

tyczenie\_oś\_odc\_1.txt

Project Name: Rokitno  
Description:  
Horizontal Alignment Name: odc\_1  
Description:  
Style: Geom\_plan

	STATION	NORTHING	EASTING
Element: Linear			
POCZĄTEK ( )	0+000.00	5859318.1778	5541761.8812
W ( )	0+052.46	5859344.0089	5541807.5465
Tangent Direction:	67.23		
Tangent Length:	52.46		
Element: Linear			
W ( )	0+052.46	5859344.0089	5541807.5465
W ( )	0+177.60	5859405.6200	5541916.4650
Tangent Direction:	67.23		
Tangent Length:	125.14		
Element: Linear			
W ( )	0+177.60	5859405.6200	5541916.4650
PL ( )	0+243.06	5859435.1743	5541974.8748
Tangent Direction:	70.18		
Tangent Length:	65.46		
Element: Circular			
PL ( )	0+243.06	5859435.1743	5541974.8748
W ( )	0+258.62	5859442.2000	5541988.7600
CC ( )		5859613.6307	5541884.5790
KL ( )	0+274.12	5859451.2889	5542001.3914
Radius:	200.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	9.89	Left	
Degree of Curvature(Arc):	31.83		
Length:	31.06		
Tangent:	15.56		
Chord:	31.03		
Middle Ordinate:	0.60		
External:	0.60		
Tangent Direction:	70.18		
Radial Direction:	170.18		
Chord Direction:	65.24		
Radial Direction:	160.29		
Tangent Direction:	60.29		
Element: Linear			
KL ( )	0+274.12	5859451.2889	5542001.3914
PL ( )	0+281.05	5859455.3343	5542007.0136
Tangent Direction:	60.29		
Tangent Length:	6.93		
Element: Circular			
PL ( )	0+281.05	5859455.3343	5542007.0136
W ( )	0+292.19	5859461.8400	5542016.0550
CC ( )		5859495.9197	5541977.8105
KL ( )	0+302.97	5859471.5685	5542021.4799
Radius:	50.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	27.91	Left	
Degree of Curvature(Arc):	127.32		
Length:	21.92		
Tangent:	11.14		
Chord:	21.74		
Middle Ordinate:	1.20		
External:	1.23		
Tangent Direction:	60.29		

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Radial Direction: 160.29  
 Chord Direction: 46.34  
 Radial Direction: 132.38  
 Tangent Direction: 32.38

Element: Linear  
     KL (            )            0+302.97    5859471.5685    5542021.4799  
     W (            )            0+317.31    5859484.0950    5542028.4650  
 Tangent Direction: 32.38  
 Tangent Length: 14.34

Element: Linear  
     W (            )            0+317.31    5859484.0950    5542028.4650  
     PL (            )            0+329.10    5859494.7511    5542033.5142  
 Tangent Direction: 28.17  
 Tangent Length: 11.79

Element: Circular  
     PL (            )            0+329.10    5859494.7511    5542033.5142  
     W (            )            0+347.44    5859511.3200    5542041.3650  
     CC (            )                            5859601.7994    5541807.5924  
     KL (            )            0+365.71    5859528.8570    5542046.7145  
             Radius: 250.00  
 Design Speed(kmph): 30.00  
     Superelevation: -2.00%  
         Delta: 9.32 Left  
 Degree of Curvature(Arc): 25.46  
     Length: 36.60  
     Tangent: 18.33  
     Chord: 36.57  
     Middle Ordinate: 0.67  
     External: 0.67  
 Tangent Direction: 28.17  
 Radial Direction: 128.17  
 Chord Direction: 23.51  
 Radial Direction: 118.85  
 Tangent Direction: 18.85

Element: Linear  
     KL (            )            0+365.71    5859528.8570    5542046.7145  
     PL (            )            0+382.11    5859544.5441    5542051.4998  
 Tangent Direction: 18.85  
 Tangent Length: 16.40

Element: Circular  
     PL (            )            0+382.11    5859544.5441    5542051.4998  
     W (            )            0+397.45    5859559.2150    5542055.9750  
     CC (            )                            5859398.6594    5542529.7441  
     KL (            )            0+412.77    5859573.5840    5542061.3411  
             Radius: 500.00  
 Design Speed(kmph): 30.00  
     Superelevation: 2.00%  
         Delta: 3.90 Right  
 Degree of Curvature(Arc): 12.73  
     Length: 30.67  
     Tangent: 15.34  
     Chord: 30.66  
     Middle Ordinate: 0.24  
     External: 0.24  
 Tangent Direction: 18.85  
 Radial Direction: 118.85  
 Chord Direction: 20.80  
 Radial Direction: 122.75  
 Tangent Direction: 22.75

Element: Linear  
     KL (            )            0+412.77    5859573.5840    5542061.3411  
     W (            )            0+442.92    5859601.8243    5542071.8874

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Tangent Direction:	22.75		
Tangent Length:	30.15		
Element: Linear			
W (            )	0+442.92	5859601.8243	5542071.8874
PL (           )	0+478.67	5859636.3401	5542081.1985
Tangent Direction:	16.77		
Tangent Length:	35.75		
Element: Circular			
PL (           )	0+478.67	5859636.3401	5542081.1985
W (           )	0+516.83	5859673.1860	5542091.1381
CC (           )		5859612.8994	5542168.0923
KL (           )	0+550.86	5859691.6563	5542124.5336
Radius:	90.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	51.06	Right	
Degree of Curvature(Arc):	70.74		
Length:	72.19		
Tangent:	38.16		
Chord:	70.27		
Middle Ordinate:	7.14		
External:	7.76		
Tangent Direction:	16.77		
Radial Direction:	116.77		
Chord Direction:	42.31		
Radial Direction:	167.84		
Tangent Direction:	67.84		
Element: Linear			
KL (           )	0+550.86	5859691.6563	5542124.5336
W (           )	0+572.80	5859702.2731	5542143.7294
Tangent Direction:	67.84		
Tangent Length:	21.94		
Element: Linear			
W (           )	0+572.80	5859702.2731	5542143.7294
PL (           )	0+616.45	5859723.3991	5542181.9266
Tangent Direction:	67.84		
Tangent Length:	43.65		
Element: Circular			
PL (           )	0+616.45	5859723.3991	5542181.9266
W (           )	0+648.60	5859738.9614	5542210.0642
CC (           )		5859872.1620	5542099.6491
KL (           )	0+680.00	5859763.7251	5542230.5744
Radius:	170.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	23.80	Left	
Degree of Curvature(Arc):	37.45		
Length:	63.56		
Tangent:	32.15		
Chord:	63.19		
Middle Ordinate:	2.96		
External:	3.01		
Tangent Direction:	67.84		
Radial Direction:	167.84		
Chord Direction:	55.94		
Radial Direction:	144.04		
Tangent Direction:	44.04		
Element: Linear			
KL (           )	0+680.00	5859763.7251	5542230.5744
PL (           )	0+727.73	5859800.4841	5542261.0194
Tangent Direction:	44.04		
Tangent Length:	47.73		

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Element: Circular			
PŁ (            )	0+727.73	5859800.4841	5542261.0194
W (            )	0+743.83	5859812.8842	5542271.2896
CC (            )		5859736.6977	5542338.0343
KŁ (            )	0+759.66	5859821.4340	5542284.9329
Radius:	100.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	20.33	Right	
Degree of Curvature(Arc):	63.66		
Length:	31.93		
Tangent:	16.10		
Chord:	31.79		
Middle Ordinate:	1.27		
External:	1.29		
Tangent Direction:	44.04		
Radial Direction:	144.04		
Chord Direction:	54.20		
Radial Direction:	164.36		
Tangent Direction:	64.36		
Element: Linear			
KŁ (            )	0+759.66	5859821.4340	5542284.9329
PŁ (            )	0+765.43	5859824.4958	5542289.8188
Tangent Direction:	64.36		
Tangent Length:	5.77		
Element: Circular			
PŁ (            )	0+765.43	5859824.4958	5542289.8188
W (            )	0+777.91	5859831.1238	5542300.3954
CC (            )		5859773.6540	5542321.6797
KŁ (            )	0+790.04	5859832.9840	5542312.7377
Radius:	60.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	26.11	Right	
Degree of Curvature(Arc):	106.10		
Length:	24.61		
Tangent:	12.48		
Chord:	24.44		
Middle Ordinate:	1.26		
External:	1.28		
Tangent Direction:	64.36		
Radial Direction:	164.36		
Chord Direction:	77.42		
Radial Direction:	190.48		
Tangent Direction:	90.48		
Element: Linear			
KŁ (            )	0+790.04	5859832.9840	5542312.7377
W (            )	0+844.49	5859841.0984	5542366.5770
Tangent Direction:	90.48		
Tangent Length:	54.45		
Element: Linear			
W (            )	0+844.49	5859841.0984	5542366.5770
PŁ (            )	0+952.56	5859857.2051	5542473.4456
Tangent Direction:	90.48		
Tangent Length:	108.08		
Element: Circular			
PŁ (            )	0+952.56	5859857.2051	5542473.4456
W (            )	0+978.64	5859861.0910	5542499.2283
CC (            )		5859768.2102	5542486.8585
KŁ (            )	1+003.32	5859850.5928	5542523.0954
Radius:	90.00		
Design Speed(kmph):	30.00		

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Superelevation:	2.00%		
Delta:	35.90	Right	
Degree of Curvature(Arc):	70.74		
Length:	50.76		
Tangent:	26.07		
Chord:	50.09		
Middle Ordinate:	3.55		
External:	3.70		
Tangent Direction:	90.48		
Radial Direction:	190.48		
Chord Direction:	108.43		
Radial Direction:	226.38		
Tangent Direction:	126.38		
Element: Linear			
KŁ ( )	1+003.32	5859850.5928	5542523.0954
W ( )	1+016.69	5859845.2105	5542535.3318
Tangent Direction:	126.38		
Tangent Length:	13.37		
Element: Linear			
W ( )	1+016.69	5859845.2105	5542535.3318
W ( )	1+092.76	5859814.5810	5542604.9662
Tangent Direction:	126.38		
Tangent Length:	76.07		
Element: Linear			
W ( )	1+092.76	5859814.5810	5542604.9662
PL ( )	1+190.51	5859767.7567	5542690.7647
Tangent Direction:	131.80		
Tangent Length:	97.74		
Element: Circular			
PL ( )	1+190.51	5859767.7567	5542690.7647
W ( )	1+210.35	5859758.2498	5542708.1846
CC ( )		5859899.4248	5542762.6223
KŁ ( )	1+229.97	5859753.6000	5542727.4775
Radius:	150.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	16.75	Left	
Degree of Curvature(Arc):	42.44		
Length:	39.46		
Tangent:	19.85		
Chord:	39.35		
Middle Ordinate:	1.30		
External:	1.31		
Tangent Direction:	131.80		
Radial Direction:	231.80		
Chord Direction:	123.43		
Radial Direction:	215.06		
Tangent Direction:	115.06		
Element: Linear			
KŁ ( )	1+229.97	5859753.6000	5542727.4775
PL ( )	1+308.54	5859735.1913	5542803.8602
Tangent Direction:	115.06		
Tangent Length:	78.57		
Element: Circular			
PL ( )	1+308.54	5859735.1913	5542803.8602
W ( )	1+327.88	5859730.6595	5542822.6639
CC ( )		5859851.8511	5542831.9760
KŁ ( )	1+346.89	5859732.2654	5542841.9392
Radius:	120.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	20.35	Left	

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Degree of Curvature(Arc): 53.05  
 Length: 38.35  
 Tangent: 19.34  
 Chord: 38.19  
 Middle Ordinate: 1.53  
 External: 1.55  
 Tangent Direction: 115.06  
 Radial Direction: 215.06  
 Chord Direction: 104.88  
 Radial Direction: 194.71  
 Tangent Direction: 94.71

Element: Linear  
 KL ( ) 1+346.89 5859732.2654 5542841.9392  
 PL ( ) 1+356.57 5859733.0694 5542851.5887  
 Tangent Direction: 94.71  
 Tangent Length: 9.68

Element: Circular  
 PL ( ) 1+356.57 5859733.0694 5542851.5887  
 W ( ) 1+372.30 5859734.3750 5542867.2600  
 CC ( ) 5859882.5514 5542839.1346  
 KL ( ) 1+387.91 5859738.9024 5542882.3198  
 Radius: 150.00  
 Design Speed(kmph): 30.00  
 Superelevation: -2.00%  
 Delta: 13.30 Left  
 Degree of Curvature(Arc): 42.44  
 Length: 31.34  
 Tangent: 15.73  
 Chord: 31.28  
 Middle Ordinate: 0.82  
 External: 0.82  
 Tangent Direction: 94.71  
 Radial Direction: 194.71  
 Chord Direction: 88.06  
 Radial Direction: 181.41  
 Tangent Direction: 81.41

Element: Linear  
 KL ( ) 1+387.91 5859738.9024 5542882.3198  
 W ( ) 1+393.74 5859740.5800 5542887.9000  
 Tangent Direction: 81.41  
 Tangent Length: 5.83

Element: Linear  
 W ( ) 1+393.74 5859740.5800 5542887.9000  
 W ( ) 1+410.36 5859745.6300 5542903.7350  
 Tangent Direction: 80.35  
 Tangent Length: 16.62

Element: Linear  
 W ( ) 1+410.36 5859745.6300 5542903.7350  
 PL ( ) 1+426.58 5859751.6255 5542918.8032  
 Tangent Direction: 75.89  
 Tangent Length: 16.22

Element: Circular  
 PL ( ) 1+426.58 5859751.6255 5542918.8032  
 W ( ) 1+457.33 5859762.9950 5542947.3776  
 CC ( ) 5859937.4557 5542844.8630  
 KL ( ) 1+487.60 5859782.4239 5542971.2163  
 Radius: 200.00  
 Design Speed(kmph): 30.00  
 Superelevation: -2.00%  
 Delta: 19.43 Left  
 Degree of Curvature(Arc): 31.83  
 Length: 61.03

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Tangent: 30.75  
 Chord: 60.79  
 Middle Ordinate: 2.32  
 External: 2.35  
 Tangent Direction: 75.89  
 Radial Direction: 175.89  
 Chord Direction: 66.18  
 Radial Direction: 156.47  
 Tangent Direction: 56.47

Element: Linear

KŁ ( ) 1+487.60 5859782.4239 5542971.2163  
 W ( ) 1+551.36 5859822.7050 5543020.6400  
 Tangent Direction: 56.47  
 Tangent Length: 63.76

Element: Linear

W ( ) 1+551.36 5859822.7050 5543020.6400  
 PŁ ( ) 1+604.30 5859855.4266 5543062.2553  
 Tangent Direction: 57.58  
 Tangent Length: 52.94

Element: Circular

PŁ ( ) 1+604.30 5859855.4266 5543062.2553  
 W ( ) 1+613.80 5859861.3000 5543069.7250  
 CC ( ) 5859737.5118 5543154.9704  
 KŁ ( ) 1+623.28 5859866.1838 5543077.8762  
 Radius: 150.00  
 Design Speed(kmph): 30.00  
 Superelevation: 2.00%  
 Delta: 8.06 Right  
 Degree of Curvature(Arc): 42.44  
 Length: 18.98  
 Tangent: 9.50  
 Chord: 18.97  
 Middle Ordinate: 0.30  
 External: 0.30  
 Tangent Direction: 57.58  
 Radial Direction: 157.58  
 Chord Direction: 61.61  
 Radial Direction: 165.64  
 Tangent Direction: 65.64

Element: Linear

KŁ ( ) 1+623.28 5859866.1838 5543077.8762  
 PŁ ( ) 1+633.02 5859871.1882 5543086.2285  
 Tangent Direction: 65.64  
 Tangent Length: 9.74

Element: Circular

PŁ ( ) 1+633.02 5859871.1882 5543086.2285  
 W ( ) 1+650.05 5859879.9434 5543100.8412  
 CC ( ) 5859785.4068 5543137.6247  
 KŁ ( ) 1+666.76 5859883.3667 5543117.5284  
 Radius: 100.00  
 Design Speed(kmph): 30.00  
 Superelevation: 2.00%  
 Delta: 21.48 Right  
 Degree of Curvature(Arc): 63.66  
 Length: 33.75  
 Tangent: 17.03  
 Chord: 33.59  
 Middle Ordinate: 1.42  
 External: 1.44  
 Tangent Direction: 65.64  
 Radial Direction: 165.64  
 Chord Direction: 76.38  
 Radial Direction: 187.12

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87.12

Tangent Direction:				
Element: Linear				
KŁ (            )	1+666.76	5859883.3667	5543117.5284	
PŁ (            )	1+685.43	5859887.1179	5543135.8134	
Tangent Direction:	87.12			
Tangent Length:	18.67			
Element: Circular				
PŁ (            )	1+685.43	5859887.1179	5543135.8134	
W (            )	1+697.10	5859889.4628	5543147.2438	
CC (            )		5859691.1981	5543176.0060	
KŁ (            )	1+708.74	5859890.4626	5543158.8692	
Radius:	200.00			
Design Speed(kmph):	30.00			
Superelevation:	2.00%			
Delta:	7.42	Right		
Degree of Curvature(Arc):	31.83			
Length:	23.31			
Tangent:	11.67			
Chord:	23.30			
Middle Ordinate:	0.34			
External:	0.34			
Tangent Direction:	87.12			
Radial Direction:	187.12			
Chord Direction:	90.83			
Radial Direction:	194.54			
Tangent Direction:	94.54			
Element: Linear				
KŁ (            )	1+708.74	5859890.4626	5543158.8692	
W (            )	1+726.10	5859891.9500	5543176.1650	
Tangent Direction:	94.54			
Tangent Length:	17.36			
Element: Linear				
W (            )	1+726.10	5859891.9500	5543176.1650	
W (            )	1+754.28	5859894.5339	5543204.2237	
Tangent Direction:	94.15			
Tangent Length:	28.18			
Element: Linear				
W (            )	1+754.28	5859894.5339	5543204.2237	
PŁ (            )	1+824.38	5859899.3063	5543274.1603	
Tangent Direction:	95.66			
Tangent Length:	70.10			
Element: Circular				
PŁ (            )	1+824.38	5859899.3063	5543274.1603	
W (            )	1+834.20	5859899.9750	5543283.9600	
CC (            )		5859869.3759	5543276.2027	
KŁ (            )	1+843.36	5859894.7184	5543292.2575	
Radius:	30.00			
Design Speed(kmph):	30.00			
Superelevation:	2.00%			
Delta:	40.29	Right		
Degree of Curvature(Arc):	212.21			
Length:	18.98			
Tangent:	9.82			
Chord:	18.67			
Middle Ordinate:	1.49			
External:	1.57			
Tangent Direction:	95.66			
Radial Direction:	195.66			
Chord Direction:	115.81			
Radial Direction:	235.95			
Tangent Direction:	135.95			

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Element: Linear			
KŁ (            )	1+843.36	5859894.7184	5543292.2575
W (            )	1+862.88	5859884.2711	5543308.7485
Tangent Direction:	135.95		
Tangent Length:	19.52		
Element: Linear			
W (            )	1+862.88	5859884.2711	5543308.7485
W (            )	1+997.46	5859803.3450	5543416.2800
Tangent Direction:	141.07		
Tangent Length:	134.58		
Element: Linear			
W (            )	1+997.46	5859803.3450	5543416.2800
W (            )	2+094.57	5859743.8279	5543493.0098
Tangent Direction:	142.00		
Tangent Length:	97.11		
Element: Linear			
W (            )	2+094.57	5859743.8279	5543493.0098
W (            )	2+191.68	5859684.3109	5543569.7396
Tangent Direction:	142.00		
Tangent Length:	97.11		
Element: Linear			
W (            )	2+191.68	5859684.3109	5543569.7396
W (            )	2+249.42	5859648.1554	5543614.7598
Tangent Direction:	143.08		
Tangent Length:	57.74		
Element: Linear			
W (            )	2+249.42	5859648.1554	5543614.7598
PŁ (            )	2+292.88	5859620.9431	5543648.6442
Tangent Direction:	143.08		
Tangent Length:	43.46		
Element: Circular			
PŁ (            )	2+292.88	5859620.9431	5543648.6442
W (            )	2+307.16	5859612.0000	5543659.7800
CC (            )		5859776.8812	5543773.8772
KŁ (            )	2+321.39	5859604.7301	5543672.0735
Radius:	200.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	9.08	Left	
Degree of Curvature(Arc):	31.83		
Length:	28.52		
Tangent:	14.28		
Chord:	28.49		
Middle Ordinate:	0.51		
External:	0.51		
Tangent Direction:	143.08		
Radial Direction:	243.08		
Chord Direction:	138.54		
Radial Direction:	234.00		
Tangent Direction:	134.00		
Element: Linear			
KŁ (            )	2+321.39	5859604.7301	5543672.0735
PŁ (            )	2+331.08	5859599.7976	5543680.4143
Tangent Direction:	134.00		
Tangent Length:	9.69		
Element: Circular			
PŁ (            )	2+331.08	5859599.7976	5543680.4143
W (            )	2+348.27	5859591.0519	5543695.2034
CC (            )		5859617.0128	5543690.5947
KŁ (            )	2+359.47	5859604.3537	5543706.0785

