

2.3. Vertikalni elementi

Prema kategoriji ceste maksimalni nagib nivelete iznosi 12%. Tok se sastoji od dva pravca i jedne konveksne krivine. Primijenjeni nagibi pravaca su 5,5 % i 6,1%. Tangenta je dužine 40,2 m, a radijus konveksne krivine 13400 m.

2.4. Poprečni presjek

Dionica ceste ima 2 prometna traka širine 2,75 m, rubni betonski trak širine 0,2 m, a debljine 0,1 m. Bankina je širine 1 m s nagibom minimalno 4 %.
Trasa je kombinirano u usjeku,zasjeku i nasipu. Nagib pokosa je 1:1,5, a usjeka 2:1. Na usjecima se izvode rigoli za odvodnju vode i drenaža koja je postavljena u glinenu posteljicu. Duž trase na pojedinim mjestima nalaze se betonski potporni zidovi različitih visina. Poprečni nagib u pravcu iznosi 2,5%, u 1. krivini 3,25%, u 2. krivini 7,0% i u 3. krivini 6,5%.

2.5. Kolnička konstrukcija

Projektom je predviđena slijedeća kolnička konstrukcija:

1. Asfalt-beton habajući sloj debljine 4 cm,
2. Bitumenizirani nosivi sloj debljine 6 cm,
3. Nevezani nosivi sloj debljine 30 cm.

2.6. Odvodnja

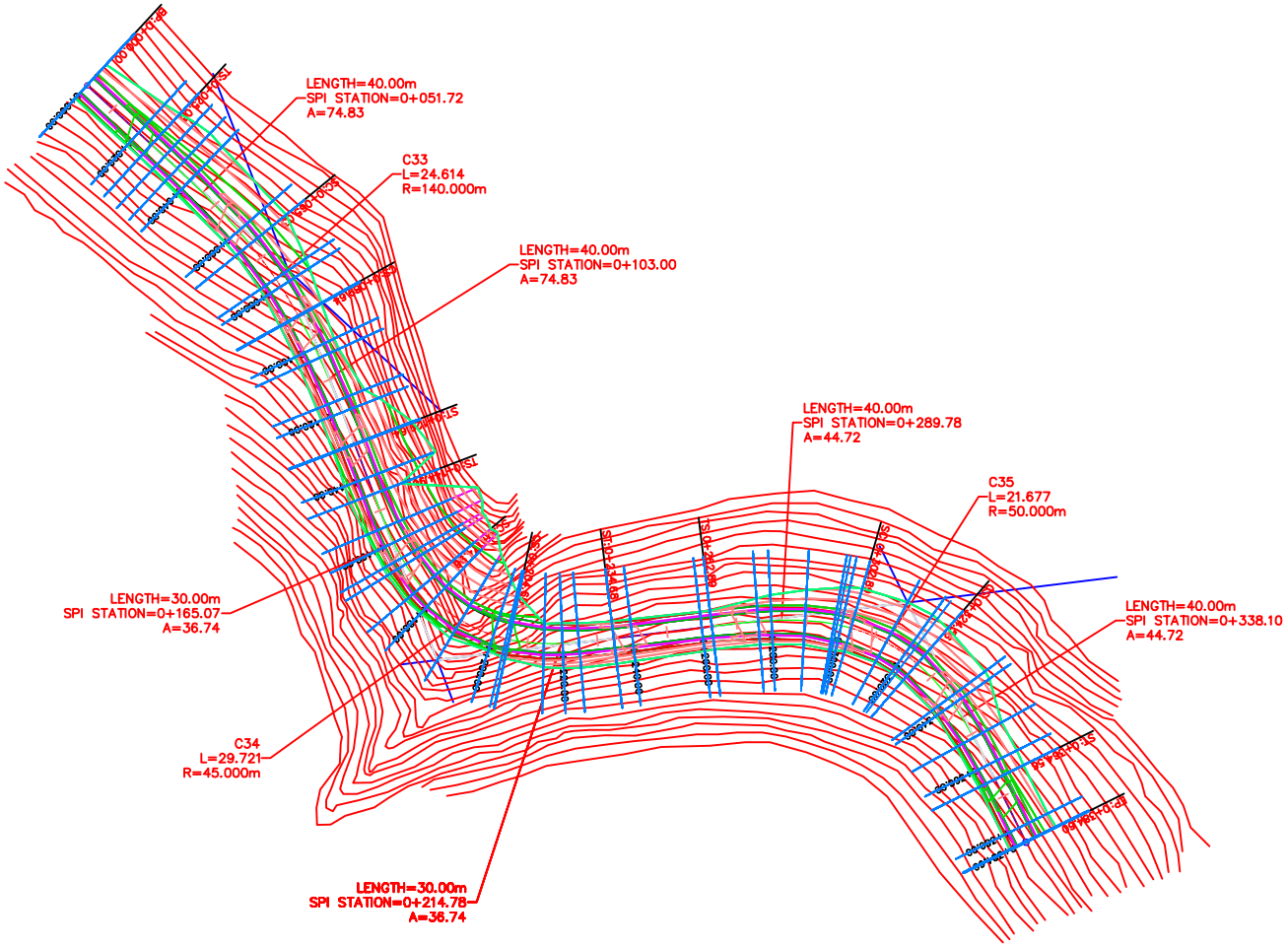
Odvodnja kolnika predviđa se otvorenim sustavom odvodnje, prihvaćanjem kolničkih i pribrežnih voda u zasjeku i usjeku u betonske rigole, te kontroliranim ispuštanjem u teren direktno ili betonskim cijevnim propustima kroz trup kolnika.

2.7. Oprema ceste

Idejnim rješenjem predviđena je horizontalna signalizacija koja se sastoji od jedne pune razdjelne crte širine 10 cm koja se postavlja u osi prometnice i punih rubnih crta širine 10 cm koje se postavljaju na svaki od rubnih trakova. Na nasip se postavlja jednostrana zaštitna čelična ograda.

3. GRAFIČKI PRILOZI

3.1. Situacija M 1:1000



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ARHITEKTURE I GEODEZIJE
21000 SPLIT, MATICE HRVATSKE 15

ZAVRŠNI RAD

TEMA: IDEJNI PROJEKT DIONICE CESTE

STUDENT: Toni Cvjetkovic

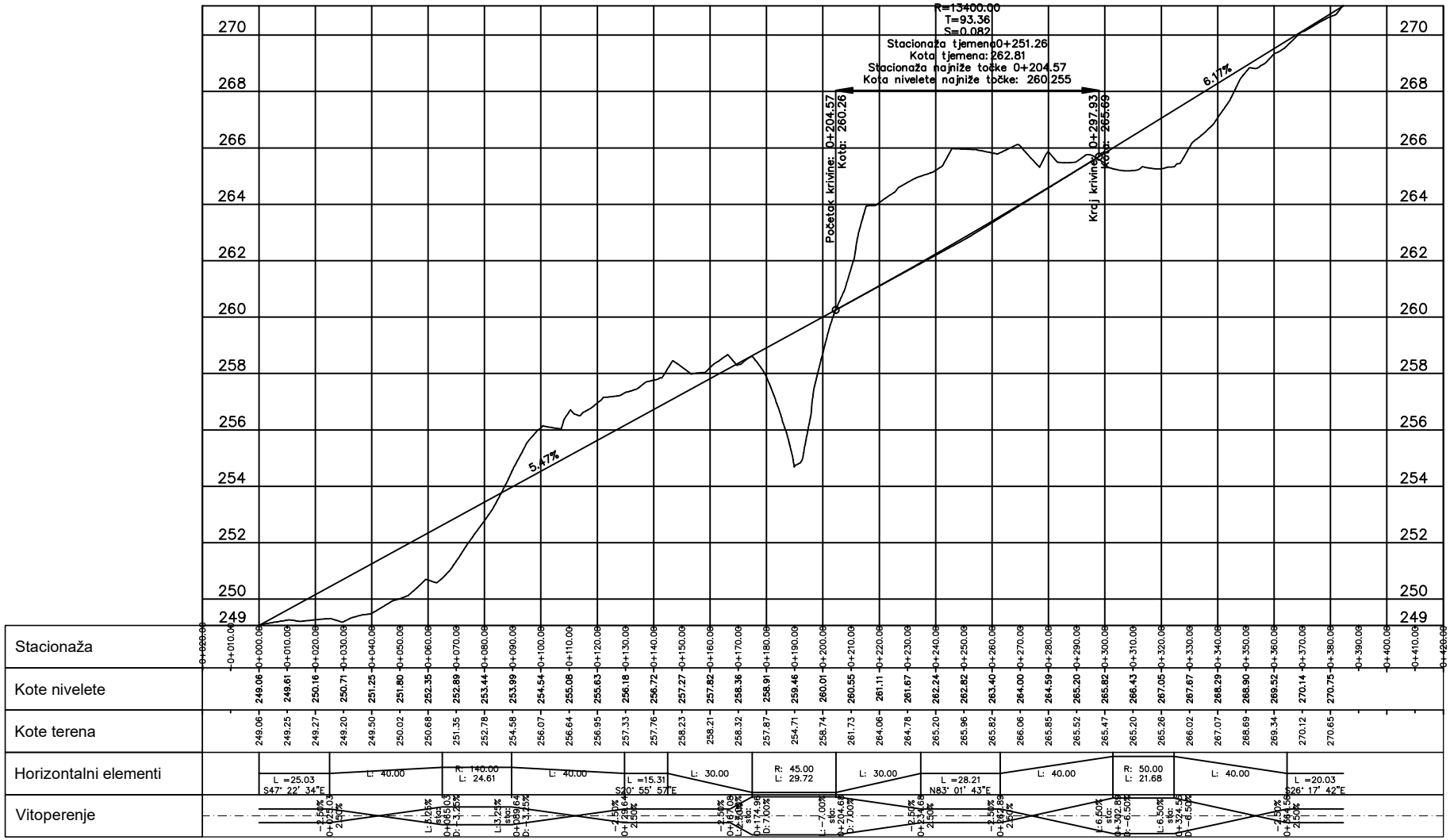
SADRŽAJ: Situacija

MJERILO: 1:1000

DATUM: lipanj 2020

3.2. Uzdužni presjek 1:1000/10

os 1 PROFILE



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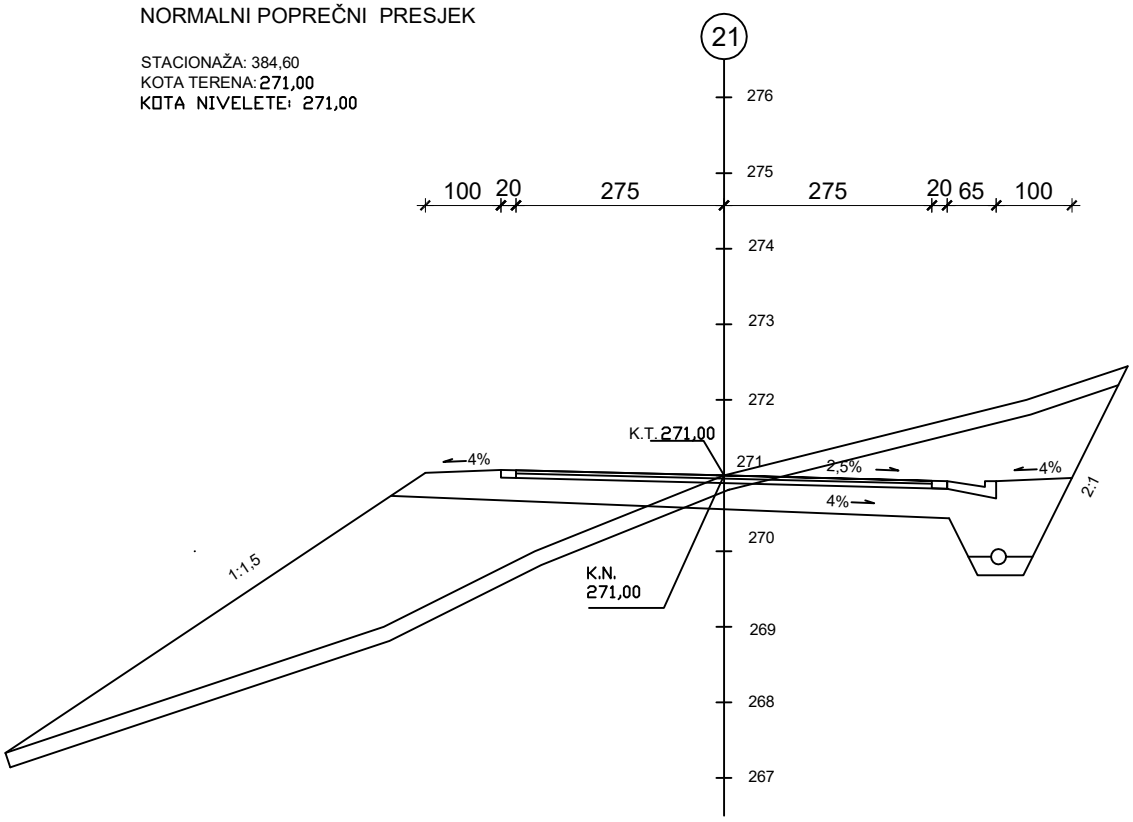
	TEMA: IDEJNI PROJEKT DIONICE CESTE
	STUDENT: Toni Cvjetkovic
	SADRŽAJ: Uzdužni presjek
	MJERILO: 1:1000/100
	DATUM: lipanj 2020

