

LAB 9-10
CREATING SURFACES, PROFILES AND CROSS-SECTIONS AND CALCULATING
VOLUMES FROM POINT CLOUDS

In this lab, we are going to use the data that we collect in lab 4 at the slope between Robles and Acacia buildings to create a surface, a profile and some cross-sections along the profile path and to calculate the filling volume of extending the disabled parking lot toward the down-slope direction.

Here is a summary of the lab (refer to the attached drawing):

1. Clean up the data by removing the trees and tripods.
2. Build a surface using the point cloud shown on the attachment.
3. Create a profile along the middle of the slope.
4. Create 6 cross-sections along the profile path.
5. Calculating the filling volume to extend the disable parking lot about 20 ft toward the down slop direction.

Lab 9-10 Report

This is a group report. Each team only needs to submit one copy. The format of the report is as follows;

1. Title page including: a) title of the lab; b) course name and lab number; c) team members; and d) date.
2. Objectives
3. Procedures for perform various tasks.
4. Results and discussion
5. Conclusion

