SANTAQUIN CITY TRAIL CORRIDOR AND RIGHT OF WAY DESIGN Project ID: CEEn_2016CPST_010

by

Silverstone Engineering & Surveying Savannah Keane Joel Whitmer Clay Hansen Brandon Walker

Objective

The objective of this project is to complete a full functioning design of a trail and right of way corridor for the city of Santaquin. The purpose is to provide a safe, comfortable route for pedestrians to travel along the existing frontage road. This trail will also serve as a showpiece that will be visible from the Interstate 15 freeway. Our team will do a full engineering assessment for the trail and right of way corridor

<u>Sponsor</u>

Norm Beagley-Santaquin City nbeagley@santaquin.org

We will communicate with our sponsor primarily through our graduate mentor Savannah Keane

Organizational Structure

At this point, individual roles are unclear. As we progress further in the project we will define roles for each member.

Scope of Work Summary

- Complete design of an 8 ft wide trail along Highland Drive from 120 East to approximately 130 South. Design aspects include:
- Full cut and fill design for the corridor
- Meandering curve trail as per Santaquin City Standards.
- Full runoff and drainage analysis
- Possible property acquisition to complete all Right-of-Way improvements
- Rerouting or relocation of driveways directly connecting onto Highland Drive, as is practical.
- Full curb & gutter design on the southeast side of the frontage road
- Design of landscaping

- Design of water/power lines along the corridor to supply sprinklers/drinking fountains

- Full design of storm drainage facilities to accommodate storm drain capture,

collection & conveyance

- Financial analysis and cost calculations of the entire project

The project will begin in January 2017 and will be worked on by 3 undergraduate students for 8 to 10 hours per week. It will be fully completed by April 10th and will be ready for presentations after that date.

<u>Schedule</u>

Date	Project Status (Meetings)	Tasks for Following Week	Deliverables Completed
January 9, 2016	Project Begins (Preliminary Meeting)	Cut and Fill Design/Possible Solutions for Depression at 255 South	
January 16, 2017	Working on Cut and Fill Design	Cut and Fill Design/Possible Solutions for Depression at 255 South	
January 23, 2017	Cut and Fill Design Completed (including possible solutions for depression at 255 South)	Meandering Curve Design	
January 30, 2017	Meandering Curve Design Completed	Runoff and Drainage Analysis	
February 6, 2017	Runoff and Drainage Analysis Completed (Monthly Evaluation Meeting)	Storm Drain Design	Monthly Status Report
February 13, 2017	Storm Drain Design Completed	Driveway Rerouting/Relocation	
February 20, 2017	Summary of Necessary Rerouting/Relocation of Driveways Completed	Property Acquisition	
February 27, 2017	Summary of Necessary Property Acquisition Completed	Curb and Gutter Design	
March 6, 2017	Curb and Gutter Design Completed (Monthly Evaluation Meeting)	Preliminary Landscape Design	Monthly Status Report
March 13, 2017	Preliminary Landscape Design Completed	Water/Power Line Design for Sprinklers and Drinking Fountains	
March 20, 2017	Water/Power Line Design for Sprinklers and Drinking Fountains Completed	Financial Analysis	
March 27, 2017	Financial Analysis Completed	Final Project Report	

April 3, 2017	Compiling Final Project Report (Final Evaluation Meeting)	Final Project Report	Monthly Status Report
April 10, 2017	Project Completed		Final Project Report and Presentation

We will meet as a team on Monday's and Wednesday's, and work individually throughout the week as needed.

<u>Budget</u>

Dete	Drain at Otatura	Total Hours Required for	Cumulative
Date	Project Status	Current Task	Total Hours
January 9, 2016			
January 16, 2017	Working on Cut and Fill Design	30	30
January 23, 2017	Cut and Fill Design Completed (including possible solutions for depression at 255 South)	30	60
•	Meandering Curve Design Completed	30	90
	Runoff and Drainage Analysis Completed	30	120
February 13, 2017	Storm Drain Design Completed	30	150
February 20, 2017	Summary of Necessary Rerouting/Relocation of Driveways Completed	30	180
February 27, 2017	Summary of Necessary Property Acquisition Completed	30	210
March 6, 2017	Curb and Gutter Design Completed	30	240
March 13, 2017	Preliminary Landscape Design Completed	30	270

March 20, 2017	Water/Power Line Design for Sprinklers and Drinking Fountains Completed	30	300
March 27, 2017	Financial Analysis Completed	30	330
April 3, 2017	Compiling Final Project Report	30	360
April 10, 2017	Project Completed	30	390

Communication Plan

We will communicate with our sponsor at least monthly to report on project status. We will communicate with each other through text, email, and bi-weekly meetings.