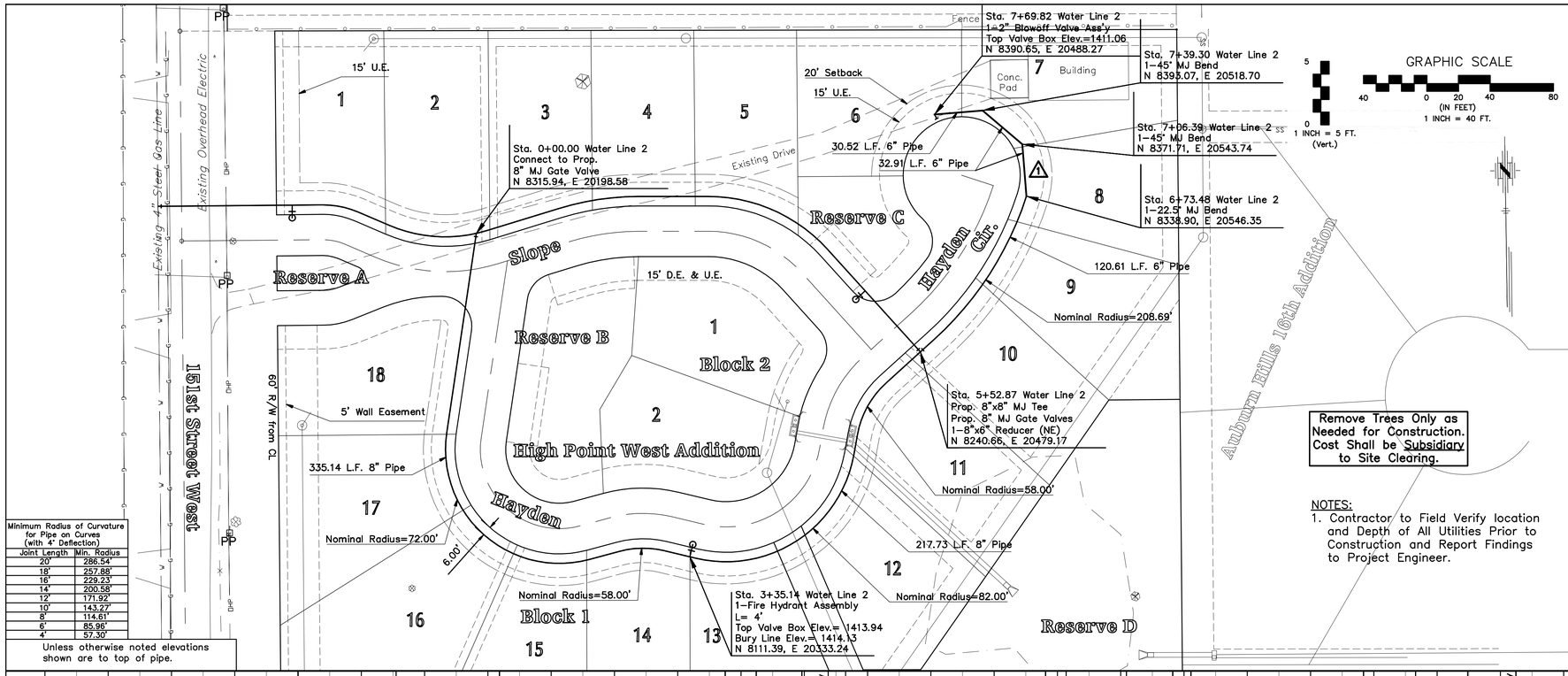


Minimum Radius of Curvature for Pipe on Curves (with 4° Deflection)	
Joint Length	Min. Radius
20'	286.54'
18'	257.88'
16'	229.23'
14'	200.58'
12'	171.92'
10'	143.27'
8'	114.61'
6'	85.96'
4'	57.30'

Unless otherwise noted elevations shown are to top of pipe.

NOTES:
1. Contractor to Field Verify location and Depth of All Utilities Prior to Construction and Report Findings to Project Engineer.

WL CURVE DATA

Δ =113°33'30" T=109.94' L=142.70' R=72.00' D=79°34'39" E=59.42'
CURVE DATA BASED ON WL RADIUS DELTA/2=56°46'45"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
1+27.31 P.C.				
1+50.00	22.69'	24.48'	9°1'41"	9°1'41"
1+75.00	25.00'	26.95'	9°56'50"	18°58'31"
2+00.00	25.00'	26.95'	9°56'50"	28°55'21"
2+25.00	25.00'	26.95'	9°56'50"	38°52'11"
2+50.00	25.00'	26.95'	9°56'50"	48°49'0"
2+70.01 P.T.	20.01'	21.61'	7°57'44"	56°46'45"
			Defl./ft.=23.873241464 Minutes	

WL CURVE DATA

Δ =28°32'13" T=14.75' L=28.89' R=58.00' D=98°47'9" E=1.85'
CURVE DATA BASED ON WL RADIUS DELTA/2=14°16'7"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
2+89.64 P.C.				
3+00.00	10.36'	11.42'	5°7'2"	5°7'2"
3+18.53 P.T.	18.53'	20.36'	9°9'5"	14°16'7"
			Defl./ft.=29.635748024 Minutes	

WL CURVE DATA

Δ =93°13'28" T=86.75' L=133.42' R=82.00' D=69°52'22" E=37.37'
CURVE DATA BASED ON WL RADIUS DELTA/2=46°36'44"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
3+39.08 P.C.				
3+50.00	10.92'	11.71'	3°48'54"	3°48'54"
3+75.00	25.00'	26.73'	8°44'3"	12°32'57"
4+00.00	25.00'	26.73'	8°44'3"	21°17'0"
4+25.00	25.00'	26.73'	8°44'3"	30°1'3"
4+50.00	25.00'	26.73'	8°44'3"	38°45'5"
4+72.50 P.T.	22.50'	24.07'	7°51'38"	46°36'44"
			Defl./ft.=20.961870554 Minutes	

