MaineDOT

ENGINEERING INSTRUCTION

Title: Horizontal Curve Radius	Number: C7
Discipline: General Engineering – Controlling Criteria	Issue Date: October 13, 2016
Originator: Steve Bodge, P.E.	Revised Date: January 17, 2019
Approved By: Bradford Foley, P.E.	

Background:

Horizontal Curve Radius is one of the Controlling Criteria for roadway design. It addresses the horizontal curvature of an alignment. The minimum radius of a curve depends on design speed, and on the maximum superelevation rate, which is determined by the urban/rural nature of the roadway. Once these are identified, horizontal curves can be established. Superelevation of horizontal curves is related to Horizontal Curve Radius but is addressed by a separate Controlling Criterion.

Applicability:

This Engineering Instruction applies to all design projects.

Engineering Instruction:

Horizontal curvature is defined by radius. The basic design criteria for horizontal curvature are based upon the information contained in Chapter 3 of the AASHTO publication *A Policy on Geometric Design of Highways and Streets* (the Green Book). The Department has adopted the following Green Book table for determining the minimum radius:

Minimum Radius Using Limiting Values of e and f

Additional guidance contained in the Green Book will be used to determine other horizontal alignment related requirements.

Responsibility:

Program Managers