

COMMUNITY PATTERNS

The Community Patterns presented in this section describe the role that individual buildings can play in creating neighborhoods and towns, in continuing the local traditions of each region, and in fulfilling the goals defined in the planning charrettes and community workshops.

The section begins with the influence of geography, climate, and culture on the physical form of building and communities. The geography of the uplands in North Louisiana is very different from the terraces, lowlands, and marshes of South Louisiana. The form of Louisiana's traditional settlements and towns developed in response to these geographic differences. Overlaid on the state's geographic patterns is an extraordinary diversity of cultures, regionally distributed in ways that mirror the state's early migration and settlement patterns. The illustrations of architecture and urbanism contained in this section of the Pattern Book depict these different characteristics and can be used to guide the selection of appropriate building and urban patterns for specific sites.

In addition to geography and culture, a third criteria for design is the scale of urban settlement. The Transect presented in this section defines six zones, ranging from rural to urban. Within each zone, there are appropriate street designs, building and use types, and architectural elements. The zones are illustrated, first with traditional examples and then with illustrations of prototype environments.

The physical structure of neighborhoods, towns, and cities can be conceived as an "urban assembly kit." The parts of this assembly kit include water systems, utilities and other infrastructure, parks and open space, streets, blocks, lots, and buildings.

All of these urban frameworks provide the setting for individual buildings. Single-family, multi-family, commercial, and mixed-use buildings should be placed on their individual lots in a manner that contributes to the character and quality of the streets and public spaces of the community, as well as in response to requirements for flood protection and accessibility.

BUILDING GREEN AT THE COMMUNITY SCALE

The first principle for building green communities is to build within existing urban areas, or to build new projects using compact, mixed-use plans in which the activities of daily life can be accomplished with limited use of a car. Projects should be located within walking distance of workplaces, schools, community facilities, retail establishments, and other civic amenities.

HISTORIC PRESERVATION/ADAPTIVE REUSE

Reusing and rehabilitating damaged structures is, by definition, a green building practice. It saves many more resources compared to what is required for new construction. Through building rehabilitation, society retains the initial energy and resources that were required to make materials such as bricks, mortar, steel, or timber and also establishes a sense of historical and community continuity. Historic buildings are also an important link to tradition and offer important educational opportunities. The National Trust for Historic Preservation estimates that the energy equivalent of one gallon of gasoline is wasted for every eight bricks destroyed and replaced. In addition, construction and demolition debris accounts for 24 percent of America's landfill volume.

LOCATION AND USE OF EXISTING INFRASTRUCTURE

Another extremely important factor in building and repairing healthy new communities is the choice of location. Wherever possible projects should be located on infill sites with access to existing roads, water, sewers, and other infrastructure. Locating projects in this manner offers the greatest savings, helps conserve land, prevents the spread of stormwater runoff to new watersheds, and reduces travel distances and pollution from vehicular exhaust.

Proper site selection avoids development of inappropriate sites and damage to fragile and/or scarce environmental resources. Development should not be located on wetlands, steep slopes, prime farmland, parkland, or other ecologically sensitive areas.

DIVERSE, MIXED-INCOME COMMUNITIES

Building diverse, mixed-income communities provides an opportunity for people of all ages, races and income groups to thrive. Neighborhoods should provide a diversity of unit types to accommodate different needs and uses. The integration of affordable and market-rate housing into a medium-density, mixed-income, mixed-use community helps create long-lasting, healthy communities.

GALLERY OF EXAMPLES



Baton Rouge



Lake Charles



Baton Rouge



St. Martinville



Thibodaux



New Orleans



St. Francisville



Vermilionville

GEOGRAPHY, HISTORY, AND CULTURAL DISTINCTIONS

Restoration projects and new settlements can draw guidance and inspiration from the combination of geographic, climatic, and cultural factors that contribute to Louisiana's unique character and sense of place.

GEOGRAPHY

The physical geography of Louisiana creates three basic regional types: Hills, Terraces, and alluvial Lowlands. Traveling up the Mississippi River from New Orleans, the high ground at Baton Rouge marks the beginning of the Terrace region and distinguishes it from the Lowlands to the south. The Mississippi River floodplain is defined by these visible changes in elevation. The Terrace spans the state, from Texas to Mississippi and is interrupted by the Mississippi River floodplain.

