# BYU | CIVIL & ENVIRONMENTAL ENGINEERING IRA A. FULTON COLLEGE



#### CEEn-2016CPST-008

### **Arterial Collector Design & Feasibility Study**

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### Introduction

This project entails the design of an access road connecting the existing Bluffs Apartments to Loumis Parkway in Bluffdale, Utah.

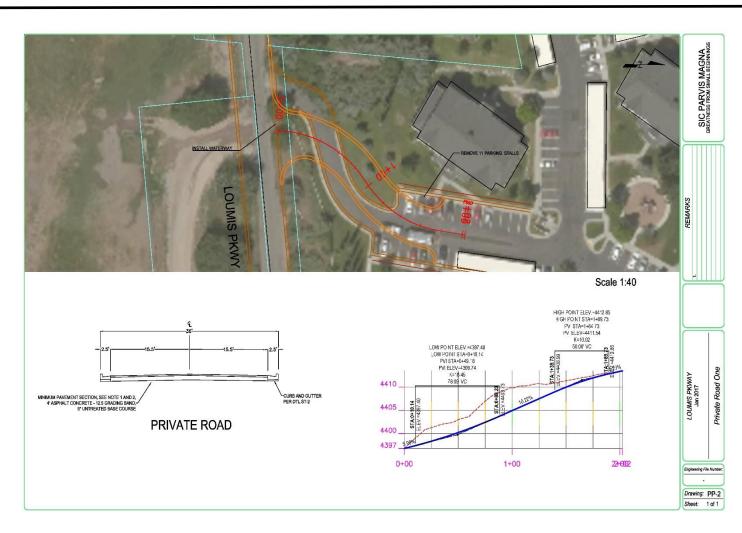
■ The residents of the apartment complex requested a second access road to the apartment complex.

Feasibility study for the proposed roadway.



### Analysis, Design & Results

- Accident Study, Traffic control device study, cost analysis, and construction feasibility.
- Looked at three different options.
- Best option was to redesign the existing roadway to be suitable for traffic.
- Overall cost would be around \$128,000.
- Most expensive route was estimated to be \$800,000.





#### **Conclusions & Recommendations**

- It is recommended that the City of Bluffdale proceed with the implementation of the private road design due to its relatively low cost and ease of construction
- Further studies will need to be done to determine the economic impact of the proposed designs

