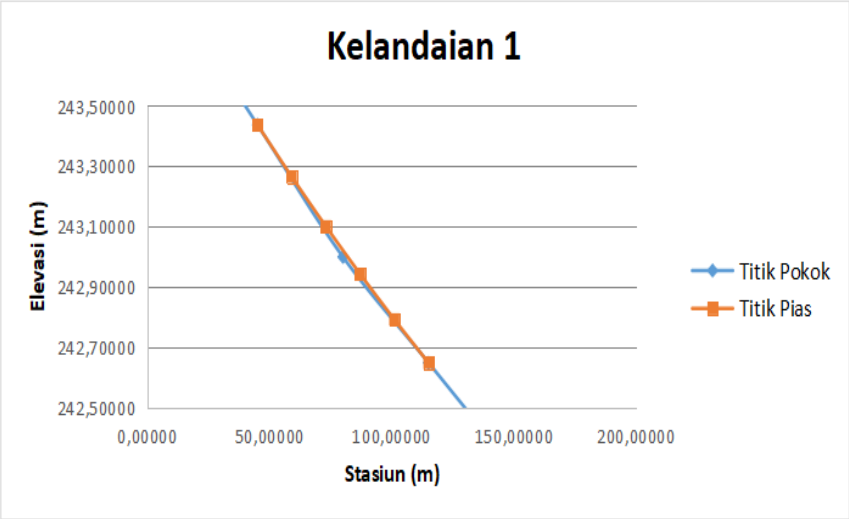
Lampiran 17 Perhitungan Analisis Vertikal Trase Baru

`	Elevasi Rencana	Stasiun	Kelandaian (g)	Detail AV		Lv	Ev	Δelevasi	x
				PPV	Δ				
	m	m	%		%	m	m	m	m
	244,00	0	-1,06	0,00	0,19	0,06	0,00	0,00	0,00
A1	244,00	0	-1,25	80,01	0,25	0,09	0,00	1,00	79,99
VPI1	243,00	80	-1,00	100,00	69,00	23,76	2,05	1,00	99,99
B1	242,00	180	-1,00	100,00	0,00	0,00	0,00	1,00	99,99
A2	243,00	80	-1,00	100,00	0,27	0,09	0,00	1,00	99,99
VPI2	242,00	180	-1,27	158,05	2,12	0,73	0,00	2,00	158,03
B2	240,00	338	0,85	0,00	0,00	0,00	0,00	0,00	0,00
	240,00	338	0,85	414,57	0,85	0,29	0,00	240,00	238,06

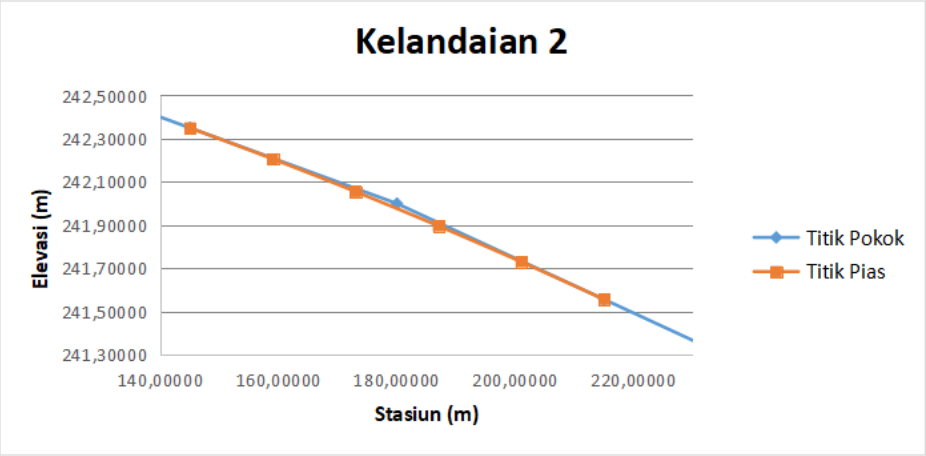
Sta A		0,00000	m	
Vr		80,00000	km/jam	
Elevasi A		244,00000	m	
ā		79,99375	m	
б		99,99500	m	
g1		-1,25000	%	
		-0,01250		
g2		-1,00000	%	
		-0,01000		
x0		0,00000	m	
A	g2-g1	0,25000	%	
		0,00250		
Ltot		155,07266	m	
D	JPH	139,45416	m	dibagi 398
Lv	(AD^2)/398	70,00000	m	
VPC				
Elevasi	elevasi A+g1(ā-0.5Lv)-A(Xo^2)/(2*Lv)	243,43758	m	
Sta	Sta A+(ā-0.5*Lv)	44,99375	m	
VPI				
Elevasi	elevasi A + (ā*g1)	243,00008	m	
Sta	Sta A + ā	79,99375	m	
VPT				
Elevasi	elevasi VPI + 0.5*Lv*g2	242,65008	m	
Sta	Sta VPI + 0.5*Lv	114,99375	m	
Titik B				
Elevasi	elevasi VPI + g2*б	242,00013	m	
Sta	Sta VPI + б	179,98875	m	
Titik Pias	Satuan	x	Elevasi	Sta
x1	meter	14,00000	243,26608	58,99375
x2		28,00000	243,10158	72,99375
x3		42,00000	242,94408	86,99375
x4		56,00000	242,79358	100,99375
x5		70,00000	242,65008	114,99375
Elevasi Tertinggi (M)				
xm	g1*Lv/A	-350,00000	m	
Elevasi	elevasi VPC + g1*xm - (A*xm^2)/(2*Lv)	245,62508	m	
Sta		-305,00625	m	