The Lowlands (marsh and alluvial floodplain adjacent to the Mississippi River and its tributaries) are generally 30 to 40 feet lower in elevation than the Terraces. The Lowlands were formed by water which still actively shapes their physical appearance. Whether by flood or hurricane, these areas are geologically dynamic.

The process of flooding creates natural levees parallel to the rivers and bayous. These natural levees created higher land parallel to the waterways on which houses and roads were built. The bayous, cut off from the Mississippi by levee projects, were populated along their lengths in a linear settlement pattern. As you get farther from the rivers and bayous, elevations gradually diminish in a perpendicular line into backswamp areas that are too low and wet for building houses.

Marsh—coastal lowland some 20 to 50 miles wide—is where the land meets the Gulf of Mexico. Composed mostly of low, wet, treeless areas covered in grasses, marsh areas are generally not occupied by permanent structures.

Hurricanes tend to impact these two areas differently. Many lowland sites will be best served by finding ways of developing neighborhoods in places where the ground can be artificially elevated; otherwise, houses will need to be elevated as described in the Architectural Patterns section.

Geographers typically divide Louisiana into two cultural regions: North (Anglo) Louisiana and South (French) Louisiana. The map shows the imaginary line that distinguishes the two areas.

HISTORY AND CULTURAL DISTINCTIONS

Geographical features define the physical boundary between Louisiana regions, but cultural influences provide equally tangible distinctions. Particularly in South Louisiana, culture and geography are integrally connected to the region's unique economy and built environment.

The brothers Iberville and Bienville, Frenchmen who arrived in the region in 1699, explored it, built forts, and established the city of New Orleans in 1722. As the French were settling New Orleans, they also imported the rural plantation culture from the Caribbean island of Saint Domingue (now Haiti and the Dominican Republic) to the banks of the Mississippi River. Because the plantation economy relied heavily on slave culture, Haitian and

"All parts of the state, even where natural conditions were very much alike, did not look the same after early European settlement. This is because people from France settled in some areas and people from the British Isles settled in others. Both built houses, barns, and roads, planted fields, raised cattle, but because of different backgrounds each did these things in its own manner. The differences we can see today, because each group left its own distinctive settlement pattern. Rarely does an individual depart from the way of his group, whether in his religious beliefs or in the kind of house he builds."

Fred B. Kniffen, *Louisiana: Its Land and People*



Lowlands



Prairie

Dominican peoples of African descent strongly influenced the region's economy and heritage. Sugar cane as a cash crop has had a lasting impact on South Louisiana's economy. With slavery came cultural distinctions and acclimations that have had a vital impact on both South Louisiana's architectural legacy and economy.

Although the majority of Louisiana's early settlers were French-speaking Catholics, Spanish, Portuguese, Dutch, German, and British immigrants arrived variously as colonists and refugees; Africans arrived either directly or via the Caribbean (primarily as slaves); and free people of color settled in the region.

The Acadians, another distinct cultural group that settled in Louisiana, also made a marked and enduring impact. Initially colonists of the French-Canadian colony of L'Acadie, they remained as the "neutral French" after the British captured the colony in 1713 and renamed it Nova Scotia. In 1755, at the start of the Seven Years' War, the Acadians were forcibly deported, dispersing throughout British North America and beyond. The Seven Years' War ended in 1763 and Louisiana was split between the Spanish and the British. Many of the Acadian refugees regrouped in Spanish Louisiana, where, in the 1760s, the government settled them on bayous and prairie lands west of New Orleans. The word "Acadian" evolved into the group's modern name, "Cajun."

Starting in 1791, Louisiana gained population due to a slave revolt in Saint Domingue that grew into the Haitian Revolution. It lasted 12 violent years, resulting in an influx of Europeans, slaves, and free people of color into New Orleans. Their strong cultural presence continues today. The Caribbean term "Creole" came to this continent with these populations and suggests being native born from foreign parents.

North Louisiana was (and still is) largely Anglo and mostly Protestant. In 1763, the "Florida Parishes"—north of Bayou Manchac and Lakes Maurepas and Pontchartrain—came under British control. This area (and the rest of what is now North Louisiana) was settled overland via the Appalachians from the British colonies and, after the American Revolution, from the United States.

Immediately after the American Revolution, Spain gained control of British Louisiana, and all of Louisiana was ceded to Napoleonic France in 1803. A few months later, Thomas Jefferson negotiated the Louisiana Purchase from France of "all the land drained by the Mississippi River"—the whole of the Mississippi River Valley. A small part of this territory became the state of Louisiana in 1812.

