

ELEMENTOS DE CURVAS

Alignment: EJE_1

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	969336,641	928062,305
End:	1+55.678	969215,258	928159,783

Tangent Data

Parameter	Value	Parameter	Value
Length:	155,678	Course:	S 38° 45' 59.1933" E

Curve Point Data

Description	Station	Northing	Easting
PC:	1+55.678	969215,258	928159,783
RP:		968905,612	927774,199
PT:	2+07.634	969173,115	928190,129

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	06° 01' 10.4449"	Type:	RIGHT
Radius:	494,525		
Length:	51,955	Tangent:	26,002
Mid-Ord:	0,682	External:	0,683
Chord:	51,932	Course:	S 35° 45' 23.9709" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+07.634	969173,115	928190,129
End:	5+45.041	968889,332	928372,642

Tangent Data

Parameter	Value	Parameter	Value
Length:	337,407	Course:	S 32° 44' 48.7484" E

Curve Point Data

Description	Station	Northing	Easting
PC:	5+45.041	968889,332	928372,642
RP:		969029,5	928590,584
PT:	8+28.857	968771,569	928615,43

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	62° 45' 19.2588"	Type:	LEFT
Radius:	259,125		
Length:	283,816	Tangent:	158,032
Mid-Ord:	37,896	External:	44,388
Chord:	269,841	Course:	S 64° 07' 28.3778" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	8+28.857	968771,569	928615,43
End:	11+66.265	968803,921	928951,283

Tangent Data

Parameter	Value	Parameter	Value
Length:	337,408	Course:	N 84° 29' 51.9927" E

Curve Point Data

Description	Station	Northing	Easting
PC:	11+66.265	968803,921	928951,283

RP: 968311,675 928998,7
 PT: 12+18.221 968806,18 929003,165

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	06° 01' 10.3991"	Type:	RIGHT
Radius:	494,525	Tangent:	26,002
Length:	51,955	External:	0,683
Mid-Ord:	0,682	Course:	N 87° 30' 27.1923" E
Chord:	51,931		

Tangent Data

Description	PT Station	Northing	Easting
Start:	12+18.221	968806,18	929003,165
End:	12+80.572	968805,617	929065,514

Tangent Data

Parameter	Value	Parameter	Value
Length:	62,351	Course:	S 89° 28' 57.6082" E

Curve Point Data

Description	Station	Northing	Easting
PC:	12+80.572	968805,617	929065,514
RP:		968441,632	929062,227
PT:	15+66.457	968696,684	929321,928

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	45° 00' 00.0000"	Type:	RIGHT
Radius:	364	Tangent:	150,774
Length:	285,885	External:	29,991
Mid-Ord:	27,708	Course:	S 66° 58' 57.6082" E
Chord:	278,594		

Tangent Data

Description	PT Station	Northing	Easting
Start:	15+66.457	968696,684	929321,928
End:	18+29.600	968508,941	929506,31

Tangent Data

Parameter	Value	Parameter	Value
Length:	263,143	Course:	S 44° 28' 57.6082" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	18+29.600	968508,941	929506,31
End:	23+91.706	968107,9	929900,174

Tangent Data

Parameter	Value	Parameter	Value
Length:	562,105	Course:	S 44° 28' 57.6082" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	23+91.706	968107,9	929900,174
End:	25+51.654	967993,783	930012,249

Tangent Data

Parameter	Value	Parameter	Value
Length:	159,949	Course:	S 44° 28' 57.6082" E

Curve Point Data

Description	Station	Northing	Easting
PC:	25+51.654	967993,783	930012,249
RP:		968271,257	930294,78

PT: 25+77.941 967975,653 930031,277

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	03° 48' 11.9275"	Type:	LEFT
Radius:	396		
Length:	26,287	Tangent:	13,148
Mid-Ord:	0,218	External:	0,218
Chord:	26,282	Course:	S 46° 23' 03.5719" E

Alignment: EJE_2

Curve Point Data

Description	Station	Northing	Easting
PC:	0+000.000	967987,597	930041,923
RP:		968271,257	930294,78
PT:	0+25.225	968004,994	930023,665

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	03° 48' 11.9275"	Type:	RIGHT
Radius:	380		
Length:	25,225	Tangent:	12,617
Mid-Ord:	0,209	External:	0,209
Chord:	25,22	Course:	N 46° 23' 03.5719" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+25.225	968004,994	930023,665
End:	2+88.368	968192,737	929839,282

Tangent Data

Parameter	Value	Parameter	Value
Length:	263,143	Course:	N 44° 28' 57.6082" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+88.368	968192,737	929839,282
End:	8+50.473	968593,778	929445,418

Tangent Data

Parameter	Value	Parameter	Value
Length:	562,105	Course:	N 44° 28' 57.6082" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	8+50.473	968593,778	929445,418
End:	10+10.422	968707,895	929333,343

Tangent Data

Parameter	Value	Parameter	Value
Length:	159,949	Course:	N 44° 28' 57.6082" W

Curve Point Data

Description	Station	Northing	Easting
PC:	10+10.422	968707,895	929333,343
RP:		968441,632	929062,227
PT:	13+08.874	968821,616	929065,658

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	45° 00' 00.0000"	Type:	LEFT
Radius:	380		
Length:	298,451	Tangent:	157,401
Mid-Ord:	28,926	External:	31,309
Chord:	290,839	Course:	N 66° 58' 57.6082" W

<u>Tangent Data</u>			
Description	PT Station	Northing	Easting
Start:	13+08.874	968821,616	929065,658
End:	16+73.369	968824,857	928701,177

<u>Tangent Data</u>			
Parameter	Value	Parameter	Value
Length:	364,495	Course:	N 89° 29' 25.9027" W

