

CEC

**Superelevation
~~Rate~~ Report A*

4555 W. Memorial Rd

*Rates, Stations
Runout lengths.*

Oklahoma City, Oklahoma 73142

Alignment Station and Curve Report

Client: OTA

Project Name: N:\OKC\Transportation\Highway\Production\OTA\15374_EOC-2441-NE Loop at I-40\EOC_2441 References\EOC-2441_ALIGNMENT &_amp;_PROFILES.dwg

Project Description:

Report Date: 4/10/2017 9:05:38 AM

Prepared by:
Corbin Chambers

Alignment: BL RAMP A - 1

Description: I-40 CONNECTION

*Station Range = Start ——— End ———
From Alignment PI Station report.*

Tangent Data

Description	PT Station	Northing	Easting
Start: <i>PI</i>	886+64.083	140854.84746549	2206874.35647795
End: <i>PI</i>	889+64.323	140844.11123213	2207174.40436295

Tangent Data

Parameter	Value	Parameter	Value
Length:	300.23990408	Course:	S 87° 57' 02.63515550" E

Tangent Data

Description	PT Station	Northing	Easting
Start: <i>PI</i>	889+64.323	140844.11123213	2207174.40436295
End: <i>PC</i>	897+64.323	140847.48099261	2207974.39726587

Tangent Data

Parameter	Value	Parameter	Value
Length:	800.00000000	Course:	N 89° 45' 31.16869075" E

Curve Point Data

Description	Station	Offset	Northing	Easting
<i>ADD</i> PC: <i>PI</i>	897+64.323		140847.48099261	2207974.39726587
RP:			138957.49775947	2207982.35832500
PT:	907+33.027		140608.52398221	2208902.25636925

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	29° 21' 59.29239554"	Type:	RIGHT



Parameter	Value	Parameter	Value
Length:	76.80973842	Course:	N 37° 02' 44.11423079" W

Alignment: BL RAMP A - 3

Description:

		<u>Tangent Data</u>	
Description	PT Station	Northing	Easting
Start: PI	942+73.990	142341.06136000	2210596.94521551
End: PC	972+26.579	144697.68885320	2208818.15747928
		<u>Tangent Data</u>	
Parameter	Value	Parameter	Value
Length:	2952.58851726	Course:	N 37° 02' 44.11423060" W

		<u>Curve Point Data</u>		
Description	Station	Offset	Northing	Easting
PC:	972+26.579		144697.68885320	2208818.15747928
RP: PI			139684.70019469	2202176.69787448
PT:	974+73.238		144892.33019678	2208666.66172136
		<u>Circular Curve Data</u>		
Parameter	Value	Parameter	Value	
Delta:	01° 41' 54.29816403"	Type:	LEFT	
Radius:	8320.99999835	Tangent:	123.33854514	
Length:	246.65902021	External:	0.91404646	
Mid-Ord:	0.91394607	Course:	N 37° 53' 41.26331290" W	
Chord:	246.64999624			

ADD Superlevation Data per Curve

Design Speed \rightarrow MPH

CMAX \rightarrow Super. Rate Table

Full Super \rightarrow XX%

DD° MM' SS.SS"

of ~~Curve~~ Curvature

		<u>Tangent Data</u>	
Description	PT Station	Northing	Easting
Start: PT	974+73.238	144892.33019678	2208666.66172136
End: PI	980+26.579	145323.90848718	2208320.35778095
		<u>Tangent Data</u>	
Parameter	Value	Parameter	Value
Length:	553.34097976	Course:	N 38° 44' 38.41239461" W

		<u>Tangent Data</u>	
Description	PT Station	Northing	Easting
Start:	980+26.579	145323.90848718	2208320.35778095
End:	983+26.818	145550.38338135	2208123.24582720
		<u>Tangent Data</u>	
Parameter	Value	Parameter	Value
Length:	300.23990408	Course:	N 41° 02' 04.60854780" W

Alignment: BL RAMP B

Description:

		<u>Tangent Data</u>	
Description	PT Station	Northing	Easting
Start: <i>PI</i>	896+06.261	141597.60040604	2210339.60618430
End: <i>PI</i>	899+06.501	141320.33405314	2210454.79025241
		<u>Tangent Data</u>	
Parameter	Value	Parameter	Value
Length:	300.23990408	Course:	S 22° 33' 33.63188405" E

		<u>Tangent Data</u>	
Description	PT Station	Northing	Easting
Start: <i>PI</i>	899+06.501	141320.33405314	2210454.79025241
End: <i>PC</i>	907+06.501	140594.40489931	2210790.98493355
		<u>Tangent Data</u>	
Parameter	Value	Parameter	Value
Length:	800.00000000	Course:	S 24° 50' 59.82803786" E

