

BRIGHAM YOUNG UNIVERSITY

PHYSICAL FACILITIES



MISSION: We design, build and maintain an environment which promotes and enriches the learning process.

VISION: To be superb, responsive and value-driven partners.

VALUES:

- C – Competency
- R – Respect for Sacred Resources
- I – Integrity
- T – Teamwork
- E – Exceeding Customer Expectations
- R – Respect for all Individuals
- I – Innovation
- A – Accountability

REQUEST FOR PROPOSALS

Snell Building and Law Parking Lot Flooding

Statement of Purpose

The purpose of this project is to study the methods of mitigating flood damage to areas in and around the Snell building at Brigham Young University. There is a need to analyze the collection and distribution system capacities and deficiencies. Then, prepare multiple solution alternatives with cost estimates and design an improvement plan for the selected alternative to present to Physical Facilities Division at Brigham Young University.

Background Information

BYU Physical Facilities Division is part of Brigham Young University Provo, Utah. It is located in the Sam F. Brewster Building (BRWB), southeast of campus. The objective of the BYU Physical Facilities is to provide stewardship over: the Physical Learning Environment, the University Project Delivery, and the administrative Support needed to complete the mission.

Physical Facilities manages programming, planning, construction, maintaining facilities and grounds and provide the best possible environment for the campus community. It maintains high standards for all campus development and maintenance. The College Representative can request services of architects, engineers, interior designers or planners, personnel from Physical Facilities Division.

Scope of Work

In July 2011 there were two major storms in Provo, Utah that caused flooding in the Snell Building and Law Parking Lot area at Brigham Young University. That experience showed that the two drainage systems available for that area were not designed appropriately. The result, was that the flood washed out the landscaping (flowers, shrubs, soil) twice and flooded the west entrance of the Snell Building.

Since it is desired that this type of flooding no longer occur in this area a new drainage design is required. As part of this project it will be necessary to analyze the collection and distribution system capacities for deficiencies. In order to meet this requirement, a site visit will have to be made to examine the structures and drainage facilities. Aerial contour maps and utility maps will

be made available to assist in the investigation. After examining the structures and the area, there is a need to determine the flooding hazards for a 25-year storm and a 50-year storm.

Finally, it is necessary to prepare multiple solution alternatives. Each solution that is presented should include a summary of benefits and potential problems that might arise if that approach were undertaken. Furthermore, the economic cost of implementing that solution should be detailed in the report. It is expected that the design team that is awarded this project will provide recommendations for which design should be used based on their collective work and experience.

Requirements for Proposal Preparation

Three copies of the proposal that should include the following items below should be submitted by November 21, 2011.

- Cover letter
- Executive summary (≤ 1 page)
- Statement of Qualifications (≤ 2 pages) - outlines the background, experience, education, and organizational structure of the team. It should include some discussion of how you plan to become a "high functioning" team in the course of completing the project. Any outside consultants (professors or others) that will help should also be included.
- Problem solving approach (≤ 2 pages) - how the team will work together (including weekly work schedule that shows the hours each will work and the time block the team will be together).
- Required materials (≤ 1 page)
- Milestones (≤ 1 page)
- Engineering design budget (≤ 1 page)
- Resumes in appendix (1 page / member)

Outcome and Performance Standards

You will provide this work "as is" meaning that there is no engineering stamp certifying the work. However, our ability to continue receiving help from outside sponsors will be contingent on the good work that you do. You represent the BYU Civil & Environmental Engineering Department and it is expected that you will interact in a professional manner at all times with your mentor and project sponsor, treating them with the utmost respect and consideration of their busy schedules.

While successful completion of the design project is fundamental to the outcome of the work, it is expected that you will also learn important team dynamics and leadership principles. This means that in the process of completing the project you are also seeking to help each member of your team grow and develop confidence in his/her engineering abilities.

Deliverables

The final results of this project will need to be delivered April 1, 2011. The results will be delivered in three ways.

- Report – this should include design alternatives for the project that include economic and environmental considerations
- Poster
- Presentation

During the week of April 4th both a presentation to sponsors and a poster session for students, faculty and other interested people will be organized. You will have a chance to show your work to the public at this time.

Term of Contract

Each student is expected to work 6 hours per week with at least 3 hours working as a group, in Winter 2012 Semester.

Payments, Incentives, and Penalties

For your effort on the performance of this project you will receive a grade that is awarded according to the following breakdown:

- 10% Time Card (putting in the requisite time)
- 10% Project Notebook (demonstrating productivity in the hours spent)
- 20% Milestones met (each project will outline the expectations for milestones)
- 35% Final report
- 10% Poster/Presentation
- 10% Teamwork Portfolio and Peer evaluation
- 5% Cooperation

Contractual Terms and Conditions

There will be no monetary compensation with respect to the work completed, and all work is completed and delivered on a "best effort" basis. Each member of your team will be asked to sign a [non-disclosure agreement](#) that simply states the work you do belongs to the project sponsor.

Evaluation and Award Process

Your team's proposal will be evaluated by a panel of three graduate students according to the criterias below:

- Firm Resources/Ability/Experience 20
- Key Project Personnel 20
- Work Plan and Understanding of the Project 40
- Technical Proposal and Presentation 20

Process Schedule

1. October 31, 4:00 pm - Request for Proposals will be available online at <http://cecapstone.groups.et.byu.net/Winter2012.htm>
2. November, 7 4:50 pm - Question and Answer period with respect to the proposal and submission procedures.

3. November 21, 4:00 pm - Three copies of the proposal must be submitted at the beginning of class
4. November 21, 4:00-5:30 pm - 5 minute interview (presentation) by your team of the proposal
5. November 30 - Award notification.

*The review committee reserves the right to reject any proposal or presentation that is not submitted in a timely fashion or in accordance with the instructions given in this RFP.

Contacts

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