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Radius: 20.00  
 Design Speed(kmph): 30.00  
 Superelevation: -2.00%  
 Delta: 90.37 Left  
 Degree of Curvature(Arc): 318.31  
 Length: 28.39  
 Tangent: 17.18  
 Chord: 26.07  
 Middle Ordinate: 4.83  
 External: 6.37  
 Tangent Direction: 134.00  
 Radial Direction: 234.00  
 Chord Direction: 88.81  
 Radial Direction: 143.63  
 Tangent Direction: 43.63

Element: Linear  
 KŁ ( ) 2+359.47 5859604.3537 5543706.0785  
 PŁ ( ) 2+374.08 5859615.6649 5543715.3261  
 Tangent Direction: 43.63  
 Tangent Length: 14.61

Element: Circular  
 PŁ ( ) 2+374.08 5859615.6649 5543715.3261  
 W ( ) 2+383.39 5859622.8711 5543721.2177  
 CC ( ) 5859640.9830 5543684.3585  
 KŁ ( ) 2+392.37 5859631.9381 5543723.3225  
 Radius: 40.00  
 Design Speed(kmph): 30.00  
 Superelevation: -2.00%  
 Delta: 29.11 Left  
 Degree of Curvature(Arc): 159.15  
 Length: 18.29  
 Tangent: 9.31  
 Chord: 18.13  
 Middle Ordinate: 1.04  
 External: 1.07  
 Tangent Direction: 43.63  
 Radial Direction: 143.63  
 Chord Direction: 29.08  
 Radial Direction: 114.52  
 Tangent Direction: 14.52

Element: Linear  
 KŁ ( ) 2+392.37 5859631.9381 5543723.3225  
 PŁ ( ) 2+404.24 5859643.4974 5543726.0058  
 Tangent Direction: 14.52  
 Tangent Length: 11.87

Element: Circular  
 PŁ ( ) 2+404.24 5859643.4974 5543726.0058  
 W ( ) 2+418.83 5859657.7100 5543729.3050  
 CC ( ) 5859666.1095 5543628.5959  
 KŁ ( ) 2+433.22 5859672.2728 5543728.4057  
 Radius: 100.00  
 Design Speed(kmph): 30.00  
 Superelevation: -2.00%  
 Delta: 18.45 Left  
 Degree of Curvature(Arc): 63.66  
 Length: 28.98  
 Tangent: 14.59  
 Chord: 28.88  
 Middle Ordinate: 1.05  
 External: 1.06  
 Tangent Direction: 14.52  
 Radial Direction: 114.52  
 Chord Direction: 5.30  
 Radial Direction: 96.07

Tangent Direction:	396.07		
Element: Linear			
KL (            )	2+433.22	5859672.2728	5543728.4057
PL (            )	2+442.23	5859681.2726	5543727.8500
Tangent Direction:	396.07		
Tangent Length:	9.02		
Element: Circular			
PL (            )	2+442.23	5859681.2726	5543727.8500
W (            )	2+453.30	5859692.3173	5543727.1680
CC (            )		5859690.5174	5543877.5648
KL (            )	2+464.33	5859703.3426	5543728.1141
Radius:	150.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	9.38	Right	
Degree of Curvature(Arc):	42.44		
Length:	22.09		
Tangent:	11.07		
Chord:	22.07		
Middle Ordinate:	0.41		
External:	0.41		
Tangent Direction:	396.07		
Radial Direction:	96.07		
Chord Direction:	0.76		
Radial Direction:	105.45		
Tangent Direction:	5.45		
Element: Linear			
KL (            )	2+464.33	5859703.3426	5543728.1141
PL (            )	2+467.47	5859706.4742	5543728.3829
Tangent Direction:	5.45		
Tangent Length:	3.14		
Element: Circular			
PL (            )	2+467.47	5859706.4742	5543728.3829
W (            )	2+505.15	5859744.0209	5543731.6050
CC (            )		5859694.5041	5543867.8702
KL (            )	2+541.09	5859774.8768	5543753.2394
Radius:	140.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	33.48	Right	
Degree of Curvature(Arc):	45.47		
Length:	73.62		
Tangent:	37.68		
Chord:	72.78		
Middle Ordinate:	4.81		
External:	4.98		
Tangent Direction:	5.45		
Radial Direction:	105.45		
Chord Direction:	22.19		
Radial Direction:	138.93		
Tangent Direction:	38.93		
Element: Linear			
KL (            )	2+541.09	5859774.8768	5543753.2394
PL (            )	2+579.66	5859806.4575	5543775.3820
Tangent Direction:	38.93		
Tangent Length:	38.57		
Element: Circular			
PL (            )	2+579.66	5859806.4575	5543775.3820
W (            )	2+607.39	5859829.1628	5543791.3016
CC (            )		5859634.2303	5544021.0195
KL (            )	2+634.97	5859848.5652	5543811.1135
Radius:	300.00		

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Design Speed(kmph): 30.00  
 Superelevation: 2.00%  
 Delta: 11.74 Right  
 Degree of Curvature(Arc): 21.22  
 Length: 55.30  
 Tangent: 27.73  
 Chord: 55.23  
 Middle Ordinate: 1.27  
 External: 1.28  
 Tangent Direction: 38.93  
 Radial Direction: 138.93  
 Chord Direction: 44.80  
 Radial Direction: 150.66  
 Tangent Direction: 50.66

Element: Linear  
 KL ( ) 2+634.97 5859848.5652 5543811.1135  
 PL ( ) 2+660.70 5859866.5672 5543829.4953  
 Tangent Direction: 50.66  
 Tangent Length: 25.73

Element: Circular  
 PL ( ) 2+660.70 5859866.5672 5543829.4953  
 W ( ) 2+680.49 5859880.4151 5543843.6354  
 CC ( ) 5859759.3997 5543934.4483  
 KL ( ) 2+700.05 5859890.1215 5543860.8833  
 Radius: 150.00  
 Design Speed(kmph): 30.00  
 Superelevation: 2.00%  
 Delta: 16.70 Right  
 Degree of Curvature(Arc): 42.44  
 Length: 39.36  
 Tangent: 19.79  
 Chord: 39.24  
 Middle Ordinate: 1.29  
 External: 1.30  
 Tangent Direction: 50.66  
 Radial Direction: 150.66  
 Chord Direction: 59.02  
 Radial Direction: 167.37  
 Tangent Direction: 67.37

Element: Linear  
 KL ( ) 2+700.05 5859890.1215 5543860.8833  
 PL ( ) 2+710.29 5859895.1417 5543869.8038  
 Tangent Direction: 67.37  
 Tangent Length: 10.24

Element: Circular  
 PL ( ) 2+710.29 5859895.1417 5543869.8038  
 W ( ) 2+730.35 5859904.9818 5543887.2894  
 CC ( ) 5859790.5642 5543928.6559  
 KL ( ) 2+750.05 5859908.5986 5543907.0249  
 Radius: 120.00  
 Design Speed(kmph): 30.00  
 Superelevation: 2.00%  
 Delta: 21.09 Right  
 Degree of Curvature(Arc): 53.05  
 Length: 39.76  
 Tangent: 20.06  
 Chord: 39.58  
 Middle Ordinate: 1.64  
 External: 1.67  
 Tangent Direction: 67.37  
 Radial Direction: 167.37  
 Chord Direction: 77.91  
 Radial Direction: 188.46  
 Tangent Direction: 88.46

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Element: Linear			
KL (            )	2+750.05	5859908.5986	5543907.0249
PL (            )	2+762.08	5859910.7666	5543918.8553
Tangent Direction:	88.46		
Tangent Length:	12.03		
Element: Circular			
PL (            )	2+762.08	5859910.7666	5543918.8553
W (            )	2+774.86	5859913.0713	5543931.4316
CC (            )		5859763.2237	5543945.8940
KL (            )	2+787.59	5859913.2143	5543944.2165
Radius:	150.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	10.83	Right	
Degree of Curvature(Arc):	42.44		
Length:	25.51		
Tangent:	12.79		
Chord:	25.48		
Middle Ordinate:	0.54		
External:	0.54		
Tangent Direction:	88.46		
Radial Direction:	188.46		
Chord Direction:	93.87		
Radial Direction:	199.29		
Tangent Direction:	99.29		
Element: Linear			
KL (            )	2+787.59	5859913.2143	5543944.2165
PL (            )	2+799.45	5859913.3470	5543956.0827
Tangent Direction:	99.29		
Tangent Length:	11.87		
Element: Circular			
PL (            )	2+799.45	5859913.3470	5543956.0827
W (            )	2+836.31	5859913.7592	5543992.9341
CC (            )		5859713.3595	5543958.3193
KL (            )	2+872.34	5859901.0091	5544027.5120
Radius:	200.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	23.20	Right	
Degree of Curvature(Arc):	31.83		
Length:	72.89		
Tangent:	36.85		
Chord:	72.49		
Middle Ordinate:	3.31		
External:	3.37		
Tangent Direction:	99.29		
Radial Direction:	199.29		
Chord Direction:	110.89		
Radial Direction:	222.49		
Tangent Direction:	122.49		
Element: Linear			
KL (            )	2+872.34	5859901.0091	5544027.5120
PL (            )	2+917.71	5859885.3133	5544070.0790
Tangent Direction:	122.49		
Tangent Length:	45.37		
Element: Circular			
PL (            )	2+917.71	5859885.3133	5544070.0790
W (            )	2+927.63	5859881.8800	5544079.3900
CC (            )		5859603.8388	5543966.2901
KL (            )	2+937.55	5859877.8389	5544088.4537
Radius:	300.00		
Design Speed(kmph):	30.00		

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Superelevation:	2.00%		
Delta:	4.21	Right	
Degree of Curvature(Arc):	21.22		
Length:	19.84		
Tangent:	9.92		
Chord:	19.84		
Middle Ordinate:	0.16		
External:	0.16		
Tangent Direction:	122.49		
Radial Direction:	222.49		
Chord Direction:	124.59		
Radial Direction:	226.70		
Tangent Direction:	126.70		
Element: Linear			
KL ( )	2+937.55	5859877.8389	5544088.4537
PL ( )	2+977.41	5859861.6093	5544124.8551
Tangent Direction:	126.70		
Tangent Length:	39.86		
Element: Circular			
PL ( )	2+977.41	5859861.6093	5544124.8551
W ( )	2+984.27	5859858.8158	5544131.1206
CC ( )		5859843.3426	5544116.7108
KL ( )	2+990.62	5859852.7647	5544134.3524
Radius:	20.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	42.07	Right	
Degree of Curvature(Arc):	318.31		
Length:	13.22		
Tangent:	6.86		
Chord:	12.98		
Middle Ordinate:	1.08		
External:	1.14		
Tangent Direction:	126.70		
Radial Direction:	226.70		
Chord Direction:	147.74		
Radial Direction:	268.77		
Tangent Direction:	168.77		
Element: Linear			
KL ( )	2+990.62	5859852.7647	5544134.3524
PL ( )	3+001.50	5859843.1720	5544139.4756
Tangent Direction:	168.77		
Tangent Length:	10.88		
Element: Circular			
PL ( )	3+001.50	5859843.1720	5544139.4756
W ( )	3+010.27	5859835.4341	5544143.6083
CC ( )		5859786.6397	5544033.6262
KL ( )	3+019.01	5859827.1774	5544146.5718
Radius:	120.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	9.29	Right	
Degree of Curvature(Arc):	53.05		
Length:	17.51		
Tangent:	8.77		
Chord:	17.50		
Middle Ordinate:	0.32		
External:	0.32		
Tangent Direction:	168.77		
Radial Direction:	268.77		
Chord Direction:	173.42		
Radial Direction:	278.06		
Tangent Direction:	178.06		

tyczenie\_oś\_odc\_1.txt

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Element: Linear
      KL (      )      3+019.01  5859827.1774  5544146.5718
      PL (      )      3+023.55  5859822.9021  5544148.1062
      Tangent Direction: 178.06
      Tangent Length:   4.54

Element: Circular
      PL (      )      3+023.55  5859822.9021  5544148.1062
      W (      )      3+038.15  5859809.1642  5544153.0369
      CC (      )      5859782.3644  5544035.1607
      KL (      )      3+052.60  5859794.6450  5544154.5306
      Radius:          120.00
      Design Speed(kmph): 30.00
      Superelevation:   2.00%
      Delta:           15.41 Right
      Degree of Curvature(Arc): 53.05
      Length:          29.05
      Tangent:          14.60
      Chord:            28.98
      Middle Ordinate:  0.88
      External:         0.88
      Tangent Direction: 178.06
      Radial Direction: 278.06
      Chord Direction:  185.77
      Radial Direction: 293.47
      Tangent Direction: 193.47

Element: Linear
      KL (      )      3+052.60  5859794.6450  5544154.5306
      W (      )      3+078.66  5859768.7225  5544157.1975
      Tangent Direction: 193.47
      Tangent Length:   26.06

Element: Linear
      W (      )      3+078.66  5859768.7225  5544157.1975
      PL (      )      3+098.64  5859748.7937  5544158.5607
      Tangent Direction: 195.65
      Tangent Length:   19.98

Element: Circular
      PL (      )      3+098.64  5859748.7937  5544158.5607
      W (      )      3+109.62  5859737.8400  5544159.3100
      CC (      )      5859735.1447  5543959.0270
      KL (      )      3+120.57  5859726.8701  5544158.8558
      Radius:          200.00
      Design Speed(kmph): 30.00
      Superelevation:   2.00%
      Delta:           6.98 Right
      Degree of Curvature(Arc): 31.83
      Length:          21.94
      Tangent:          10.98
      Chord:            21.93
      Middle Ordinate:  0.30
      External:         0.30
      Tangent Direction: 195.65
      Radial Direction: 295.65
      Chord Direction:  199.14
      Radial Direction: 302.63
      Tangent Direction: 202.63

Element: Linear
      KL (      )      3+120.57  5859726.8701  5544158.8558
      PL (      )      3+134.33  5859713.1251  5544158.2866
      Tangent Direction: 202.63
      Tangent Length:   13.76

Element: Circular
      PL (      )      3+134.33  5859713.1251  5544158.2866

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	tyczenie_oś_odc_1.txt			
W ( )	3+157.66	5859689.8177	5544157.3215	
CC ( )		5859721.3997	5543958.4578	
KŁ ( )	3+180.78	5859667.3581	5544151.0182	
Radius:	200.00			
Design Speed(kmph):	30.00			
Superelevation:	2.00%			
Delta:	14.78	Right		
Degree of Curvature(Arc):	31.83			
Length:	46.44			
Tangent:	23.33			
Chord:	46.34			
Middle Ordinate:	1.35			
External:	1.36			
Tangent Direction:	202.63			
Radial Direction:	302.63			
Chord Direction:	210.03			
Radial Direction:	317.42			
Tangent Direction:	217.42			
Element: Linear				
KŁ ( )	3+180.78	5859667.3581	5544151.0182	
PŁ ( )	3+222.14	5859627.5334	5544139.8415	
Tangent Direction:	217.42			
Tangent Length:	41.36			
Element: Circular				
PŁ ( )	3+222.14	5859627.5334	5544139.8415	
W ( )	3+256.83	5859594.1314	5544130.4674	
CC ( )		5859573.4918	5544332.4019	
KŁ ( )	3+290.84	5859559.5237	5544132.8903	
Radius:	200.00			
Design Speed(kmph):	30.00			
Superelevation:	-2.00%			
Delta:	21.87	Left		
Degree of Curvature(Arc):	31.83			
Length:	68.70			
Tangent:	34.69			
Chord:	68.36			
Middle Ordinate:	2.94			
External:	2.99			
Tangent Direction:	217.42			
Radial Direction:	317.42			
Chord Direction:	206.48			
Radial Direction:	295.55			
Tangent Direction:	195.55			
Element: Linear				
KŁ ( )	3+290.84	5859559.5237	5544132.8903	
W ( )	3+309.60	5859540.8139	5544134.2002	
Tangent Direction:	195.55			
Tangent Length:	18.76			
Element: Linear				
W ( )	3+309.60	5859540.8139	5544134.2002	
PŁ ( )	3+322.92	5859527.5806	5544135.7387	
Tangent Direction:	192.63			
Tangent Length:	13.32			
Element: Circular				
PŁ ( )	3+322.92	5859527.5806	5544135.7387	
W ( )	3+353.51	5859497.1928	5544139.2716	
CC ( )		5859533.3547	5544185.4042	
KŁ ( )	3+377.83	5859486.5052	5544167.9365	
Radius:	50.00			
Design Speed(kmph):	30.00			
Superelevation:	-2.00%			
Delta:	69.91	Left		
Degree of Curvature(Arc):	127.32			

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Length: 54.91  
Tangent: 30.59  
Chord: 52.19  
Middle Ordinate: 7.35  
External: 8.62  
Tangent Direction: 192.63  
Radial Direction: 292.63  
Chord Direction: 157.68  
Radial Direction: 222.72  
Tangent Direction: 122.72

Element: Linear  
KL ( ) 3+377.83 5859486.5052 5544167.9365  
PL ( ) 3+390.06 5859482.2310 5544179.4000  
Tangent Direction: 122.72  
Tangent Length: 12.23

Element: Circular  
PL ( ) 3+390.06 5859482.2310 5544179.4000  
W ( ) 3+415.32 5859473.4064 5544203.0683  
CC ( ) 5859294.8328 5544109.5294  
KL ( ) 3+440.32 5859458.9742 5544223.7993  
Radius: 200.00  
Design Speed(kmph): 30.00  
Superelevation: 2.00%  
Delta: 16.00 Right  
Degree of Curvature(Arc): 31.83  
Length: 50.25  
Tangent: 25.26  
Chord: 50.12  
Middle Ordinate: 1.58  
External: 1.59  
Tangent Direction: 122.72  
Radial Direction: 222.72  
Chord Direction: 130.72  
Radial Direction: 238.72  
Tangent Direction: 138.72

Element: Linear  
KL ( ) 3+440.32 5859458.9742 5544223.7993  
W ( ) 3+480.39 5859436.0750 5544256.6925  
Tangent Direction: 138.72  
Tangent Length: 40.08

Element: Linear  
W ( ) 3+480.39 5859436.0750 5544256.6925  
PL ( ) 3+523.16 5859413.7577 5544293.1750  
Tangent Direction: 134.95  
Tangent Length: 42.77

Element: Circular  
PL ( ) 3+523.16 5859413.7577 5544293.1750  
W ( ) 3+540.08 5859404.9296 5544307.6064  
CC ( ) 5859243.1481 5544188.8085  
KL ( ) 3+556.92 5859393.8029 5544320.3498  
Radius: 200.00  
Design Speed(kmph): 30.00  
Superelevation: 2.00%  
Delta: 10.74 Right  
Degree of Curvature(Arc): 31.83  
Length: 33.75  
Tangent: 16.92  
Chord: 33.71  
Middle Ordinate: 0.71  
External: 0.71  
Tangent Direction: 134.95  
Radial Direction: 234.95  
Chord Direction: 140.32

