

Practice Exercise 3

Create an Alignment and Surface Profile



This exercise provides you with practice for creating an alignment and a surface profile. You'll use the concepts you learned in Lesson 3: Alignments and Profiles.

Instructions:

1. Open the file **Practice Exercise 003.dwg**.
2. Create an alignment using the points RD1-RD4 as your PIs.
3. Set your curve and spiral settings to clothoid and 200' default radius.
4. Draw the alignment using the Tangent-Tangent (With Curves) method. Start at RD1 and continue in order ending at RD4. Make sure that you are starting your alignment with station 0+00.
5. Create a surface profile and profile view along your created alignment.

Once you have completed these steps, please answer the following questions (Precision 0.01):

- What is the bearing and distance of the tangent section between RD3 and RD4?
- What is the Land Δ of the curve at PI RD2?
- What is the station offset at the center of circle A?
- What is the station of the highpoint elevation of the surface profile?