	Rekapitulasi		
	Titik	Sta	Elevasi
POKOK	A	0,00000	244,00000
	VPC	44,99375	243,43758
	VPI	79,99375	243,00008
	VPT	114,99375	242,65008
	B	180,00000	242,00000
PIAS	VPC	44,99375	243,43758
	x1	58,99375	243,26608
	x2	72,99375	243,10158
	x3	86,99375	242,94408
	x4	100,99375	242,79358
	x5	114,99375	242,65008



Sta B		80,00000	m	
Vr		80,00000	km/jam	
Elevasi B		243,00000	m	
ā		99,99500	m	
ƀ		158,02734	m	
g1		-1,00000	%	
		-0,01000		
g2		-1,26550	%	
		-0,01266		
x0		0,00000	m	
A	g2-g1	0,26550	%	
		0,00266		
Ltot		155,07266	m	
D	JPH	139,45416	m	dibagi 398
Lv	(AD^2)/398	70,00000	m	
VPC				
Elevasi	elevasi A+g1(ā-0.5Lv)-A(Xo^2)/(2*Lv)	242,35005	m	
Sta	Sta A+(ā-0.5*Lv)	144,99500	m	
VPI				
Elevasi	elevasi A + (ā*g1)	242,00005	m	
Sta	Sta A + ā	179,99500	m	
VPT				
Elevasi	elevasi VPI + 0.5*Lv*g2	241,55712	m	
Sta	Sta VPI + 0.5*Lv	214,99500	m	
Titik B				
Elevasi	elevasi VPI + g2*ƀ	240,00021	m	
Sta	Sta VPI + ƀ	338,02234	m	
Titik Pias	Satuan	x	Elevasi	Sta
x1	meter	14,00000	242,20633	158,99500
x2		28,00000	242,05518	172,99500
x3		42,00000	241,89660	186,99500
x4		56,00000	241,73058	200,99500
x5		70,00000	241,55712	214,99500
Elevasi Tertinggi (M)				
xm	g1*Lv/A	-263,65110	m	
Elevasi	elevasi VPC + g1*xm - (A*xm^2)/(2*Lv)	243,66831	m	
Sta		-118,65610	m	

	Rekapitulasi		
	Titik	Sta	Elevasi
POKOK	A	80,00000	243,00000
	VPC	144,99500	242,35005
	VPI	179,99500	242,00005
	VPT	214,99500	241,55712
	B	338,04000	240,00000
PIAS	VPC	144,99500	242,35005
	x1	158,99500	242,20633
	x2	172,99500	242,05518
	x3	186,99500	241,89660
	x4	200,99500	241,73058
	x5	214,99500	241,55712


Kelandaian 2
242,50000
242,30000
242,10000
241,90000
241,70000
241,50000
241,30000
Elevasi (m)
140,00000
160,00000
180,00000
200,00000
220,00000
Stasiun (m)
Titik Pokok
Titik Pias