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Radial Direction:	245.69		
Tangent Direction:	145.69		
Element: Linear			
KL (            )	3+556.92	5859393.8029	5544320.3498
PL (            )	3+593.14	5859369.9759	5544347.6391
Tangent Direction:	145.69		
Tangent Length:	36.23		
Element: Circular			
PL (            )	3+593.14	5859369.9759	5544347.6391
W (            )	3+613.08	5859356.8650	5544362.6550
CC (            )		5859219.3210	5544216.0978
KL (            )	3+632.88	5859341.0482	5544374.7877
Radius:	200.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	12.65	Right	
Degree of Curvature(Arc):	31.83		
Length:	39.74		
Tangent:	19.93		
Chord:	39.67		
Middle Ordinate:	0.99		
External:	0.99		
Tangent Direction:	145.69		
Radial Direction:	245.69		
Chord Direction:	152.02		
Radial Direction:	258.34		
Tangent Direction:	158.34		
Element: Linear			
KL (            )	3+632.88	5859341.0482	5544374.7877
PL (            )	3+758.42	5859241.4390	5544451.1955
Tangent Direction:	158.34		
Tangent Length:	125.54		
Element: Circular			
PL (            )	3+758.42	5859241.4390	5544451.1955
W (            )	3+786.66	5859219.0352	5544468.3809
CC (            )		5859271.8708	5544490.8680
KL (            )	3+809.83	5859222.1823	5544496.4408
Radius:	50.00		
Design Speed(kmph):	30.00		
Superelevation:	-2.00%		
Delta:	65.45	Left	
Degree of Curvature(Arc):	127.32		
Length:	51.41		
Tangent:	28.24		
Chord:	49.17		
Middle Ordinate:	6.46		
External:	7.42		
Tangent Direction:	158.34		
Radial Direction:	258.34		
Chord Direction:	125.62		
Radial Direction:	192.89		
Tangent Direction:	92.89		
Element: Linear			
KL (            )	3+809.83	5859222.1823	5544496.4408
W (            )	3+829.83	5859224.4114	5544516.3162
Tangent Direction:	92.89		
Tangent Length:	20.00		
Element: Linear			
W (            )	3+829.83	5859224.4114	5544516.3162
W (            )	3+870.38	5859229.0079	5544556.6031
Tangent Direction:	92.77		
Tangent Length:	40.55		

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Element: Linear			
W ( )	3+870.38	5859229.0079	5544556.6031
W ( )	3+923.03	5859235.6480	5544608.8332
Tangent Direction:	91.95		
Tangent Length:	52.65		
Element: Linear			
W ( )	3+923.03	5859235.6480	5544608.8332
PL ( )	3+943.03	5859238.0594	5544628.6874
Tangent Direction:	92.31		
Tangent Length:	20.00		
Element: Circular			
PL ( )	3+943.03	5859238.0594	5544628.6874
W ( )	3+964.50	5859240.6485	5544650.0049
CC ( )		5859118.9348	5544643.1555
KL ( )	3+985.53	5859235.6841	5544670.8973
Radius:	120.00		
Design Speed(kmph):	30.00		
Superelevation:	2.00%		
Delta:	22.55	Right	
Degree of Curvature(Arc):	53.05		
Length:	42.50		
Tangent:	21.47		
Chord:	42.28		
Middle Ordinate:	1.88		
External:	1.91		
Tangent Direction:	92.31		
Radial Direction:	192.31		
Chord Direction:	103.58		
Radial Direction:	214.85		
Tangent Direction:	114.85		
Element: Linear			
KL ( )	3+985.53	5859235.6841	5544670.8973
W ( )	4+005.53	5859231.0604	5544690.3555
Tangent Direction:	114.85		
Tangent Length:	20.00		
Element: Linear			
W ( )	4+005.53	5859231.0604	5544690.3555
W ( )	4+086.02	5859212.4509	5544768.6723
Tangent Direction:	114.85		
Tangent Length:	80.50		
Element: Linear			
W ( )	4+086.02	5859212.4509	5544768.6723
W ( )	4+219.82	5859182.0247	5544898.9633
Tangent Direction:	114.60		
Tangent Length:	133.80		
Element: Linear			
W ( )	4+219.82	5859182.0247	5544898.9633
W ( )	4+304.39	5859163.0264	5544981.3736
Tangent Direction:	114.42		
Tangent Length:	84.57		
Element: Linear			
W ( )	4+304.39	5859163.0264	5544981.3736
KONIEC ( )	4+365.48	5859147.9300	5545040.5650
Tangent Direction:	115.90		
Tangent Length:	61.09		

Project Name: tyczenie\_niweleta\_odc\_1.txt  
 Description: Rokitno  
 Horizontal Alignment Name: odc\_1  
 Description:  
 Style: Geom\_plan  
 Vertical Alignment Name: niw\_1  
 Description:  
 Style: Geom\_plan

	STATION	ELEVATION
Element: Linear		
POCZĄTEK	0+000.00	73.667
PŁP	0+078.96	71.298
Tangent Grade:	-3.00	
Tangent Length:	78.96	
Element: Parabola		
PŁP	0+078.96	71.298
WP	0+097.71	70.736
KŁP	0+116.46	70.642
Length:	37.50	
Headlight Sight Distance:	142.50	
Entrance Grade:	-3.00	
Exit Grade:	-0.50	
$r = (g2 - g1) / L$ :	6.67	
$K = 1 / (g2 - g1)$ :	15.00	
Middle Ordinate:	0.12	
Element: Linear		
KŁP	0+116.46	70.642
WP	0+175.49	70.347
Tangent Grade:	-0.50	
Tangent Length:	59.03	
Element: Linear		
WP	0+175.49	70.347
WP	0+231.86	70.065
Tangent Grade:	-0.50	
Tangent Length:	56.37	
Element: Linear		
WP	0+231.86	70.065
PŁP	0+282.43	69.357
Tangent Grade:	-1.40	
Tangent Length:	50.57	
Element: Parabola		
PŁP	0+282.43	69.357
WP	0+298.93	69.126
KŁP	0+315.43	68.714
Length:	33.00	
Stopping Sight Distance:	270.29	
Entrance Grade:	-1.40	
Exit Grade:	-2.50	
$r = (g2 - g1) / L$ :	-3.33	
$K = 1 / (g2 - g1)$ :	30.00	
Middle Ordinate:	-0.05	
Element: Linear		
KŁP	0+315.43	68.714
WP	0+369.20	67.369
Tangent Grade:	-2.50	
Tangent Length:	53.77	
Element: Linear		
WP	0+369.20	67.369
WP	0+398.19	66.848
Tangent Grade:	-1.80	

Tangent Length: 28.99

Element: Linear

WP	0+398.19	66.848
WP	0+508.81	65.631
Tangent Grade:	-1.10	
Tangent Length:	110.62	

Element: Linear

WP	0+508.81	65.631
WP	0+560.66	64.594
Tangent Grade:	-2.00	
Tangent Length:	51.85	

Element: Linear

WP	0+560.66	64.594
WP	0+625.38	63.623
Tangent Grade:	-1.50	
Tangent Length:	64.72	

Element: Linear

WP	0+625.38	63.623
WP	0+693.43	62.466
Tangent Grade:	-1.70	
Tangent Length:	68.05	

Element: Linear

WP	0+693.43	62.466
WP	0+794.40	61.153
Tangent Grade:	-1.30	
Tangent Length:	100.98	

Element: Linear

WP	0+794.40	61.153
WP	0+896.42	59.623
Tangent Grade:	-1.50	
Tangent Length:	102.02	

Element: Linear

WP	0+896.42	59.623
WP	0+964.89	58.391
Tangent Grade:	-1.80	
Tangent Length:	68.47	

Element: Linear

WP	0+964.89	58.391
WP	1+017.63	57.600
Tangent Grade:	-1.50	
Tangent Length:	52.74	

Element: Linear

WP	1+017.63	57.600
WP	1+104.46	57.079
Tangent Grade:	-0.60	
Tangent Length:	86.83	

Element: Linear

WP	1+104.46	57.079
WP	1+202.03	56.883
Tangent Grade:	-0.20	
Tangent Length:	97.56	

Element: Linear

WP	1+202.03	56.883
WP	1+311.60	56.007
Tangent Grade:	-0.80	
Tangent Length:	109.58	

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Element: Linear	WP	1+311.60	56.007
	WP	1+423.57	55.783
	Tangent Grade:	-0.20	
	Tangent Length:	111.97	
Element: Linear	WP	1+423.57	55.783
	PŁP	1+483.45	56.442
	Tangent Grade:	1.10	
	Tangent Length:	59.87	
Element: Parabola	PŁP	1+483.45	56.442
	WP	1+512.70	56.763
	KŁP	1+541.95	56.515
	MAX	1+516.45	56.623
	Length:	58.50	
Stopping Sight Distance:		172.41	
	Entrance Grade:	1.10	
	Exit Grade:	-0.85	
	$r = (g_2 - g_1) / L:$	-3.33	
	$K = 1 / (g_2 - g_1):$	30.00	
	Middle Ordinate:	-0.14	
Element: Linear	KŁP	1+541.95	56.515
	WP	1+599.34	56.027
	Tangent Grade:	-0.85	
	Tangent Length:	57.40	
Element: Linear	WP	1+599.34	56.027
	WP	1+674.85	54.705
	Tangent Grade:	-1.75	
	Tangent Length:	75.50	
Element: Linear	WP	1+674.85	54.705
	WP	1+721.01	54.244
	Tangent Grade:	-1.00	
	Tangent Length:	46.16	
Element: Linear	WP	1+721.01	54.244
	WP	1+815.28	53.820
	Tangent Grade:	-0.45	
	Tangent Length:	94.27	
Element: Linear	WP	1+815.28	53.820
	WP	1+913.57	53.377
	Tangent Grade:	-0.45	
	Tangent Length:	98.29	
Element: Linear	WP	1+913.57	53.377
	WP	1+985.26	53.377
	Tangent Grade:	0.00	
	Tangent Length:	71.70	
Element: Linear	WP	1+985.26	53.377
	WP	2+089.69	54.108
	Tangent Grade:	0.70	
	Tangent Length:	104.42	

Element: Linear

	tyczenie_niwelleta_odc_1.txt		
	WP	2+089.69	54.108
	PŁP	2+192.19	55.441
	Tangent Grade:	1.30	
	Tangent Length:	102.51	
Element: Parabola			
	PŁP	2+192.19	55.441
	WP	2+232.69	55.967
	KŁP	2+273.19	54.854
	MAX	2+218.19	55.610
	Length:	81.00	
Stopping Sight Distance:		109.43	
Entrance Grade:		1.30	
Exit Grade:		-2.75	
$r = (g_2 - g_1) / L$ :		-5.00	
$K = 1 / (g_2 - g_1)$ :		20.00	
Middle Ordinate:		-0.41	
Element: Linear			
	KŁP	2+273.19	54.854
	PŁP	2+331.67	53.246
	Tangent Grade:	-2.75	
	Tangent Length:	58.48	
Element: Parabola			
	PŁP	2+331.67	53.246
	WP	2+360.67	52.448
	KŁP	2+389.67	52.492
	MIN	2+386.67	52.489
	Length:	58.00	
Headlight Sight Distance:		125.30	
Entrance Grade:		-2.75	
Exit Grade:		0.15	
$r = (g_2 - g_1) / L$ :		5.00	
$K = 1 / (g_2 - g_1)$ :		20.00	
Middle Ordinate:		0.21	
Element: Linear			
	KŁP	2+389.67	52.492
	WP	2+466.83	52.607
	Tangent Grade:	0.15	
	Tangent Length:	77.16	
Element: Linear			
	WP	2+466.83	52.607
	WP	2+524.13	53.123
	Tangent Grade:	0.90	
	Tangent Length:	57.30	
Element: Linear			
	WP	2+524.13	53.123
	PŁP	2+651.05	53.821
	Tangent Grade:	0.55	
	Tangent Length:	126.93	
Element: Parabola			
	PŁP	2+651.05	53.821
	WP	2+674.80	53.952
	KŁP	2+698.55	53.857
	MAX	2+678.55	53.897
	Length:	47.50	
Stopping Sight Distance:		317.61	
Entrance Grade:		0.55	
Exit Grade:		-0.40	
$r = (g_2 - g_1) / L$ :		-2.00	
$K = 1 / (g_2 - g_1)$ :		50.00	
Middle Ordinate:		-0.06	

tyczenie\_niweleta\_odc\_1.txt

```

Element: Linear
      KŁP      2+698.55      53.857
      PŁP      2+750.67      53.648
      Tangent Grade:      -0.40
      Tangent Length:      52.12

Element: Parabola
      PŁP      2+750.67      53.648
      WP      2+765.67      53.588
      KŁP      2+780.67      53.378
      Length:      30.00
      Stopping Sight Distance:      294.16
      Entrance Grade:      -0.40
      Exit Grade:      -1.40
       $r = (g_2 - g_1) / L:$       -3.33
       $K = 1 / (g_2 - g_1):$       30.00
      Middle Ordinate:      -0.04

Element: Linear
      KŁP      2+780.67      53.378
      PŁP      2+824.81      52.760
      Tangent Grade:      -1.40
      Tangent Length:      44.13

Element: Parabola
      PŁP      2+824.81      52.760
      WP      2+862.31      52.235
      KŁP      2+899.81      52.835
      MIN      2+859.81      52.515
      Length:      75.00
      Headlight Sight Distance:      138.00
      Entrance Grade:      -1.40
      Exit Grade:      1.60
       $r = (g_2 - g_1) / L:$       4.00
       $K = 1 / (g_2 - g_1):$       25.00
      Middle Ordinate:      0.28

Element: Linear
      KŁP      2+899.81      52.835
      PŁP      2+929.09      53.304
      Tangent Grade:      1.60
      Tangent Length:      29.29

Element: Parabola
      PŁP      2+929.09      53.304
      WP      2+979.09      54.104
      KŁP      3+029.09      52.904
      MAX      2+969.09      53.624
      Length:      100.00
      Stopping Sight Distance:      119.79
      Entrance Grade:      1.60
      Exit Grade:      -2.40
       $r = (g_2 - g_1) / L:$       -4.00
       $K = 1 / (g_2 - g_1):$       25.00
      Middle Ordinate:      -0.50

Element: Linear
      KŁP      3+029.09      52.904
      WP      3+160.91      49.740
      Tangent Grade:      -2.40
      Tangent Length:      131.82

Element: Linear
      WP      3+160.91      49.740
      WP      3+200.84      48.722
      Tangent Grade:      -2.55
      Tangent Length:      39.92

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tyczenie\_niweleta\_odc\_1.txt

```

Element: Linear
      WP      3+200.84      48.722
      WP      3+232.11      48.206
      Tangent Grade:      -1.65
      Tangent Length:      31.27

Element: Linear
      WP      3+232.11      48.206
      WP      3+264.24      47.837
      Tangent Grade:      -1.15
      Tangent Length:      32.13

Element: Linear
      WP      3+264.24      47.837
      PŁP      3+291.80      47.671
      Tangent Grade:      -0.60
      Tangent Length:      27.56

Element: Parabola
      PŁP      3+291.80      47.671
      WP      3+307.55      47.577
      KŁP      3+323.30      47.648
      MIN      3+309.80      47.617
      Length:      31.50
Headlight Sight Distance:      132.23
      Entrance Grade:      -0.60
      Exit Grade:      0.45
       $r = (g_2 - g_1) / L:$       3.33
       $K = 1 / (g_2 - g_1):$       30.00
      Middle Ordinate:      0.04

Element: Linear
      KŁP      3+323.30      47.648
      PŁP      3+343.98      47.741
      Tangent Grade:      0.45
      Tangent Length:      20.68

Element: Parabola
      PŁP      3+343.98      47.741
      WP      3+360.48      47.815
      KŁP      3+376.98      47.708
      MAX      3+357.48      47.771
      Length:      33.00
Stopping Sight Distance:      270.29
      Entrance Grade:      0.45
      Exit Grade:      -0.65
       $r = (g_2 - g_1) / L:$       -3.33
       $K = 1 / (g_2 - g_1):$       30.00
      Middle Ordinate:      -0.05

Element: Linear
      KŁP      3+376.98      47.708
      PŁP      3+409.41      47.497
      Tangent Grade:      -0.65
      Tangent Length:      32.42

Element: Parabola
      PŁP      3+409.41      47.497
      WP      3+426.66      47.385
      KŁP      3+443.91      47.471
      MIN      3+428.91      47.434
      Length:      34.50
Headlight Sight Distance:      132.23
      Entrance Grade:      -0.65
      Exit Grade:      0.50
       $r = (g_2 - g_1) / L:$       3.33
       $K = 1 / (g_2 - g_1):$       30.00
      Middle Ordinate:      0.05

```

tyczenie\_niweleta\_odc\_1.txt

```

Element: Linear
          KŁP      3+443.91      47.471
          PŁP      3+454.54      47.524
      Tangent Grade:      0.50
      Tangent Length:     10.64

Element: Parabola
          PŁP      3+454.54      47.524
          WP       3+471.79      47.611
          KŁP      3+489.04      47.300
          MAX      3+462.04      47.543
      Length:      34.50
      Stopping Sight Distance: 138.63
      Entrance Grade: 0.50
      Exit Grade:    -1.80
       $r = (g_2 - g_1) / L:$  -6.67
       $K = 1 / (g_2 - g_1):$  15.00
      Middle Ordinate: -0.10

Element: Linear
          KŁP      3+489.04      47.300
          PŁP      3+509.10      46.939
      Tangent Grade:    -1.80
      Tangent Length:   20.06

Element: Parabola
          PŁP      3+509.10      46.939
          WP       3+555.10      46.111
          KŁP      3+601.10      47.399
          MIN      3+545.10      46.615
      Length:      92.00
      Headlight Sight Distance: 95.30
      Entrance Grade: -1.80
      Exit Grade:     2.80
       $r = (g_2 - g_1) / L:$  5.00
       $K = 1 / (g_2 - g_1):$  20.00
      Middle Ordinate: 0.53

Element: Linear
          KŁP      3+601.10      47.399
          PŁP      3+603.55      47.468
      Tangent Grade:     2.80
      Tangent Length:    2.45

Element: Parabola
          PŁP      3+603.55      47.468
          WP       3+627.85      48.148
          KŁP      3+652.15      47.516
          MAX      3+628.75      47.820
      Length:      48.60
      Stopping Sight Distance: 76.00
      Entrance Grade: 2.80
      Exit Grade:    -2.60
       $r = (g_2 - g_1) / L:$  -11.11
       $K = 1 / (g_2 - g_1):$  9.00
      Middle Ordinate: -0.33

Element: Linear
          KŁP      3+652.15      47.516
          WP       3+688.59      46.569
      Tangent Grade:    -2.60
      Tangent Length:   36.44