		<u>Curve Point Data</u>	
Description	Station	Northing	Easting
<i>ADD</i> <i>PC:</i>	907+06.501	140594.40489931	2210790.98493355
<i>RP:</i>	_____	140464.12946037	2210509.68738644
<i>PCC:</i>	923+24.128	140773.32512940	2210532.00415710
<i>R</i>			
		<u>Circular Curve Data</u>	
Parameter	Value	Parameter	Value
Delta:	298° 58' 41.60113522"	Type:	RIGHT
Radius:	310.00000000	Tangent:	182.68328923
Length:	1617.62785626	External:	669.82382379
Mid-Ord:	577.07514524	Course:	N 55° 21' 39.02747031" W
Chord:	314.77526455		

		<u>Curve Point Data</u>	
Description	Station	Northing	Easting
<i>ADD</i> <i>PCC:</i>	923+24.128	140773.32512940	2210532.00415710
<i>RP:</i>	_____	162764.11903517	2212119.23047791
<i>PCC:</i>	936+74.128	140717.41007384	2211880.63464036
		<u>Circular Curve Data</u>	
Parameter	Value	Parameter	Value
Delta:	03° 30' 29.60306757"	Type:	LEFT
Radius:	22047.99999998		

Match Alignment Geometry point Abbreviation per label st.

Length:	1350.00000000	Tangent:	675.21098558
Mid-Ord:	10.33176340	External:	10.33660717
Chord:	1349.78915910	Course:	S 87° 37' 33.02843653" E

Curve Point Data

Description	Station	Northing	Easting
PCC:	936+74.128	140717.41007384	2211880.63464036
RP:	<u> </u>	162732.61609137	2211240.48863205
PT:	939+74.941	140728.20631312	2212181.25067279

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	00° 46' 57.17787196"	Type:	LEFT
Radius:	22024.51095725		
Length:	300.81217459	Tangent:	150.40842957
Mid-Ord:	0.51356201	External:	0.51357399
Chord:	300.80984478	Course:	N 87° 56' 35.44636287" E

Alignment: BL RAMP C

Description: W.B. I-40 TO N.B. TPK.

Curve Point Data

Description	Station	Northing	Easting
PC:	448+72.156	141120.52345243	2213684.40560314
RP:		112495.86699880	2212086.47975449
PCC:	451+72.835	141135.70771951	2213384.11128877

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	00° 36' 03.28035217"	Type:	LEFT
Radius:	28669.22259334		
Length:	300.67934068	Tangent:	150.34105255
Mid-Ord:	0.39418519	External:	0.39419061
Chord:	300.67797089	Course:	N 87° 06' 19.17422291" W

Curve Point Data

Description	Station	Northing	Easting
PCC:	451+72.835	141135.70771951	2213384.11128877
RP:		112438.12090212	2213230.11503120
PCC:	459+72.835	141128.85032094	2212584.16657731

Circular Curve Data

Parameter	Value	Parameter	Value
Delta:	01° 35' 49.94237336"	Type:	LEFT
Radius:	28697.99999980		

Alignment PI Station Report

Client:
EOC 2441
OTA

Prepared by:
Corbin Chambers
CEC

Date: 4/13/2017 9:40:26 AM

Alignment Name: BL RAMP A - 1
Description: I-40 CONNECTION

Station Range: Start: 886+64.0831, End: 908+76.8000

ADD to Alignment Station & Curve Report

PI Station	Northing	Easting	Distance	Direction
886+64.0831	140,854.8475'	2,206,874.3565'		
			300.240'	S87° 57' 02.64"E
889+64.3230	140,844.1112'	2,207,174.4044'		
			1,295.241'	N89° 45' 31.17"E
902+59.5642 <i>PI on Curve</i>	140,849.5670'	2,208,469.6341'		
			639.015'	S60° 52' 29.54"E
908+76.8000	140,538.5468'	2,209,027.8509'		

Alignment Name: BL RAMP A - 2

Description: FLY-OVER

Station Range: Start: 908+76.8000, End: 942+73.9900

PI Station	Northing	Easting	Distance	Direction
908+76.8000	140,551.6502'	2,209,035.1517'		
			2,360.440'	N41° 02' 22.80"E
942+73.9900	142,332.0246'	2,210,584.9729'		

Alignment Name: BL RAMP A - 3

Description:

Station Range: Start: 942+73.9900, End: 983+26.8184

PI Station	Northing	Easting	Distance	Direction
942+73.9900	142,341.0614'	2,210,596.9452'		
			3,075.927'	N37° 02' 44.11"W
973+49.9171	144,796.1323'	2,208,743.8521'		
			676.680'	N38° 44' 38.41"W
980+26.5785	145,323.9085'	2,208,320.3578'		
			300.240'	N41° 02' 04.61"W
983+26.8184	145,550.3834'	2,208,123.2458'		