WL CURVE DATA

Δ =37°36'25" T=19.75' L=38.07' R=58.00' D=98°47'9" E=3.27'
CURVE DATA BASED ON WL RADIUS DELTA/2=18°48'13"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
4+85.48 P.C.				
5+00.00	14.52'	15.98'	7°10'19"	7°10'19"
5+23.55 P.T.	23.55'	25.81'	11°37'54"	18°48'13"
			Defl./ft.=29.635748024 Minutes	

WL CURVE DATA

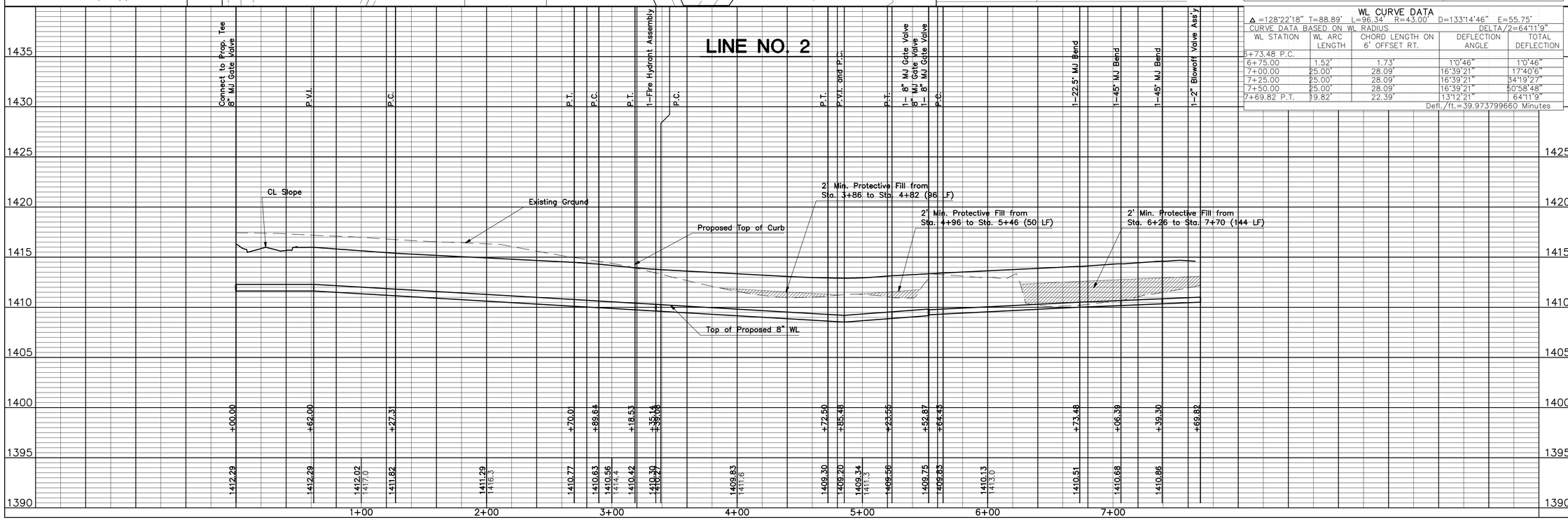
Δ =29°56'29" T=55.80' L=109.05' R=208.68' D=27°27'23" E=7.33'
CURVE DATA BASED ON WL RADIUS DELTA/2=14°58'15"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
5+64.43 P.C.				
5+75.00	10.57'	10.87'	1°27'4"	1°27'4"
6+00.00	25.00'	25.70'	3°25'55"	4°52'59"
6+25.00	25.00'	25.70'	3°25'55"	8°18'54"
6+50.00	25.00'	25.70'	3°25'55"	11°44'50"
6+73.48 P.T.	23.48'	24.14'	3°13'25"	14°58'15"
			Defl./ft.=8.236886071 Minutes	

WL CURVE DATA

Δ =128°22'18" T=88.89' L=96.34' R=43.00' D=133°14'46" E=55.75'
CURVE DATA BASED ON WL RADIUS DELTA/2=64°11'9"

WL STATION	WL ARC LENGTH	CHORD LENGTH ON 6" OFFSET RT.	DEFLECTION ANGLE	TOTAL DEFLECTION
6+73.48 P.C.				
6+75.00	1.52'	1.73'	1°0'46"	1°0'46"
7+00.00	25.00'	28.09'	16°39'21"	17°40'6"
7+25.00	25.00'	28.09'	16°39'21"	34°19'27"
7+50.00	25.00'	28.09'	16°39'21"	50°58'48"
7+69.82 P.T.	19.82'	22.39'	13°12'21"	64°11'9"
			Defl./ft.=39.973799660 Minutes	



No.	Date	By	Approved	Revision
1	11-6-2008	MLT	JPD	Water Line Revision Around Hayden Circle
2				
3				
4				

HIGH POINT WEST ADDITION
WATER DISTRIBUTION SYSTEM IMPROVEMENTS
LINE NO. 2
CITY OF WICHITA, KANSAS
JAMES L. ARMOUR, P.E. – CITY ENGINEER
C.O.W. Proj. No. 448-90377 OCA No. 735422

POE & ASSOCIATES, INC.
CONSULTING ENGINEERS
5940 E. Central, Suite 200 ■ Wichita, KS 67208-6242
Phone 316/685-4114 ■ FAX 316/685-4444

FINAL

Designed By: J. Dickman
Drawn By: M. Tucker
Poe Job No.: 1916A
Date: October 2008

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