Element: Linear
          WP       3+688.59      46.569
          PŁP      3+719.89      45.911
      Tangent Grade:    -2.10

```

Tangent Length: 31.30

Element: Parabola

PŁP	3+719.89	45.911
WP	3+740.14	45.486
KŁP	3+760.39	45.608
MIN	3+751.39	45.581
Length:	40.50	
Headlight Sight Distance:	120.71	
Entrance Grade:	-2.10	
Exit Grade:	0.60	
$r = (g_2 - g_1) / L$ :	6.67	
$K = 1 / (g_2 - g_1)$ :	15.00	
Middle Ordinate:	0.14	

Element: Linear

KŁP	3+760.39	45.608
WP	3+788.58	45.777
Tangent Grade:	0.60	
Tangent Length:	28.19	

Element: Linear

WP	3+788.58	45.777
WP	3+831.83	46.426
Tangent Grade:	1.50	
Tangent Length:	43.25	

Element: Linear

WP	3+831.83	46.426
PŁP	3+866.66	46.669
Tangent Grade:	0.70	
Tangent Length:	34.82	

Element: Parabola

PŁP	3+866.66	46.669
WP	3+890.66	46.837
KŁP	3+914.66	46.621
MAX	3+887.66	46.743
Length:	48.00	
Stopping Sight Distance:	198.48	
Entrance Grade:	0.70	
Exit Grade:	-0.90	
$r = (g_2 - g_1) / L$ :	-3.33	
$K = 1 / (g_2 - g_1)$ :	30.00	
Middle Ordinate:	-0.10	

Element: Linear

KŁP	3+914.66	46.621
WP	3+998.45	45.867
Tangent Grade:	-0.90	
Tangent Length:	83.80	

Element: Linear

WP	3+998.45	45.867
WP	4+054.83	45.247
Tangent Grade:	-1.10	
Tangent Length:	56.38	

Element: Linear

WP	4+054.83	45.247
WP	4+088.04	45.114
Tangent Grade:	-0.40	
Tangent Length:	33.21	

Element: Linear

WP	4+088.04	45.114
WP	4+133.81	44.428
Tangent Grade:	-1.50	

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Tangent Length: 45.77

Element: Linear

WP	4+133.81	44.428
WP	4+211.53	43.728
Tangent Grade:	-0.90	
Tangent Length:	77.72	

Element: Linear

WP	4+211.53	43.728
WP	4+255.21	43.641
Tangent Grade:	-0.20	
Tangent Length:	43.68	

Element: Linear

WP	4+255.21	43.641
WP	4+284.33	43.728
Tangent Grade:	0.30	
Tangent Length:	29.12	

Element: Linear

WP	4+284.33	43.728
WP	4+321.52	44.137
Tangent Grade:	1.10	
Tangent Length:	37.18	

Element: Linear

WP	4+321.52	44.137
KONIEC	4+365.48	44.225
Tangent Grade:	0.20	
Tangent Length:	43.96	

Project Name: Rokitno  
 Description:  
 Horizontal Alignment Name: odc1\_kr\_L  
 Description:  
 Style: Default

	STATION	NORTHING	EASTING
Element: Linear			
POCZĄTEK ( )	0+000.00	5859319.5471	5541759.2244
W ( )	0+086.82	5859362.2918	5541834.7900
Tangent Direction:	67.23		
Tangent Length:	86.82		
Element: Linear			
W ( )	0+086.82	5859362.2918	5541834.7900
W ( )	0+106.82	5859371.7036	5541852.4441
Tangent Direction:	68.82		
Tangent Length:	20.01		
Element: Linear			
W ( )	0+106.82	5859371.7036	5541852.4441
W ( )	0+179.25	5859407.3608	5541915.4803
Tangent Direction:	67.23		
Tangent Length:	72.42		
Non-coincident			
Element: Linear			
W ( )	0+179.25	5859407.4046	5541915.5620
PL ( )	0+244.71	5859436.9589	5541973.9718
Tangent Direction:	70.18		
Tangent Length:	65.46		
Non-collinear			
Element: Circular			
PL ( )	0+244.71	5859436.9589	5541973.9718
W ( )	0+263.56	5859446.0397	5541990.4913
CC ( )		5859649.2717	5541857.2626
PCC ( )	0+282.33	5859457.5665	5542005.4074
Radius:	242.28		
Delta:	9.89	Left	
Degree of Curvature(Arc):	26.28		
Length:	37.63		
Tangent:	18.85		
Chord:	37.59		
Middle Ordinate:	0.73		
External:	0.73		
Tangent Direction:	68.00		
Radial Direction:	168.00		
Chord Direction:	63.06		
Radial Direction:	158.12		
Tangent Direction:	58.12		
Non-collinear			
Element: Circular			
PCC ( )	0+282.33	5859457.5665	5542005.4074
W ( )	0+292.86	5859463.7144	5542013.9516
CC ( )		5859495.9197	5541977.8105
KL ( )	0+303.05	5859472.9078	5542019.0780
Radius:	47.25		
Delta:	27.91	Left	
Degree of Curvature(Arc):	134.73		
Length:	20.71		
Tangent:	10.53		
Chord:	20.55		
Middle Ordinate:	1.13		

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External: 1.16  
Tangent Direction: 60.29  
Radial Direction: 160.29  
Chord Direction: 46.34  
Radial Direction: 132.38  
Tangent Direction: 32.38

Non-collinear

Element: Linear  
KŁ ( ) 0+303.05 5859472.9078 5542019.0780  
W ( ) 0+304.64 5859474.2804 5542019.8917  
Tangent Direction: 34.07  
Tangent Length: 1.60

Element: Linear  
W ( ) 0+304.64 5859474.2804 5542019.8917  
W ( ) 0+317.37 5859485.0386 5542026.6989  
Tangent Direction: 35.92  
Tangent Length: 12.73

Element: Linear  
W ( ) 0+317.37 5859485.0386 5542026.6989  
PŁ ( ) 0+329.07 5859495.6075 5542031.7068  
Tangent Direction: 28.17  
Tangent Length: 11.70

Element: Circular  
PŁ ( ) 0+329.07 5859495.6075 5542031.7068  
W ( ) 0+347.26 5859512.0438 5542039.4948  
CC ( ) 5859601.7994 5541807.5924  
KŁ ( ) 0+365.38 5859529.4406 5542044.8016  
Radius: 248.00  
Delta: 9.32 Left  
Degree of Curvature(Arc): 25.67  
Length: 36.31  
Tangent: 18.19  
Chord: 36.28  
Middle Ordinate: 0.66  
External: 0.67  
Tangent Direction: 28.17  
Radial Direction: 128.17  
Chord Direction: 23.51  
Radial Direction: 118.85  
Tangent Direction: 18.85

Element: Linear  
KŁ ( ) 0+365.38 5859529.4406 5542044.8016  
PŁ ( ) 0+381.78 5859545.1277 5542049.5868  
Tangent Direction: 18.85  
Tangent Length: 16.40

Element: Circular  
PŁ ( ) 0+381.78 5859545.1277 5542049.5868  
W ( ) 0+397.18 5859559.8572 5542054.0799  
CC ( ) 5859398.6594 5542529.7441  
KŁ ( ) 0+412.57 5859574.2837 5542059.4675  
Radius: 502.00  
Delta: 3.90 Right  
Degree of Curvature(Arc): 12.68  
Length: 30.79  
Tangent: 15.40  
Chord: 30.78  
Middle Ordinate: 0.24  
External: 0.24  
Tangent Direction: 18.85  
Radial Direction: 118.85  
Chord Direction: 20.80

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Radial Direction: 122.75  
Tangent Direction: 22.75

Element: Linear  
KŁ ( ) 0+412.57 5859574.2837 5542059.4675  
W ( ) 0+442.62 5859602.4359 5542069.9809  
Tangent Direction: 22.75  
Tangent Length: 30.05

Element: Linear  
W ( ) 0+442.62 5859602.4359 5542069.9809  
W ( ) 0+458.28 5859617.5513 5542074.0585  
Tangent Direction: 16.77  
Tangent Length: 15.66

Element: Linear  
W ( ) 0+458.28 5859617.5513 5542074.0585  
PŁ ( ) 0+478.28 5859636.9913 5542078.7848  
Tangent Direction: 15.18  
Tangent Length: 20.01

Non-collinear

Element: Circular  
PŁ ( ) 0+478.28 5859636.9913 5542078.7848  
W ( ) 0+517.51 5859674.8606 5542089.0005  
CC ( ) 5859612.8994 5542168.0923  
KŁ ( ) 0+552.48 5859693.8440 5542123.3236  
Radius: 92.50  
Delta: 51.06 Right  
Degree of Curvature(Arc): 68.82  
Length: 74.19  
Tangent: 39.22  
Chord: 72.22  
Middle Ordinate: 7.34  
External: 7.97  
Tangent Direction: 16.77  
Radial Direction: 116.77  
Chord Direction: 42.31  
Radial Direction: 167.84  
Tangent Direction: 67.84

Non-collinear

Element: Linear  
KŁ ( ) 0+552.48 5859693.8440 5542123.3236  
PŁ ( ) 0+618.07 5859725.1492 5542180.9586  
Tangent Direction: 68.32  
Tangent Length: 65.59

Non-collinear

Element: Circular  
PŁ ( ) 0+618.07 5859725.1492 5542180.9586  
W ( ) 0+649.84 5859740.5284 5542208.7652  
CC ( ) 5859872.1620 5542099.6491  
KŁ ( ) 0+680.88 5859765.0008 5542229.0341  
Radius: 168.00  
Delta: 23.80 Left  
Degree of Curvature(Arc): 37.89  
Length: 62.81  
Tangent: 31.78  
Chord: 62.45  
Middle Ordinate: 2.93  
External: 2.98  
Tangent Direction: 67.84  
Radial Direction: 167.84  
Chord Direction: 55.94

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Radial Direction:	144.04			
Tangent Direction:	44.04			
Element: Linear				
KL (            )	0+680.88	5859765.0008	5542229.0341	
PL (            )	0+728.61	5859801.7598	5542259.4791	
Tangent Direction:	44.04			
Tangent Length:	47.73			
Element: Circular				
PL (            )	0+728.61	5859801.7598	5542259.4791	
W (            )	0+745.07	5859814.4391	5542269.9805	
CC (            )		5859736.6977	5542338.0343	
KL (            )	0+761.25	5859823.1706	5542283.9378	
Radius:	102.00			
Delta:	20.38 Right			
Degree of Curvature(Arc):	62.41			
Length:	32.65			
Tangent:	16.46			
Chord:	32.51			
Middle Ordinate:	1.30			
External:	1.32			
Tangent Direction:	44.04			
Radial Direction:	144.04			
Chord Direction:	54.22			
Radial Direction:	164.41			
Tangent Direction:	64.41			
Non-collinear				
Element: Linear				
KL (            )	0+761.25	5859823.1706	5542283.9378	
W (            )	0+777.84	5859832.9096	5542297.3626	
Tangent Direction:	60.05			
Tangent Length:	16.59			
Element: Linear				
W (            )	0+777.84	5859832.9096	5542297.3626	
W (            )	0+802.41	5859837.3438	5542321.5353	
Tangent Direction:	88.45			
Tangent Length:	24.58			
Element: Linear				
W (            )	0+802.41	5859837.3438	5542321.5353	
W (            )	0+827.41	5859841.0696	5542346.2561	
Tangent Direction:	90.48			
Tangent Length:	25.00			
Element: Linear				
W (            )	0+827.41	5859841.0696	5542346.2561	
W (            )	0+847.53	5859843.3233	5542366.2416	
Tangent Direction:	92.85			
Tangent Length:	20.11			
Element: Linear				
W (            )	0+847.53	5859843.3233	5542366.2416	
W (            )	0+935.60	5859856.4494	5542453.3336	
Tangent Direction:	90.48			
Tangent Length:	88.08			
Element: Linear				
W (            )	0+935.60	5859856.4494	5542453.3336	
PL (            )	0+955.61	5859859.9244	5542473.0358	
Tangent Direction:	88.89			
Tangent Length:	20.01			
Non-collinear				

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Element: Circular  
 PL ( ) 0+955.61 5859859.9244 5542473.0358  
 W ( ) 0+982.48 5859863.9290 5542499.6063  
 CC ( ) 5859768.2102 5542486.8585  
 KL ( ) 1+007.92 5859853.1100 5542524.2027  
 Radius: 92.75  
 Delta: 35.90 Right  
 Degree of Curvature(Arc): 68.64  
 Length: 52.31  
 Tangent: 26.87  
 Chord: 51.62  
 Middle ordinate: 3.66  
 External: 3.81  
 Tangent Direction: 90.48  
 Radial Direction: 190.48  
 Chord Direction: 108.43  
 Radial Direction: 226.38  
 Tangent Direction: 126.38

Non-collinear

Element: Linear  
 KL ( ) 1+007.92 5859853.1100 5542524.2027  
 W ( ) 1+027.94 5859844.1420 5542542.1073  
 Tangent Direction: 129.56  
 Tangent Length: 20.02

Element: Linear  
 W ( ) 1+027.94 5859844.1420 5542542.1073  
 W ( ) 1+090.21 5859819.0704 5542599.1063  
 Tangent Direction: 126.38  
 Tangent Length: 62.27

Element: Linear  
 W ( ) 1+090.21 5859819.0704 5542599.1063  
 W ( ) 1+110.04 5859810.1185 5542616.7962  
 Tangent Direction: 129.82  
 Tangent Length: 19.83

Element: Linear  
 W ( ) 1+110.04 5859810.1185 5542616.7962  
 W ( ) 1+175.26 5859778.8738 5542674.0473  
 Tangent Direction: 131.80  
 Tangent Length: 65.22

Element: Linear  
 W ( ) 1+175.26 5859778.8738 5542674.0473  
 PL ( ) 1+195.27 5859769.7317 5542691.8425  
 Tangent Direction: 130.21  
 Tangent Length: 20.01

Non-collinear

Element: Circular  
 PL ( ) 1+195.27 5859769.7317 5542691.8425  
 W ( ) 1+214.81 5859760.3674 5542709.0012  
 CC ( ) 5859899.4248 5542762.6223  
 KL ( ) 1+234.13 5859755.7874 5542728.0047  
 Radius: 147.75  
 Delta: 16.75 Left  
 Degree of Curvature(Arc): 43.09  
 Length: 38.87  
 Tangent: 19.55  
 Chord: 38.76  
 Middle ordinate: 1.28  
 External: 1.29  
 Tangent Direction: 131.80  
 Radial Direction: 231.80

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Chord Direction: 123.43  
 Radial Direction: 215.06  
 Tangent Direction: 115.06

Element: Linear  
     KL (            ) 1+234.13 5859755.7874 5542728.0047  
     PL (            ) 1+312.70 5859737.3787 5542804.3874  
 Tangent Direction: 115.06  
     Tangent Length: 78.57

Element: Circular  
     PL (            ) 1+312.70 5859737.3787 5542804.3874  
     W (            ) 1+331.68 5859732.9318 5542822.8385  
     CC (            ) 5859851.8511 5542831.9760  
     KL (            ) 1+350.34 5859734.5076 5542841.7524  
         Radius: 117.75  
         Delta: 20.35 Left  
 Degree of Curvature(Arc): 54.07  
     Length: 37.64  
     Tangent: 18.98  
     Chord: 37.48  
     Middle Ordinate: 1.50  
     External: 1.52  
 Tangent Direction: 115.06  
     Radial Direction: 215.06  
     Chord Direction: 104.88  
     Radial Direction: 194.71  
     Tangent Direction: 94.71

Element: Linear  
     KL (            ) 1+350.34 5859734.5076 5542841.7524  
     PL (            ) 1+360.02 5859735.3116 5542851.4018  
 Tangent Direction: 94.71  
     Tangent Length: 9.68

Element: Circular  
     PL (            ) 1+360.02 5859735.3116 5542851.4018  
     W (            ) 1+375.51 5859736.5976 5542866.8381  
     CC (            ) 5859882.5514 5542839.1346  
     KL (            ) 1+390.89 5859741.0572 5542881.6720  
         Radius: 147.75  
         Delta: 13.30 Left  
 Degree of Curvature(Arc): 43.09  
     Length: 30.87  
     Tangent: 15.49  
     Chord: 30.81  
     Middle Ordinate: 0.81  
     External: 0.81  
 Tangent Direction: 94.71  
     Radial Direction: 194.71  
     Chord Direction: 88.06  
     Radial Direction: 181.41  
     Tangent Direction: 81.41

Element: Linear  
     KL (            ) 1+390.89 5859741.0572 5542881.6720  
     W (            ) 1+396.72 5859742.7347 5542887.2522  
 Tangent Direction: 81.41  
     Tangent Length: 5.83

Non-coincident

Element: Linear  
     W (            ) 1+396.72 5859742.7236 5542887.2164  
     W (            ) 1+413.26 5859747.7497 5542902.9763  
 Tangent Direction: 80.35  
     Tangent Length: 16.54

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Element: Linear  
W ( ) 1+413.26 5859747.7497 5542902.9763  
PL ( ) 1+429.40 5859753.7161 5542917.9714  
Tangent Direction: 75.89  
Tangent Length: 16.14

Element: Circular  
PL ( ) 1+429.40 5859753.7161 5542917.9714  
W ( ) 1+459.80 5859764.9577 5542946.2243  
CC ( ) 5859937.4557 5542844.8630  
KL ( ) 1+489.74 5859784.1680 5542969.7948  
Radius: 197.75  
Delta: 19.43 Left  
Degree of Curvature(Arc): 32.19  
Length: 60.34  
Tangent: 30.41  
Chord: 60.11  
Middle Ordinate: 2.30  
External: 2.32  
Tangent Direction: 75.89  
Radial Direction: 175.89  
Chord Direction: 66.18  
Radial Direction: 156.47  
Tangent Direction: 56.47

Element: Linear  
KL ( ) 1+489.74 5859784.1680 5542969.7948  
W ( ) 1+553.50 5859824.4491 5543019.2185  
Tangent Direction: 56.47  
Tangent Length: 63.76

Non-coincident

Element: Linear  
W ( ) 1+553.50 5859824.4737 5543019.2493  
PL ( ) 1+606.44 5859857.1954 5543060.8645  
Tangent Direction: 57.58  
Tangent Length: 52.94

Element: Circular  
PL ( ) 1+606.44 5859857.1954 5543060.8645  
W ( ) 1+616.08 5859863.1568 5543068.4463  
CC ( ) 5859737.5118 5543154.9704  
KL ( ) 1+625.70 5859868.1139 5543076.7198  
Radius: 152.25  
Delta: 8.06 Right  
Degree of Curvature(Arc): 41.81  
Length: 19.26  
Tangent: 9.64  
Chord: 19.25  
Middle Ordinate: 0.30  
External: 0.31  
Tangent Direction: 57.58  
Radial Direction: 157.58  
Chord Direction: 61.61  
Radial Direction: 165.64  
Tangent Direction: 65.64

Element: Linear  
KL ( ) 1+625.70 5859868.1139 5543076.7198  
W ( ) 1+631.38 5859871.0332 5543081.5922  
Tangent Direction: 65.64  
Tangent Length: 5.68

Element: Linear  
W ( ) 1+631.38 5859871.0332 5543081.5922  
PL ( ) 1+635.47 5859873.5471 5543084.8152  
Tangent Direction: 57.83

Tangent Length:

Non-collinear

Element: Circular

PL ( )	1+635.47	5859873.5471	5543084.8152
W ( )	1+652.97	5859882.5431	5543099.8296
CC ( )		5859785.4068	5543137.6247
KŁ ( )	1+670.14	5859886.0606	5543116.9757
Radius:	102.75		
Delta:	21.48	Right	
Degree of Curvature(Arc):	61.96		
Length:	34.67		
Tangent:	17.50		
Chord:	34.51		
Middle Ordinate:	1.46		
External:	1.48		
Tangent Direction:	65.64		
Radial Direction:	165.64		
Chord Direction:	76.38		
Radial Direction:	187.12		
Tangent Direction:	87.12		

Non-collinear

Element: Linear

KŁ ( )	1+670.14	5859886.0606	5543116.9757
PL ( )	1+688.81	5859889.3219	5543135.3613
Tangent Direction:	88.82		
Tangent Length:	18.67		

Non-collinear

Element: Circular

PL ( )	1+688.81	5859889.3219	5543135.3613
W ( )	1+700.61	5859891.6932	5543146.9202
CC ( )		5859691.1981	5543176.0060
KŁ ( )	1+712.39	5859892.7043	5543158.6764
Radius:	202.25		
Delta:	7.42	Right	
Degree of Curvature(Arc):	31.48		
Length:	23.57		
Tangent:	11.80		
Chord:	23.56		
Middle Ordinate:	0.34		
External:	0.34		
Tangent Direction:	87.12		
Radial Direction:	187.12		