3.3. Normalni poprečni presjek 1:50

NORMALNI POPREČNI PRESJEK

STACIONAŽA: 384,60
KOTA TERENA: 271,00
KOTA NIVELETE: 271,00



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FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 SPLIT, MATICE HRVATSKE 15

ZAVRŠNI RAD

TEMA: iDEJNI PROJEKT DIONICE CESTE

STUDENT: Toni Cvjetkovic

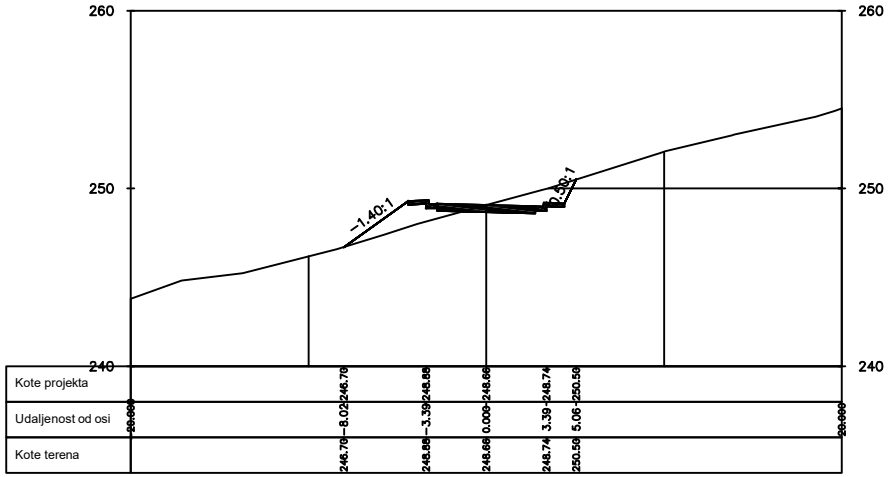
SADRŽAJ: Normalni poprečnio presjek

MJERILO: 1:50

DATUM: lipanj 2020

3.4. Karakteristični poprečni presjeci 1:200

0+000.00



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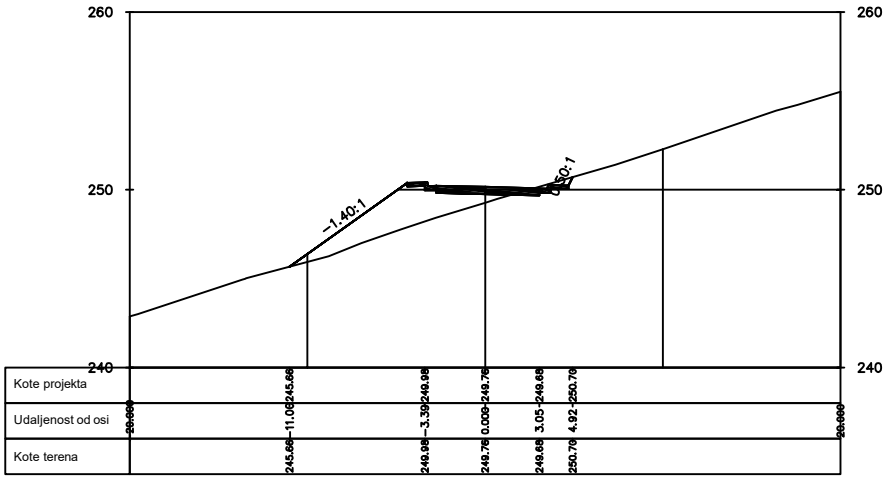

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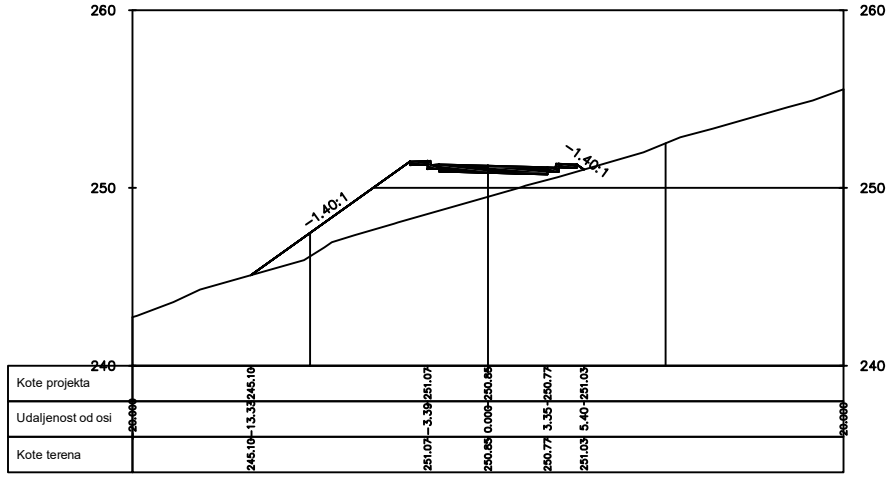

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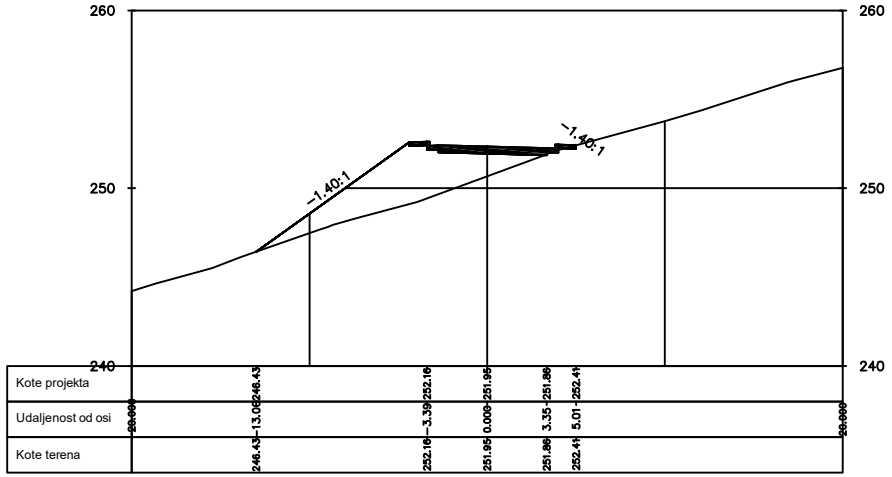

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21000 SPLIT, MATICE HRVATSKE 15

ZAVRŠNI RAD

TEMA: IDEJNI PROJEKT DIONICE CESTE

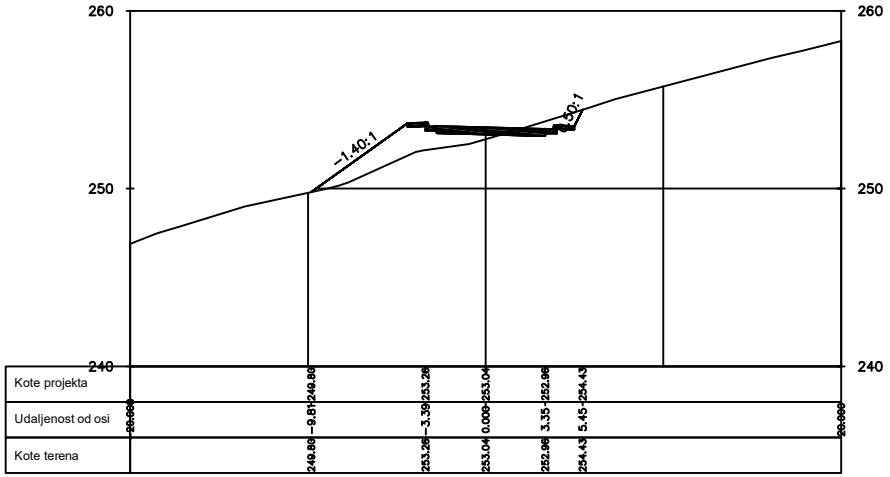
STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

DATUM: lipanj 2020

0+080.00



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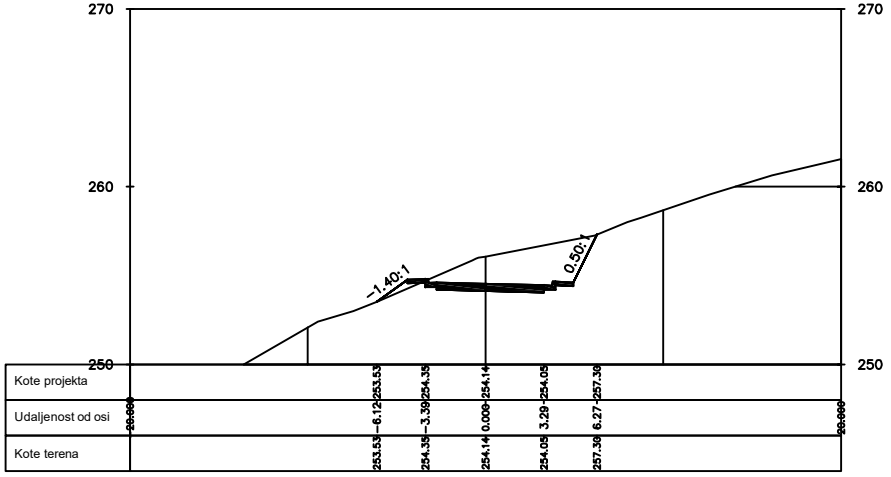

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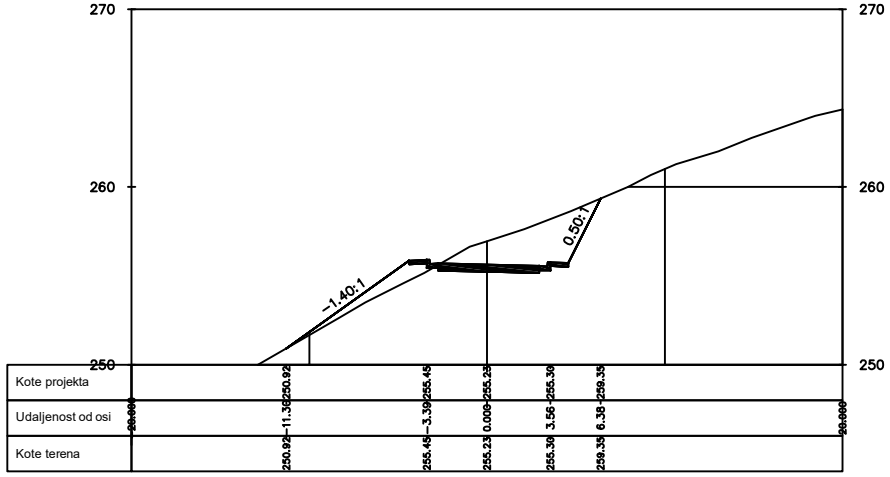

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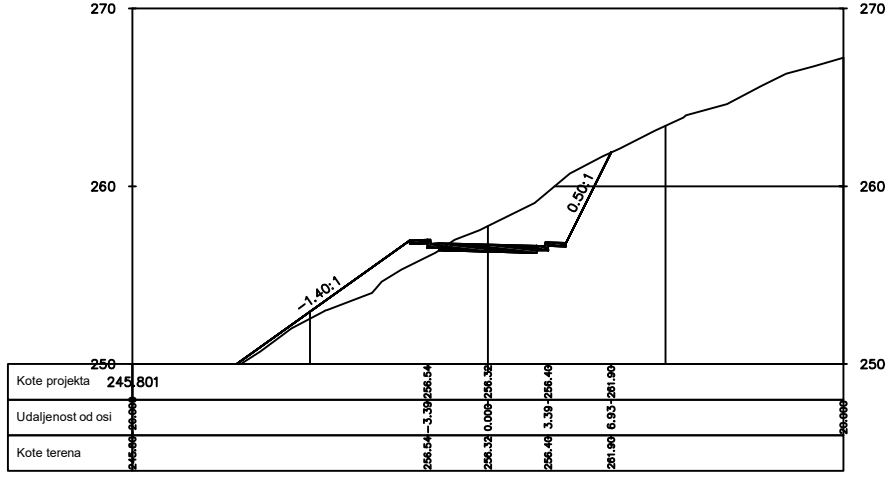

