

Request for Proposal (RFP)

Flood Control Feasibility Plan
Project ID: CEEEn-2016CPST-007

1. Introduction (Background Information)

Project Location: Payson, Utah

Sponsor: City of Payson, Travis Jockumsen

A retention basin needs to be designed to handle the Payson City 100-year storm requirements for the Ridge Lane Area. The contributing area will need to be determined and the storm drain conveyance system will need to be designed and routed to the retention basin to fix flooding issues that have existed in this area for 30 to 40 years.

This area currently has no stormwater system, which ends up causing some of the houses to occasionally flood in this area. The City of Payson bought a property where they would like to put a retention basin to prevent flooding in this area.

They would also like to place drainage basins, stormwater pipe, and a filtration system before the stormwater enters the retention basin.

1. Project Description and Scope of Services

Design a retention basin for the area described above. The major tasks involved are as listed below:

1. Design a retention basin will be able to hold stormwater for a 100 year storm
2. Develop a stormwater system that includes:
 - a. Drainage basins, as needed
 - b. Stormwater pipe system
 - c. Filtration system, per City of Payson specs
 - d. Manholes
 - e. 100 year storm requirement
3. Stop flooding that affects the houses in the area

Geospatial data has been collected for this area and will be provided with the project information. The City of Payson will perform a percolation test for the retention basin site will forward this data. The ultimate goal of the project is to be able to handle the stormwater requirement and prevent future flooding.

2. Outcome and Performance Standards

Include the following in your proposal:

Our student team will provide the work for this Capstone project “as is”. Our results cannot be construed as work provided by licensed professionals and cannot be used as “stamped deliverables” without first being reviewed, approved and stamped by a qualified license professional engineer.

3. Deliverables

- Minimum required deliverables
 - Short monthly status reports documenting challenges, solutions & progress
 - Answers to 4 questions
 - What challenges have your team encountered in your Capstone project?
 - What actions did your team decided to do to overcome these challenges?
 - Any progress in overcoming these challenges?
 - Summarize the current status of your Capstone Project
 - Did challenges negatively impact the progress of your project?
 - A final report with design alternatives for the project that include economic and environmental considerations
 - If planned ahead and done properly, proposal and monthly status reports can provide a significant portion of the information for the final report
 - i.e. Incorporate status reports in final report as project progresses to reduce work load on final report
 - A poster reflecting a summary of your project to be presented to student, faculty and other interested individuals in the final undergraduate seminar
 - A presentation summarizing your project to be presented to your sponsor
- Any other additional reports as proposed and agreed upon between team & sponsor
 - In most cases, there should not be any additional reports
- Before the end of winter semester both a presentation to sponsors and poster session for students, faculty and other interested people will be organized.
- All deliverables are tentatively due Monday April 10th.

4. Contractual Terms and Conditions

- Contract type: Non-monetary compensation with all project work on a “best effort” basis
- Term: Team members are to spend 8 hours/week/student with at least 3 hours/week working together. Class time or time spent on class assignments counts toward these hours
- Each project team consists of
 - A project manager/mentor: A graduate student who does not perform technical work on the project. He/she guides, facilitates and directs the team toward successful

- completion of the project by achieving customer objectives, adhering to schedule/time/cost, and promoting team unity.
- A project team lead: An undergraduate student team member who serves as the team's spokesperson and liaison among the team, its project manager, sponsor, faculty advisor and Capstone Committee advisors
 - Two project team members/task leads who may be assigned to take lead on certain aspects of the project in addition to the project team lead. All team members, including project team lead, are to assist one another on each member's specific task assignments
 - One can take lead on analysis or data gathering, another on design/drawings, data interpretations etc.
- Customer/sponsor may require team members to sign a non-disclosure agreement that simply states the work you do belongs to the project sponsor

5. Payments, Incentives and Penalties

- Project work to be graded by graduate student mentors/project managers with potential additional inputs from sponsors, Capstone Committee members and faculty advisors
- Grading criteria
- Team work and unity
 - Project proposal
 - Project Management Plan (PMP)
 - Monthly status report
 - Final report, poster, and presentation
 - Customer satisfaction in satisfying project objectives and required deliverables

6. Submittal Requirements for the Proposal

- Proposal deadline: Monday, October 31, 2016 at 4:00 pm MDT
- Three copies of proposals in accordance with guidelines & formats specified in the proposal template
- Minimum requirements for the proposal (each section must start on a new page. Details and formats will be provided in the standardize proposal template)
- Cover page
 - Letter of submittal / introduction
 - Executive summary (one page or less)
 - Work plan
 - Proposed approach, including innovative ideas, to complete the project
 - Weekly project work schedule for individual team members
 - Weekly team work/meeting schedule
 - Section identifying necessary tools, data, equipment, etc. with brief explanations

- Project schedule including important milestones
 - Engineering budget: Estimated hours for each phase/element of the proposed work plan
 - Outcome and Performance Standards
 - List of outside consultants (faculty, Capstone Committee member etc.) necessary for this project
 - Statement of qualifications
 - Background, experience, education and organizational structure of the team
 - Team member assignments
 - Team member collaboration plan: (How will team work together seamlessly)
 - Appendices
 - Appendix A: 1 page resume for each team member
 - Appendix B, C, etc. as necessary
- Review committee reserves the right to reject any proposal or presentation that is not submitted in a timely fashion or in accordance with instructions and requirements in this RFP

7. Contacts

Christian Kesler, Brigham Young University – Graduate Mentor

- christiankesler11@gmail.com
- (949) 607-605

Travis Jockumsen, City of Payson – Public Works Director/Development Services Director/City Engineer

- travisj@payson.org
- (801) 465-5235

8. Proposal Evaluation Criteria

- Proposal will be evaluated by graduate student mentor/project manager in accordance with the following rubric, with inputs from project sponsor, Capstone Committee member and potentially faculty advisor.

Timeliness - 1 pt off per full hour late, up to 5.	5
Grammar/Spelling - 1 pt off per blatant error, up to 5.	5
Cover Page - Title, Data, Sponsor, Team Name, Team Members, Department of Civil & Environmental Engineering, Ira A. Fulton College of Engineering and Technology, Brigham Young University - 1 pt per piece of information included.	6
Cover Letter - brief letter of introduction that 1) states your intent to propose and 2) how you may be contacted.	6
Executive Summary 3/4 to 1 page that summarizes the contents of your proposal	12
Team Abilities Summary as a team of 1) relevant courses and experience, 2) abilities to complete the work on time and in a professional manner, 3) including use of specific engineering tools/software. Include résumés.	12
Key Personnel - 1) Identify which individuals will focus on which pieces of your potential tasks, and 2) some kind of organizational chart or visual describing how you will work together as a team.	12
Project Understanding - 1) Did they address specific items mentioned in the RFP? 2) Do they repeat basic background in somewhat new terms to <i>demonstrate their understanding</i> of the project? 3) Do they mention key deliverables they may need to provide? 4) Did they articulate a <i>specific</i> approach for developing design alternatives and deliverables? 6 pts max per piece.	24
Formatting - Does it look professional? Consistent?	6
Concise vs. Wordy , Meaningful vs. Fluffy, repetitive wording. 6 pts means concise, and accurate, and specific. 1 pt means often confusing, wordy, or vague.	6
Clear and professional flow of writing and style. 6 pts means that you would feel comfortable handing this in if it were your own; it is easy to read and understand; feels professional; 1 pt means it feels like it was cut-pasted, rushed, and done with little thought; hard to read; feels like a high school essay.	6
Total	100