Chord Direction:	90.83		
Radial Direction:	194.54		
Tangent Direction:	94.54		

Element: Linear

KŁ ( )	1+712.39	5859892.7043	5543158.6764
W ( )	1+729.75	5859894.1917	5543175.9722
Tangent Direction:	94.54		
Tangent Length:	17.36		

Non-coincident

Element: Linear

W ( )	1+729.75	5859894.1905	5543175.9587
W ( )	1+755.00	5859896.5060	5543201.1021
Tangent Direction:	94.15		
Tangent Length:	25.25		

Element: Linear

W ( )	1+755.00	5859896.5060	5543201.1021
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	tyczenie_odc_1_kr_L.txt		
W ( )	1+761.00	5859896.9950	5543207.0830
Tangent Direction:	94.81		
Tangent Length:	6.00		
Non-coincident			
Element: Linear			
W ( )	1+761.00	5859896.9843	5543207.0838
W ( )	1+808.08	5859900.1895	5543254.0535
Tangent Direction:	95.66		
Tangent Length:	47.08		
Element: Linear			
W ( )	1+808.08	5859900.1895	5543254.0535
W ( )	1+823.08	5859901.3977	5543269.0060
Tangent Direction:	94.87		
Tangent Length:	15.00		
Non-coincident			
Element: Linear			
W ( )	1+823.08	5859901.4012	5543269.0488
PL ( )	1+828.03	5859901.8005	5543273.9901
Tangent Direction:	94.87		
Tangent Length:	4.96		
Non-collinear			
Element: Circular			
PL ( )	1+828.03	5859901.8005	5543273.9901
W ( )	1+838.68	5859902.5249	5543284.6064
CC ( )		5859869.3759	5543276.2027
KL ( )	1+848.60	5859896.8303	5543293.5954
Radius:	32.50		
Delta:	40.29	Right	
Degree of Curvature(Arc):	195.88		
Length:	20.57		
Tangent:	10.64		
Chord:	20.23		
Middle Ordinate:	1.61		
External:	1.70		
Tangent Direction:	95.66		
Radial Direction:	195.66		
Chord Direction:	115.81		
Radial Direction:	235.95		
Tangent Direction:	135.95		
Element: Linear			
KL ( )	1+848.60	5859896.8303	5543293.5954
W ( )	1+853.60	5859894.1545	5543297.8192
Tangent Direction:	135.95		
Tangent Length:	5.00		
Element: Linear			
W ( )	1+853.60	5859894.1545	5543297.8192
PL ( )	1+868.22	5859885.5774	5543309.6517
Tangent Direction:	139.93		
Tangent Length:	14.61		
Non-collinear			
Element: Circular			
PL ( )	1+868.22	5859885.5774	5543309.6517
W ( )	1+872.27	5859883.2694	5543312.9899
CC ( )		5859719.6289	5543194.9165
KL ( )	1+876.33	5859880.8290	5543316.2326
Radius:	201.75		
Delta:	2.56	Right	

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Degree of Curvature(Arc): 31.55  
 Length: 8.12  
 Tangent: 4.06  
 Chord: 8.12  
 Middle Ordinate: 0.04  
 External: 0.04  
 Tangent Direction: 138.51  
 Radial Direction: 238.51  
 Chord Direction: 139.79  
 Radial Direction: 241.07  
 Tangent Direction: 141.07

Element: Linear  
 KŁ ( ) 1+876.33 5859880.8290 5543316.2326  
 W ( ) 2+002.86 5859804.7433 5543417.3323  
 Tangent Direction: 141.07  
 Tangent Length: 126.53

Non-coincident

Element: Linear  
 W ( ) 2+002.86 5859804.7278 5543417.3526  
 W ( ) 2+025.64 5859790.7647 5543435.3538  
 Tangent Direction: 142.00  
 Tangent Length: 22.78

Element: Linear  
 W ( ) 2+025.64 5859790.7647 5543435.3538  
 W ( ) 2+035.67 5859785.2283 5543443.7151  
 Tangent Direction: 137.23  
 Tangent Length: 10.03

Element: Linear  
 W ( ) 2+035.67 5859785.2283 5543443.7151  
 W ( ) 2+067.10 5859765.9662 5543468.5480  
 Tangent Direction: 142.00  
 Tangent Length: 31.43

Element: Linear  
 W ( ) 2+067.10 5859765.9662 5543468.5480  
 W ( ) 2+076.55 5859760.1744 5543476.0148  
 Tangent Direction: 142.00  
 Tangent Length: 9.45

Element: Linear  
 W ( ) 2+076.55 5859760.1744 5543476.0148  
 W ( ) 2+086.58 5859753.4528 5543483.4567  
 Tangent Direction: 146.77  
 Tangent Length: 10.03

Element: Linear  
 W ( ) 2+086.58 5859753.4528 5543483.4567  
 W ( ) 2+197.13 5859685.6936 5543570.8122  
 Tangent Direction: 142.00  
 Tangent Length: 110.55

Non-coincident

Element: Linear  
 W ( ) 2+197.13 5859685.6753 5543570.8354  
 W ( ) 2+278.33 5859634.8308 5543634.1462  
 Tangent Direction: 143.08  
 Tangent Length: 81.20

Element: Linear  
 W ( ) 2+278.33 5859634.8308 5543634.1462  
 PL ( ) 2+298.33 5859622.3075 5543649.7400  
 Tangent Direction: 143.08

Tangent Length: 20.00

Element: Circular

PL ( )	2+298.33	5859622.3075	5543649.7400
W ( )	2+312.49	5859613.4427	5543660.7784
CC ( )		5859776.8812	5543773.8772
KŁ ( )	2+326.60	5859606.2364	5543672.9643
Radius:	198.25		
Delta:	9.08	Left	
Degree of Curvature(Arc):	32.11		
Length:	28.27		
Tangent:	14.16		
Chord:	28.24		
Middle Ordinate:	0.50		
External:	0.50		
Tangent Direction:	143.08		
Radial Direction:	243.08		
Chord Direction:	138.54		
Radial Direction:	234.00		
Tangent Direction:	134.00		

Element: Linear

KŁ ( )	2+326.60	5859606.2364	5543672.9643
PL ( )	2+336.29	5859601.3040	5543681.3051
Tangent Direction:	134.00		
Tangent Length:	9.69		

Element: Circular

PL ( )	2+336.29	5859601.3040	5543681.3051
W ( )	2+351.97	5859593.3235	5543694.8001
CC ( )		5859617.0128	5543690.5947
KŁ ( )	2+362.19	5859605.4614	5543704.7237
Radius:	18.25		
Delta:	90.37	Left	
Degree of Curvature(Arc):	348.83		
Length:	25.91		
Tangent:	15.68		
Chord:	23.78		
Middle Ordinate:	4.41		
External:	5.81		
Tangent Direction:	134.00		
Radial Direction:	234.00		
Chord Direction:	88.81		
Radial Direction:	143.63		
Tangent Direction:	43.63		

Element: Linear

KŁ ( )	2+362.19	5859605.4614	5543704.7237
PL ( )	2+376.81	5859616.7726	5543713.9713
Tangent Direction:	43.63		
Tangent Length:	14.61		

Element: Circular

PL ( )	2+376.81	5859616.7726	5543713.9713
W ( )	2+385.71	5859623.6635	5543719.6051
CC ( )		5859640.9830	5543684.3585
KŁ ( )	2+394.30	5859632.3339	5543721.6178
Radius:	38.25		
Delta:	29.11	Left	
Degree of Curvature(Arc):	166.44		
Length:	17.49		
Tangent:	8.90		
Chord:	17.34		
Middle Ordinate:	1.00		
External:	1.02		
Tangent Direction:	43.63		
Radial Direction:	143.63		
Chord Direction:	29.08		

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Radial Direction: 114.52  
Tangent Direction: 14.52

Element: Linear

KŁ ( )	2+394.30	5859632.3339	5543721.6178
PŁ ( )	2+406.16	5859643.8931	5543724.3011
Tangent Direction:	14.52		
Tangent Length:	11.87		

Non-collinear

Element: Circular

PŁ ( )	2+406.16	5859643.8931	5543724.3011
W ( )	2+420.46	5859657.8780	5543727.2908
CC ( )		5859664.3839	5543628.4519
KŁ ( )	2+434.56	5859672.1341	5543726.1600
Radius:	98.01		
Delta:	18.45	Left	
Degree of Curvature(Arc):	64.95		
Length:	28.40		
Tangent:	14.30		
Chord:	28.30		
Middle Ordinate:	1.03		
External:	1.04		
Tangent Direction:	13.41		
Radial Direction:	113.41		
Chord Direction:	4.18		
Radial Direction:	94.96		
Tangent Direction:	394.96		

Non-collinear

Element: Linear

KŁ ( )	2+434.56	5859672.1341	5543726.1600
PŁ ( )	2+443.58	5859681.1339	5543725.6043
Tangent Direction:	396.07		
Tangent Length:	9.02		

Element: Circular

PŁ ( )	2+443.58	5859681.1339	5543725.6043
W ( )	2+454.81	5859692.3443	5543724.9120
CC ( )		5859690.5174	5543877.5648
KŁ ( )	2+466.00	5859703.5349	5543725.8724
Radius:	152.25		
Delta:	9.38	Right	
Degree of Curvature(Arc):	41.81		
Length:	22.42		
Tangent:	11.23		
Chord:	22.40		
Middle Ordinate:	0.41		
External:	0.41		
Tangent Direction:	396.07		
Radial Direction:	96.07		
Chord Direction:	0.76		
Radial Direction:	105.45		
Tangent Direction:	5.45		

Element: Linear

KŁ ( )	2+466.00	5859703.5349	5543725.8724
PŁ ( )	2+469.15	5859706.6666	5543726.1411
Tangent Direction:	5.45		
Tangent Length:	3.14		

Element: Circular

PŁ ( )	2+469.15	5859706.6666	5543726.1411
W ( )	2+507.44	5859744.8167	5543729.4150
CC ( )		5859694.5041	5543867.8702
KŁ ( )	2+543.95	5859776.1685	5543751.3971

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Radius:	142.25		
Delta:	33.48	Right	
Degree of Curvature(Arc):	44.75		
Length:	74.81		
Tangent:	38.29		
Chord:	73.95		
Middle Ordinate:	4.89		
External:	5.06		
Tangent Direction:	5.45		
Radial Direction:	105.45		
Chord Direction:	22.19		
Radial Direction:	138.93		
Tangent Direction:	38.93		
Element: Linear			
KL ( )	2+543.95	5859776.1685	5543751.3971
PL ( )	2+582.52	5859807.7492	5543773.5397
Tangent Direction:	38.93		
Tangent Length:	38.57		
Element: Circular			
PL ( )	2+582.52	5859807.7492	5543773.5397
W ( )	2+610.46	5859830.6248	5543789.5788
CC ( )		5859634.2303	5544021.0195
KL ( )	2+638.24	5859850.1728	5543809.5392
Radius:	302.25		
Delta:	11.74	Right	
Degree of Curvature(Arc):	21.06		
Length:	55.72		
Tangent:	27.94		
Chord:	55.64		
Middle Ordinate:	1.28		
External:	1.29		
Tangent Direction:	38.93		
Radial Direction:	138.93		
Chord Direction:	44.80		
Radial Direction:	150.66		
Tangent Direction:	50.66		
Element: Linear			
KL ( )	2+638.24	5859850.1728	5543809.5392
PL ( )	2+663.97	5859868.1747	5543827.9210
Tangent Direction:	50.66		
Tangent Length:	25.73		
Element: Circular			
PL ( )	2+663.97	5859868.1747	5543827.9210
W ( )	2+684.06	5859882.2303	5543842.2732
CC ( )		5859759.3997	5543934.4483
KL ( )	2+703.92	5859892.0824	5543859.7798
Radius:	152.25		
Delta:	16.70	Right	
Degree of Curvature(Arc):	41.81		
Length:	39.95		
Tangent:	20.09		
Chord:	39.83		
Middle Ordinate:	1.31		
External:	1.32		
Tangent Direction:	50.66		
Radial Direction:	150.66		
Chord Direction:	59.02		
Radial Direction:	167.37		
Tangent Direction:	67.37		
Element: Linear			
KL ( )	2+703.92	5859892.0824	5543859.7798
PL ( )	2+714.15	5859897.1025	5543868.7004
Tangent Direction:	67.37		

Tangent Length: 10.24

Element: Circular

PL ( )	2+714.15	5859897.1025	5543868.7004
W ( )	2+734.59	5859907.1272	5543886.5137
CC ( )		5859790.5642	5543928.6559
KŁ ( )	2+754.66	5859910.8117	5543906.6193
Radius:	122.25		
Delta:	21.09	Right	
Degree of Curvature(Arc):	52.08		
Length:	40.51		
Tangent:	20.44		
Chord:	40.32		
Middle Ordinate:	1.67		
External:	1.70		
Tangent Direction:	67.37		
Radial Direction:	167.37		
Chord Direction:	77.91		
Radial Direction:	188.46		
Tangent Direction:	88.46		

Element: Linear

KŁ ( )	2+754.66	5859910.8117	5543906.6193
PL ( )	2+766.69	5859912.9797	5543918.4497
Tangent Direction:	88.46		
Tangent Length:	12.03		

Element: Circular

PL ( )	2+766.69	5859912.9797	5543918.4497
W ( )	2+779.66	5859915.3190	5543931.2146
CC ( )		5859763.2237	5543945.8940
KŁ ( )	2+792.58	5859915.4642	5543944.1913
Radius:	152.25		
Delta:	10.83	Right	
Degree of Curvature(Arc):	41.81		
Length:	25.89		
Tangent:	12.98		
Chord:	25.86		
Middle Ordinate:	0.55		
External:	0.55		
Tangent Direction:	88.46		
Radial Direction:	188.46		
Chord Direction:	93.87		
Radial Direction:	199.29		
Tangent Direction:	99.29		

Element: Linear

KŁ ( )	2+792.58	5859915.4642	5543944.1913
PL ( )	2+804.45	5859915.5969	5543956.0575
Tangent Direction:	99.29		
Tangent Length:	11.87		

Element: Circular

PL ( )	2+804.45	5859915.5969	5543956.0575
W ( )	2+841.71	5859916.0137	5543993.3235
CC ( )		5859713.3595	5543958.3193
KŁ ( )	2+878.16	5859903.1202	5544028.2904
Radius:	202.25		
Delta:	23.20	Right	
Degree of Curvature(Arc):	31.48		
Length:	73.71		
Tangent:	37.27		
Chord:	73.30		
Middle Ordinate:	3.35		
External:	3.41		
Tangent Direction:	99.29		
Radial Direction:	199.29		
Chord Direction:	110.89		

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Radial Direction: 222.49  
Tangent Direction: 122.49

Element: Linear

KŁ ( ) 2+878.16 5859903.1202 5544028.2904  
PŁ ( ) 2+923.52 5859887.4243 5544070.8574  
Tangent Direction: 122.49  
Tangent Length: 45.37

Element: Circular

PŁ ( ) 2+923.52 5859887.4243 5544070.8574  
W ( ) 2+933.52 5859883.9653 5544080.2382  
CC ( ) 5859603.8388 5543966.2901  
KŁ ( ) 2+943.51 5859879.8939 5544089.3699  
Radius: 302.25  
Delta: 4.21 Right  
Degree of Curvature(Arc): 21.06  
Length: 19.99  
Tangent: 10.00  
Chord: 19.99  
Middle Ordinate: 0.17  
External: 0.17  
Tangent Direction: 122.49  
Radial Direction: 222.49  
Chord Direction: 124.59  
Radial Direction: 226.70  
Tangent Direction: 126.70

Non-collinear

Element: Linear

KŁ ( ) 2+943.51 5859879.8939 5544089.3699  
PŁ ( ) 2+983.38 5859864.5776 5544126.1785  
Tangent Direction: 125.10  
Tangent Length: 39.87

Non-collinear

Element: Circular

PŁ ( ) 2+983.38 5859864.5776 5544126.1785  
W ( ) 2+991.36 5859861.3302 5544133.4622  
CC ( ) 5859843.3426 5544116.7108  
KŁ ( ) 2+998.75 5859854.2957 5544137.2191  
Radius: 23.25  
Delta: 42.07 Right  
Degree of Curvature(Arc): 273.81  
Length: 15.36  
Tangent: 7.97  
Chord: 15.09  
Middle Ordinate: 1.26  
External: 1.33  
Tangent Direction: 126.70  
Radial Direction: 226.70  
Chord Direction: 147.74  
Radial Direction: 268.77  
Tangent Direction: 168.77

Element: Linear

KŁ ( ) 2+998.75 5859854.2957 5544137.2191  
PŁ ( ) 3+009.62 5859844.7031 5544142.3424  
Tangent Direction: 168.77  
Tangent Length: 10.88

Element: Circular

PŁ ( ) 3+009.62 5859844.7031 5544142.3424  
W ( ) 3+018.63 5859836.7556 5544146.5870  
CC ( ) 5859786.6397 5544033.6262  
KŁ ( ) 3+027.61 5859828.2753 5544149.6307

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Radius: 123.25  
 Delta: 9.29 Right  
 Degree of Curvature(Arc): 51.65  
 Length: 17.99  
 Tangent: 9.01  
 Chord: 17.97  
 Middle Ordinate: 0.33  
 External: 0.33  
 Tangent Direction: 168.77  
 Radial Direction: 268.77  
 Chord Direction: 173.42  
 Radial Direction: 278.06  
 Tangent Direction: 178.06

Element: Linear

KŁ ( ) 3+027.61 5859828.2753 5544149.6307  
 PŁ ( ) 3+032.15 5859824.0000 5544151.1652  
 Tangent Direction: 178.06  
 Tangent Length: 4.54

Element: Circular

PŁ ( ) 3+032.15 5859824.0000 5544151.1652  
 W ( ) 3+047.14 5859809.8901 5544156.2294  
 CC ( ) 5859782.3644 5544035.1607  
 KŁ ( ) 3+061.99 5859794.9776 5544157.7636  
 Radius: 123.25  
 Delta: 15.41 Right  
 Degree of Curvature(Arc): 51.65  
 Length: 29.84  
 Tangent: 14.99  
 Chord: 29.76  
 Middle Ordinate: 0.90  
 External: 0.91  
 Tangent Direction: 178.06  
 Radial Direction: 278.06  
 Chord Direction: 185.77  
 Radial Direction: 293.47  
 Tangent Direction: 193.47

Non-collinear

Element: Linear

KŁ ( ) 3+061.99 5859794.9776 5544157.7636  
 W ( ) 3+088.07 5859768.9528 5544159.4357  
 Tangent Direction: 195.92  
 Tangent Length: 26.08

Non-coincident

Element: Linear

W ( ) 3+088.07 5859768.8761 5544159.4423  
 PŁ ( ) 3+108.04 5859748.9302 5544160.5561  
 Tangent Direction: 196.45  
 Tangent Length: 19.98

Non-collinear

Element: Circular

PŁ ( ) 3+108.04 5859748.9302 5544160.5561  
 W ( ) 3+119.13 5859737.8670 5544161.3128  
 CC ( ) 5859735.1447 5543959.0270  
 KŁ ( ) 3+130.20 5859726.7874 5544160.8540  
 Radius: 202.00  
 Delta: 6.98 Right  
 Degree of Curvature(Arc): 31.52  
 Length: 22.16  
 Tangent: 11.09  
 Chord: 22.14

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Middle Ordinate: 0.30  
 External: 0.30  
 Tangent Direction: 195.65  
 Radial Direction: 295.65  
 Chord Direction: 199.14  
 Radial Direction: 302.63  
 Tangent Direction: 202.63

Element: Linear  
 KL ( ) 3+130.20 5859726.7874 5544160.8540  
 PL ( ) 3+143.96 5859713.0424 5544160.2849  
 Tangent Direction: 202.63  
 Tangent Length: 13.76

Element: Circular  
 PL ( ) 3+143.96 5859713.0424 5544160.2849  
 W ( ) 3+146.99 5859710.0151 5544160.1595  
 CC ( ) 5859721.3997 5543958.4578  
 KL ( ) 3+150.02 5859706.9929 5544159.9434  
 Radius: 202.00  
 Delta: 1.91 Right  
 Degree of Curvature(Arc): 31.52  
 Length: 6.06  
 Tangent: 3.03  
 Chord: 6.06  
 Middle Ordinate: 0.02  
 External: 0.02  
 Tangent Direction: 202.63  
 Radial Direction: 302.63  
 Chord Direction: 203.59  
 Radial Direction: 304.54  
 Tangent Direction: 204.54

Non-collinear

Element: Linear  
 KL ( ) 3+150.02 5859706.9929 5544159.9434  
 PL ( ) 3+157.84 5859699.1966 5544159.2339  
 Tangent Direction: 205.78  
 Tangent Length: 7.83

Non-collinear

Element: Circular  
 PL ( ) 3+157.84 5859699.1966 5544159.2339  
 W ( ) 3+169.70 5859687.4081 5544157.9303  
 CC ( ) 5859721.3997 5543958.4578  
 KL ( ) 3+181.54 5859675.8531 5544155.2560  
 Radius: 202.00  
 Delta: 7.47 Right  
 Degree of Curvature(Arc): 31.52  
 Length: 23.69  
 Tangent: 11.86  
 Chord: 23.68  
 Middle Ordinate: 0.35  
 External: 0.35  
 Tangent Direction: 207.01  
 Radial Direction: 307.01  
 Chord Direction: 210.75  