In Louisiana, the various French, Anglo, and African-American groups have, through time, strongly maintained their distinct cultural identities.

SETTLEMENT PATTERNS

Land surveying methods were a powerful factor that shaped Louisiana's settlement patterns. The marked differences in community patterns and architecture which can be observed today have their roots in the cultural distinctions of the early settlers.

South Louisiana reflects the long lot (arpent) surveying method used by the French and Spanish. Land was settled along the waterways in long parcels which varied in width. Property lines were placed perpendicular to the river from front lands to backswamp. On the inside of a bend, land diminished quickly making it less desirable. To encourage settlement there, the government granted twice as much land on that side. The method required that landowners build a road along the levee. Houses were set close together, forming a continuous, curving line (particularly along narrow strips); villages constituted little "knots" along the line.

The Anglo-Saxons who settled North Louisiana divided their land by metes and bounds. Boundaries ran independently of a regular survey system, creating an irregular pattern. On large farms, the houses and barns were often built in remote spots. Roads connecting them with village centers were highly irregular and, in this dispersed pattern, individual farmsteads might have miles of forest between them and their neighbors.

The American system of surveying land, commonly associated with the midwest, was prevalent in Louisiana as well. This system of land surveying was based on dividing up square miles of land into regular 40-acre properties.



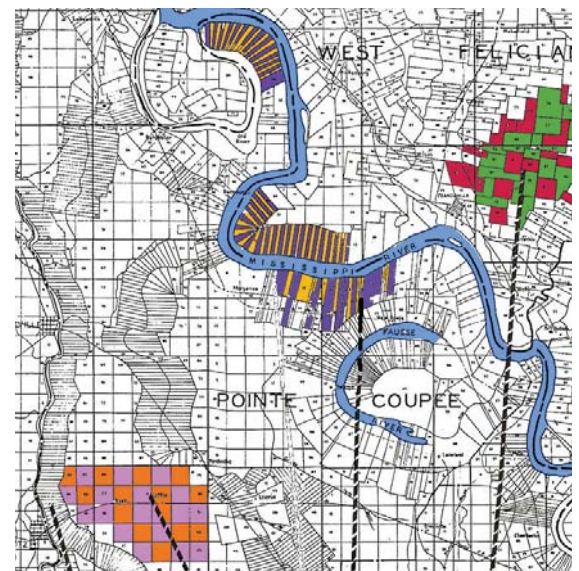
St. Francisville: Terrace



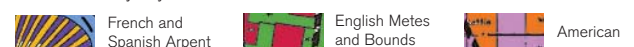
New Iberia



Baton Rouge

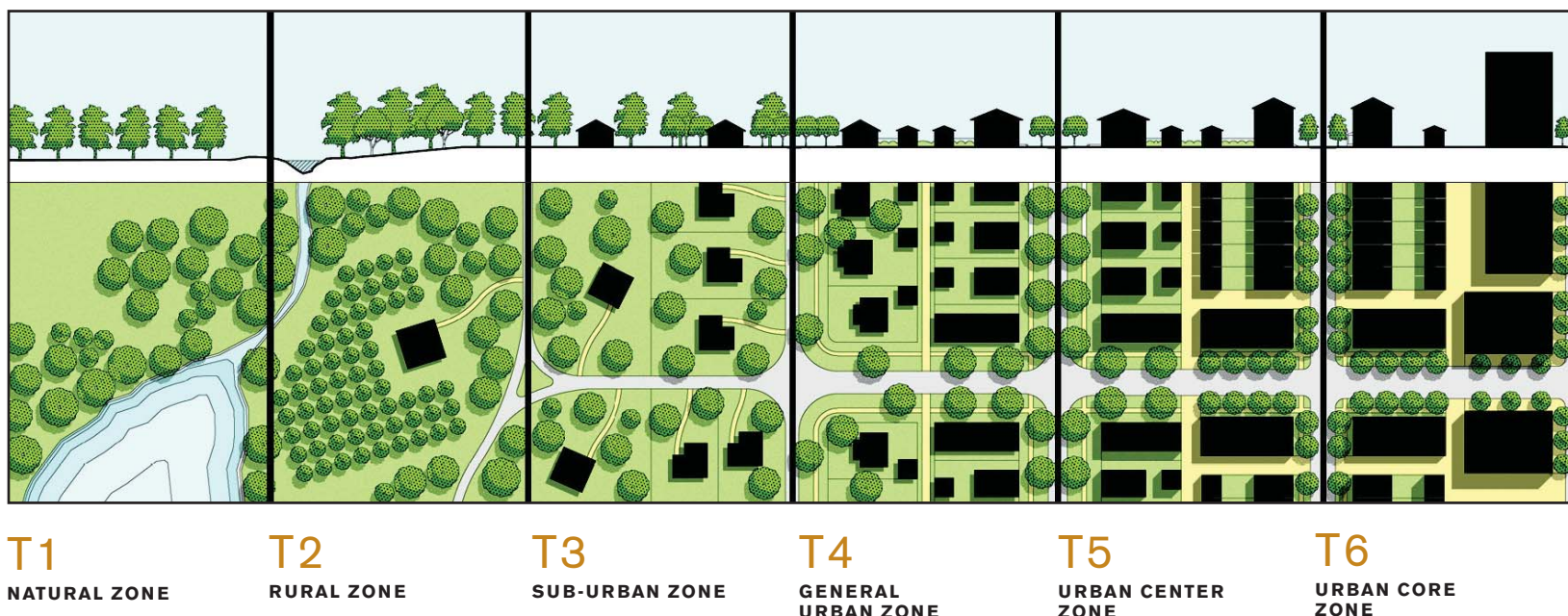


Land Survey Systems



Courtesy of Jay Edwards

TRANSECT OF SOUTH LOUISIANA AND DEMONSTRATION PLANS



Louisiana's systems of roads and waterways—which serve the farms, industries, villages, towns, and cities of the state—overlay the patterns of geography and culture discussed previously. The pattern of roads follows the land at higher elevations, which is also where the majority of development has occurred. Much of the state remains rural and agricultural with small settlements. Large towns and cities along major roads include Lake Charles, Lafayette, and Baton Rouge, as well as New Orleans.

