

**Purdue University
School of Civil Engineering**

CE 361 – TRANSPORTATION ENGINEERING

Assignment 2

Problem	Answer
3.14	Curve length adequate K = 165.1 actual > 151 needed or L = 656.4 needed < 720 actual
3.16	Sta PVI 122+00 Elev PVI 725.5ft Sta PVT 129+00 Elev PVT 771ft Sta Low Point 119+90 Elev Low Point 741.4ft
3.27	Note from Problem 3.26 that the elevation difference between the sections of highway is 80 ft (4,000 separation at 2% so $4,000 \times 0.02 = 80$). Then: Sta PVC (crest) 0+00 Elev PVC (crest) 100ft Sta PVT (crest) 3+27.48 Elev PVT (crest) 96.45ft Sta PVC (sag) 37+05.05 Elev PVC (sag) 23.2ft Sta PVT (sag) 40+00 Elev PVT (sag) 20ft Hint: See Example 3.10
3.32	5.689% 20.62ft
3.52	a