 Radial Direction: 314.48  
 Tangent Direction: 214.48

Non-collinear

Element: Linear  
 KL ( ) 3+181.54 5859675.8531 5544155.2560  
 PL ( ) 3+187.96 5859669.6209 5544153.7089  
 Tangent Direction: 215.49

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6.42

Tangent Length:

Non-collinear

Element: Circular

PL ( )	3+187.96	5859669.6209	5544153.7089
W ( )	3+189.41	5859668.2165	5544153.3364
CC ( )		5859721.3997	5543958.4578
KL ( )	3+190.86	5859666.8177	5544152.9439
Radius:	202.00		
Delta:	0.92	Right	
Degree of Curvature(Arc):	31.52		
Length:	2.91		
Tangent:	1.45		
Chord:	2.91		
Middle Ordinate:	0.01		
External:	0.01		
Tangent Direction:	216.50		
Radial Direction:	316.50		
Chord Direction:	216.96		
Radial Direction:	317.42		
Tangent Direction:	217.42		

Element: Linear

KL ( )	3+190.86	5859666.8177	5544152.9439
PL ( )	3+232.23	5859626.9930	5544141.7672
Tangent Direction:	217.42		
Tangent Length:	41.36		

Element: Circular

PL ( )	3+232.23	5859626.9930	5544141.7672
W ( )	3+266.57	5859593.9250	5544132.4867
CC ( )		5859573.4918	5544332.4019
KL ( )	3+300.24	5859559.6634	5544134.8854
Radius:	198.00		
Delta:	21.87	Left	
Degree of Curvature(Arc):	32.15		
Length:	68.01		
Tangent:	34.35		
Chord:	67.68		
Middle Ordinate:	2.91		
External:	2.96		
Tangent Direction:	217.42		
Radial Direction:	317.42		
Chord Direction:	206.48		
Radial Direction:	295.55		
Tangent Direction:	195.55		

Element: Linear

KL ( )	3+300.24	5859559.6634	5544134.8854
W ( )	3+319.00	5859540.9536	5544136.1953
Tangent Direction:	195.55		
Tangent Length:	18.76		

Non-coincident

Element: Linear

W ( )	3+319.00	5859541.0449	5544136.1868
PL ( )	3+332.32	5859527.8116	5544137.7253
Tangent Direction:	192.63		
Tangent Length:	13.32		

Element: Circular

PL ( )	3+332.32	5859527.8116	5544137.7253
W ( )	3+361.69	5859498.6392	5544141.1169
CC ( )		5859533.3547	5544185.4042
KL ( )	3+385.03	5859488.3791	5544168.6352
Radius:	48.00		

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Delta: 69.91 Left  
Degree of Curvature(Arc): 132.63  
Length: 52.71  
Tangent: 29.37  
Chord: 50.10  
Middle ordinate: 7.06  
External: 8.27  
Tangent Direction: 192.63  
Radial Direction: 292.63  
Chord Direction: 157.68  
Radial Direction: 222.72  
Tangent Direction: 122.72

Element: Linear  
KL ( ) 3+385.03 5859488.3791 5544168.6352  
PL ( ) 3+397.27 5859484.1050 5544180.0987  
Tangent Direction: 122.72  
Tangent Length: 12.23

Element: Circular  
PL ( ) 3+397.27 5859484.1050 5544180.0987  
W ( ) 3+422.78 5859475.1922 5544204.0037  
CC ( ) 5859294.8328 5544109.5294  
KL ( ) 3+448.02 5859460.6156 5544224.9420  
Radius: 202.00  
Delta: 16.00 Right  
Degree of Curvature(Arc): 31.52  
Length: 50.76  
Tangent: 25.51  
Chord: 50.62  
Middle Ordinate: 1.59  
External: 1.60  
Tangent Direction: 122.72  
Radial Direction: 222.72  
Chord Direction: 130.72  
Radial Direction: 238.72  
Tangent Direction: 138.72

Non-collinear

Element: Linear  
KL ( ) 3+448.02 5859460.6156 5544224.9420  
W ( ) 3+476.14 5859444.4072 5544247.9174  
Tangent Direction: 139.11  
Tangent Length: 28.12

Element: Linear  
W ( ) 3+476.14 5859444.4072 5544247.9174  
W ( ) 3+482.14 5859440.9484 5544252.8201  
Tangent Direction: 139.11  
Tangent Length: 6.00

Element: Linear  
W ( ) 3+482.14 5859440.9484 5544252.8201  
W ( ) 3+488.05 5859437.5409 5544257.6503  
Tangent Direction: 139.11  
Tangent Length: 5.91

Element: Linear  
W ( ) 3+488.05 5859437.5409 5544257.6503  
PL ( ) 3+530.77 5859415.4638 5544294.2186  
Tangent Direction: 134.58  
Tangent Length: 42.72

Non-collinear

Element: Circular  
PL ( ) 3+530.77 5859415.4638 5544294.2186

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W ( )	3+547.85	5859406.5474	5544308.7943	
CC ( )		5859243.1481	5544188.8085	
KŁ ( )	3+564.86	5859395.3095	5544321.6652	
Radius:	202.00			
Delta:	10.74	Right		
Degree of Curvature(Arc):	31.52			
Length:	34.09			
Tangent:	17.09			
Chord:	34.05			
Middle Ordinate:	0.72			
External:	0.72			
Tangent Direction:	134.95			
Radial Direction:	234.95			
Chord Direction:	140.32			
Radial Direction:	245.69			
Tangent Direction:	145.69			
Element: Linear				
KŁ ( )	3+564.86	5859395.3095	5544321.6652	
PŁ ( )	3+601.09	5859371.4824	5544348.9545	
Tangent Direction:	145.69			
Tangent Length:	36.23			
Element: Circular				
PŁ ( )	3+601.09	5859371.4824	5544348.9545	
W ( )	3+621.22	5859358.2404	5544364.1206	
CC ( )		5859219.3210	5544216.0978	
KŁ ( )	3+641.22	5859342.2655	5544376.3746	
Radius:	202.00			
Delta:	12.65	Right		
Degree of Curvature(Arc):	31.52			
Length:	40.13			
Tangent:	20.13			
Chord:	40.07			
Middle Ordinate:	1.00			
External:	1.00			
Tangent Direction:	145.69			
Radial Direction:	245.69			
Chord Direction:	152.02			
Radial Direction:	258.34			
Tangent Direction:	158.34			
Element: Linear				
KŁ ( )	3+641.22	5859342.2655	5544376.3746	
W ( )	3+746.76	5859258.5252	5544440.6097	
Tangent Direction:	158.34			
Tangent Length:	105.54			
Element: Linear				
W ( )	3+746.76	5859258.5252	5544440.6097	
PŁ ( )	3+766.77	5859243.1127	5544453.3775	
Tangent Direction:	155.96			
Tangent Length:	20.01			
Non-collinear				
Element: Circular				
PŁ ( )	3+766.77	5859243.1127	5544453.3775	
W ( )	3+793.46	5859221.9412	5544469.6177	
CC ( )		5859271.8708	5544490.8680	
KŁ ( )	3+815.35	5859224.9152	5544496.1343	
Radius:	47.25			
Delta:	65.45	Left		
Degree of Curvature(Arc):	134.73			
Length:	48.58			
Tangent:	26.68			
Chord:	46.47			
Middle Ordinate:	6.11			

tyczenie\_odc\_1\_kr\_L.txt

External: 7.01  
Tangent Direction: 158.34  
Radial Direction: 258.34  
Chord Direction: 125.62  
Radial Direction: 192.89  
Tangent Direction: 92.89

Non-collinear

Element: Linear  
KŁ ( ) 3+815.35 5859224.9152 5544496.1343  
W ( ) 3+835.36 5859226.3986 5544516.0895  
Tangent Direction: 95.28  
Tangent Length: 20.01

Element: Linear  
W ( ) 3+835.36 5859226.3986 5544516.0895  
W ( ) 3+875.91 5859230.9950 5544556.3764  
Tangent Direction: 92.77  
Tangent Length: 40.55

Non-coincident

Element: Linear  
W ( ) 3+875.91 5859230.9919 5544556.3508  
W ( ) 3+928.56 5859237.6321 5544608.5810  
Tangent Direction: 91.95  
Tangent Length: 52.65

Element: Linear  
W ( ) 3+928.56 5859237.6321 5544608.5810  
PL ( ) 3+948.60 5859241.0375 5544628.3256  
Tangent Direction: 89.13  
Tangent Length: 20.04

Non-collinear

Element: Circular  
PL ( ) 3+948.60 5859241.0375 5544628.3256  
W ( ) 3+970.61 5859243.6913 5544650.1761  
CC ( ) 5859118.9348 5544643.1555  
KŁ ( ) 3+992.16 5859238.6028 5544671.5908  
Radius: 123.00  
Delta: 22.55 Right  
Degree of Curvature(Arc): 51.76  
Length: 43.56  
Tangent: 22.01  
Chord: 43.33  
Middle Ordinate: 1.92  
External: 1.95  
Tangent Direction: 92.31  
Radial Direction: 192.31  
Chord Direction: 103.58  
Radial Direction: 214.85  
Tangent Direction: 114.85

Non-collinear

Element: Linear  
KŁ ( ) 3+992.16 5859238.6028 5544671.5908  
W ( ) 4+012.19 5859233.0063 5544690.8179  
Tangent Direction: 118.03  
Tangent Length: 20.02

Element: Linear  
W ( ) 4+012.19 5859233.0063 5544690.8179  
W ( ) 4+084.22 5859216.3535 5544760.8997  
Tangent Direction: 114.85

	tyczenie_odc_1_kr_L.txt		
Tangent Length:	72.03		
Element: Linear			
W (            )	4+084.22	5859216.3535	5544760.8997
W (            )	4+100.44	5859212.6332	5544776.6865
Tangent Direction:	114.73		
Tangent Length:	16.22		
Element: Linear			
W (            )	4+100.44	5859212.6332	5544776.6865
W (            )	4+217.96	5859185.9090	5544891.1249
Tangent Direction:	114.60		
Tangent Length:	117.52		
Element: Linear			
W (            )	4+217.96	5859185.9090	5544891.1249
W (            )	4+232.62	5859182.5911	5544905.4097
Tangent Direction:	114.53		
Tangent Length:	14.67		
Element: Linear			
W (            )	4+232.62	5859182.5911	5544905.4097
W (            )	4+311.04	5859164.9753	5544981.8229
Tangent Direction:	114.42		
Tangent Length:	78.42		
Non-coincident			
Element: Linear			
W (            )	4+311.04	5859164.9644	5544981.8679
W (            )	4+318.25	5859163.1829	5544988.8528
Tangent Direction:	115.90		
Tangent Length:	7.21		
Element: Linear			
W (            )	4+318.25	5859163.1829	5544988.8528
W (            )	4+328.25	5859160.7113	5544998.5439
Tangent Direction:	115.90		
Tangent Length:	10.00		
Element: Linear			
W (            )	4+328.25	5859160.7113	5544998.5439
W (            )	4+352.19	5859154.7936	5545021.7463
Tangent Direction:	115.90		
Tangent Length:	23.95		
Element: Linear			
W (            )	4+352.19	5859154.7936	5545021.7463
KONIEC (        )	4+373.41	5859149.9948	5545042.4119
Tangent Direction:	114.53		
Tangent Length:	21.22		

Project Name: Rokitno  
 Description:  
 Horizontal Alignment Name: odc1\_kr\_P  
 Description:  
 Style: Default

	STATION	NORTHING	EASTING
Element: Linear			
POCZĄTEK ( )	0+000.00	5859315.1952	5541761.6861
W ( )	0+061.82	5859345.6310	5541815.4918
Tangent Direction:	67.23		
Tangent Length:	61.82		
Element: Linear			
W ( )	0+061.82	5859345.6310	5541815.4918
W ( )	0+086.82	5859357.9398	5541837.2517
Tangent Direction:	67.23		
Tangent Length:	25.00		
Element: Linear			
W ( )	0+086.82	5859357.9398	5541837.2517
W ( )	0+106.82	5859368.2220	5541854.4135
Tangent Direction:	65.64		
Tangent Length:	20.01		
Element: Linear			
W ( )	0+106.82	5859368.2220	5541854.4135
W ( )	0+179.25	5859403.8792	5541917.4497
Tangent Direction:	67.23		
Tangent Length:	72.42		
Non-coincident			
Element: Linear			
W ( )	0+179.25	5859403.8354	5541917.3680
PL ( )	0+244.71	5859433.3898	5541975.7778
Tangent Direction:	70.18		
Tangent Length:	65.46		
Non-collinear			
Element: Circular			
PL ( )	0+244.71	5859433.3898	5541975.7778
W ( )	0+263.94	5859441.7540	5541993.0958
CC ( )		5859655.9665	5541868.2790
PCC ( )	0+283.09	5859452.6962	5542008.9118
Radius:	247.18		
Delta:	9.89	Left	
Degree of Curvature(Arc):	25.76		
Length:	38.39		
Tangent:	19.23		
Chord:	38.35		
Middle Ordinate:	0.74		
External:	0.75		
Tangent Direction:	71.36		
Radial Direction:	171.36		
Chord Direction:	66.41		
Radial Direction:	161.47		
Tangent Direction:	61.47		
Non-collinear			
Element: Circular			
PCC ( )	0+283.09	5859452.6962	5542008.9118
W ( )	0+294.96	5859459.6248	5542018.5409
CC ( )		5859495.9197	5541977.8105
KL ( )	0+306.44	5859469.9856	5542024.3184
Radius:	53.25		

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Delta: 27.91 Left  
Degree of Curvature(Arc): 119.55  
Length: 23.34  
Tangent: 11.86  
Chord: 23.16  
Middle ordinate: 1.27  
External: 1.31  
Tangent Direction: 60.29  
Radial Direction: 160.29  
Chord Direction: 46.34  
Radial Direction: 132.38  
Tangent Direction: 32.38

Non-collinear

Element: Linear  
KL ( ) 0+306.44 5859469.9856 5542024.3184  
W ( ) 0+320.97 5859483.2386 5542030.2724  
Tangent Direction: 26.88  
Tangent Length: 14.53

Element: Linear  
W ( ) 0+320.97 5859483.2386 5542030.2724  
PL ( ) 0+332.76 5859493.8947 5542035.3215  
Tangent Direction: 28.17  
Tangent Length: 11.79

Element: Circular  
PL ( ) 0+332.76 5859493.8947 5542035.3215  
W ( ) 0+351.24 5859510.5962 5542043.2352  
CC ( ) 5859601.7994 5541807.5924  
KL ( ) 0+369.66 5859528.2735 5542048.6275  
Radius: 252.00  
Delta: 9.32 Left  
Degree of Curvature(Arc): 25.26  
Length: 36.90  
Tangent: 18.48  
Chord: 36.86  
Middle ordinate: 0.67  
External: 0.68  
Tangent Direction: 28.17  
Radial Direction: 128.17  
Chord Direction: 23.51  
Radial Direction: 118.85  
Tangent Direction: 18.85

Element: Linear  
KL ( ) 0+369.66 5859528.2735 5542048.6275  
PL ( ) 0+386.06 5859543.9606 5542053.4127  
Tangent Direction: 18.85  
Tangent Length: 16.40

Element: Circular  
PL ( ) 0+386.06 5859543.9606 5542053.4127  
W ( ) 0+401.33 5859558.5728 5542057.8701  
CC ( ) 5859398.6594 5542529.7441  
KL ( ) 0+416.60 5859572.8843 5542063.2147  
Radius: 498.00  
Delta: 3.90 Right  
Degree of Curvature(Arc): 12.78  
Length: 30.54  
Tangent: 15.28  
Chord: 30.54  
Middle ordinate: 0.23  
External: 0.23  
Tangent Direction: 18.85  
Radial Direction: 118.85  
Chord Direction: 20.80

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Radial Direction: 122.75  
Tangent Direction: 22.75

Element: Linear  
KŁ ( ) 0+416.60 5859572.8843 5542063.2147  
W ( ) 0+435.32 5859590.4155 5542069.7617  
Tangent Direction: 22.75  
Tangent Length: 18.71

Element: Linear  
W ( ) 0+435.32 5859590.4155 5542069.7617  
W ( ) 0+452.19 5859606.3916 5542075.1910  
Tangent Direction: 20.86  
Tangent Length: 16.87

Element: Linear  
W ( ) 0+452.19 5859606.3916 5542075.1910  
W ( ) 0+462.67 5859616.5095 5542077.9204  
Tangent Direction: 16.77  
Tangent Length: 10.48

Element: Linear  
W ( ) 0+462.67 5859616.5095 5542077.9204  
PŁ ( ) 0+482.67 5859635.6890 5542083.6122  
Tangent Direction: 18.37  
Tangent Length: 20.01

Non-collinear

Element: Circular  
PŁ ( ) 0+482.67 5859635.6890 5542083.6122  
W ( ) 0+519.78 5859671.5113 5542093.2757  
CC ( ) 5859612.8994 5542168.0923  
KŁ ( ) 0+552.86 5859689.4686 5542125.7436  
Radius: 87.50  
Delta: 51.06 Right  
Degree of Curvature(Arc): 72.76  
Length: 70.18  
Tangent: 37.10  
Chord: 68.32  
Middle ordinate: 6.94  
External: 7.54  
Tangent Direction: 16.77  
Radial Direction: 116.77  
Chord Direction: 42.31  
Radial Direction: 167.84  
Tangent Direction: 67.84

Non-collinear

Element: Linear  
KŁ ( ) 0+552.86 5859689.4686 5542125.7436  
PŁ ( ) 0+618.45 5859720.7738 5542183.3785  
Tangent Direction: 68.32  
Tangent Length: 65.59

Non-collinear

Element: Circular  
PŁ ( ) 0+618.45 5859720.7738 5542183.3785  
W ( ) 0+651.17 5859736.6108 5542212.0127  
CC ( ) 5859872.1620 5542099.6491  
KŁ ( ) 0+683.13 5859761.8115 5542232.8848  
Radius: 173.00  
Delta: 23.80 Left  
Degree of Curvature(Arc): 36.80  
Length: 64.68  
Tangent: 32.72

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Chord: 64.30  
 Middle Ordinate: 3.01  
 External: 3.07  
 Tangent Direction: 67.84  
 Radial Direction: 167.84  
 Chord Direction: 55.94  
 Radial Direction: 144.04  
 Tangent Direction: 44.04

Non-collinear

Element: Linear  
 KŁ ( ) 0+683.13 5859761.8115 5542232.8848  
 PŁ ( ) 0+730.87 5859799.2084 5542262.5597  
 Tangent Direction: 42.70  
 Tangent Length: 47.74

Non-collinear

Element: Circular  
 PŁ ( ) 0+730.87 5859799.2084 5542262.5597  
 W ( ) 0+746.65 5859811.3604 5542272.6245  
 CC ( ) 5859736.6977 5542338.0343  
 KŁ ( ) 0+762.16 5859819.7392 5542285.9949  
 Radius: 98.00  
 Delta: 20.33 Right  
 Degree of Curvature(Arc): 64.96  
 Length: 31.29  
 Tangent: 15.78  
 Chord: 31.16  
 Middle Ordinate: 1.25  
 External: 1.26  
 Tangent Direction: 44.04  
 Radial Direction: 144.04  
 Chord Direction: 54.20  
 Radial Direction: 164.36  
 Tangent Direction: 64.36

Element: Linear  
 KŁ ( ) 0+762.16 5859819.7392 5542285.9949  
 PŁ ( ) 0+767.92 5859822.8011 5542290.8808  
 Tangent Direction: 64.36  
 Tangent Length: 5.77

Element: Circular  
 PŁ ( ) 0+767.92 5859822.8011 5542290.8808  
 W ( ) 0+772.05 5859824.9937 5542294.3797  
 CC ( ) 5859773.6540 5542321.6797  
 PCC ( ) 0+776.17 5859826.6686 5542298.1539  
 Radius: 58.00  
 Delta: 9.05 Right  
 Degree of Curvature(Arc): 109.76  
 Length: 8.24  
 Tangent: 4.13  
 Chord: 8.24  
 Middle Ordinate: 0.15  
 External: 0.15  
 Tangent Direction: 64.36  
 Radial Direction: 164.36  
 Chord Direction: 68.89  
 Radial Direction: 173.41  
 Tangent Direction: 73.41

Element: Circular  
 PCC ( ) 0+776.17 5859826.6686 5542298.1539  
 W ( ) 0+780.21 5859828.3094 5542301.8514  
 CC ( ) 5859799.2473 5542310.3224  
 KŁ ( ) 0+784.21 5859828.9122 5542305.8515

tyczenie\_odc\_1\_kr\_P.txt

Radius: 30.00  
 Delta: 17.07 Right  
 Degree of Curvature(Arc): 212.21  
 Length: 8.04  
 Tangent: 4.05  
 Chord: 8.02  
 Middle Ordinate: 0.27  
 External: 0.27  
 Tangent Direction: 73.41  
 Radial Direction: 173.41  
 Chord Direction: 81.94  
 Radial Direction: 190.48  
 Tangent Direction: 90.48

Element: Linear  
 KŁ ( ) 0+784.21 5859828.9122 5542305.8515  
