LAFAYETTE
ENGINEERING COMPANY
Civil and Environmental Engineering Services

740 High Street # 319 AEC | Easton, Pennsylvania 18042
Tel: (610) 330-5437 | Fax: (610) 330-5437 | www.ce.lafayette.edu

PROPOSED

LAFAYETTE COLLEGE

CEERC

Civil & Environmental Engineering Research Center

-

Report 1

Executive Summary of Proposed Project

Site
Former Hummel Lumber Supply at 900 Bushkill Drive

City of Easton, Northampton County, Pennsylvania

– this page intentionally left blank –

SECTION I: EXECUTIVE SUMMARY

The purpose of this course was to complete a year-long project that integrates different disciplines of Civil Engineering. The first semester involved investigating two potential project sites for a land development project and an analysis of each. The research and analysis were used to identify which site would be used to complete land development and building plans in the spring semester. In the second semester, students utilized information obtained from the first semester to complete detailed designs, construction drawings and permit application documents for a proposed Lafayette College Civil and Environmental Engineering Research Center (CEERC). The CEERC will be located on the site of a former lumber mill owned by Lafayette College located at the intersection of Bushkill Drive and Detrich Road in the City of Easton.

The course exposed students to open-ended design problems and provided an opportunity for students to utilize skills learned in previous civil engineering courses. The course also allowed students the opportunity to become familiar with the overall process of designing a turnkey project and understanding how various design constraints affect the decision-making process when developing solutions to open-ended problems. Students were also able to identify skills related to real-world design and technical problems encountered in the field of Civil Engineering.

In essence, the course was organized to reflect a real-world design project as much as can be achieved within the constraints of the academic environment. As such, the work is designed to be cumulative and require effective team coordination and communications. Each student was assigned a specific task based on the overall scope of the project. The course culminated with the following work product reflecting the tasks completed throughout the semester shown in SECTION II and SECTION III of the Executive Summary of Proposed Project.

SECTION II: REPORTS

Report 1: Executive Summary of Proposed Project
Report 1A: Renderings
Report 2: Permitting and Construction Management
Report 3: Sustainable Design Elements
Report 4: Post-Construction Stormwater Management Plan
Report 5: Erosion & Sedimentation Pollution Control Plan Narrative
Report 6: Hummel Building - Structural Design Report
Report 7: Hummel Building Green Roof - Structural Design Report
Report 8: Parking Garage - Structural Design Report
Report 9: Pedestrian Bridge - Structural Design Report
Report 10: Lafayette Engineering Company Marketing Material
Site Alternatives Analysis of proposed Civil and Environmental Engineering Research Center (Fall 2013)

SECTION III: PLANS

Land Development Plans (9 sheets)
Erosion & Sedimentation Pollution Control Plan (2 sheets)
Post-Construction Stormwater Management Plan (3 sheets)
Architecture & Structural Engineering Plan Set (17 sheets)