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TEMA: IDEJNI PROJEKT DIONICE CESTE

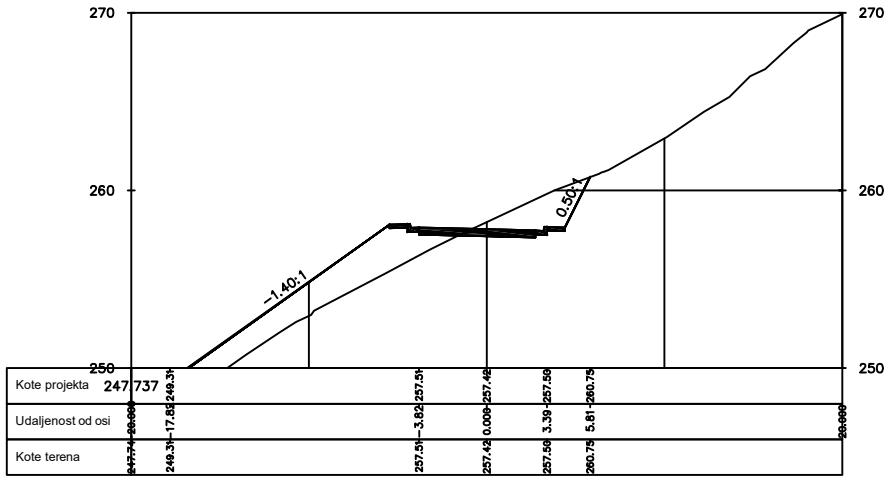
STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

DATUM: lipanj 2020

0+160.00



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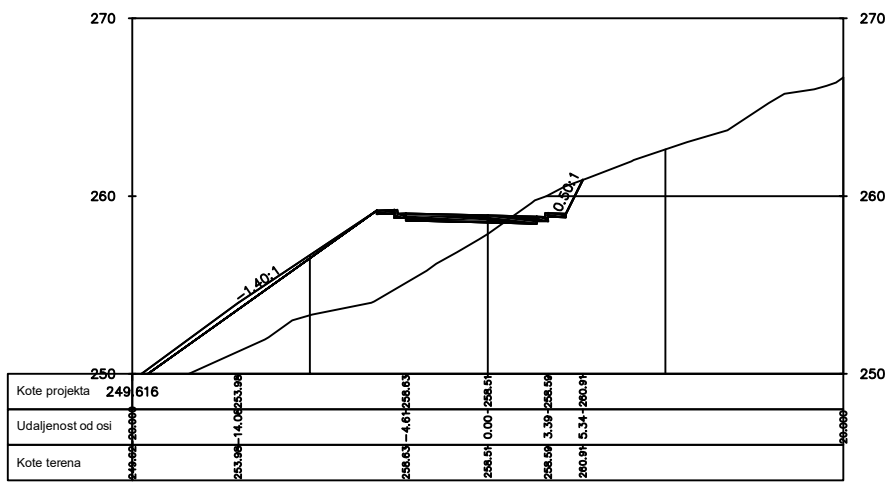

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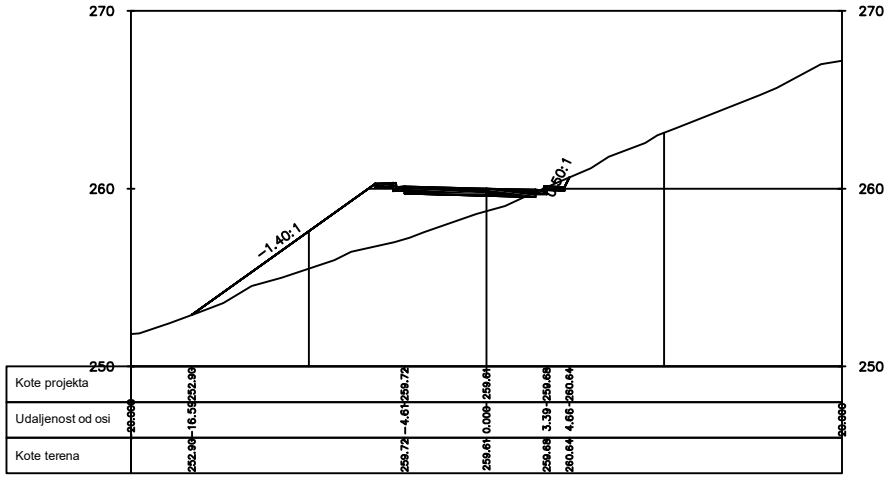

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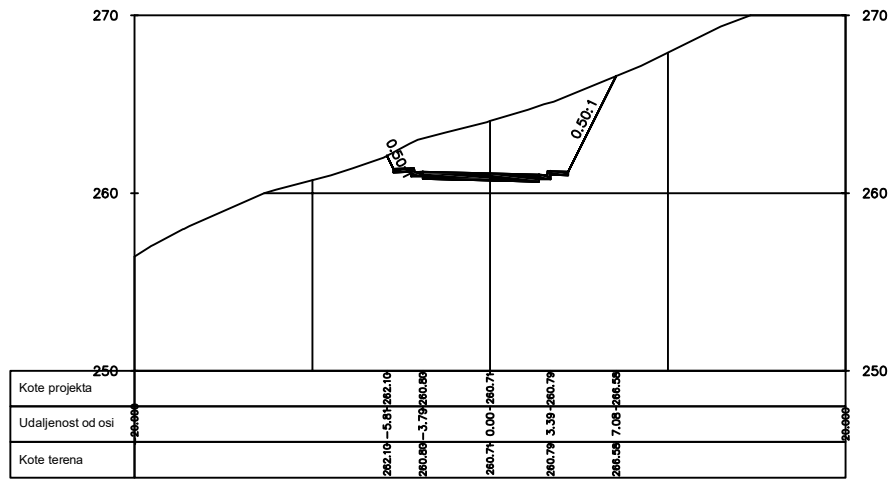

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ZAVRŠNI RAD

TEMA: IDEJNI PROJEKT DIONICE CESTE

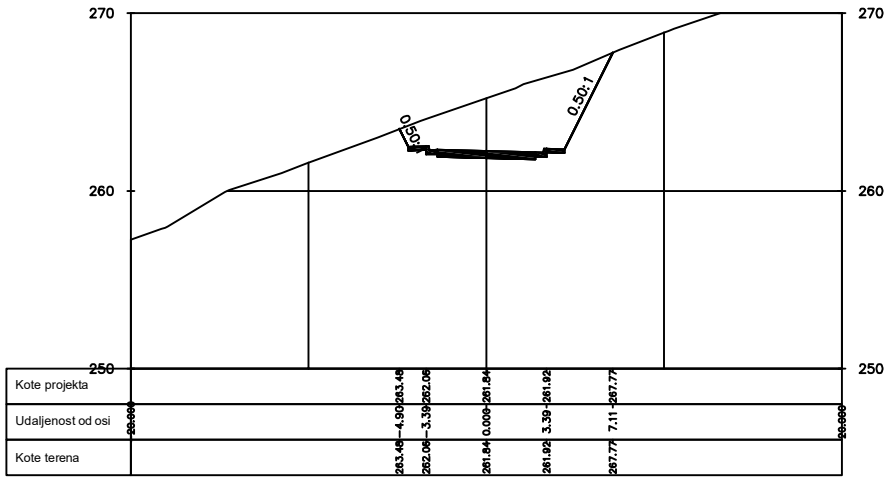
STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

DATUM: lipanj 2020

0+240.00



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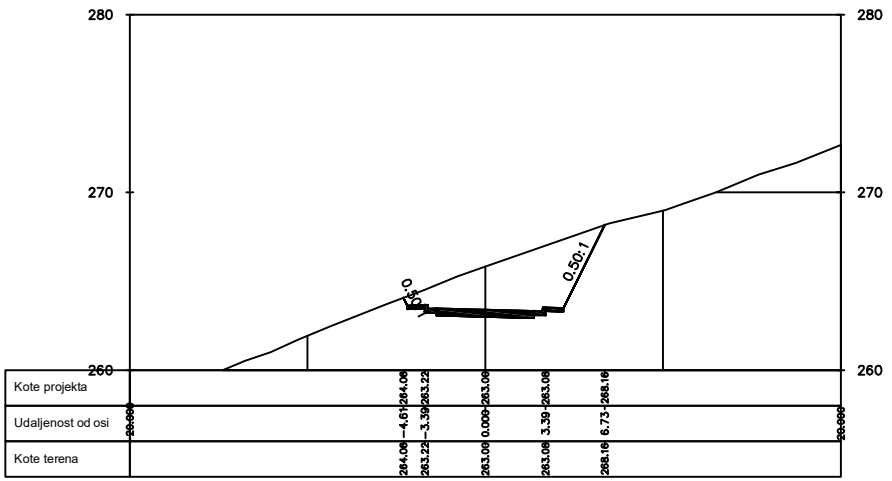

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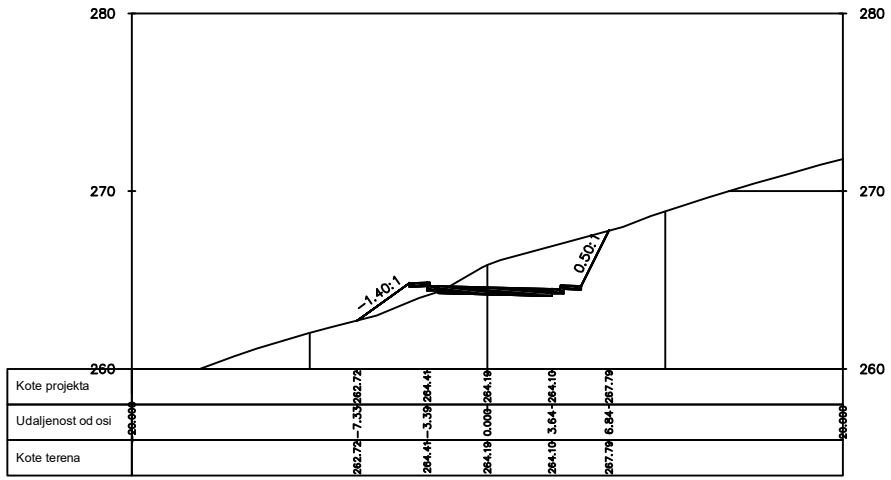

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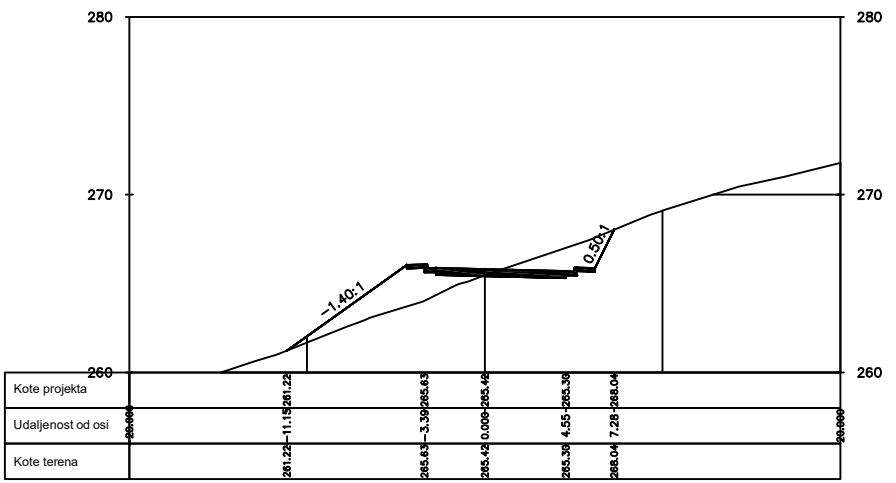

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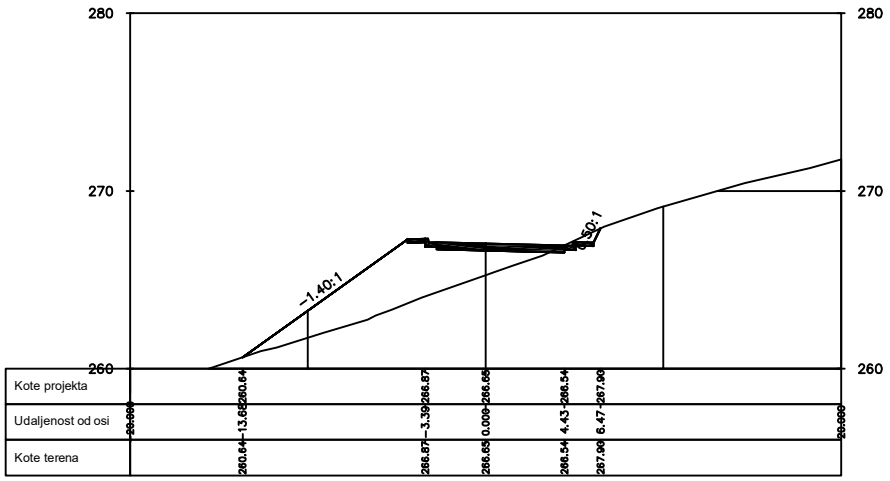
STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

