HORIZONTAL CURVE:

1. <u>Curvature in Vitrified Clay Pipe (VCP)</u> - Horizontal curves shall be obtained by pulling the pipe joint. Joint deflections shall conform to the table entitled "RADIUS OF CURVATURE AND ANGLE OF DEFLECTION FOR CURVILINEAR SEWERS USING VARIOUS PIPE LENGTHS", of Clay Pipe Engineering Manual, latest edition, published by National Clay Pipe Institute. Curvature in vitrified clay pipe shall be accommodated through joint deflection and shortened lengths of pipe and shall conform to the following table:

Nominal Pipe Diameter (inches)	Minimum Radius of Curvature
6" to 12"	200'
15" to 24"	200'
27" to 36"	200'

2. <u>PVC</u> - Horizontal curves for PVC shall be obtained by bending the pipe along its length within the trench. Beveling pipe ends will not be allowed. Bending shall be done manually by the workers in the trench, and shall not be done by mechanical equipment. The following table shall be used as basis for horizontal curve:

Minimum Radius of Pipe	Minimum Radius (Feet)
6"	200'
8"	200'
10"	250'
12"	300'
15"	350'

REVERSE CURVE:

Reverse curves are not permitted between manholes.

Note:

- 1. Horizontal curves may be used where economies in construction may be obtained without increasing problems of maintenance and operations. Horizontal curve shall have a minimum radius of 200 feet and shall be between manholes, with the manhole spacing being reduced to a maximum of 350 feet.
- 2. In curved streets, the sewer shall follow the curvature parallel to the centerline where the street curve is the same or greater than the minimum allowable radius of the sewer. Allowable joint deflections shall be the more stringent of those set forth below the manufacture's recommendations, with manhole spacing being reduced to a maximum of 350 feet.

SEWER PIPE CURVATURE



EAST VALLEY WATER DISTRICT, ENGINEERING DEPARTMENT APPROVED BY:

JEFF NOELTE, P.E. 67924

JEFF NOELTE, P.E. 67924 DIRECTOR of ENGINEERING and OPERATIONS APRIL 2022 REVISION

