

Vertical Alignment Report

Vertical Curves

Data generated:
07/12/2009 06:19:09 م

Project: mohana&anas 31-10

Units: meter

Horizontal Alignment Information

Name: CL
Station Range: 0+00 to 12+42.39
Station Equations: None

Curve Calculation Options ▼

Vertical Alignment: Center FG

<u>Vertical Curve Information: (crest curve)</u>			
PVC Station:	1+75	Elevation:	984.63
PVI Station:	2+00	Elevation:	984.00
PVT Station:	2+25	Elevation:	982.40
Grade in (%):	-2.50	Grade out (%):	-6.40
Change (%):	3.90	K:	12.82
Curve Length:	50.00		
Passing Distance:	146.25	Stopping Distance:	138.81
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	3+00	Elevation:	977.60
PVI Station:	3+25	Elevation:	976.00
PVT Station:	3+50	Elevation:	974.51
Grade in (%):	-6.40	Grade out (%):	-5.97
Change (%):	0.43	K:	116.69
Curve Length:	50.00		
Headlight Distance:	Infinite		
<u>Vertical Curve Information: (crest curve)</u>			
PVC Station:	5+29.55	Elevation:	963.79
PVI Station:	5+54.55	Elevation:	962.29
PVT Station:	5+79.55	Elevation:	959.29
Grade in (%):	-5.97	Grade out (%):	-12.01
Change (%):	6.04	K:	8.28
Curve Length:	50.00		
Passing Distance:	103.29	Stopping Distance:	98.49
Vertical Curve Information: (crest curve)			

PVC Station:	6+79.71	Elevation:	947.26
PVI Station:	6+94.71	Elevation:	945.46
PVT Station:	7+09.71	Elevation:	943.51
Grade in (%):	-12.01	Grade out (%):	-12.95
Change (%):	0.94	K:	31.87
Curve Length:	30.00		
Passing Distance:	517.34	Stopping Distance:	486.50
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	7+98.40	Elevation:	932.03
PVI Station:	8+08.40	Elevation:	930.73
PVT Station:	8+18.40	Elevation:	929.46
Grade in (%):	-12.95	Grade out (%):	-12.73
Change (%):	0.22	K:	89.17
Curve Length:	20.00		
Headlight Distance:	Infinite		
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	9+02.91	Elevation:	918.70
PVI Station:	9+12.91	Elevation:	917.43
PVT Station:	9+22.91	Elevation:	916.22
Grade in (%):	-12.73	Grade out (%):	-12.09
Change (%):	0.64	K:	31.16
Curve Length:	20.00		
Headlight Distance:	Infinite		
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	9+65.88	Elevation:	911.03
PVI Station:	9+84.38	Elevation:	908.79
PVT Station:	10+02.88	Elevation:	908.31
Grade in (%):	-12.09	Grade out (%):	-2.60
Change (%):	9.49	K:	3.90
Curve Length:	37.00		
Headlight Distance:	29.48		
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	10+12.29	Elevation:	908.07
PVI Station:	10+24.79	Elevation:	907.74
PVT Station:	10+37.29	Elevation:	908.47
Grade in (%):	-2.60	Grade out (%):	5.87
Change (%):	8.47	K:	2.95

Curve Length:	25.00		
Low Point:	10+19.96	Elevation:	907.97
Headlight Distance:	24.67		
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	10+38.05	Elevation:	908.52
PVI Station:	10+50.55	Elevation:	909.25
PVT Station:	10+63.05	Elevation:	910.87
Grade in (%):	5.87	Grade out (%):	12.91
Change (%):	7.04	K:	3.55
Curve Length:	25.00		
Headlight Distance:	27.94		
<u>Vertical Curve Information: (crest curve)</u>			
PVC Station:	10+90.44	Elevation:	914.40
PVI Station:	11+08.94	Elevation:	916.79
PVT Station:	11+27.44	Elevation:	918.87
Grade in (%):	12.91	Grade out (%):	11.21
Change (%):	1.71	K:	21.65
Curve Length:	37.00		
Passing Distance:	295.22	Stopping Distance:	278.24
<u>Vertical Curve Information: (sag curve)</u>			
PVC Station:	11+72.93	Elevation:	923.96
PVI Station:	11+91.43	Elevation:	926.04
PVT Station:	12+09.93	Elevation:	928.31
Grade in (%):	11.21	Grade out (%):	12.29
Change (%):	1.08	K:	34.21
Curve Length:	37.00		
Headlight Distance:	Infinite		

