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Our Site

Located in the Schulle Canyon Natural Area, our team will design a bridge spanning a proposed 60 feet to improve trail safety, accessibility and visual appeal.

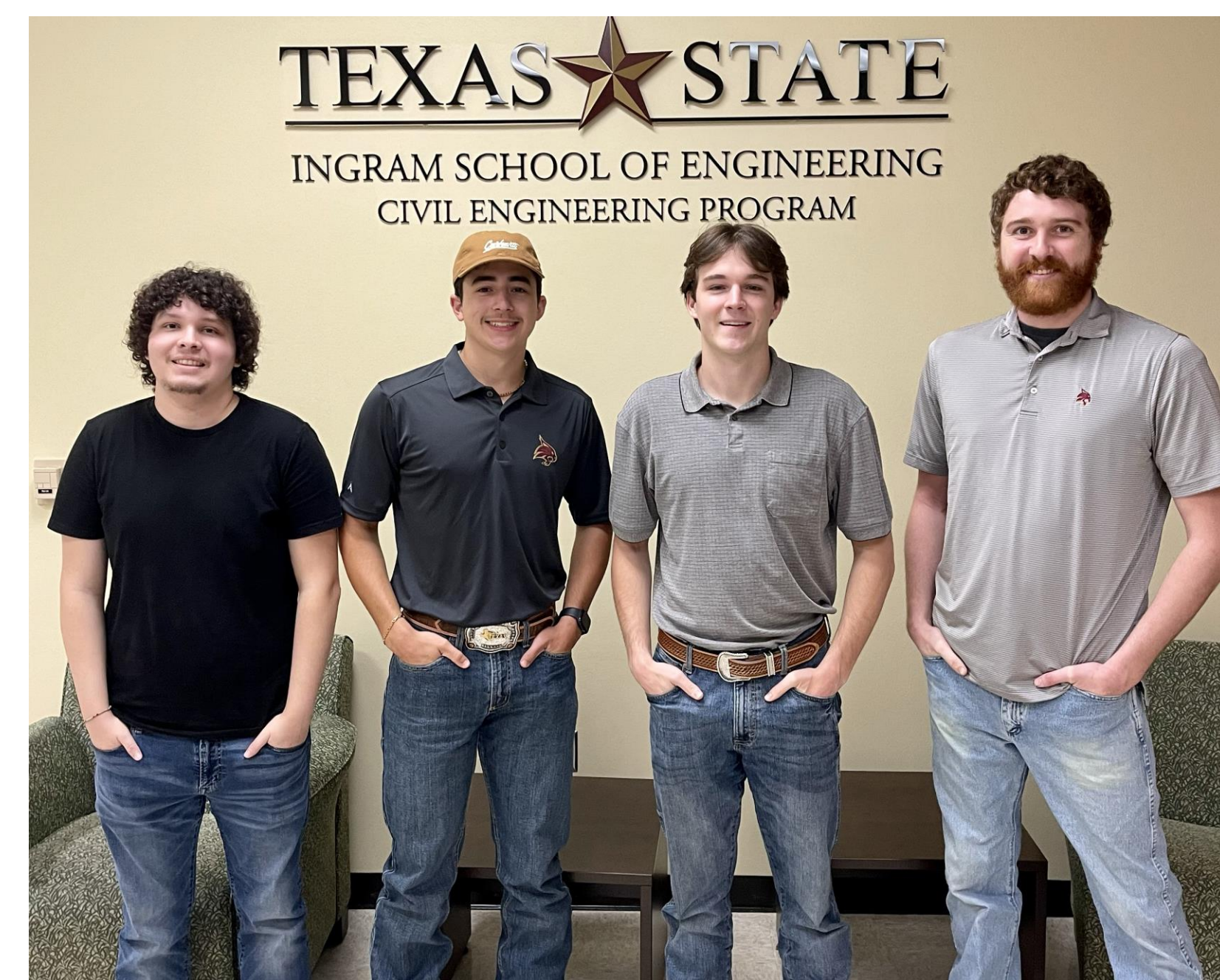
Problem Statement

SMGA tasked us with improving the walking trail that crosses a small canyon in the local natural area. The current path is a safety hazard during wet conditions.

Alternative

The SMGA and BBC decided on a single span bridge composed of galvanized steel I-Beams, wood railings with steel cable inserts, and reinforced concrete foundations for the structure.

Meet the Team



Life Cycle Costs

Initial Cost	\$ 31,709.74		
Analysis Period (Years)	30		
Maintenance costs	\$ 1,268.40	Year: 3, 6, 14, 17, 20, 27	
Salvage Value, 30 Years	\$ 5,000.00		
Rehabilitation Costs	\$ 4,756.46	Year: 10, 20	
		NPV (thousands of \$)	
	NPV	\$ 41.62	\$ 41,624.58

A full rehabilitation will be done twice during the 30-year lifespan.

Site Images



Future Considerations

- Soil properties/ analysis
- Beam load calculations
- CAD modelling and simulation