

## Executive Summary

This final thesis proposal is the foundation of the research topics for next semester. Several topics have been researched and analyzed on how they could apply to Pasadena Elementary School. Three analyses have been identified that will be concentrated on.

The first analysis strives for Pasadena Elementary School to become a minimum of LEED Certified. Using LEED for Schools, prerequisites and credits for LEED points will be sought after.

Greenroofs can greatly help with credits in the LEED process. Pasadena Elementary school has a conventional roof in its initial design. The second analysis concentrates on designing a greenroof for the elementary school. This can count toward two of my breath studies. A look at the structural system will be taken into consideration due to a change in the loads the roof will provide. Also the mechanical system will be analyzed on how it will differ due to stormwater drainage control and design loads.

The final analysis studies if the existing elementary school would not have been demolished and instead have been reused for the new elementary school. This will take into consideration phasing and sequencing of the construction, schedule impact and construction waste reduction. Also a cost analysis will be conducted.

At the end of this report is a weight matrix on how the research topics are distributed. Each topic is weighted from 10-40% of the final thesis research.