 W ( ) 0+800.97 5859831.4108 5542322.4295  
 Tangent Direction: 90.48  
 Tangent Length: 16.77

Element: Linear  
 W ( ) 0+800.97 5859831.4108 5542322.4295  
 W ( ) 0+825.97 5859835.1366 5542347.1503  
 Tangent Direction: 90.48  
 Tangent Length: 25.00

Element: Linear  
 W ( ) 0+825.97 5859835.1366 5542347.1503  
 W ( ) 0+846.09 5859838.8735 5542366.9123  
 Tangent Direction: 88.10  
 Tangent Length: 20.11

Element: Linear  
 W ( ) 0+846.09 5859838.8735 5542366.9123  
 W ( ) 0+934.16 5859851.9996 5542454.0043  
 Tangent Direction: 90.48  
 Tangent Length: 88.08

Element: Linear  
 W ( ) 0+934.16 5859851.9996 5542454.0043  
 PŁ ( ) 0+954.17 5859854.4858 5542473.8555  
 Tangent Direction: 92.07  
 Tangent Length: 20.01

Non-collinear

Element: Circular  
 PŁ ( ) 0+954.17 5859854.4858 5542473.8555  
 W ( ) 0+979.44 5859858.2530 5542498.8504  
 CC ( ) 5859768.2102 5542486.8585  
 KŁ ( ) 1+003.37 5859848.0755 5542521.9882  
 Radius: 87.25  
 Delta: 35.90 Right  
 Degree of Curvature(Arc): 72.97  
 Length: 49.21  
 Tangent: 25.28  
 Chord: 48.56  
 Middle Ordinate: 3.45  
 External: 3.59  
 Tangent Direction: 90.48  
 Radial Direction: 190.48  
 Chord Direction: 108.43  
 Radial Direction: 226.38  
 Tangent Direction: 126.38

Non-collinear

Element: Linear

		tyczenie_odc_1_kr_P.txt		
	KŁ ( )	1+003.37	5859848.0755	5542521.9882
	W ( )	1+010.87	5859845.4030	5542528.9940
	Tangent Direction:	123.20		
	Tangent Length:	7.50		
Element:	Linear			
	W ( )	1+010.87	5859845.4030	5542528.9940
	W ( )	1+020.97	5859841.8038	5542538.4292
	Tangent Direction:	123.20		
	Tangent Length:	10.10		
Element:	Linear			
	W ( )	1+020.97	5859841.8038	5542538.4292
	W ( )	1+023.40	5859840.9383	5542540.6980
	Tangent Direction:	123.20		
	Tangent Length:	2.43		
Element:	Linear			
	W ( )	1+023.40	5859840.9383	5542540.6980
	W ( )	1+084.22	5859816.4480	5542596.3753
	Tangent Direction:	126.38		
	Tangent Length:	60.83		
Element:	Linear			
	W ( )	1+084.22	5859816.4480	5542596.3753
	PL ( )	1+093.96	5859812.3540	5542605.2097
	Tangent Direction:	127.63		
	Tangent Length:	9.74		
Non-collinear				
Element:	Circular			
	PL ( )	1+093.96	5859812.3540	5542605.2097
	W ( )	1+096.52	5859811.2073	5542607.4949
	CC ( )		5859679.8506	5542538.7199
	KŁ ( )	1+099.07	5859809.9825	5542609.7392
	Radius:	148.25		
	Delta:	2.20	Right	
Degree of Curvature(Arc):		42.94		
	Length:	5.11		
	Tangent:	2.56		
	Chord:	5.11		
	Middle Ordinate:	0.02		
	External:	0.02		
	Tangent Direction:	129.61		
	Radial Direction:	229.61		
	Chord Direction:	130.71		
	Radial Direction:	231.80		
	Tangent Direction:	131.80		
Element:	Linear			
	KŁ ( )	1+099.07	5859809.9825	5542609.7392
	W ( )	1+170.43	5859775.8016	5542672.3706
	Tangent Direction:	131.80		
	Tangent Length:	71.35		
Element:	Linear			
	W ( )	1+170.43	5859775.8016	5542672.3706
	PL ( )	1+190.45	5859765.3428	5542689.4473
	Tangent Direction:	134.98		
	Tangent Length:	20.02		
Non-collinear				
Element:	Circular			
	PL ( )	1+190.45	5859765.3428	5542689.4473
	W ( )	1+210.66	5859755.6616	5542707.1866
	CC ( )		5859899.4248	5542762.6223

	tyczenie_odc_1_kr_P.txt		
KŁ ( )	1+230.64	5859750.9266	5542726.8332
Radius:	152.75		
Delta:	16.75	Left	
Degree of Curvature(Arc):	41.68		
Length:	40.18		
Tangent:	20.21		
Chord:	40.07		
Middle Ordinate:	1.32		
External:	1.33		
Tangent Direction:	131.80		
Radial Direction:	231.80		
Chord Direction:	123.43		
Radial Direction:	215.06		
Tangent Direction:	115.06		

Non-collinear

Element: Linear			
KŁ ( )	1+230.64	5859750.9266	5542726.8332
W ( )	1+309.21	5859733.0039	5542803.3330
Tangent Direction:	114.65		
Tangent Length:	78.57		

Element: Linear			
W ( )	1+309.21	5859733.0039	5542803.3330
PL ( )	1+320.92	5859730.3187	5542814.7295
Tangent Direction:	114.73		
Tangent Length:	11.71		

Non-collinear

Element: Circular			
PL ( )	1+320.92	5859730.3187	5542814.7295
W ( )	1+329.62	5859729.0953	5542823.3507
CC ( )		5859851.8511	5542831.9760
KŁ ( )	1+338.30	5859729.1011	5542832.0583
Radius:	122.75		
Delta:	9.02	Left	
Degree of Curvature(Arc):	51.86		
Length:	17.39		
Tangent:	8.71		
Chord:	17.37		
Middle Ordinate:	0.31		
External:	0.31		
Tangent Direction:	108.97		
Radial Direction:	208.97		
Chord Direction:	104.47		
Radial Direction:	199.96		
Tangent Direction:	99.96		

Non-collinear

Element: Linear			
KŁ ( )	1+338.30	5859729.1011	5542832.0583
PL ( )	1+359.52	5859730.9519	5542853.1936
Tangent Direction:	94.44		
Tangent Length:	21.22		

Non-collinear

Element: Circular			
PL ( )	1+359.52	5859730.9519	5542853.1936
W ( )	1+374.76	5859732.3594	5542868.3707
CC ( )		5859882.5514	5542839.1346
KŁ ( )	1+389.90	5859736.7477	5542882.9676
Radius:	152.25		
Delta:	12.70	Left	
Degree of Curvature(Arc):	41.81		

tyczenie\_odc\_1\_kr\_P.txt

Length: 30.38  
Tangent: 15.24  
Chord: 30.33  
Middle Ordinate: 0.76  
External: 0.76  
Tangent Direction: 94.11  
Radial Direction: 194.11  
Chord Direction: 87.76  
Radial Direction: 181.41  
Tangent Direction: 81.41

Element: Linear  
KŁ ( ) 1+389.90 5859736.7477 5542882.9676  
W ( ) 1+395.73 5859738.4253 5542888.5478  
Tangent Direction: 81.41  
Tangent Length: 5.83

Non-coincident

Element: Linear  
W ( ) 1+395.73 5859738.4364 5542888.5836  
W ( ) 1+412.43 5859743.5103 5542904.4937  
Tangent Direction: 80.35  
Tangent Length: 16.70

Element: Linear  
W ( ) 1+412.43 5859743.5103 5542904.4937  
PŁ ( ) 1+428.72 5859749.5349 5542919.6350  
Tangent Direction: 75.89  
Tangent Length: 16.30

Element: Circular  
PŁ ( ) 1+428.72 5859749.5349 5542919.6350  
W ( ) 1+459.82 5859761.0323 5542948.5309  
CC ( ) 5859937.4557 5542844.8630  
KŁ ( ) 1+490.44 5859780.6798 5542972.6378  
Radius: 202.25  
Delta: 19.43 Left  
Degree of Curvature(Arc): 31.48  
Length: 61.72  
Tangent: 31.10  
Chord: 61.48  
Middle Ordinate: 2.35  
External: 2.38  
Tangent Direction: 75.89  
Radial Direction: 175.89  
Chord Direction: 66.18  
Radial Direction: 156.47  
Tangent Direction: 56.47

Element: Linear  
KŁ ( ) 1+490.44 5859780.6798 5542972.6378  
W ( ) 1+554.20 5859820.9609 5543022.0615  
Tangent Direction: 56.47  
Tangent Length: 63.76

Non-coincident

Element: Linear  
W ( ) 1+554.20 5859820.9363 5543022.0307  
PŁ ( ) 1+607.14 5859853.6579 5543063.6460  
Tangent Direction: 57.58  
Tangent Length: 52.94

Element: Circular  
PŁ ( ) 1+607.14 5859853.6579 5543063.6460  
W ( ) 1+616.50 5859859.4432 5543071.0037  
CC ( ) 5859737.5118 5543154.9704

	tyczenie_odc_1_kr_P.txt			
KŁ ( )	1+625.83	5859864.2537	5543079.0326	
Radius:	147.75			
Delta:	8.06	Right		
Degree of Curvature(Arc):	43.09			
Length:	18.69			
Tangent:	9.36			
Chord:	18.68			
Middle Ordinate:	0.30			
External:	0.30			
Tangent Direction:	57.58			
Radial Direction:	157.58			
Chord Direction:	61.61			
Radial Direction:	165.64			
Tangent Direction:	65.64			
Element: Linear				
KŁ ( )	1+625.83	5859864.2537	5543079.0326	
PL ( )	1+635.57	5859869.2581	5543087.3850	
Tangent Direction:	65.64			
Tangent Length:	9.74			
Element: Circular				
PL ( )	1+635.57	5859869.2581	5543087.3850	
W ( )	1+652.22	5859877.8163	5543101.6688	
CC ( )		5859785.4068	5543137.6247	
KŁ ( )	1+668.55	5859881.1626	5543117.9806	
Radius:	97.75			
Delta:	21.48	Right		
Degree of Curvature(Arc):	65.13			
Length:	32.99			
Tangent:	16.65			
Chord:	32.83			
Middle Ordinate:	1.39			
External:	1.41			
Tangent Direction:	65.64			
Radial Direction:	165.64			
Chord Direction:	76.38			
Radial Direction:	187.12			
Tangent Direction:	87.12			
Element: Linear				
KŁ ( )	1+668.55	5859881.1626	5543117.9806	
PL ( )	1+687.22	5859884.9138	5543136.2656	
Tangent Direction:	87.12			
Tangent Length:	18.67			
Element: Circular				
PL ( )	1+687.22	5859884.9138	5543136.2656	
W ( )	1+698.76	5859887.2323	5543147.5673	
CC ( )		5859691.1981	5543176.0060	
KŁ ( )	1+710.27	5859888.2208	5543159.0620	
Radius:	197.75			
Delta:	7.42	Right		
Degree of Curvature(Arc):	32.19			
Length:	23.05			
Tangent:	11.54			
Chord:	23.04			
Middle Ordinate:	0.34			
External:	0.34			
Tangent Direction:	87.12			
Radial Direction:	187.12			
Chord Direction:	90.83			
Radial Direction:	194.54			
Tangent Direction:	94.54			
Element: Linear				
KŁ ( )	1+710.27	5859888.2208	5543159.0620	
W ( )	1+727.63	5859889.7083	5543176.3578	

Tangent Direction: 94.54  
Tangent Length: 17.36

Non-coincident

Element: Linear  
W ( ) 1+727.63 5859889.7095 5543176.3713  
W ( ) 1+755.81 5859892.2934 5543204.4300  
Tangent Direction: 94.15  
Tangent Length: 28.18

Non-coincident

Element: Linear  
W ( ) 1+755.81 5859892.2891 5543204.3768  
W ( ) 1+805.91 5859895.6999 5543254.3599  
Tangent Direction: 95.66  
Tangent Length: 50.10

Element: Linear  
W ( ) 1+805.91 5859895.6999 5543254.3599  
PL ( ) 1+825.91 5859896.8121 5543274.3305  
Tangent Direction: 96.46  
Tangent Length: 20.00

Non-collinear

Element: Circular  
PL ( ) 1+825.91 5859896.8121 5543274.3305  
W ( ) 1+834.91 5859897.4251 5543283.3136  
CC ( ) 5859869.3759 5543276.2027  
KL ( ) 1+843.31 5859892.6065 5543290.9196  
Radius: 27.50  
Delta: 40.29 Right  
Degree of Curvature(Arc): 231.50  
Length: 17.40  
Tangent: 9.00  
Chord: 17.11  
Middle Ordinate: 1.37  
External: 1.44  
Tangent Direction: 95.66  
Radial Direction: 195.66  
Chord Direction: 115.81  
Radial Direction: 235.95  
Tangent Direction: 135.95

Non-collinear

Element: Linear  
KL ( ) 1+843.31 5859892.6065 5543290.9196  
W ( ) 1+862.71 5859882.8729 5543307.6962  
Tangent Direction: 133.47  
Tangent Length: 19.40

Element: Linear  
W ( ) 1+862.71 5859882.8729 5543307.6962  
W ( ) 1+896.16 5859862.7583 5543334.4236  
Tangent Direction: 141.07  
Tangent Length: 33.45

Element: Linear  
W ( ) 1+896.16 5859862.7583 5543334.4236  
W ( ) 1+901.66 5859859.4511 5543338.8182  
Tangent Direction: 141.07  
Tangent Length: 5.50

Element: Linear  
W ( ) 1+901.66 5859859.4511 5543338.8182

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W ( )	1+997.29	5859801.9467	5543415.2277
Tangent Direction:	141.07		
Tangent Length:	95.63		
Non-coincident			
Element: Linear			
W ( )	1+997.29	5859801.9622	5543415.2074
W ( )	2+020.07	5859787.9992	5543433.2087
Tangent Direction:	142.00		
Tangent Length:	22.78		
Element: Linear			
W ( )	2+020.07	5859787.9992	5543433.2087
W ( )	2+030.10	5859781.2775	5543440.6506
Tangent Direction:	146.77		
Tangent Length:	10.03		
Element: Linear			
W ( )	2+030.10	5859781.2775	5543440.6506
W ( )	2+045.21	5859772.0168	5543452.5896
Tangent Direction:	142.00		
Tangent Length:	15.11		
Element: Linear			
W ( )	2+045.21	5859772.0168	5543452.5896
W ( )	2+048.13	5859770.2247	5543454.9000
Tangent Direction:	142.00		
Tangent Length:	2.92		
Element: Linear			
W ( )	2+048.13	5859770.2247	5543454.9000
W ( )	2+067.82	5859758.1582	5543470.4561
Tangent Direction:	142.00		
Tangent Length:	19.69		
Element: Linear			
W ( )	2+067.82	5859758.1582	5543470.4561
W ( )	2+070.97	5859756.2236	5543472.9503
Tangent Direction:	142.00		
Tangent Length:	3.16		
Element: Linear			
W ( )	2+070.97	5859756.2236	5543472.9503
W ( )	2+081.00	5859750.6872	5543481.3115
Tangent Direction:	137.23		
Tangent Length:	10.03		
Element: Linear			
W ( )	2+081.00	5859750.6872	5543481.3115
W ( )	2+191.56	5859682.9281	5543568.6671
Tangent Direction:	142.00		
Tangent Length:	110.55		
Non-coincident			
Element: Linear			
W ( )	2+191.56	5859682.9464	5543568.6439
W ( )	2+272.76	5859632.1019	5543631.9546
Tangent Direction:	143.08		
Tangent Length:	81.20		
Element: Linear			
W ( )	2+272.76	5859632.1019	5543631.9546
PL ( )	2+292.76	5859619.5786	5543647.5485
Tangent Direction:	143.08		
Tangent Length:	20.00		

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Non-collinear

Element: Circular

PL ( )	2+292.76	5859619.5786	5543647.5485
W ( )	2+307.21	5859610.2467	5543658.5912
CC ( )		5859867.7155	5543857.2417
KŁ ( )	2+321.65	5859601.9326	5543670.4192
Radius:	324.87		
Delta:	5.66	Left	
Degree of Curvature(Arc):	19.60		
Length:	28.90		
Tangent:	14.46		
Chord:	28.89		
Middle Ordinate:	0.32		
External:	0.32		
Tangent Direction:	144.67		
Radial Direction:	244.67		
Chord Direction:	141.84		
Radial Direction:	239.00		
Tangent Direction:	139.00		

Non-collinear

Element: Linear

KŁ ( )	2+321.65	5859601.9326	5543670.4192
PL ( )	2+331.34	5859597.0002	5543678.7600
Tangent Direction:	134.00		
Tangent Length:	9.69		

Element: Circular

PL ( )	2+331.34	5859597.0002	5543678.7600
W ( )	2+351.32	5859586.8333	5543695.9523
CC ( )		5859617.0128	5543690.5947
KŁ ( )	2+364.35	5859602.2966	5543708.5946
Radius:	23.25		
Delta:	90.37	Left	
Degree of Curvature(Arc):	273.81		
Length:	33.00		
Tangent:	19.97		
Chord:	30.30		
Middle Ordinate:	5.61		
External:	7.40		
Tangent Direction:	134.00		
Radial Direction:	234.00		
Chord Direction:	88.81		
Radial Direction:	143.63		
Tangent Direction:	43.63		

Element: Linear

KŁ ( )	2+364.35	5859602.2966	5543708.5946
PL ( )	2+378.96	5859613.6078	5543717.8423
Tangent Direction:	43.63		
Tangent Length:	14.61		

Element: Circular

PL ( )	2+378.96	5859613.6078	5543717.8423
W ( )	2+389.02	5859621.3996	5543724.2125
CC ( )		5859640.9830	5543684.3585
KŁ ( )	2+398.73	5859631.2032	5543726.4883
Radius:	43.25		
Delta:	29.11	Left	
Degree of Curvature(Arc):	147.20		
Length:	19.78		
Tangent:	10.06		
Chord:	19.60		
Middle Ordinate:	1.13		
External:	1.16		
Tangent Direction:	43.63		

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Radial Direction: 143.63  
 Chord Direction: 29.08  
 Radial Direction: 114.52  
 Tangent Direction: 14.52

Element: Linear  
     KL (            ) 2+398.73 5859631.2032 5543726.4883  
     PL (            ) 2+410.60 5859642.7625 5543729.1716  
 Tangent Direction: 14.52  
 Tangent Length: 11.87

Non-collinear

Element: Circular  
     PL (            ) 2+410.60 5859642.7625 5543729.1716  
     W (            ) 2+425.60 5859657.4790 5543732.0745  
     CC (            ) 5859662.6584 5543628.3080  
     KL (            ) 2+440.39 5859672.4115 5543730.6515  
         Radius: 102.81  
         Delta: 18.45 Left  
 Degree of Curvature(Arc): 61.92  
     Length: 29.79  
     Tangent: 15.00  
     Chord: 29.69  
     Middle Ordinate: 1.08  
     External: 1.09  
 Tangent Direction: 12.40  
 Radial Direction: 112.40  
     Chord Direction: 3.17  
 Radial Direction: 93.95  
 Tangent Direction: 393.95

Non-collinear

Element: Linear  
     KL (            ) 2+440.39 5859672.4115 5543730.6515  
     PL (            ) 2+449.41 5859681.4112 5543730.0957  
 Tangent Direction: 396.07  
 Tangent Length: 9.02

Element: Circular  
     PL (            ) 2+449.41 5859681.4112 5543730.0957  
     W (            ) 2+460.31 5859692.2903 5543729.4240  
     CC (            ) 5859690.5174 5543877.5648  
     KL (            ) 2+471.17 5859703.1502 5543730.3559  
         Radius: 147.75  
         Delta: 9.38 Right  
 Degree of Curvature(Arc): 43.09  
     Length: 21.76  
     Tangent: 10.90  
     Chord: 21.74  
     Middle Ordinate: 0.40  
     External: 0.40  
 Tangent Direction: 396.07  
 Radial Direction: 96.07  
     Chord Direction: 0.76  
 Radial Direction: 105.45  
 Tangent Direction: 5.45

Element: Linear  
     KL (            ) 2+471.17 5859703.1502 5543730.3559  
     PL (            ) 2+474.31 5859706.2819 5543730.6246  
 Tangent Direction: 5.45  
 Tangent Length: 3.14

Element: Circular  
     PL (            ) 2+474.31 5859706.2819 5543730.6246  
     W (            ) 2+511.39 5859743.2251 5543733.7949

tyczenie_odc_1_kr_P.txt			
CC ( )		5859694.5041	5543867.8702
KŁ ( )	2+546.75	5859773.5851	5543755.0817
Radius:	137.75		
Delta:	33.48	Right	
Degree of Curvature(Arc):	46.22		
Length:	72.44		
Tangent:	37.08		
Chord:	71.61		
Middle ordinate:	4.73		
External:	4.90		
Tangent Direction:	5.45		
Radial Direction:	105.45		
Chord Direction:	22.19		
Radial Direction:	138.93		
Tangent Direction:	38.93		
Element: Linear			
KŁ ( )	2+546.75	5859773.5851	5543755.0817
PL ( )	2+585.32	5859805.1658	5543777.2243