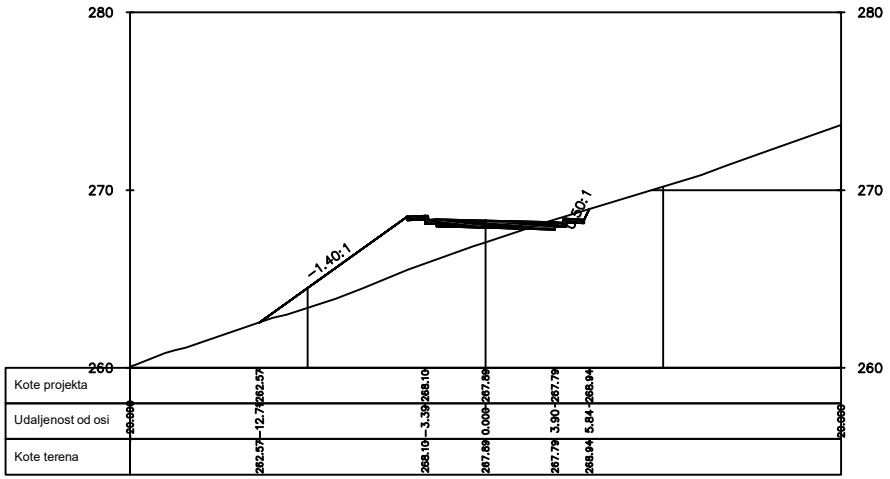
DATUM: lipanj 2020

0+320.00



Kote projekta		260.64		266.87	266.65	266.54	267.00		
Udaljenost od osi	20.000	-13.68	260.64	-3.39	0.000	4.43	6.47	20.000	
Kote terena				266.87	266.65	266.54	267.00		

0+340.00



Kote projekta		262.57		268.10	267.89	267.79	268.94		
Udaljenost od osi	20.000	-12.76	262.57	-3.39	0.000	3.90	5.84	20.000	
Kote terena				268.10	267.89	267.79	268.94		

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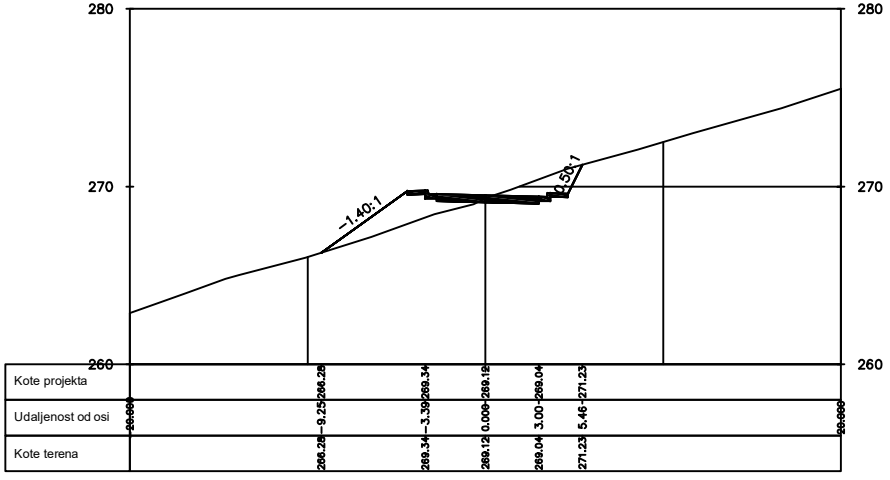
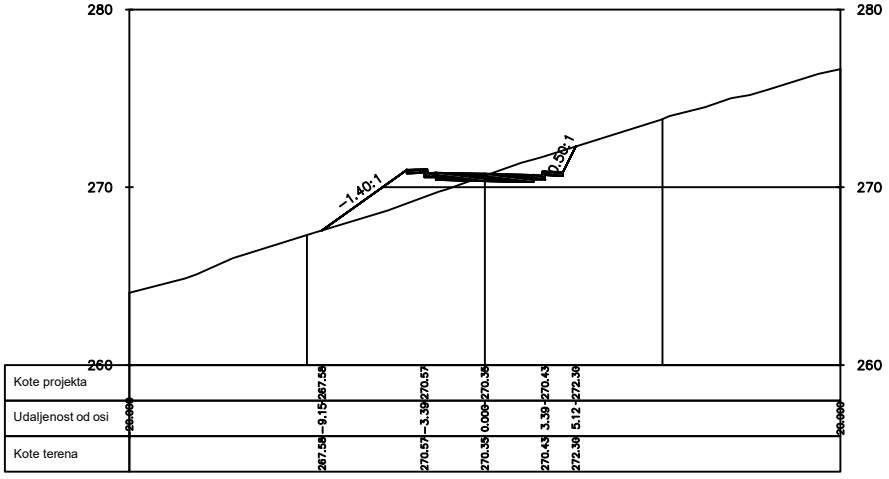


Kote projekta		266.28		269.34	269.12	269.04	271.23		
Udaljenost od osi	20.000	-9.25	266.28	-3.39	0.000	3.00	5.46	20.000	
Kote terena				269.34	269.12	269.04	271.23		

0+380.00



Kote projekta		267.58		270.57	270.35	270.43	272.30		
Udaljenost od osi	20.000	-9.15	267.58	-3.39	0.000	3.39	5.12	20.000	
Kote terena				270.57	270.35	270.43	272.30		

SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA, ARHITEKTURE I GEODEZIJE
21000 SPLIT, MATICE HRVATSKE 15

ZAVRŠNI RAD

TEMA: IDEJNI PROJEKT DIONICE CESTE

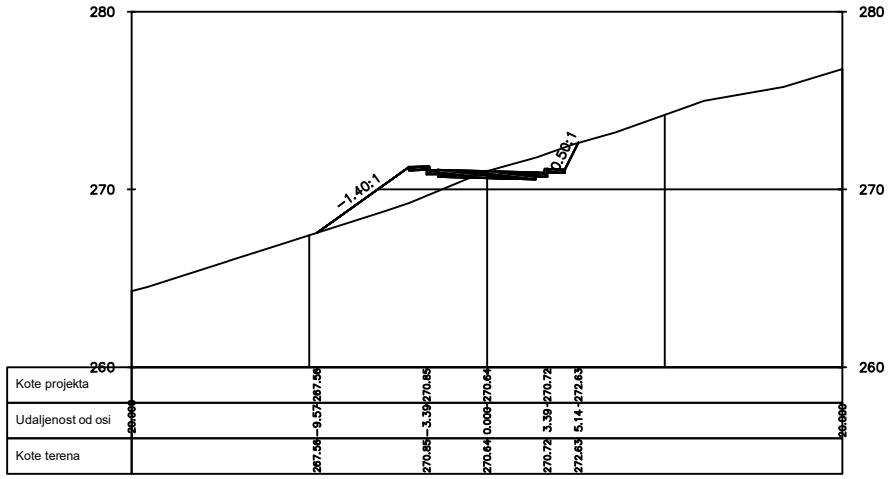
STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

DATUM: lipanj 2020

0+384.60



SVEUČILIŠTE U SPLITU
FAKULTET GRAĐEVINARSTVA,
ARHITEKTURE I GEODEZIJE
21000 SPLIT, MATICE HRVATSKE 15

ZAVRŠNI RAD

TEMA: IDEJNI PROJEKT DIONICE CESTE

STUDENT: Toni Cvjetkovic

SADRŽAJ: Karakteristični poprečni presjeci

MJERILO: 1:200

DATUM: lipanj 2020

4.Obrada na računalu

Prilikom izrade završnog rada korišteno je računalo uz pomoć softvera Autodesk Autocad Civil 3D. Prvi korak izrade zadatka je definiranje podloge odnosno terena na kojem će se postaviti dionica ceste. Potrebno je iscrtati slojnice terena pomoću polilinija te definirati odgovarajuće visine (elevation) u programu.Od konstruiranih slojnica je potrebno napraviti 3D model terena na način da se svakoj slojnici pridruži niz točaka koje kasnije formiraju prostorni prikaz terena.Nakon toga se u program ubacuju tangente,postavljamo prijelazne krivine i kružne lukove te tako riješavamo horizontalnu geometriju.Idući korak je izračun dijagrama vitoperenja te riješavanje vertikalne geometrije. Niveleta se postavlja tako da se u konačnici riješe geometrijski, sigurnosni elementi i odvodnja. Između tangenti interpolira se odgovarajuća kružna krivina. Nakon toga radimo 3D model terena (koridor) i definiramo poprečni presjek.U poprečnom presjeku su definirani svi njegovi elementi; poprečni nagib,dimenzije slivnika,bankine,usjeka i nasipa. Kao zadnji korak radimo ispis točaka osi naše ceste i računamo ukupnu količinu radova na temelju naših presjeka.

5. Izlazni podaci iz programa

5.1. Koordinatni račun glavnih točaka osi

Your Company Name

123 Main Street

Suite #321

City, State 01234

Alignment Station and Curve Report
Project Name: C:\Users\Toni\Desktop\zavrsni rad\novo civil.dwg
Report Date: 28.8.2020. 17:14:38

Client: Client Company
Project Description:
Prepared by: Preparer

Alignment: os_1

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	42926.759	27159.876
End:	0+25.030	42909.810	27178.293

Tangent Data

Parameter	Value	Parameter	Value
Length:	25.030	Course:	S 47° 22' 34.3166" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+25.030	42909.810	27178.293
SPI:		42891.732	27197.936
SC:	0+65.030	42881.378	27206.377

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.695
Radius:	140.000	S Tan:	13.359
Theta:	08° 11' 06.4009"	P:	0.476
X:	39.918	K:	19.986
Y:	1.902	A:	74.833
Chord:	39.964	Course:	S 44° 38' 53.8807" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+65.030	42881.378	27206.377
RP:		42792.911	27097.871
CS:	0+89.644	42861.036	27220.179

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	10° 04' 24.4989"	Type:	RIGHT
Radius:	140.000		
Length:	24.614	Tangent:	12.339
Mid-Ord:	0.541	External:	0.543
Chord:	24.582	Course:	S 34° 09' 15.6662" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+89.644	42861.036	27220.179
SPI:		42849.365	27226.679
ST:	1+29.644	42824.431	27236.217

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.695
Radius:	140.000	S Tan:	13.359
Theta:	08° 11' 06.4009"	P:	0.476
X:	39.918	K:	19.986
Y:	1.902	A:	74.833
Chord:	39.964	Course:	S 23° 39' 37.4518" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+29.644	42824.431	27236.217
End:	1+44.957	42810.129	27241.688

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.313	Course:	S 20° 55' 57.0159" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	1+44.957	42810.129	27241.688
SPI:		42791.339	27248.875
SC:	1+74.957	42783.600	27255.376

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.118

Radius:	45.000	S Tan:	10.107
Theta:	19° 05' 54.9354"	P:	0.830
X:	29.668	K:	14.945
Y:	3.307	A:	36.742
Chord:	29.852	Course:	S 27° 17' 33.7120" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+74.957	42783.600	27255.376
RP:		42812.544	27289.832
CS:	2+04.678	42768.548	27280.379

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	37° 50' 30.2510"	Type:	LEFT
Radius:	45.000		
Length:	29.721	Tangent:	15.425
Mid-Ord:	2.431	External:	2.570
Chord:	29.184	Course:	S 58° 57' 07.0768" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+04.678	42768.548	27280.379
SPI:		42766.425	27290.260
ST:	2+34.678	42768.867	27310.229

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.000	L Tan:	20.118
Radius:	45.000	S Tan:	10.107
Theta:	19° 05' 54.9354"	P:	0.830
X:	29.668	K:	14.945
Y:	3.307	A:	36.742
Chord:	29.852	Course:	N 89° 23' 19.5584" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+34.678	42768.867	27310.229
End:	2+62.886	42772.290	27338.229

