Project Description

• The Genesis Community of Transformation (GCT) asked Team 11 to design a multi-purpose building for their property in Phnom Penh, Cambodia.
• GCT is currently paying rent for office space, but would like to have its own office building, as well as space to rent to others.
• GCT originally hoped to build a 12-story building housing offices, condos, hotel-style rooms, meeting rooms, an assembly hall, a kitchen, a gym, a store, and a permanent residence for GCT’s directors.
• Team 11 set out to design a building appropriate to Phnom Penh and GCT’s needs, to estimate its cost, and to produce promotional materials to assist in fundraising for the building.

Genesis Community of Transformation

• Genesis Community of Transformation (GCT) is a non-profit, Non-Government Organization in Cambodia.
• GCT assists in Cambodia’s recovery from the atrocities suffered under the Khmer Rouge, a communist regime that took power in the 1970s.
• GCT was founded by Cambodian national Navy Chan. It aims to train farmers in sustainable agriculture techniques, improve community organization in villages, and provide educational opportunities for women and youth.
• Currently, GCT is in need of a building for its offices in Phnom Penh, the capital of Cambodia.

Solution

• Team 11 has designed a 9-story building that is more feasible than the original 12 and meets all of the client’s needs.
• The building is made of reinforced concrete, and designed to the strength of concrete and steel that is readily available in Phnom Penh.
• The design takes local weather, hydrology, and soil type into consideration.
• ‘Stilts’ protect the finished floors above from flooding, while allowing for motorcycle parking on the ground floor during the dry season.
• The site plan, pictured above left, includes space for a garden promoting sustainable farming, parking, access for cars to drive through the site, a small pool, and the building.
• The floor plans are designed for each level to be handicap-accessible, incorporate many uses, and accommodate plumbing, electrical wiring, and elevator installation.
• A virtual walk-through and promotional images such as the one above have been created, using Source™ Engine rendering.