THE TRANSECT is a tool developed by Duany Plater Zyberk & Company which describes the hierarchy of scale and location of these different settlement types. As the illustration shows, the Transect includes six zones from the most natural undeveloped areas, to rural landscapes with farmsteads or coastal homesteads, small hamlets and villages, larger towns around historic trading centers, administrative centers, up to the larger urban centers.

Building smarter, safer, and stronger involves finding ways to reduce the sprawl development that threatens the rural landscape and coastal wetlands, and to encourage compact, mixed-use development that reduces people's dependency on automobiles. Within each of the Transect Zones (T-Zones), infill development and reconstruction should be consistent with the scale of the existing settlement.

TRANSECT AND DEMONSTRATION PLANS

Three Demonstration Charrettes took place in three different parts of South Louisiana, each part having its own scale and particular issues.

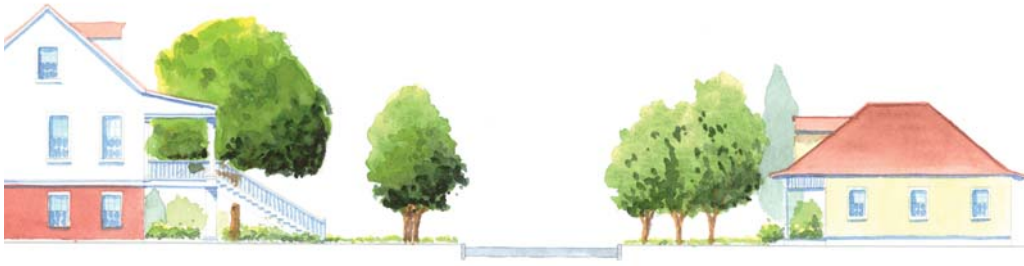
In **VERMILION PARISH**, the charrette developed plans for three communities: Erath, Delcambre, and Abbeville. All three are located in an agricultural landscape of sugar cane, rice, and other crops. Recent development patterns have included incursions into this landscape at a time when the future of agriculture is threatened by world economic forces. The rural landscape is also highly valued by the people of the region for hunting and fishing as well as for its aesthetic value. Therefore, the plans for the three towns called for compact development within areas currently developed. The edges between town and country are well defined. In the case of Erath (which was originally built on low ground), the plan calls for a new neighborhood on high ground with a series of canals and waterways to improve drainage for the existing town. The proposed scale of development fits within the T-3 through T-5 Transect Zones.

The charrette in **ST. BERNARD PARISH** created a plan for approximately 20 urban neighborhoods. The plan calls for large areas of parkland and concentrated areas of development with a mix of building types. These all fall within the scales of Transect Zones T-3 through T-5.