Tangent Data

Parameter	Value	Parameter	Value
Length:	28.208	Course:	N 83° 01' 42.8623" E

Spiral Point Data

Description	Station	Northing	Easting

TS:	2+62.886	42772.290	27338.229
SPI:		42775.555	27364.924
SC:	3+02.886	42771.834	27377.942

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.894
Radius:	50.000	S Tan:	13.540
Theta:	22° 55' 05.9225"	P:	1.326
X:	39.365	K:	19.894
Y:	5.273	A:	44.721
Chord:	39.716	Course:	S 89° 20' 32.5599" E

Curve Point Data

Description	Station	Northing	Easting
SC:	3+02.886	42771.834	27377.942
RP:		42723.759	27364.205
CS:	3+24.563	42761.616	27396.867

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	24° 50' 23.2427"	Type:	RIGHT
Radius:	50.000		
Length:	21.677	Tangent:	11.011
Mid-Ord:	1.170	External:	1.198
Chord:	21.507	Course:	S 61° 37' 59.5939" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	3+24.563	42761.616	27396.867
SPI:		42752.771	27407.119
ST:	3+64.563	42728.660	27419.033

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.000	L Tan:	26.894
Radius:	50.000	S Tan:	13.540
Theta:	22° 55' 05.9225"	P:	1.326
X:	39.365	K:	19.894
Y:	5.273	A:	44.721
Chord:	39.716	Course:	S 33° 55' 26.6278" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+64.563	42728.660	27419.033

End:	3+84.597	42710.699	27427.908

Tangent Data

Parameter	Value	Parameter	Value
Length:	20.034	Course:	S 26° 17' 42.0500" E

Alignment: os 1-Left-2.750

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	42928.783	27161.738
End:	0+25.030	42911.833	27180.155

Tangent Data

Parameter	Value	Parameter	Value
Length:	25.030	Course:	S 47° 22' 34.3166" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+25.030	42911.833	27180.155
SPI:		42893.623	27199.943
SC:	0+65.422	42883.116	27208.509

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.393	L Tan:	26.957
Radius:	142.750	S Tan:	13.490
Theta:	08° 06' 22.5739"	P:	0.476
X:	40.312	K:	20.183
Y:	1.902	A:	75.935
Chord:	40.356	Course:	S 44° 38' 06.1013" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+65.422	42883.116	27208.509
RP:		42792.911	27097.871
CS:	0+90.520	42862.374	27222.581

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	10° 04' 24.4989"	Type:	RIGHT
Radius:	142.750		
Length:	25.098	Tangent:	12.581

Mid-Ord:	0.551	External:	0.553
Chord:	25.065	Course:	S 34° 09' 15.6662" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+90.520	42862.374	27222.581
SPI:		42850.531	27229.178
ST:	1+30.913	42825.414	27238.785

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	40.393	L Tan:	26.957
Radius:	142.750	S Tan:	13.490
Theta:	08° 06' 22.5739"	P:	0.476
X:	40.312	K:	20.183
Y:	1.902	A:	75.935
Chord:	40.356	Course:	S 23° 40' 25.2311" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+30.913	42825.414	27238.785
End:	1+46.226	42811.111	27244.256

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.313	Course:	S 20° 55' 57.0159" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+46.226	42811.111	27244.256
End:	1+56.128	42802.154	27248.476

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.902	Course:	S 25° 13' 30.3366" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+56.128	42802.154	27248.476
End:	1+65.730	42793.802	27253.214

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.602	Course:	S 29° 33' 54.5231" E

Tangent Data

Description	PT Station	Northing	Easting

Start:	1+65.730	42793.802	27253.214
End:	1+74.937	42786.565	27258.906

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.207	Course:	S 38° 11' 09.4567" E

Curve Point Data

Description	Station	Northing	Easting
PC:	1+74.937	42786.565	27258.906
RP:		42812.544	27289.832
PT:	2+01.613	42773.055	27281.347

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	37° 50' 30.2510"	Type:	LEFT
Radius:	40.390		
Length:	26.676	Tangent:	13.845
Mid-Ord:	2.182	External:	2.307
Chord:	26.194	Course:	S 58° 57' 07.0768" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+01.613	42773.055	27281.347
End:	2+10.820	42771.412	27290.406

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.207	Course:	S 79° 43' 04.6969" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+10.820	42771.412	27290.406
End:	2+20.422	42771.133	27300.004

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.602	Course:	S 88° 20' 19.6306" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+20.422	42771.133	27300.004
End:	2+30.324	42771.596	27309.895

Tangent Data

Parameter	Value	Parameter	Value
Length:	9.902	Course:	N 87° 19' 16.1829" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+30.324	42771.596	27309.895
End:	2+58.532	42775.020	27337.895

Tangent Data

Parameter	Value	Parameter	Value
Length:	28.208	Course:	N 83° 01' 42.8623" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	2+58.532	42775.020	27337.895
SPI:		42778.352	27365.143
SC:	2+99.632	42774.479	27378.698

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	41.100	L Tan:	27.621
Radius:	52.750	S Tan:	13.901
Theta:	22° 19' 15.2942"	P:	1.327
X:	40.481	K:	20.446
Y:	5.280	A:	46.562
Chord:	40.807	Course:	S 89° 14' 23.6220" E

Curve Point Data

Description	Station	Northing	Easting
SC:	2+99.632	42774.479	27378.698
RP:		42723.759	27364.205
CS:	3+22.501	42763.698	27398.664

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	24° 50' 23.2427"	Type:	RIGHT
Radius:	52.750		
Length:	22.869	Tangent:	11.617
Mid-Ord:	1.234	External:	1.264
Chord:	22.690	Course:	S 61° 37' 59.5939" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	3+22.501	42763.698	27398.664
SPI:		42754.489	27409.338
ST:	3+63.601	42729.879	27421.498

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value

Length:	41.100	L Tan:	27.621
Radius:	52.750	S Tan:	13.901
Theta:	22° 19' 15.2942"	P:	1.327
X:	40.481	K:	20.446
Y:	5.280	A:	46.562
Chord:	40.807	Course:	S 34° 01' 35.5658" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+63.601	42729.879	27421.498
End:	3+83.636	42711.917	27430.373

Tangent Data

Parameter	Value	Parameter	Value
Length:	20.034	Course:	S 26° 17' 42.0500" E

Alignment: os 1-Right-2.750

Description:

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	42924.736	27158.013
End:	0+00.030	42924.716	27158.035

Tangent Data

Parameter	Value	Parameter	Value
Length:	0.030	Course:	S 47° 22' 34.3166" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.030	42924.716	27158.035
End:	0+25.032	42907.510	27176.177

Tangent Data

Parameter	Value	Parameter	Value
Length:	25.003	Course:	S 46° 31' 00.5765" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+25.032	42907.510	27176.177
End:	0+30.026	42904.071	27179.797

Tangent Data

Parameter	Value	Parameter	Value

Length:	4.993	Course:	S 46° 28' 22.8249" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+30.026	42904.071	27179.797
End:	0+35.005	42900.626	27183.392

Tangent Data

Parameter	Value	Parameter	Value
Length:	4.979	Course:	S 46° 12' 53.1385" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+35.005	42900.626	27183.392
End:	0+39.968	42897.160	27186.944

Tangent Data

Parameter	Value	Parameter	Value
Length:	4.964	Course:	S 45° 42' 02.1753" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	0+39.968	42897.160	27186.944
SPI:		42887.333	27197.200
SC:	0+64.557	42879.261	27203.781

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	24.589	L Tan:	14.197
Radius:	136.650	S Tan:	10.421
Theta:	07° 03' 31.6671"	P:	0.245
X:	24.540	K:	7.747
Y:	1.275	A:	72.992
Chord:	24.573	Course:	S 43° 15' 00.2238" E

Curve Point Data

Description	Station	Northing	Easting
SC:	0+64.557	42879.261	27203.781
RP:		42792.911	27097.871
CS:	0+88.582	42859.405	27217.252

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	10° 04' 24.4989"	Type:	RIGHT
Radius:	136.650		
Length:	24.025	Tangent:	12.044
Mid-Ord:	0.528	External:	0.530

Chord:	23.994	Course:	S 34° 09' 15.6662" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	0+88.582	42859.405	27217.252
SPI:		42859.302	27217.309
ST:	0+88.818	42859.199	27217.367

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	0.236	L Tan:	0.118
Radius:	136.650	S Tan:	0.118
Theta:	00° 05' 55.0245"	P:	0.000
X:	0.236	K:	0.001
Y:	0.000	A:	72.171
Chord:	0.236	Course:	S 29° 04' 05.7209" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+88.818	42859.199	27217.367
End:	1+01.814	42847.672	27223.366

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.996	Course:	S 27° 29' 45.0710" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+01.814	42847.672	27223.366
End:	1+14.923	42835.686	27228.677

Tangent Data

Parameter	Value	Parameter	Value
Length:	13.109	Course:	S 23° 53' 45.6429" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+14.923	42835.686	27228.677
End:	1+28.131	42823.447	27233.645

Tangent Data

Parameter	Value	Parameter	Value
Length:	13.209	Course:	S 22° 05' 37.6551" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+28.131	42823.447	27233.645

End:	1+28.373	42823.223	27233.735

Tangent Data

Parameter	Value	Parameter	Value
Length:	0.242	Course:	S 21° 47' 30.7560" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	1+28.373	42823.223	27233.735
End:	1+43.445	42809.146	27239.119

Tangent Data

Parameter	Value	Parameter	Value
Length:	15.072	Course:	S 20° 55' 57.0159" E

Spiral Point Data

Description	Station	Northing	Easting
TS:	1+43.445	42809.146	27239.119
SPI:		42789.924	27246.472
SC:	1+74.361	42781.831	27253.270

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.917	L Tan:	20.725
Radius:	47.750	S Tan:	10.410
Theta:	18° 32' 55.0813"	P:	0.831
X:	30.594	K:	15.404
Y:	3.311	A:	38.422
Chord:	30.763	Course:	S 27° 23' 14.0535" E

Curve Point Data

Description	Station	Northing	Easting
SC:	1+74.361	42781.831	27253.270
RP:		42812.544	27289.832
CS:	2+05.898	42765.859	27279.801

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	37° 50' 30.2510"	Type:	LEFT
Radius:	47.750		
Length:	31.537	Tangent:	16.368
Mid-Ord:	2.580	External:	2.727
Chord:	30.967	Course:	S 58° 57' 07.0768" E

Spiral Point Data

Description	Station	Northing	Easting
CS:	2+05.898	42765.859	27279.801

SPI:		42763.639	27290.135
ST:	2+36.815	42766.137	27310.563

Spiral Curve Data: clothoid

Parameter	Value	Parameter	Value
Length:	30.917	L Tan:	20.725
Radius:	47.750	S Tan:	10.410
Theta:	18° 32' 55.0813"	P:	0.831
X:	30.594	K:	15.404
Y:	3.311	A:	38.422
Chord:	30.763	Course:	N 89° 28' 59.8998" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+36.815	42766.137	27310.563
End:	2+65.024	42769.561	27338.563

Tangent Data

Parameter	Value	Parameter	Value
Length:	28.208	Course:	N 83° 01' 42.8623" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+65.024	42769.561	27338.563
End:	2+78.229	42770.412	27351.740

Tangent Data

Parameter	Value	Parameter	Value
Length:	13.205	Course:	N 86° 18' 10.3997" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+78.229	42770.412	27351.740
End:	2+91.082	42770.088	27364.589

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.853	Course:	S 88° 33' 14.5656" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+91.082	42770.088	27364.589
End:	3+03.475	42767.575	27376.725

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.394	Course:	S 78° 18' 06.9632" E

Curve Point Data

Description	Station	Northing	Easting
PC:	3+03.475	42767.575	27376.725
RP:		42723.759	27364.205
PT:	3+23.232	42758.262	27393.974

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	24° 50' 23.2427"	Type:	RIGHT
Radius:	45.570		
Length:	19.756	Tangent:	10.036
Mid-Ord:	1.066	External:	1.092
Chord:	19.602	Course:	S 61° 37' 59.5939" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+23.232	42758.262	27393.974
End:	3+35.625	42749.493	27402.732

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.394	Course:	S 44° 57' 52.2245" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+35.625	42749.493	27402.732
End:	3+48.478	42738.927	27410.051

Tangent Data

Parameter	Value	Parameter	Value
Length:	12.853	Course:	S 34° 42' 44.6221" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+48.478	42738.927	27410.051
End:	3+61.683	42727.442	27416.567

Tangent Data

Parameter	Value	Parameter	Value
Length:	13.205	Course:	S 29° 34' 09.5875" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	3+61.683	42727.442	27416.567
End:	3+81.718	42709.481	27425.442

Tangent Data

Parameter	Value	Parameter	Value

Length:	20.034	Course:	S 26° 17' 42.0500" E

5.2. Koordinatni račun detaljnih točaka osi

Alignment Incremental Station Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 29.8.2020. 16:22:53

