BYU CIVIL & ENVIRONMENTAL ENGINEERING

IRA A. FULTON COLLEGE

CAPSTONE

Project Status Report: CEEn-2018CPST-012 Report Date: 22 October 2018

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Project Title: Springville Irrigation Canal Breach Mitigation

1) Summary of technical/non-technical challenges encountered

- 20 cfs canal design
- Trail and canal crosses private property
- Canal Breach

2) Team approaches & resolutions to overcome challenges

- Trail and canal crosses private property went around private property
- 20 cfs canal design collected average volume measurements for canal
- Canal Breach collected soil samples to create flow net of soil

3) Status of challenge resolutions & potential project impact

Status:

Trail and canal crosses private property – measured average measurements of canal 20 cfs canal design – collected measurements

Canal Breach – soil sample collected

Impact:

Trail and canal crosses private property – have good estimates of canal within private properties

20 cfs canal design $-\,$ ability to create 3D model and solve manning's equation

Canal Breach – gradation and Atterburg limits can be performed

4) Project status & summary

- Site visit completed on October 20, 2018 waded canal and measured width and depth of canal at several locations based on house addresses
- Obtained permission and collected soil sample
- Research to be done perform manning's equation for canal data and soil tests on collected soil samples

10/22/2018