The charrette in **LAKE CHARLES** focused on the downtown and its immediate environs that span Transect Zones T-4 through T-6.



Courtesy of Duany Plater Zyberk & Company



T3 SUB-URBAN ZONE SECTION



Abbeville



T4 GENERAL URBAN ZONE SECTION



Baton Rouge



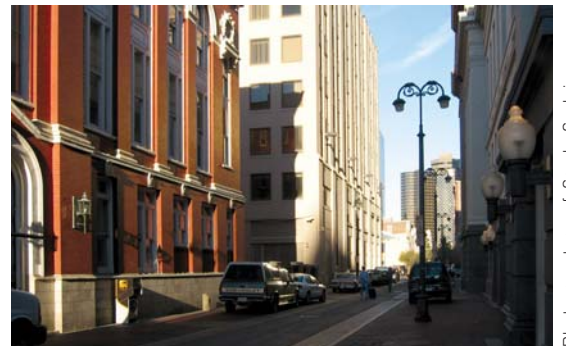
T5 URBAN CENTER ZONE SECTION



Covington



T6 URBAN CORE ZONE SECTION



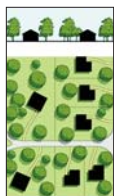
New Orleans

Photo courtesy of Sandy Sorlein

Photo courtesy of Sandy Sorlein

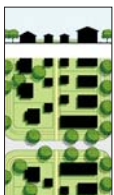
COMMUNITY CHARACTER

Four different scales of streets and public space illustrate how the elements in the Pattern Book are applied to create appropriate designs for each of the Transect Zones listed. The perspective drawings on this page are idealized images representing the essential qualities of different public spaces and neighborhoods in South Louisiana as described by residents during the public process.



T3 SUB-URBAN ZONE

A small-scale neighborhood space in the T-3 (Sub-Urban) Transect Zone includes houses on large lots, set back from a small-scale street. A wide planting verge separates the street from the sidewalk. The individual lots are served from the street with driveways, but the parking and garages are set back behind the front facade line of the houses.



T4 GENERAL URBAN ZONE

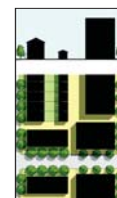
A neighborhood street in the T-4 (General Urban) Transect Zone has a diverse range of house types on small lots. The houses are close to the street with small-scale gardens defined either by low fences or hedges. The individual lots are served by an alley system and there are no driveways from the street.





T5 URBAN CENTER ZONE

A mixed-use street in T-5 (the Urban Center) features mixed-use buildings along a commercial street. Sidewalks are broad, used for café tables, display of goods, galleries, or landscaping. On-street parking buffers pedestrians and provides short-term parking for shops.



T6 URBAN CORE ZONE

A mixed-use street in T-6 (Urban Core) includes a mix of small-scale, mixed-use buildings and larger mid-rise buildings with shops on the ground floor and residential above. Parking is located mid-block, typically in garages or landscaped parking lots. Sidewalks are wide with ample space for pedestrians.



URBAN ASSEMBLY KIT

Neighborhoods, towns, and cities are complex systems that consist of many different elements. The most appealing and congenial spaces in towns are those in which there is harmony among all of the elements which create them, including: the scale of the street pavement area, the size of the sidewalk, the placement of buildings and their height, the character of the architecture, the small details that add richness to the space, and the plantings that add shade, texture, and color. Yet each of these elements is designed and maintained by a different person or organization and each is designed according to different criteria.

To illustrate the relationship among these elements, we have used the new neighborhood plan as proposed in the Erath Demonstration Charrette as an example and have drawn the key elements separately.

EXISTING SITE AND TOWN

The first aerial view illustrates the existing site. It is a single, large parcel running north from Route 14 between two stream beds. The parcel is immediately adjacent to the existing town in an area already experiencing some growth and in which the town is proposing to build new schools.

FRAMEWORKS

WATER SYSTEMS: CANALS, LAKES, AND STREET CONNECTIONS

The first step in the planning was to mitigate the flooding in the existing towns and protect new neighborhoods from future flooding. This is accomplished with a series of canals and lakes which are designed to help control the flow of flood water from the north. Following techniques long used by rice farmers in the region, the soil from the excavation is carefully placed on the portion of the site to be developed in order to raise the ground level above the floodplain.