Alignment Name: os 1
Description:
Station Range: Start: 0+000.00, End: 38+460.00
Station Increment: 20.00

Station	Northing	Easting	Tangential Direction
0+000.00	42,926.7593m	27,159.8757m	S47° 22' 34"E
0+020.00	42,913.2157m	27,174.5920m	S47° 22' 34"E
0+040.00	42,899.5990m	27,189.2403m	S46° 13' 47"E
0+060.00	42,885.2209m	27,203.1328m	S41° 07' 12"E
0+080.00	42,869.2923m	27,215.1997m	S33° 03' 52"E
0+100.00	42,851.8245m	27,224.9087m	S25° 25' 40"E
0+120.00	42,833.4288m	27,232.7464m	S21° 24' 30"E
0+140.00	42,814.7584m	27,239.9167m	S20° 55' 57"E
0+160.00	42,796.2383m	27,247.4506m	S25° 44' 05"E
0+180.00	42,779.9279m	27,258.8290m	S46° 27' 08"E
0+200.00	42,769.7665m	27,275.8644m	S71° 55' 01"E
0+220.00	42,767.4735m	27,295.6216m	N87° 36' 01"E
0+240.00	42,769.5125m	27,315.5118m	N83° 01' 43"E
0+260.00	42,771.9400m	27,335.3639m	N83° 01' 43"E
0+280.00	42,773.9520m	27,355.2576m	N87° 13' 26"E
0+300.00	42,772.5489m	27,375.1465m	S77° 14' 28"E
0+320.00	42,764.4351m	27,393.2814m	S54° 26' 32"E
0+340.00	42,750.0854m	27,407.0709m	S34° 56' 14"E
0+360.00	42,732.7477m	27,417.0043m	S26° 35' 36"E
0+380.00	42,714.8207m	27,425.8713m	S26° 17' 42"E

5.3. Račun kota kolnika

Corridor Section Points Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 29.8.2020. 16:26:38

Corridor Name: koridor0
Description:
Base Alignment Name: os 1
Station Range: Start: 0+000.00, End: 0+384.60

CHAINAGE 0+000.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,165.3079	42,932.6619	246.6986	-8.022m	Daylight
2	27,162.8497	42,929.9908	249.2916	-4.392m	Hinge
3	27,162.8490	42,929.9901	249.0916	-4.391m	EPS_Sub
4	27,162.1725	42,929.2550	249.3316	-3.392m	Back_Curb
5	27,162.0709	42,929.1446	249.3316	-3.242m	Top_Curb
6	27,162.0427	42,929.1140	249.1066	-3.200m	Flowline_Gutter
7	27,161.7379	42,928.7828	249.1336	-2.750m	ETW
8	27,161.7379	42,928.7828	248.7336	-2.750m	ETW_SubBase
9	27,158.0134	42,924.7358	248.9961	2.750m	Flange
10	27,158.0134	42,924.7358	248.5961	2.750m	ETW_SubBase
11	27,157.7087	42,924.4047	248.9691	3.200m	Flowline_Gutter
12	27,157.6805	42,924.3740	249.1941	3.242m	Top_Curb
13	27,157.5789	42,924.2637	249.1941	3.392m	Back_Curb
14	27,156.9024	42,923.5286	248.9541	4.391m	EPS_Sub
15	27,156.9017	42,923.5279	249.1541	4.392m	Hinge_Cut
16	27,156.4463	42,923.0330	250.4992	5.064m	Daylight

CHAINAGE 0+020.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,182.0420	42,921.3108	245.6644	-11.001m	Daylight
2	27,177.5660	42,916.4472	250.3856	-4.392m	Hinge
3	27,177.5653	42,916.4465	250.1856	-4.391m	EPS_Sub
4	27,176.8888	42,915.7114	250.4256	-3.392m	Back_Curb
5	27,176.7872	42,915.6010	250.4256	-3.242m	Top_Curb
6	27,176.7590	42,915.5703	250.2006	-3.200m	Flowline_Gutter
7	27,176.4543	42,915.2392	250.2276	-2.750m	ETW

8	27,176.4543	42,915.2392	249.8276	-2.750m	ETW_SubBase
9	27,172.5269	42,910.9718	250.0826	3.050m	Flange
10	27,172.5269	42,910.9718	249.6826	3.050m	ETW_SubBase
11	27,172.2222	42,910.6407	250.0556	3.500m	Flowline_Gutter
12	27,172.1939	42,910.6100	250.2806	3.541m	Top_Curb
13	27,172.0924	42,910.4996	250.2806	3.691m	Back_Curb
14	27,171.4159	42,909.7645	250.0406	4.690m	EPS_Sub
15	27,171.4152	42,909.7638	250.2406	4.691m	Hinge_Cut
16	27,171.2581	42,909.5931	250.7046	4.923m	Daylight

CHAINAGE 0+040.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,198.4603	42,909.2236	245.0965	-13.328m	Daylight
2	27,192.2784	42,902.7704	251.4797	-4.392m	Hinge
3	27,192.2777	42,902.7697	251.2797	-4.391m	EPS_Sub
4	27,191.5866	42,902.0483	251.5197	-3.392m	Back_Curb
5	27,191.4828	42,901.9399	251.5197	-3.242m	Top_Curb
6	27,191.4540	42,901.9098	251.2947	-3.200m	Flowline_Gutter
7	27,191.1427	42,901.5849	250.9217	-2.750m	ETW_SubBase
8	27,191.1427	42,901.5849	251.3217	-2.750m	Flange
9	27,186.9230	42,897.1801	251.1692	3.350m	Flange
10	27,186.9230	42,897.1801	250.7692	3.350m	ETW_SubBase
11	27,186.6117	42,896.8551	251.1422	3.800m	Flowline_Gutter
12	27,186.5829	42,896.8250	251.3672	3.841m	Top_Curb
13	27,186.4791	42,896.7167	251.3672	3.991m	Back_Curb
14	27,185.7880	42,895.9953	251.1272	4.990m	EPS_Sub
15	27,185.7874	42,895.9946	251.3272	4.991m	EPS
16	27,185.5020	42,895.6968	251.0326	5.404m	Daylight

CHAINAGE 0+060.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,212.9251	42,893.7693	246.4257	-12.999m	Daylight
2	27,206.4409	42,888.1088	252.5737	-4.391m	Hinge
3	27,206.4402	42,888.1082	252.3737	-4.390m	EPS_Sub
4	27,205.6876	42,887.4512	252.6137	-3.391m	Back_Curb
5	27,205.5746	42,887.3525	252.6137	-3.241m	Top_Curb
6	27,205.5432	42,887.3251	252.3887	-3.200m	Flowline_Gutter
7	27,205.2042	42,887.0292	252.0157	-2.750m	ETW_SubBase
8	27,205.2042	42,887.0292	252.4157	-2.750m	Flange
9	27,200.6091	42,883.0178	252.2632	3.350m	Flange
10	27,200.6091	42,883.0178	251.8632	3.350m	ETW_SubBase

11	27,200.2701	42,882.7219	252.2362	3.800m	Flowline_Gutter
12	27,200.2387	42,882.6944	252.4612	3.842m	Top_Curb
13	27,200.1257	42,882.5958	252.4612	3.992m	Back_Curb
14	27,199.3731	42,881.9388	252.2212	4.991m	EPS_Sub
15	27,199.3724	42,881.9382	252.4212	4.992m	EPS
16	27,199.3611	42,881.9283	252.4106	5.007m	Daylight

CHAINAGE 0+080.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,223.4185	42,874.6428	249.7998	-9.807m	Daylight
2	27,218.8802	42,871.6883	253.6678	-4.392m	Hinge
3	27,218.8793	42,871.6878	253.4678	-4.391m	EPS_Sub
4	27,218.0421	42,871.1427	253.7078	-3.392m	Back_Curb
5	27,217.9164	42,871.0609	253.7078	-3.242m	Top_Curb
6	27,217.8814	42,871.0382	253.4828	-3.200m	Flowline_Gutter
7	27,217.5043	42,870.7926	253.5098	-2.750m	ETW
8	27,217.5043	42,870.7926	253.1098	-2.750m	ETW_SubBase
9	27,212.3922	42,867.4646	253.3573	3.350m	Flange
10	27,212.3922	42,867.4646	252.9573	3.350m	ETW_SubBase
11	27,212.0150	42,867.2191	253.3303	3.800m	Flowline_Gutter
12	27,211.9801	42,867.1963	253.5553	3.842m	Top_Curb
13	27,211.8544	42,867.1145	253.5553	3.992m	Back_Curb
14	27,211.0172	42,866.5695	253.3153	4.991m	EPS_Sub
15	27,211.0163	42,866.5689	253.5153	4.992m	Hinge_Cut
16	27,210.6330	42,866.3194	254.4300	5.449m	Daylight

CHAINAGE 0+100.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,230.4356	42,854.4522	253.5277	-6.120m	Daylight
2	27,228.8751	42,853.7103	254.7619	-4.392m	Hinge
3	27,228.8742	42,853.7099	254.5619	-4.391m	EPS_Sub
4	27,227.9720	42,853.2809	254.8019	-3.392m	Back_Curb
5	27,227.8365	42,853.2165	254.8019	-3.242m	Top_Curb
6	27,227.7989	42,853.1986	254.5769	-3.200m	Flowline_Gutter
7	27,227.3925	42,853.0054	254.6039	-2.750m	ETW
8	27,227.3925	42,853.0054	254.2039	-2.750m	ETW_SubBase
9	27,221.9397	42,850.4130	254.4529	3.287m	Flange
10	27,221.9397	42,850.4130	254.0529	3.287m	ETW_SubBase
11	27,221.5333	42,850.2198	254.4259	3.737m	Flowline_Gutter
12	27,221.4956	42,850.2019	254.6509	3.779m	Top_Curb
13	27,221.3601	42,850.1375	254.6509	3.929m	Back_Curb

14	27,220.4579	42,849.7085	254.4109	4.928m	EPS_Sub
15	27,220.4570	42,849.7081	254.6109	4.929m	Hinge_Cut
16	27,219.2428	42,849.1308	257.2999	6.274m	Daylight

CHAINAGE 0+120.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,243.2667	42,837.5534	250.9212	-11.300m	Daylight
2	27,236.8349	42,835.0317	255.8559	-4.391m	Hinge
3	27,236.8339	42,835.0314	255.6559	-4.390m	EPS_Sub
4	27,235.9039	42,834.6667	255.8959	-3.391m	Back_Curb
5	27,235.7642	42,834.6120	255.8959	-3.241m	Top_Curb
6	27,235.7254	42,834.5968	255.6709	-3.200m	Flowline_Gutter
7	27,235.3064	42,834.4325	255.6979	-2.750m	ETW
8	27,235.3064	42,834.4325	255.2979	-2.750m	ETW_SubBase
9	27,230.0260	42,832.3622	255.5561	2.922m	Flange
10	27,230.0260	42,832.3622	255.1561	2.922m	ETW_SubBase
11	27,229.6070	42,832.1980	255.5291	3.372m	Flowline_Gutter
12	27,229.5682	42,832.1828	255.7541	3.414m	Top_Curb
13	27,229.4286	42,832.1280	255.7541	3.564m	Back_Curb
14	27,228.4985	42,831.7634	255.5141	4.563m	EPS_Sub
15	27,228.4976	42,831.7630	255.7141	4.564m	Hinge_Cut
16	27,226.8073	42,831.1003	259.3451	6.379m	Daylight

CHAINAGE 0+140.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,259.3786	42,822.2028	245.2032	-20.837m	Daylight
2	27,244.0185	42,816.3274	256.9500	-4.392m	Hinge
3	27,244.0176	42,816.3270	256.7500	-4.391m	EPS_Sub
4	27,243.0845	42,815.9701	256.9900	-3.392m	Back_Curb
5	27,242.9444	42,815.9165	256.9900	-3.242m	Top_Curb
6	27,242.9055	42,815.9016	256.7650	-3.200m	Flowline_Gutter
7	27,242.4852	42,815.7409	256.7920	-2.750m	ETW
8	27,242.4852	42,815.7409	256.3920	-2.750m	ETW_SubBase
9	27,237.3482	42,813.7759	256.6545	2.750m	Flange
10	27,237.3482	42,813.7759	256.2545	2.750m	ETW_SubBase
11	27,236.9279	42,813.6151	256.6275	3.200m	Flowline_Gutter
12	27,236.8889	42,813.6002	256.8525	3.242m	Top_Curb
13	27,236.7488	42,813.5466	256.8525	3.392m	Back_Curb
14	27,235.8158	42,813.1897	256.6125	4.391m	EPS_Sub
15	27,235.8148	42,813.1894	256.8125	4.392m	Hinge_Cut
16	27,233.4397	42,812.2808	261.8983	6.935m	Daylight

