CCE 201, Summer 2016

Lab5 – Civil 3D – 2 points each (22 points)

Part I: Read Ch. 3 (AutoCAD Civil 3D 2016 Essentials by Sybex) pages 37-54 and 58-59.

Complete exercises: 3.2, 3.3, 3.5, and 3.6 and answer questions below.

1. What does Ex. 3.2 accomplish?
2. Explain the difference between importing points into a survey database and importing points without a survey database.
3. What does Ex. 3.3 accomplish?
4. Explain the concept of “field to finish”.
5. Explain how line work code set is utilized in C3D.
6. Discuss how point groups are used in C3D. Provide an example.
7. Discuss the difference between survey points and COGO points.

Part II: Read Ch. 4 (AutoCAD Civil 3D 2016 Essentials by Sybex) pages 65-74 and 82-87.

Complete exercises: 4.1, 4.2, 4.6, 4.7, and 4.8 – see below questions for snippets.

1. Take a snippet of step 7 of Ex. 4.6
2. Take a snippet of step 8 of Ex. 4.7
3. Take a snippet of step 15 of Ex. 4.8
4. Discuss how triangular irregular network (TIN) is constructed and how it is used.
5. What is a breakline? Why are they used? Discuss two examples of breaklines.