Tangent Direction:	38.93		
Tangent Length:	38.57		
Element: Circular			
PL ( )	2+585.32	5859805.1658	5543777.2243
W ( )	2+612.84	5859827.7008	5543793.0245
CC ( )		5859634.2303	5544021.0195
KŁ ( )	2+640.21	5859846.9577	5543812.6878
Radius:	297.75		
Delta:	11.74	Right	
Degree of Curvature(Arc):	21.38		
Length:	54.89		
Tangent:	27.52		
Chord:	54.81		
Middle ordinate:	1.26		
External:	1.27		
Tangent Direction:	38.93		
Radial Direction:	138.93		
Chord Direction:	44.80		
Radial Direction:	150.66		
Tangent Direction:	50.66		
Element: Linear			
KŁ ( )	2+640.21	5859846.9577	5543812.6878
PL ( )	2+665.94	5859864.9597	5543831.0696
Tangent Direction:	50.66		
Tangent Length:	25.73		
Element: Circular			
PL ( )	2+665.94	5859864.9597	5543831.0696
W ( )	2+685.43	5859878.5999	5543844.9976
CC ( )		5859759.3997	5543934.4483
KŁ ( )	2+704.70	5859888.1607	5543861.9868
Radius:	147.75		
Delta:	16.70	Right	
Degree of Curvature(Arc):	43.09		
Length:	38.77		
Tangent:	19.49		
Chord:	38.65		
Middle ordinate:	1.27		
External:	1.28		
Tangent Direction:	50.66		
Radial Direction:	150.66		
Chord Direction:	59.02		
Radial Direction:	167.37		
Tangent Direction:	67.37		
Element: Linear			
KŁ ( )	2+704.70	5859888.1607	5543861.9868

		tyczenie_odc_1_kr_P.txt		
PŁ ( )		2+714.94	5859893.1809	5543870.9073
Tangent Direction:		67.37		
Tangent Length:		10.24		
Element: Circular				
PŁ ( )		2+714.94	5859893.1809	5543870.9073
W ( )		2+734.63	5859902.8365	5543888.0650
CC ( )			5859790.5642	5543928.6559
KŁ ( )		2+753.95	5859906.3854	5543907.4305
Radius:		117.75		
Delta:		21.09	Right	
Degree of Curvature(Arc):		54.07		
Length:		39.02		
Tangent:		19.69		
Chord:		38.84		
Middle Ordinate:		1.61		
External:		1.63		
Tangent Direction:		67.37		
Radial Direction:		167.37		
Chord Direction:		77.91		
Radial Direction:		188.46		
Tangent Direction:		88.46		
Element: Linear				
KŁ ( )		2+753.95	5859906.3854	5543907.4305
PŁ ( )		2+765.98	5859908.5535	5543919.2608
Tangent Direction:		88.46		
Tangent Length:		12.03		
Element: Circular				
PŁ ( )		2+765.98	5859908.5535	5543919.2608
W ( )		2+778.58	5859910.8236	5543931.6485
CC ( )			5859763.2237	5543945.8940
KŁ ( )		2+791.11	5859910.9645	5543944.2417
Radius:		147.75		
Delta:		10.83	Right	
Degree of Curvature(Arc):		43.09		
Length:		25.13		
Tangent:		12.59		
Chord:		25.10		
Middle Ordinate:		0.53		
External:		0.54		
Tangent Direction:		88.46		
Radial Direction:		188.46		
Chord Direction:		93.87		
Radial Direction:		199.29		
Tangent Direction:		99.29		
Element: Linear				
KŁ ( )		2+791.11	5859910.9645	5543944.2417
PŁ ( )		2+802.98	5859911.0972	5543956.1079
Tangent Direction:		99.29		
Tangent Length:		11.87		
Element: Circular				
PŁ ( )		2+802.98	5859911.0972	5543956.1079
W ( )		2+839.41	5859911.5047	5543992.5447
CC ( )			5859713.3595	5543958.3193
KŁ ( )		2+875.05	5859898.8981	5544026.7336
Radius:		197.75		
Delta:		23.20	Right	
Degree of Curvature(Arc):		32.19		
Length:		72.07		
Tangent:		36.44		
Chord:		71.67		
Middle Ordinate:		3.27		
External:		3.33		
Tangent Direction:		99.29		

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Radial Direction: 199.29  
 Chord Direction: 110.89  
 Radial Direction: 222.49  
 Tangent Direction: 122.49

Element: Linear  
     KŁ (            ) 2+875.05 5859898.8981 5544026.7336  
     PŁ (            ) 2+920.41 5859883.2022 5544069.3006  
 Tangent Direction: 122.49  
 Tangent Length: 45.37

Element: Circular  
     PŁ (            ) 2+920.41 5859883.2022 5544069.3006  
     W (            ) 2+930.26 5859879.7947 5544078.5418  
     CC (            ) 5859603.8388 5543966.2901  
     KŁ (            ) 2+940.11 5859875.7839 5544087.5375  
         Radius: 297.75  
         Delta: 4.21 Right  
 Degree of Curvature(Arc): 21.38  
     Length: 19.69  
     Tangent: 9.85  
     Chord: 19.69  
     Middle Ordinate: 0.16  
     External: 0.16  
 Tangent Direction: 122.49  
     Radial Direction: 222.49  
     Chord Direction: 124.59  
     Radial Direction: 226.70  
     Tangent Direction: 126.70

Non-collinear

Element: Linear  
     KŁ (            ) 2+940.11 5859875.7839 5544087.5375  
     PŁ (            ) 2+979.96 5859860.0109 5544124.1424  
 Tangent Direction: 125.90  
 Tangent Length: 39.86

Non-collinear

Element: Circular  
     PŁ (            ) 2+979.96 5859860.0109 5544124.1424  
     W (            ) 2+986.22 5859857.4619 5544129.8597  
     CC (            ) 5859843.3426 5544116.7108  
     KŁ (            ) 2+992.02 5859851.9402 5544132.8088  
         Radius: 18.25  
         Delta: 42.07 Right  
 Degree of Curvature(Arc): 348.83  
     Length: 12.06  
     Tangent: 6.26  
     Chord: 11.84  
     Middle Ordinate: 0.99  
     External: 1.04  
 Tangent Direction: 126.70  
     Radial Direction: 226.70  
     Chord Direction: 147.74  
     Radial Direction: 268.77  
     Tangent Direction: 168.77

Element: Linear  
     KŁ (            ) 2+992.02 5859851.9402 5544132.8088  
     PŁ (            ) 3+002.90 5859842.3476 5544137.9320  
 Tangent Direction: 168.77  
 Tangent Length: 10.88

Element: Circular  
     PŁ (            ) 3+002.90 5859842.3476 5544137.9320  
     W (            ) 3+011.54 5859834.7225 5544142.0044

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CC ( )		5859786.6397	5544033.6262
KŁ ( )	3+020.16	5859826.5862	5544144.9247
Radius:	118.25		
Delta:	9.29	Right	
Degree of Curvature(Arc):	53.84		
Length:	17.26		
Tangent:	8.64		
Chord:	17.24		
Middle ordinate:	0.31		
External:	0.32		
Tangent Direction:	168.77		
Radial Direction:	268.77		
Chord Direction:	173.42		
Radial Direction:	278.06		
Tangent Direction:	178.06		
Element: Linear			
KŁ ( )	3+020.16	5859826.5862	5544144.9247
PL ( )	3+024.70	5859822.3109	5544146.4591
Tangent Direction:	178.06		
Tangent Length:	4.54		
Element: Circular			
PL ( )	3+024.70	5859822.3109	5544146.4591
W ( )	3+039.08	5859808.7734	5544151.3179
CC ( )		5859782.3644	5544035.1607
KŁ ( )	3+053.33	5859794.4659	5544152.7898
Radius:	118.25		
Delta:	15.41	Right	
Degree of Curvature(Arc):	53.84		
Length:	28.63		
Tangent:	14.38		
Chord:	28.56		
Middle Ordinate:	0.87		
External:	0.87		
Tangent Direction:	178.06		
Radial Direction:	278.06		
Chord Direction:	185.77		
Radial Direction:	293.47		
Tangent Direction:	193.47		
Non-collinear			
Element: Linear			
KŁ ( )	3+053.33	5859794.4659	5544152.7898
W ( )	3+079.31	5859768.5689	5544154.9527
Tangent Direction:	194.70		
Tangent Length:	25.99		
Element: Linear			
W ( )	3+079.31	5859768.5689	5544154.9527
PL ( )	3+099.29	5859748.6572	5544156.5654
Tangent Direction:	194.86		
Tangent Length:	19.98		
Non-collinear			
Element: Circular			
PL ( )	3+099.29	5859748.6572	5544156.5654
W ( )	3+110.16	5859737.8130	5544157.3072
CC ( )		5859735.1447	5543959.0270
KŁ ( )	3+121.01	5859726.9529	5544156.8575
Radius:	198.00		
Delta:	6.98	Right	
Degree of Curvature(Arc):	32.15		
Length:	21.72		
Tangent:	10.87		
Chord:	21.71		

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Middle Ordinate: 0.30  
 External: 0.30  
 Tangent Direction: 195.65  
 Radial Direction: 295.65  
 Chord Direction: 199.14  
 Radial Direction: 302.63  
 Tangent Direction: 202.63

Element: Linear  
 KŁ ( ) 3+121.01 5859726.9529 5544156.8575  
 PŁ ( ) 3+134.76 5859713.2079 5544156.2883  
 Tangent Direction: 202.63  
 Tangent Length: 13.76

Element: Circular  
 PŁ ( ) 3+134.76 5859713.2079 5544156.2883  
 W ( ) 3+157.86 5859690.1335 5544155.3329  
 CC ( ) 5859721.3997 5543958.4578  
 KŁ ( ) 3+180.74 5859667.8985 5544149.0926  
 Radius: 198.00  
 Delta: 14.78 Right  
 Degree of Curvature(Arc): 32.15  
 Length: 45.98  
 Tangent: 23.09  
 Chord: 45.88  
 Middle Ordinate: 1.33  
 External: 1.34  
 Tangent Direction: 202.63  
 Radial Direction: 302.63  
 Chord Direction: 210.03  
 Radial Direction: 317.42  
 Tangent Direction: 217.42

Element: Linear  
 KŁ ( ) 3+180.74 5859667.8985 5544149.0926  
 PŁ ( ) 3+222.11 5859628.0738 5544137.9159  
 Tangent Direction: 217.42  
 Tangent Length: 41.36

Element: Circular  
 PŁ ( ) 3+222.11 5859628.0738 5544137.9159  
 W ( ) 3+257.15 5859594.3378 5544128.4480  
 CC ( ) 5859573.4918 5544332.4019  
 KŁ ( ) 3+291.50 5859559.3840 5544130.8952  
 Radius: 202.00  
 Delta: 21.87 Left  
 Degree of Curvature(Arc): 31.52  
 Length: 69.39  
 Tangent: 35.04  
 Chord: 69.05  
 Middle Ordinate: 2.97  
 External: 3.02  
 Tangent Direction: 217.42  
 Radial Direction: 317.42  
 Chord Direction: 206.48  
 Radial Direction: 295.55  
 Tangent Direction: 195.55

Element: Linear  
 KŁ ( ) 3+291.50 5859559.3840 5544130.8952  
 W ( ) 3+310.25 5859540.6742 5544132.2051  
 Tangent Direction: 195.55  
 Tangent Length: 18.76

Non-coincident

Element: Linear  
 W ( ) 3+310.25 5859540.5829 5544132.2136

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PŁ ( )		3+323.57	5859527.3497	5544133.7521
Tangent Direction:		192.63		
Tangent Length:		13.32		
Element: Circular				
PŁ ( )		3+323.57	5859527.3497	5544133.7521
W ( )		3+355.39	5859495.7463	5544137.4263
CC ( )			5859533.3547	5544185.4042
KŁ ( )		3+380.68	5859484.6312	5544167.2378
Radius:		52.00		
Delta:		69.91	Left	
Degree of Curvature(Arc):		122.43		
Length:		57.11		
Tangent:		31.82		
Chord:		54.28		
Middle Ordinate:		7.64		
External:		8.96		
Tangent Direction:		192.63		
Radial Direction:		292.63		
Chord Direction:		157.68		
Radial Direction:		222.72		
Tangent Direction:		122.72		
Element: Linear				
KŁ ( )		3+380.68	5859484.6312	5544167.2378
PŁ ( )		3+392.91	5859480.3571	5544178.7013
Tangent Direction:		122.72		
Tangent Length:		12.23		
Element: Circular				
PŁ ( )		3+392.91	5859480.3571	5544178.7013
W ( )		3+417.92	5859471.6207	5544202.1329
CC ( )			5859294.8328	5544109.5294
KŁ ( )		3+442.66	5859457.3328	5544222.6566
Radius:		198.00		
Delta:		16.00	Right	
Degree of Curvature(Arc):		32.15		
Length:		49.75		
Tangent:		25.01		
Chord:		49.62		
Middle Ordinate:		1.56		
External:		1.57		
Tangent Direction:		122.72		
Radial Direction:		222.72		
Chord Direction:		130.72		
Radial Direction:		238.72		
Tangent Direction:		138.72		
Non-collinear				
Element: Linear				
KŁ ( )		3+442.66	5859457.3328	5544222.6566
W ( )		3+482.80	5859434.6092	5544255.7357
Tangent Direction:		138.32		
Tangent Length:		40.13		
Element: Linear				
W ( )		3+482.80	5859434.6092	5544255.7357
PŁ ( )		3+525.62	5859412.0516	5544292.1313
Tangent Direction:		135.32		
Tangent Length:		42.82		
Non-collinear				
Element: Circular				
PŁ ( )		3+525.62	5859412.0516	5544292.1313
W ( )		3+542.36	5859403.3118	5544306.4184
CC ( )			5859243.1481	5544188.8085

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KŁ ( )	3+559.03	5859392.2964	5544319.0344
Radius:	198.00		
Delta:	10.74	Right	
Degree of Curvature(Arc):	32.15		
Length:	33.42		
Tangent:	16.75		
Chord:	33.38		
Middle Ordinate:	0.70		
External:	0.71		
Tangent Direction:	134.95		
Radial Direction:	234.95		
Chord Direction:	140.32		
Radial Direction:	245.69		
Tangent Direction:	145.69		

Element: Linear			
KŁ ( )	3+559.03	5859392.2964	5544319.0344
PL ( )	3+595.26	5859368.4693	5544346.3236
Tangent Direction:	145.69		
Tangent Length:	36.23		

Element: Circular			
PL ( )	3+595.26	5859368.4693	5544346.3236
W ( )	3+615.00	5859355.4896	5544361.1894
CC ( )		5859219.3210	5544216.0978
KŁ ( )	3+634.60	5859339.8309	5544373.2008
Radius:	198.00		
Delta:	12.65	Right	
Degree of Curvature(Arc):	32.15		
Length:	39.34		
Tangent:	19.73		
Chord:	39.28		
Middle Ordinate:	0.98		
External:	0.98		
Tangent Direction:	145.69		
Radial Direction:	245.69		
Chord Direction:	152.02		
Radial Direction:	258.34		
Tangent Direction:	158.34		

Element: Linear			
KŁ ( )	3+634.60	5859339.8309	5544373.2008
W ( )	3+740.14	5859256.0907	5544437.4359
Tangent Direction:	158.34		
Tangent Length:	105.54		

Element: Linear			
W ( )	3+740.14	5859256.0907	5544437.4359
PL ( )	3+760.14	5859240.0695	5544449.4102
Tangent Direction:	159.14		
Tangent Length:	20.00		

Non-collinear

Element: Circular			
PL ( )	3+760.14	5859240.0695	5544449.4102
W ( )	3+789.65	5859216.6576	5544467.3690
CC ( )		5859271.8708	5544490.8680
KŁ ( )	3+813.86	5859219.9463	5544496.6916
Radius:	52.25		
Delta:	65.45	Left	
Degree of Curvature(Arc):	121.84		
Length:	53.72		
Tangent:	29.51		
Chord:	51.39		
Middle Ordinate:	6.75		
External:	7.76		
Tangent Direction:	158.34		

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Radial Direction: 258.34  
 Chord Direction: 125.62  
 Radial Direction: 192.89  
 Tangent Direction: 92.89

Non-collinear

Element: Linear  
     KL (            )            3+813.86   5859219.9463   5544496.6916  
     W (            )            3+833.87   5859222.4243   5544516.5429  
 Tangent Direction: 92.09  
     Tangent Length: 20.01

Element: Linear  
     W (            )            3+833.87   5859222.4243   5544516.5429  
     W (            )            3+874.42   5859227.0208   5544556.8298  
 Tangent Direction: 92.77  
     Tangent Length: 40.55

Non-coincident

Element: Linear  
     W (            )            3+874.42   5859227.0238   5544556.8553  
     W (            )            3+927.07   5859233.6640   5544609.0855  
 Tangent Direction: 91.95  
     Tangent Length: 52.65

Element: Linear  
     W (            )            3+927.07   5859233.6640   5544609.0855  
     PL (            )            3+947.06   5859235.5776   5544628.9888  
 Tangent Direction: 93.90  
     Tangent Length: 20.00

Non-collinear

Element: Circular  
     PL (            )            3+947.06   5859235.5776   5544628.9888  
     W (            )            3+968.09   5859238.1128   5544649.8622  
     CC (            )            5859118.9348   5544643.1555  
     KL (            )            3+988.67   5859233.2518   5544670.3194  
     Radius: 117.50  
     Delta: 22.55  
 Degree of Curvature(Arc): 54.18  
     Length: 41.61  
     Tangent: 21.03  
     Chord: 41.40  
     Middle Ordinate: 1.84  
     External: 1.87  
 Tangent Direction: 92.31  
 Radial Direction: 192.31  
     Chord Direction: 103.58  
 Radial Direction: 214.85  
 Tangent Direction: 114.85

Non-collinear

Element: Linear  
     KL (            )            3+988.67   5859233.2518   5544670.3194  
     W (            )            4+008.68   5859229.1146   5544689.8932  
 Tangent Direction: 113.26  
     Tangent Length: 20.01

Element: Linear  
     W (            )            4+008.68   5859229.1146   5544689.8932  
     W (            )            4+015.97   5859227.4285   5544696.9890  
 Tangent Direction: 114.85  
     Tangent Length: 7.29

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Element: Linear  
W ( ) 4+015.97 5859227.4285 5544696.9890  
W ( ) 4+029.53 5859224.2940 5544710.1803  
Tangent Direction: 114.85  
Tangent Length: 13.56

Element: Linear  
W ( ) 4+029.53 5859224.2940 5544710.1803  
W ( ) 4+089.18 5859210.5051 5544768.2099  
Tangent Direction: 114.85  
Tangent Length: 59.65

Non-coincident

Element: Linear  
W ( ) 4+089.18 5859210.5033 5544768.2175  
W ( ) 4+214.46 5859182.0138 5544890.2153  
Tangent Direction: 114.60  
Tangent Length: 125.28

Element: Linear  
W ( ) 4+214.46 5859182.0138 5544890.2153  
W ( ) 4+222.97 5859180.0771 5544898.5084  
Tangent Direction: 114.60  
Tangent Length: 8.52

Non-coincident

Element: Linear  
W ( ) 4+222.97 5859180.0759 5544898.5140  
W ( ) 4+229.13 5859178.6933 5544904.5112  
Tangent Direction: 114.42  
Tangent Length: 6.15

Element: Linear  
W ( ) 4+229.13 5859178.6933 5544904.5112  
W ( ) 4+307.55 5859161.0775 5544980.9243  
Tangent Direction: 114.42  
Tangent Length: 78.42

Non-coincident

Element: Linear  
W ( ) 4+307.55 5859161.0885 5544980.8793  
W ( ) 4+348.52 5859150.9613 5545020.5867  
Tangent Direction: 115.90  
Tangent Length: 40.98

Element: Linear  
W ( ) 4+348.52 5859150.9613 5545020.5867  
KONIEC ( ) 4+370.03 5859145.1978 5545041.3058  
Tangent Direction: 117.27  
Tangent Length: 21.51