

## Executive Summary

Habitat for humanity is a non-profit organization that aids in building homes for low-income families. As students, we were to research, design, and estimate three different wall systems and house plans using precast concrete. We began with the architects designing three different house plans with three different wall systems. We then continued with the schematic design phase and ultimately chose one floor plan but elaborated on three wall systems. We also were able to cast concrete panels that were designed by the architects. We had a rubber mold, MDF mold, and a homemade mold. From here, we were to pick one final house design, wall system, and panel design. We began finalizing all decisions and ultimately came up with different elevations, renderings, sections, interior finishes, logistics plans, estimates, and a schedule of construction. Our total construction cost came out to be **\$187,920.74** for the medium with labor cost and **\$162,580.98** for the low with labor cost. Our total duration came out to be **72 days** without adding weather days.