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Adjustment of the Traverse

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Adjustment of the Traverse

- 6
- حساب إحدائيات المحطات قبل التصحيح
- 6 تصحيح الأخطاء للمضلع (Reduction of Error)
- 3-6 Error in Angle
- 6 - الخطأ في الضبط المؤقت للجهاز (Instrument Centering Error)
- 6 - أخطاء التوجيه (Target Centering)
- 6 - الأخطاء في قياس الزوايا
- 6 تصحيح الأخطاء في الإحدائيات
- 6 - Least Square Method
- 6

1-7 .

1-1-7 حساب الحجم والكميات.

2-7 التمثيل الخطي لكميات الحفر والردم.

Vertical Alignment Report

PVI Stations and Curves

Data generated:
07/12/2009 06:19:09 م

Project: mohana&anas 31-10

Units: meter

Horizontal Alignment Information

Name: CL
Station Range: 0+00 to 12+42.39
Station Equations: None

[Curve Calculation Options](#) ▼

Vertical Alignment: Center FG

PVI	Station	Elevation	Grade Out (%)	Curve Length
1	0+00	989.00	-2.50	
2	2+00	984.00	-6.40	50.00
<u>Vertical Curve Information: (crest curve)</u> _ _ _ _ _ PVC Station: 1+75 Elevation: 984.63 PVI Station: 2+00 Elevation: 984.00 PVT Station: 2+25 Elevation: 982.40 Grade in (%): -2.50 Grade out (%): -6.40 Change (%): 3.90 K: 12.82 Curve Length: 50.00 Passing Distance: 146.25 Stopping Distance: 138.81				
3	3+25	976.00	-5.97	50.00
<u>Vertical Curve Information: (sag curve)</u> _ _ _ _ _ PVC Station: 3+00 Elevation: 977.60 PVI Station: 3+25 Elevation: 976.00 PVT Station: 3+50 Elevation: 974.51 Grade in (%): -6.40 Grade out (%): -5.97 Change (%): 0.43 K: 116.69 Curve Length: 50.00 Headlight Distance: Infinite				
4	5+54.55	962.29	-12.01	50.00
<u>Vertical Curve Information: (crest curve)</u> _ _ _ _ _ PVC Station: 5+29.55 Elevation: 963.79 PVI Station: 5+54.55 Elevation: 962.29				

PVI	Station	Elevation	Grade Out (%)	Curve Length
	PVT Station:	5+79.55	Elevation:	959.29
	Grade in (%):	-5.97	Grade out (%):	-12.01
	Change (%):	6.04	K:	8.28
	Curve Length:	50.00		
	Passing Distance:	103.29	Stopping Distance:	98.49
5	6+94.71	945.46	-12.95	30.00
	<u>Vertical Curve Information: (crest curve)</u>			
	PVC Station:	6+79.71	Elevation:	947.26
	PVI Station:	6+94.71	Elevation:	945.46
	PVT Station:	7+09.71	Elevation:	943.51
	Grade in (%):	-12.01	Grade out (%):	-12.95
	Change (%):	0.94	K:	31.87
	Curve Length:	30.00		
	Passing Distance:	517.34	Stopping Distance:	486.50
6	8+08.40	930.73	-12.73	20.00
	<u>Vertical Curve Information: (sag curve)</u>			
	PVC Station:	7+98.40	Elevation:	932.03
	PVI Station:	8+08.40	Elevation:	930.73
	PVT Station:	8+18.40	Elevation:	929.46
	Grade in (%):	-12.95	Grade out (%):	-12.73
	Change (%):	0.22	K:	89.17
	Curve Length:	20.00		
	Headlight Distance:	Infinite		
7	9+12.91	917.43	-12.09	20.00
	<u>Vertical Curve Information: (sag curve)</u>			
	PVC Station:	9+02.91	Elevation:	918.70
	PVI Station:	9+12.91	Elevation:	917.43
	PVT Station:	9+22.91	Elevation:	916.22
	Grade in (%):	-12.73	Grade out (%):	-12.09
	Change (%):	0.64	K:	31.16
	Curve Length:	20.00		
	Headlight Distance:	Infinite		
8	9+84.38	908.79	-2.60	37.00
	<u>Vertical Curve Information: (sag curve)</u>			
	PVC Station:	9+65.88	Elevation:	911.03

