

# Vertical Alignment Review Report

Report Created: 2/24/2022  
Time: 3:27pm

**Project:** Alternative3  
**Description:** Alternative3  
**File Name:** M:\Projects\21D287\Design\InRoads\Alternative3.alg  
**Last Revised:** cleach 2/24/2022 3:17:19 PM  
**Input Grid Factor:** 1.00000000 **Note:** All units in this report are in feet unless specified otherwise.

**Horizontal Alignment:** Alternative3  
**Horizontal Description:** Alternative3  
**Horizontal Style:** Default

**Vertical Alignment:** Alternative3  
**Vertical Description:** Alternative3  
**Vertical Style:** Default

	<u>Station</u>	<u>Elevation</u>
Element: Linear		
POB	47+71.46	113.55
PVC	47+94.41	114.78
Tangent Grade:	5.39%	
Tangent Length:	22.95	
Element: Symmetrical Parabola		
PVC	47+94.41	114.78
PVI	49+19.41	121.52
PVT	50+44.41	120.01
VHIGH	49+98.53	120.29
Length:	250.00	
Entrance Grade:	5.39%	
Exit Grade:	-1.21%	
$r = (g2 - g1) / L$ :	-2.64	
$K = L / (g2 - g1)$ :	37.85	
Middle Ordinate:	-2.06	
Element: Linear		
PVT	50+44.41	120.01
PVC	51+90.39	118.24
Tangent Grade:	-1.21%	
Tangent Length:	145.98	
Element: Symmetrical Parabola		
PVC	51+90.39	118.24
PVI	52+90.39	117.03
PVT	53+90.39	118.14

	VLOW	52+94.70	117.61
	Length:	200.00	
	Entrance Grade:	-1.21%	
	Exit Grade:	1.11%	
	$r = (g2 - g1) / L$ :	1.16	
	$K = L / (g2 - g1)$ :	86.06	
	Middle Ordinate:	0.58	
Element: Linear			
	PVT	53+90.39	118.14
	PVC	54+05.15	118.30
	Tangent Grade:	1.11%	
	Tangent Length:	14.76	
Element: Symmetrical Parabola			
	PVC	54+05.15	118.30
	PVI	54+30.15	118.58
	PVT	54+55.15	118.39
	VHIGH	54+34.71	118.47
	Length:	50.00	
	Entrance Grade:	1.11%	
	Exit Grade:	-0.77%	
	$r = (g2 - g1) / L$ :	-3.76	
	$K = L / (g2 - g1)$ :	26.59	
	Middle Ordinate:	-0.12	
Element: Linear			
	PVT	54+55.15	118.39
	POE	54+62.87	118.33
	Tangent Grade:	-0.77%	
	Tangent Length:	7.72	