Project Status Report: CEEn-2016CPST-002: Soil Data Percolation App Development

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1) Summary of technical/non-technical challenges encountered

- Developing design life equations based off of soils caught in storm water systems
- Using the Percolation/Infiltration/and Hydraulic Conductivity data appropriately in application
- Finishing the application in Excel and coordinating the various spreadsheets
- Checking equations with professors to define appropriate flows through the system

2) Team approaches/resolutions to overcome challenges

- Met with teachers to verify equations being used.
- Developed a variety of ways to solve the storage capacity for the system in order to cover any possible way the user might decide to analyze the design of the system
- Obtained soil from street sweepers and performed hydrometer tests to determine mass of fines
- Created equations for percolation vs depth using hydraulic conductivity data
- Met more regularly together beyond 3 hours to collaborate on spreadsheet development
- Continuously developed a better understanding of equations used

3) Status of challenge resolutions & potential project impacts

- Due to some of the confusion about percolation rates we started the spreadsheet development a week behind schedule. That has pushed everything one week behind but we had previously planned for the change and gave ourselves an extra week to finish by. We will finish the spreadsheet this week and begin our final presentation items the following week in preparation for the final

4) Project Status & Summary

- We are approaching the end of the development phase and are beginning to collaborate on a final report, presentation and poster
- We plan to schedule a final review with our sponsor coming up on the week of April 10th, 2017