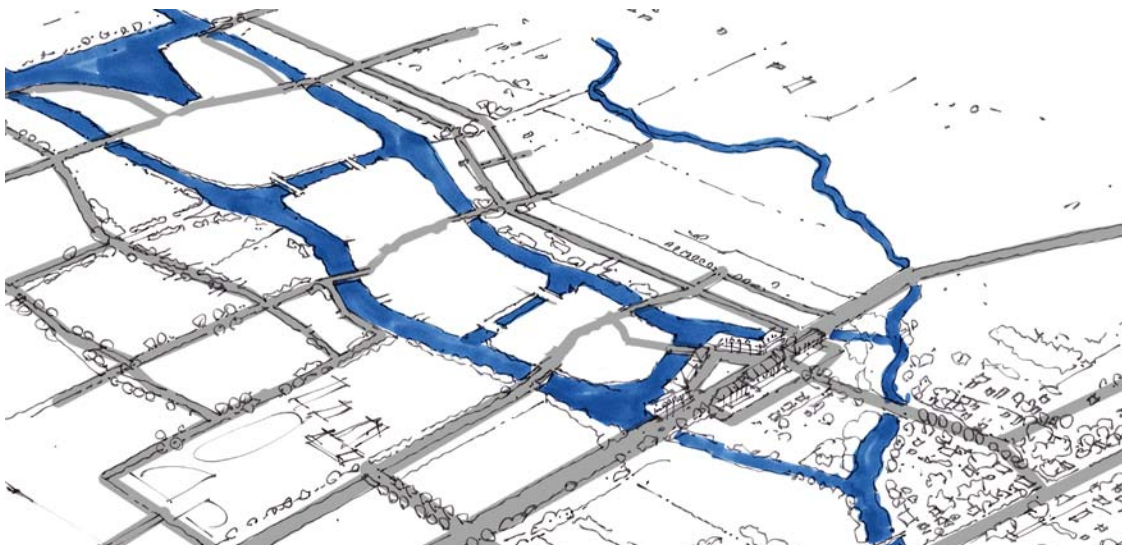
Once the pattern of waterways is in place to create land protected from flooding, it is possible to overlay a network of streets connected to the existing roads in the area.

NEIGHBORHOODS

Separate neighborhoods, each scaled to about a five-minute walking radius, are created within the framework. Each neighborhood contains a mixture of house types and public amenities (such as parks) and schools.



Existing Site and Town



Canals, Lakes, and Street Connections



Neighborhoods



Streets



Lot Requirements: Setbacks and facade zones at the neighborhood scale

ELEMENTS OF THE NEW NEIGHBORHOOD

The new neighborhood is a collection of streets, parks, houses, and mixed-use buildings that fit within these frameworks.

STREETS

Within the plan area, street types include small-scale neighborhood streets, a collection of alleys and service ways, and a perimeter drive around the park. For each of these street types, there is an appropriate cross-section which describes its width, the design of the sidewalks, and the lighting.

LANDSCAPE: STREETSCAPES AND PUBLIC OPEN SPACE

The street rights-of-way are further developed with street trees in the planting verges, the development of a park, and special treatment along the banks of the canals.

BLOCKS AND LOTS

The framework of streets defines the blocks for development. The blocks are subdivided into individual parcels for sale to home owners and developers. Different parcel types accommodate different building types.

LOT REQUIREMENTS

In order to organize the urban space of the neighborhood, the plan establishes setback lines and facade zones for each parcel. These set the location of individual buildings within the plan and create the relationship of the house to the street.

BUILDINGS

A wide variety of houses and buildings can then be placed on the lots. A diverse collection of styles and types of buildings creates a coherent urban environment. The illustration includes:

- >> Single-family houses on wide lots
- >> Small cottages on small-scale streets
- >> Attached houses
- >> Small apartment houses
- >> Mixed-use buildings on the main square



Landscape: Streetscapes and Public Open Space

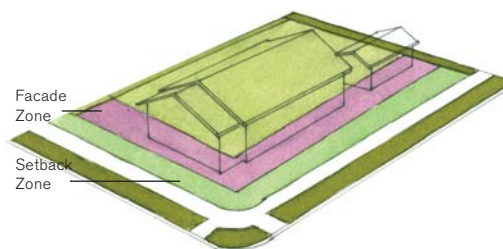


Buildings placed on lots



Blocks with Lot Types

Rowhouses Large Houses Mixed-Use Buildings



Lot Requirements: Lot scale



A Louisiana house on its lot