PVI	Station	Elevation	Grade Out (%)	Curve Length
	PVI Station:	9+84.38	Elevation:	908.79
	PVT Station:	10+02.88	Elevation:	908.31
	Grade in (%):	-12.09	Grade out (%):	-2.60
	Change (%):	9.49	K:	3.90
	Curve Length:	37.00		
	Headlight Distance:	29.48		
9	10+24.79	907.74	5.87	25.00
	<u>Vertical Curve Information: (sag curve)</u>			
	PVC Station:	10+12.29	Elevation:	908.07
	PVI Station:	10+24.79	Elevation:	907.74
	PVT Station:	10+37.29	Elevation:	908.47
	Grade in (%):	-2.60	Grade out (%):	5.87
	Change (%):	8.47	K:	2.95
	Curve Length:	25.00		
	Low Point:	10+19.96	Elevation:	907.97
	Headlight Distance:	24.67		
10	10+50.55	909.25	12.91	25.00
	<u>Vertical Curve Information: (sag curve)</u>			
	PVC Station:	10+38.05	Elevation:	908.52
	PVI Station:	10+50.55	Elevation:	909.25
	PVT Station:	10+63.05	Elevation:	910.87
	Grade in (%):	5.87	Grade out (%):	12.91
	Change (%):	7.04	K:	3.55
	Curve Length:	25.00		
	Headlight Distance:	27.94		
11	11+08.94	916.79	11.21	37.00
	<u>Vertical Curve Information: (crest curve)</u>			
	PVC Station:	10+90.44	Elevation:	914.40
	PVI Station:	11+08.94	Elevation:	916.79
	PVT Station:	11+27.44	Elevation:	918.87
	Grade in (%):	12.91	Grade out (%):	11.21
	Change (%):	1.71	K:	21.65
	Curve Length:	37.00		
	Passing Distance:	295.22	Stopping Distance:	278.24
12	11+91.43	926.04	12.29	37.00

PVI	Station	Elevation	Grade Out (%)	Curve Length
<u>Vertical Curve Information: (sag curve)</u>				
	PVC Station:	11+72.93	Elevation:	923.96
	PVI Station:	11+91.43	Elevation:	926.04
	PVT Station:	12+09.93	Elevation:	928.31
	Grade in (%):	11.21	Grade out (%):	12.29
	Change (%):	1.08	K:	34.21
	Curve Length:	37.00		
	Headlight Distance:	Infinite		

Vertical Alignment Report

Station Increment

Data generated:
07/12/2009 06:19:09 م

Project: mohana&anas 31-10

Units: meter

Horizontal Alignment Information

Name: CL
Station Range: 0+00 to 12+42.39
Station Equations: None

Station	Elevation
	Center FG
0+00	989.00
0+25	988.38
0+50	987.75
0+75	987.13
1+00	986.50
1+25	985.88
1+50	985.25
1+75	984.63
2+00	983.76
2+25	982.40
2+50	980.80
2+75	979.20
3+00	977.60
3+25	976.03
3+50	974.51
3+75	973.01
4+00	971.52
4+25	970.03
4+50	968.54
4+75	967.04
5+00	965.55
5+25	964.06
5+50	962.31
5+75	959.82

Station	Elevation
	Center FG
6+00	956.83
6+25	953.83
6+50	950.83
6+75	947.83
7+00	944.76
7+25	941.53
7+50	938.30
7+75	935.06
8+00	931.82
8+25	928.62
8+50	925.44
8+75	922.25
9+00	919.07
9+25	915.97
9+50	912.95
9+75	910.03
10+00	908.40
10+25	908.01
10+50	909.42
10+75	912.41
11+00	915.62
11+25	918.59
11+50	921.39
11+75	924.20
12+00	927.10
12+25	930.16