CHAINAGE 0+160.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,272.6800	42,808.3991	241.9661	-28.007m	Daylight
2	27,252.3698	42,798.6094	258.0708	-5.461m	Hinge
3	27,252.3689	42,798.6089	257.8708	-5.460m	EPS_Sub
4	27,251.4690	42,798.1752	258.1108	-4.461m	Back_Curb
5	27,251.3338	42,798.1100	258.1108	-4.311m	Top_Curb
6	27,251.2963	42,798.0919	257.8858	-4.269m	Flowline_Gutter
7	27,250.8909	42,797.8965	257.9128	-3.819m	ETW
8	27,250.8909	42,797.8965	257.5128	-3.819m	ETW_SubBase
9	27,244.9737	42,795.0444	257.7486	2.750m	Flange
10	27,244.9737	42,795.0444	257.3486	2.750m	ETW_SubBase
11	27,244.5683	42,794.8490	257.7216	3.200m	Flowline_Gutter
12	27,244.5308	42,794.8309	257.9466	3.241m	Top_Curb
13	27,244.3956	42,794.7658	257.9466	3.391m	Back_Curb
14	27,243.4957	42,794.3320	257.7066	4.390m	EPS_Sub
15	27,243.4948	42,794.3315	257.9066	4.391m	Hinge_Cut
16	27,242.2147	42,793.7145	260.7486	5.812m	Daylight

CHAINAGE 0+180.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,277.0523	42,799.0992	244.7569	-26.450m	Daylight
2	27,263.1362	42,784.4591	259.1846	-6.252m	Hinge
3	27,263.1355	42,784.4584	258.9846	-6.251m	EPS_Sub
4	27,262.4472	42,783.7344	259.2246	-5.252m	Back_Curb
5	27,262.3438	42,783.6256	259.2246	-5.102m	Top_Curb
6	27,262.3151	42,783.5954	258.9996	-5.060m	Flowline_Gutter
7	27,262.0051	42,783.2692	259.0266	-4.610m	ETW
8	27,262.0051	42,783.2692	258.6266	-4.610m	ETW_SubBase
9	27,256.9343	42,777.9347	258.8426	2.750m	Flange
10	27,256.9343	42,777.9347	258.4426	2.750m	ETW_SubBase
11	27,256.6243	42,777.6086	258.8156	3.200m	Flowline_Gutter
12	27,256.5956	42,777.5783	259.0406	3.242m	Top_Curb
13	27,256.4922	42,777.4696	259.0406	3.392m	Back_Curb
14	27,255.8040	42,776.7456	258.8006	4.391m	EPS_Sub
15	27,255.8033	42,776.7448	259.0006	4.392m	Hinge_Cut
16	27,255.1470	42,776.0544	260.9057	5.344m	Daylight

CHAINAGE 0+200.00

POINT	X	Y	Z	OFFSET	STRING CUT

1	27,281.0124	42,785.5326	252.8975	-16.585m	Daylight
2	27,277.8049	42,775.7095	260.2787	-6.252m	Hinge
3	27,277.8046	42,775.7085	260.0787	-6.251m	EPS_Sub
4	27,277.4945	42,774.7588	260.3187	-5.252m	Back_Curb
5	27,277.4479	42,774.6163	260.3187	-5.102m	Top_Curb
6	27,277.4350	42,774.5766	260.0937	-5.060m	Flowline_Gutter
7	27,277.2953	42,774.1488	260.1207	-4.610m	ETW
8	27,277.2953	42,774.1488	259.7207	-4.610m	ETW_SubBase
9	27,275.0108	42,767.1524	259.9367	2.750m	Flange
10	27,275.0108	42,767.1524	259.5367	2.750m	ETW_SubBase
11	27,274.8711	42,766.7246	259.9097	3.200m	Flowline_Gutter
12	27,274.8582	42,766.6850	260.1347	3.242m	Top_Curb
13	27,274.8116	42,766.5424	260.1347	3.392m	Back_Curb
14	27,274.5015	42,765.5927	259.8947	4.391m	EPS_Sub
15	27,274.5012	42,765.5918	260.0947	4.392m	Hinge_Cut
16	27,274.4172	42,765.3345	260.6359	4.662m	Daylight

CHAINAGE 0+220.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,295.3784	42,773.2760	262.1030	-5.808m	Daylight
2	27,295.3939	42,772.9054	261.3613	-5.437m	EPS
3	27,295.3940	42,772.9044	261.1613	-5.436m	EPS_Sub
4	27,295.4358	42,771.9063	261.4013	-4.437m	Back_Curb
5	27,295.4421	42,771.7564	261.4013	-4.287m	Top_Curb
6	27,295.4438	42,771.7148	261.1763	-4.245m	Flowline_Gutter
7	27,295.4627	42,771.2652	261.2033	-3.795m	ETW
8	27,295.4627	42,771.2652	260.8033	-3.795m	ETW_SubBase
9	27,295.7367	42,764.7265	260.6397	2.749m	ETW_SubBase
10	27,295.7367	42,764.7265	261.0397	2.749m	ETW
11	27,295.7555	42,764.2769	261.0127	3.199m	Flowline_Gutter
12	27,295.7573	42,764.2353	261.2377	3.241m	Top_Curb
13	27,295.7636	42,764.0854	261.2377	3.391m	Back_Curb
14	27,295.8054	42,763.0873	260.9977	4.390m	EPS_Sub
15	27,295.8054	42,763.0863	261.1977	4.391m	Hinge_Cut
16	27,295.9180	42,760.3989	266.5772	7.081m	Daylight

CHAINAGE 0+240.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,314.9175	42,774.3731	263.4774	-4.897m	Daylight
2	27,314.9788	42,773.8718	262.4673	-4.392m	EPS
3	27,314.9789	42,773.8708	262.2673	-4.391m	EPS_Sub

4	27,315.1001	42,772.8792	262.5073	-3.392m	Back_Curb
5	27,315.1183	42,772.7303	262.5073	-3.242m	Top_Curb
6	27,315.1234	42,772.6889	262.2823	-3.200m	Flowline_Gutter
7	27,315.1780	42,772.2422	262.3093	-2.750m	ETW
8	27,315.1780	42,772.2422	261.9093	-2.750m	ETW_SubBase
9	27,315.8456	42,766.7829	261.7718	2.750m	ETW_SubBase
10	27,315.8456	42,766.7829	262.1718	2.750m	ETW
11	27,315.9002	42,766.3362	262.1448	3.200m	Flowline_Gutter
12	27,315.9053	42,766.2948	262.3698	3.242m	Top_Curb
13	27,315.9235	42,766.1459	262.3698	3.392m	Back_Curb
14	27,316.0447	42,765.1543	262.1298	4.391m	EPS_Sub
15	27,316.0448	42,765.1533	262.3298	4.392m	Hinge_Cut
16	27,316.3751	42,762.4525	267.7716	7.113m	Daylight

CHAINAGE 0+260.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,334.8047	42,776.5135	264.0613	-4.608m	Daylight
2	27,334.8309	42,776.2993	263.6295	-4.392m	EPS
3	27,334.8310	42,776.2983	263.4295	-4.391m	EPS_Sub
4	27,334.9523	42,775.3066	263.6695	-3.392m	Back_Curb
5	27,334.9705	42,775.1578	263.6695	-3.242m	Top_Curb
6	27,334.9755	42,775.1164	263.4445	-3.200m	Flowline_Gutter
7	27,335.0302	42,774.6697	263.4715	-2.750m	ETW
8	27,335.0302	42,774.6697	263.0715	-2.750m	ETW_SubBase
9	27,335.6977	42,769.2104	262.9340	2.750m	ETW_SubBase
10	27,335.6977	42,769.2104	263.3340	2.750m	ETW
11	27,335.7523	42,768.7637	263.3070	3.200m	Flowline_Gutter
12	27,335.7574	42,768.7223	263.5320	3.242m	Top_Curb
13	27,335.7756	42,768.5734	263.5320	3.392m	Back_Curb
14	27,335.8968	42,767.5818	263.2920	4.391m	EPS_Sub
15	27,335.8970	42,767.5808	263.4920	4.392m	Hinge_Cut
16	27,336.1802	42,765.2641	268.1599	6.726m	Daylight

CHAINAGE 0+280.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,354.9027	42,781.2715	262.7240	-7.328m	Daylight
2	27,355.0449	42,778.3381	264.8217	-4.391m	Hinge
3	27,355.0450	42,778.3371	264.6217	-4.390m	EPS_Sub
4	27,355.0934	42,777.3393	264.8617	-3.391m	Back_Curb
5	27,355.1006	42,777.1895	264.8617	-3.241m	Top_Curb
6	27,355.1027	42,777.1478	264.6367	-3.200m	Flowline_Gutter

7	27,355.1245	42,776.6984	264.6637	-2.750m	ETW
8	27,355.1245	42,776.6984	264.2637	-2.750m	ETW_SubBase
9	27,355.4338	42,770.3189	264.5040	3.637m	Flange
10	27,355.4338	42,770.3189	264.1040	3.637m	ETW_SubBase
11	27,355.4556	42,769.8695	264.4770	4.087m	Flowline_Gutter
12	27,355.4576	42,769.8278	264.7020	4.129m	Top_Curb
13	27,355.4649	42,769.6780	264.7020	4.279m	Back_Curb
14	27,355.5133	42,768.6802	264.4620	5.278m	EPS_Sub
15	27,355.5133	42,768.6792	264.6620	5.279m	Hinge_Cut
16	27,355.5890	42,767.1186	267.7869	6.841m	Daylight

CHAINAGE 0+300.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,377.6080	42,783.4195	261.2198	-11.146m	Daylight
2	27,376.1165	42,776.8327	266.0438	-4.392m	Hinge
3	27,376.1163	42,776.8317	265.8438	-4.391m	EPS_Sub
4	27,375.8956	42,775.8574	266.0838	-3.392m	Back_Curb
5	27,375.8625	42,775.7111	266.0838	-3.242m	Top_Curb
6	27,375.8533	42,775.6704	265.8588	-3.201m	Flowline_Gutter
7	27,375.7539	42,775.2315	265.8858	-2.751m	ETW
8	27,375.7539	42,775.2315	265.4858	-2.751m	ETW_SubBase
9	27,374.1413	42,768.1100	265.7032	4.551m	Flange
10	27,374.1413	42,768.1100	265.3032	4.551m	ETW_SubBase
11	27,374.0419	42,767.6711	265.6762	5.001m	Flowline_Gutter
12	27,374.0327	42,767.6305	265.9012	5.043m	Top_Curb
13	27,373.9996	42,767.4842	265.9012	5.193m	Back_Curb
14	27,373.7790	42,766.5098	265.6612	6.192m	EPS_Sub
15	27,373.7787	42,766.5089	265.8612	6.193m	Hinge_Cut
16	27,373.5383	42,765.4469	268.0389	7.282m	Daylight

CHAINAGE 0+320.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,401.2389	42,775.5673	260.6406	-13.684m	Daylight
2	27,395.8353	42,768.0079	267.2779	-4.392m	Hinge
3	27,395.8347	42,768.0071	267.0779	-4.391m	EPS_Sub
4	27,395.2537	42,767.1944	267.3179	-3.392m	Back_Curb
5	27,395.1665	42,767.0723	267.3179	-3.242m	Top_Curb
6	27,395.1423	42,767.0384	267.0929	-3.200m	Flowline_Gutter
7	27,394.8806	42,766.6723	267.1199	-2.750m	ETW
8	27,394.8806	42,766.6723	266.7199	-2.750m	ETW_SubBase
9	27,390.7052	42,760.8312	266.9404	4.430m	Flange

10	27,390.7052	42,760.8312	266.5404	4.430m	ETW_SubBase
11	27,390.4435	42,760.4651	266.9134	4.880m	Flowline_Gutter
12	27,390.4193	42,760.4312	267.1384	4.922m	Top_Curb
13	27,390.3321	42,760.3091	267.1384	5.072m	Back_Curb
14	27,389.7511	42,759.4964	266.8984	6.071m	EPS_Sub
15	27,389.7505	42,759.4956	267.0984	6.072m	Hinge_Cut
16	27,389.5176	42,759.1697	267.8996	6.472m	Daylight

