We believe that many sustainable, climate responsive and valuable cultural characteristics are to be found in the architecture of the city of New Orleans. The proposal is based on the New Orleans Creole Cottage house type. Traditional features such as the front porch, an entry bay and dormer windows are presented in the front face of the house for housing services and a private court are incorporated as the basis of the design. In addition the idea of a main house on the street and secondary buildings to the rear is transformed into a main three bedrooms, two bathroom, double story unit at the front and a one bedroom one bathroom flat in the rear. The rear unit could be used by a member of the extended family or rented out. The two units are easily linked together to form a four or five bedroom single family house.

The house could be raised eight feet or five feet above the ground. In the five feet option both parking spaces would be provided by windows in the southern side wing. In both parking spaces and the rear garden are secured by gates. Sizing window shutters further enhance security.

The house is set back from the southern property line to optimize solar orientation for the central raised outdoor living court which is the heart of the house. Windows are shaded by porches, sliding shutters or vegetated screens. Ramps and windows are arranged to maximize cross ventilation in both the east-west and north-south directions. Natural ventilation is supplemented by ceiling fans. Sliding and hinged doors, high windows and a chimney induce stack ventilation.

Wet cores, dining, kitchen and bathrooms are tightly grouped in close proximity to the Barnhouse cottages for maximizing the southern exposure of the rear flat accompanied by photo voltaic panels and solar tubes as a source of generating energy. Ground source heat pump wells in the rear are located beneath the raised house so that digging in the garden will not pose a potential cause of damage.

Barnwaters is collected from the east facing roof in the cottages and used for toilet flushing and site irrigation. Additional rainwater falling on the house and site is collected through the garden in a series of channels, bioswales and rain gardens that will reduce the load on the neighborhood storm water drainage system and help irrigate the site so that a productive edible landscape can be supported.

Construction is proposed in structural insulated panels (SIPs) and dimensions are carefully coordinated to avoid waste. This allows for the off site production of components and raised assembly. The use of SIPs in many Context houses and panels applied as a rainscreen ensures that this feature is protected. Windows are double hung, double glazed units that allow the operation of shutters when they are open and do not require the use of impact resistant glass as the shutters provide storm protection. This combination of materials allows a highly efficient building envelope that reduces cooling and heating loads and requires minimal maintenance.

Sustainable, healthy and low maintenance materials are proposed throughout the interior as are highly efficient appliances and heating and cooling equipment.