<u>Curve Point Data</u>			
Description	Station	Northing	Easting
PC:	16+73.369	968824,857	928701,177
RP:		969265,714	928705,158
PT:	20+63.616	968989,662	928361,406

<u>Circular Curve Data</u>			
Parameter	Value	Parameter	Value
Delta:	50° 42' 58.4149"	Type:	RIGHT
Radius:	440,875		
Length:	390,247	Tangent:	208,948
Mid-Ord:	42,479	External:	47,008
Chord:	377,631	Course:	N 64° 07' 28.4007" W

<u>Tangent Data</u>			
Description	PT Station	Northing	Easting
Start:	20+63.616	968989,662	928361,406
End:	25+21.438	969346,628	928074,741

<u>Tangent Data</u>			
Parameter	Value	Parameter	Value
Length:	457,822	Course:	N 38° 45' 59.1933" W

Alignment: RTN_1

<u>Curve Point Data</u>			
Description	Station	Northing	Easting
PC:	0+00.000	968820,477	928459,726
RP:		968855,209	928456,121
PT:	0+64.294	968867,961	928488,628

<u>Circular Curve Data</u>			
Parameter	Value	Parameter	Value
Delta:	105° 29' 34.0456"	Type:	LEFT
Radius:	34,92		
Length:	64,294	Tangent:	45,916
Mid-Ord:	13,781	External:	22,766
Chord:	55,589	Course:	N 31° 19' 40.9506" E

Alignment: RTN_2

<u>Curve Point Data</u>			
Description	Station	Northing	Easting
PC:	0+00.000	968849,426	928526,841
RP:		968816,003	928536,952
PT:	0+64.294	968797,331	928507,444

<u>Circular Curve Data</u>			
Parameter	Value	Parameter	Value
Delta:	105° 29' 33.9804"	Type:	LEFT
Radius:	34,92		
Length:	64,294	Tangent:	45,915
Mid-Ord:	13,781	External:	22,766
Chord:	55,589	Course:	S 20° 25' 22.2808" W

Alignment: RTN_3

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	968439,982	929557,013
End:	0+89.395	968368,052	929610,094

Tangent Data

Parameter	Value	Parameter	Value
Length:	89,395	Course:	S 36° 25' 33.7176" E

Curve Point Data

Description	Station	Northing	Easting
PC:	0+89.395	968368,052	929610,094
RP:		968386,997	929638,853
PCC:	1+20.951	968352,648	929636,376

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	52° 30' 00.6842"	Type:	LEFT
Radius:	34,438		
Length:	31,555	Tangent:	16,983
Mid-Ord:	3,552	External:	3,96
Chord:	30,463	Course:	S 59° 37' 28.6435" E

Curve Point Data

Description	Station	Northing	Easting
PCC:	1+20.951	968352,648	929636,376
RP:		968387,647	929636,647
PCC:	1+73.831	968385,28	929671,567

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	86° 33' 56.3579"	Type:	LEFT
Radius:	35		
Length:	52,88	Tangent:	32,963
Mid-Ord:	9,521	External:	13,078
Chord:	47,992	Course:	N 47° 09' 39.7348" E

Curve Point Data

Description	Station	Northing	Easting
PCC:	1+73.831	968385,28	929671,567
RP:		968385,398	929637,129
PT:	2+05.386	968412,647	929658,187

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	52° 30' 00.6842"	Type:	LEFT
Radius:	34,438		
Length:	31,555	Tangent:	16,983
Mid-Ord:	3,552	External:	3,96
Chord:	30,463	Course:	N 26° 03' 11.8868" W

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+05.386	968412,647	929658,187
End:	3+56.865	968511,523	929543,429

Tangent Data

Parameter	Value	Parameter	Value
Length:	151,479	Course:	N 49° 15' 06.8127" W

Alignment: RTN_4

Tangent Data

Description	PT Station	Northing	Easting
Start:	0+00.000	968261,696	929788,58
End:	0+89.395	968333,626	929735,498

Tangent Data

Parameter	Value	Parameter	Value
Length:	89,395	Course:	N 36° 25' 33.7176" W

Curve Point Data

Description	Station	Northing	Easting
PC:	0+89.395	968333,626	929735,498
RP:		968314,681	929706,739
PCC:	1+20.951	968349,03	929709,216

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	52° 30' 00.6843"	Type:	LEFT
Radius:	34,438		
Length:	31,555	Tangent:	16,983
Mid-Ord:	3,552	External:	3,96
Chord:	30,463	Course:	N 59° 37' 28.6434" W

Curve Point Data

Description	Station	Northing	Easting
PCC:	1+20.951	968349,03	929709,216
RP:		968314,031	929708,945
PCC:	1+73.831	968316,398	929674,025

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	86° 33' 56.3470"	Type:	LEFT
Radius:	35		
Length:	52,88	Tangent:	32,963
Mid-Ord:	9,521	External:	13,078
Chord:	47,992	Course:	S 47° 09' 39.7405" W

Curve Point Data

Description	Station	Northing	Easting
PCC:	1+73.831	968316,398	929674,025
RP:		968316,28	929708,463
PT:	2+05.386	968289,031	929687,405

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	52° 30' 00.6843"	Type:	LEFT
Radius:	34,438		
Length:	31,555	Tangent:	16,983
Mid-Ord:	3,552	External:	3,96
Chord:	30,463	Course:	S 26° 03' 11.8756" E

Tangent Data

Description	PT Station	Northing	Easting
Start:	2+05.386	968289,031	929687,405
End:	3+56.865	968190,155	929802,163

Tangent Data

Parameter	Value	Parameter	Value
Length:	151,479	Course:	S 49° 15' 06.8015" E