CHAINAGE 0+340.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,417.4926	42,757.3658	262.5682	-12.713m	Daylight
2	27,410.6710	42,752.6004	268.5120	-4.392m	Hinge
3	27,410.6702	42,752.5998	268.3120	-4.391m	EPS_Sub
4	27,409.8512	42,752.0277	268.5520	-3.392m	Back_Curb
5	27,409.7283	42,751.9418	268.5520	-3.242m	Top_Curb
6	27,409.6941	42,751.9179	268.3270	-3.200m	Flowline_Gutter
7	27,409.3252	42,751.6602	268.3540	-2.750m	ETW
8	27,409.3252	42,751.6602	267.9540	-2.750m	ETW_SubBase
9	27,403.8701	42,747.8495	268.1876	3.904m	Flange
10	27,403.8701	42,747.8495	267.7876	3.904m	ETW_SubBase
11	27,403.5012	42,747.5918	268.1606	4.354m	Flowline_Gutter
12	27,403.4670	42,747.5679	268.3856	4.396m	Top_Curb
13	27,403.3441	42,747.4820	268.3856	4.546m	Back_Curb
14	27,402.5251	42,746.9099	268.1456	5.545m	EPS_Sub
15	27,402.5243	42,746.9093	268.3456	5.546m	Hinge_Cut
16	27,402.2824	42,746.7403	268.9357	5.841m	Daylight

CHAINAGE 0+360.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,425.2714	42,736.8863	266.2775	-9.245m	Daylight
2	27,420.9292	42,734.7125	269.7461	-4.389m	Hinge
3	27,420.9283	42,734.7121	269.5461	-4.388m	EPS_Sub
4	27,420.0350	42,734.2649	269.7861	-3.389m	Back_Curb
5	27,419.9008	42,734.1977	269.7861	-3.239m	Top_Curb
6	27,419.8635	42,734.1790	269.5611	-3.197m	Flowline_Gutter
7	27,419.4611	42,733.9776	269.5881	-2.747m	ETW
8	27,419.4611	42,733.9776	269.1881	-2.747m	ETW_SubBase
9	27,414.3197	42,731.4037	269.4443	3.002m	Flange
10	27,414.3197	42,731.4037	269.0443	3.002m	ETW_SubBase
11	27,413.9173	42,731.2022	269.4173	3.452m	Flowline_Gutter
12	27,413.8800	42,731.1836	269.6423	3.494m	Top_Curb

13	27,413.7458	42,731.1164	269.6423	3.644m	Back_Curb
14	27,412.8525	42,730.6692	269.4023	4.643m	EPS_Sub
15	27,412.8516	42,730.6688	269.6023	4.644m	Hinge_Cut
16	27,412.1240	42,730.3045	271.2297	5.458m	Daylight

CHAINAGE 0+380.00

POINT	X	Y	Z	OFFSET	STRING CUT
1	27,434.0748	42,718.8742	267.5812	-9.150m	Daylight
2	27,429.8085	42,716.7662	270.9802	-4.392m	Hinge
3	27,429.8076	42,716.7657	270.7802	-4.391m	EPS_Sub
4	27,428.9120	42,716.3232	271.0202	-3.392m	Back_Curb
5	27,428.7775	42,716.2567	271.0202	-3.242m	Top_Curb
6	27,428.7402	42,716.2383	270.7952	-3.200m	Flowline_Gutter
7	27,428.3367	42,716.0389	270.8222	-2.750m	ETW
8	27,428.3367	42,716.0389	270.4222	-2.750m	ETW_SubBase
9	27,423.4058	42,713.6025	270.6847	2.750m	Flange
10	27,423.4058	42,713.6025	270.2847	2.750m	ETW_SubBase
11	27,423.0024	42,713.4031	270.6577	3.200m	Flowline_Gutter
12	27,422.9650	42,713.3846	270.8827	3.242m	Top_Curb
13	27,422.8305	42,713.3182	270.8827	3.392m	Back_Curb
14	27,421.9349	42,712.8756	270.6427	4.391m	EPS_Sub
15	27,421.9340	42,712.8752	270.8427	4.392m	Hinge_Cut
16	27,421.2811	42,712.5526	272.2991	5.120m	Daylight

5.4. Vertikalni tok trase

Profile PVI Station & Curve Report

Client:	**Prepared by:**
Client	Preparer
Client Company	Your Company Name
Address 1	123 Main Street

Date: 29.8.2020. 16:27:43

Vertical Alignment: niveleta
Description:
Station Range: Start: 0+000.00, End: 38+460.00

PVI	Station	Grade Out	Curve Length
0.00	0+000.00	5.47%	
1.00	0+251.26	6.17%	93.359m
	Vertical Curve Information:(sag curve) PVC Station: 0+204.57 Elevation: 260.255m PVI Station: 0+251.26 Elevation: 262.809m PVT Station: 0+297.93 Elevation: 265.689m Low Point: 0+204.57 Elevation: 260.255m Grade in: 5.47% Grade out: 6.17% Change: 0.70% K: Curve Length: 93.359m Headlight Distance:		
2.00	0+384.60		

6. Proračun količine zemljanih radova za troškovnik

Volume Report

Project: C:\Users\Toni\AppData\Local\Temp\novo civil_1_5947_1f7c07c4.sv$
Alignment: os 1
Sample Line Group: nn
Start Sta: 0+000.000
End Sta: 0+384.597

Station	Cut Area (Sq.m.)	Cut Volume (Cu.m.)	Reusable Volume (Cu.m.)	Fill Area (Sq.m.)	Fill Volume (Cu.m.)	Cum. Cut Vol. (Cu.m.)	Cum. Reusable Vol. (Cu.m.)	Cum. Fill Vol. (Cu.m.)	Cum. Net Vol. (Cu.m.)
0+000.000	4.75	0.00	0.00	4.53	0.00	0.00	0.00	0.00	0.00
0+000.030	4.75	0.14	0.14	4.54	0.13	0.14	0.14	0.13	0.00
0+020.000	1.11	58.51	58.51	14.82	193.24	58.65	58.65	193.38	-134.72
0+025.030	0.40	3.79	3.79	18.40	83.53	62.45	62.45	276.91	-214.46
0+025.030	0.40	0.00	0.00	18.40	0.00	62.45	62.45	276.92	-214.47
0+030.030	0.00	0.99	0.99	24.50	107.24	63.43	63.43	384.16	-320.72
0+035.030	0.00	0.00	0.00	28.07	131.43	63.43	63.43	515.59	-452.15
0+040.000	0.00	0.00	0.00	26.97	136.79	63.43	63.43	652.38	-588.94
0+040.030	0.00	0.00	0.00	26.95	0.80	63.43	63.43	653.17	-589.74
0+060.000	0.08	0.83	0.83	26.05	540.13	64.26	64.26	1193.31	-1129.05
0+065.030	0.22	0.75	0.75	27.69	139.44	65.02	65.02	1332.75	-1267.73
0+077.337	1.59	10.86	10.86	12.71	257.02	75.87	75.87	1589.77	-1513.90
0+080.000	2.52	5.34	5.34	9.53	30.62	81.21	81.21	1620.39	-1539.18
0+089.644	10.44	61.24	61.24	2.91	62.06	142.45	142.45	1682.45	-1540.00
0+089.885	10.73	2.56	2.56	2.76	0.69	145.01	145.01	1683.13	-1538.12
0+100.000	17.42	140.43	140.43	0.53	17.16	285.44	285.44	1700.29	-1414.85
0+103.138	17.47	54.74	54.74	0.74	1.99	340.18	340.18	1702.28	-1362.10
0+116.391	17.51	230.00	230.00	1.89	17.77	570.18	570.18	1720.05	-1149.87
0+120.000	16.83	61.96	61.96	4.18	10.96	632.14	632.14	1731.01	-1098.87
0+129.640	16.72	161.69	161.69	9.15	64.25	793.83	793.83	1795.26	-1001.43
0+129.644	16.72	0.06	0.06	9.15	0.03	793.89	793.89	1795.29	-1001.40
0+129.885	16.65	4.03	4.03	9.30	2.23	797.92	797.92	1797.52	-999.60
0+140.000	18.34	176.93	176.93	9.19	93.49	974.85	974.85	1891.01	-916.16
0+144.957	20.39	95.98	95.98	3.27	30.88	1070.83	1070.83	1921.89	-851.06
0+154.957	11.03	158.80	158.80	28.11	150.98	1229.63	1229.63	2072.87	-843.24
0+160.000	10.04	54.49	54.49	31.65	135.28	1284.12	1284.12	2208.15	-924.03
0+164.957	11.46	55.18	55.18	31.79	134.57	1339.31	1339.31	2342.71	-1003.41
0+167.082	11.53	25.52	25.52	34.88	58.64	1364.82	1364.82	2401.36	-1036.53
0+174.957	8.08	81.67	81.67	41.93	241.40	1446.49	1446.49	2642.75	-1196.26
0+180.000	4.37	33.60	33.60	56.80	195.57	1480.10	1480.10	2838.33	-1358.23

0+189.817	0.00	23.06	23.06	99.51	635.55	1503.15	1503.15	3473.88	-1970.73
0+200.000	0.70	3.87	3.87	30.58	562.82	1507.02	1507.02	4036.70	-2529.68
0+204.568	6.64	17.85	17.85	14.78	87.95	1524.87	1524.87	4124.65	-2599.77
0+204.678	6.79	0.74	0.74	14.46	1.60	1525.61	1525.61	4126.25	-2600.64
0+214.678	33.70	208.47	208.47	0.00	63.16	1734.08	1734.08	4189.41	-2455.33
0+220.000	36.67	190.14	190.14	0.00	0.00	1924.22	1924.22	4189.41	-2265.19
0+224.678	37.19	174.63	174.63	0.00	0.00	2098.85	2098.85	4189.41	-2090.55
0+234.678	36.16	368.73	368.73	0.00	0.00	2467.59	2467.59	4189.41	-1721.82
0+234.680	36.16	0.08	0.08	0.00	0.00	2467.67	2467.67	4189.41	-1721.74
0+240.000	34.79	188.73	188.73	0.00	0.00	2656.40	2656.40	4189.41	-1533.01
0+260.000	28.10	628.87	628.87	0.00	0.00	3285.27	3285.27	4189.41	-904.14
0+262.886	26.33	78.54	78.54	0.00	0.00	3363.81	3363.81	4189.41	-825.60
0+262.890	26.33	0.10	0.10	0.00	0.00	3363.91	3363.91	4189.41	-825.50
0+276.220	16.19	281.53	281.53	1.04	7.03	3645.44	3645.44	4196.44	-551.00
0+280.000	17.22	61.91	61.91	2.50	6.94	3707.35	3707.35	4203.38	-496.03
0+289.553	11.52	132.86	132.86	6.09	43.29	3840.21	3840.21	4246.67	-406.47
0+297.927	9.82	84.23	84.23	10.45	74.83	3924.44	3924.44	4321.51	-397.07
0+300.000	7.74	16.81	16.81	11.72	25.17	3941.25	3941.25	4346.67	-405.43
0+302.886	4.55	16.24	16.24	15.58	43.46	3957.49	3957.49	4390.13	-432.65
0+313.725	1.68	30.62	30.62	24.46	240.31	3988.11	3988.11	4630.44	-642.33
0+320.000	1.09	7.81	7.81	30.30	189.75	3995.93	3995.93	4820.19	-824.26
0+324.563	1.20	4.68	4.68	31.12	154.32	4000.61	4000.61	4974.51	-973.91
0+337.896	1.03	13.64	13.64	24.24	400.71	4014.25	4014.25	5375.22	-1360.97
0+340.000	1.39	2.40	2.40	21.95	51.87	4016.65	4016.65	5427.09	-1410.45
0+351.230	5.21	35.88	35.88	7.85	175.54	4052.53	4052.53	5602.64	-1550.11
0+360.000	5.22	45.14	45.14	7.61	69.29	4097.67	4097.67	5671.92	-1574.25
0+364.560	4.65	22.52	22.52	7.45	34.35	4120.19	4120.19	5706.27	-1586.08
0+364.563	4.65	0.01	0.01	7.45	0.02	4120.20	4120.20	5706.29	-1586.09
0+380.000	4.83	73.20	73.20	7.57	115.95	4193.41	4193.41	5822.24	-1628.84
0+384.597	4.93	22.43	22.43	8.35	36.59	4215.83	4215.83	5858.83	-1643.00

Cut/Fill Report

Generated: 2020-08-31 21:02:14

By user: Toni

Drawing: C:\Users\Toni\Desktop\zavrsni rad\C:\Users\Toni\Desktop\zavrsni rad\novo civil.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (sq.m)	Cut (Cu. M.)	Fill (Cu. M.)	Net (Cu. M.)
Surface3	full	1.000	1.000	6711.98	4288.24	5941.40	1653.16<Fill>

Totals

	2d Area (sq.m)	Cut (Cu. M.)	Fill (Cu. M.)	Net (Cu. M.)
Total	6711.98	4288.24	5941.40	1653.16<Fill>

* Value adjusted by cut or fill factor other than 1.0

7. Literatura

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5) Bilješke tijekom predavanja