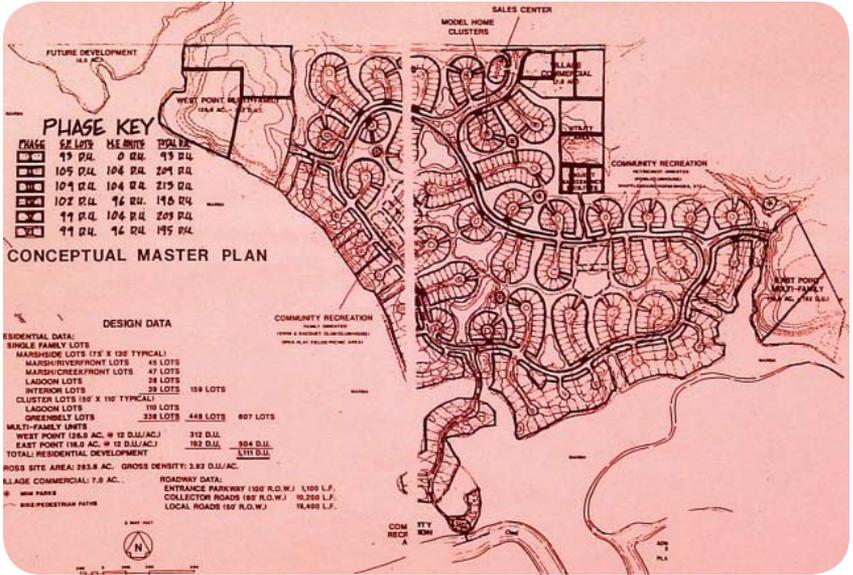


CASE STUDY

Habersham
Beaufort, South Carolina



Original Master Plan

Habersham

Beaufort County, South Carolina

The Introduction

The master plan for the new town of Habersham was created by Duany Plater-Zyberk and Company in 1997. At that time, the site was predominately covered in natural vegetation such as large specimen live oak trees although portions of the property had been cleared for agricultural use. One feature the town founders wanted to accentuate is an allée of live oaks left from an antebellum plantation that once occupied part of the site.

The new town of Habersham can be used as a case study for Duany Plater-Zyberk and Company's Light Imprint initiative. The initiative is designed to provide a framework for the design of sustainable neighborhoods like Habersham based on New Urbanism planning principles.

Some of Habersham's infrastructure is based on low technology techniques for providing good environmental design.

The History

The land on which Habersham is constructed has been inhabited for centuries. There is evidence that Archaic Indians were living in the region as early as 4000 B.C. Archeological digs along the southern edge of the Habersham site provide evidence of early native American settlements.

Spanish and French explorers both visited the Broad River region, but the English established the first permanent European settlement in South Carolina near present day Charleston in 1670. Beaufort is, however, the second oldest town in South Carolina; it was founded in 1711. Over the years that followed, several explorers and Native American warriors



DPZ Master Plan

tried to win the region for their nations. The local architecture shows the influence of the many nationalities involved in the region's settlement.

Over many years, the region has produced varied crops, but the most important were probably indigo, rice, and cotton. The Habersham site includes the grounds of Treadlands, a former antebellum plantation house built by the Campbell and Barnwell families in the early 1800's. The ruins of the house's tabby foundation have been preserved in the center of a park. Additionally, one of Habersham's islands was the site of an oyster factory in the late 1930's and early 1940's.

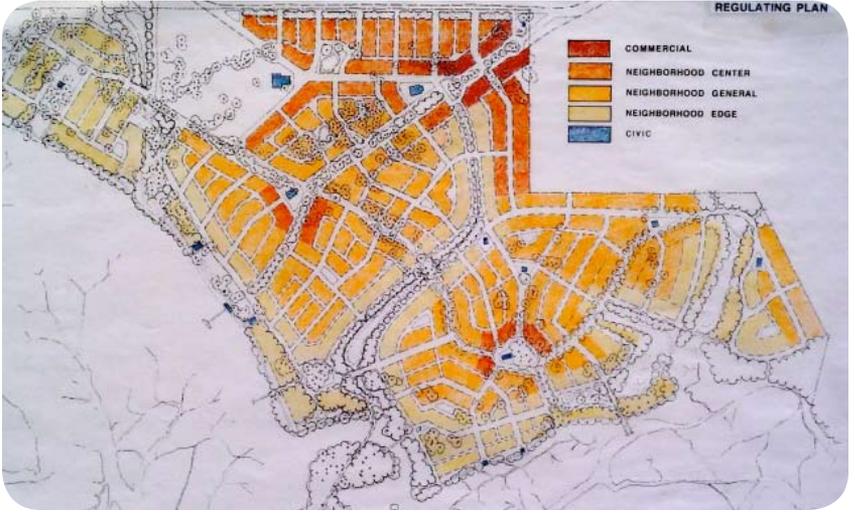
Previously, a conventional master plan was drawn for Habersham. That plan proposed that the entire site become a private, gated community with distinct and separate pods for single-

family lots, multifamily housing, and commercial interests. That master plan proposed as many as forty-five cul-de-sacs arranged along a single oval-shaped spine road that looped through the site. Almost the entire shoreline, over ten thousand linear feet, was to be devoted to lots for single-family housing. That plan would have completely privatized the shoreline with the backs of large houses facing the marshes. Those who could not own lots on the shoreline would have had no access to the marshes and no chance to see the glorious sunsets over the Broad River. The shoreline of the largest island would have suffered the same fate.

The DPZ master plan of 1997 is completely different from the conventional plan. Now almost completely implemented, Habersham is the winner of the 2004

CASE STUDIES

Habersham ~ The Transect



Regulating Plan



T2 - Neighborhood Edge



T3 - Neighborhood General



T4 - Neighborhood Center - Detached Houses



T4 - Neighborhood Center - Attached Houses



T5 - Town Center

CASE STUDIES

Habersham, ~ LI Tools



Existing natural marsh used for filtration



Curbless, waterside drive



Neighborhood General houses fronting pond



Park-front houses with a one-side curbed street



Wood plank bridge over a creek



Street adjustment for natural vegetation



Concrete path with gravel swales



Gravel swales with pedestrian crossings



Live-Work courtyard using pervious paving methods



Extension of green fingers into the Neighborhood Center

Platinum Award in the Best in American Living (BALA) Competition, sponsored by Professional Builder magazine and the National Association of Home Builders.

The Site

Located on the island of Port Royal in Beaufort County, Habersham is approximately six miles southwest of the city of Beaufort, South Carolina. Habersham is less than a mile from the intercoastal waterway. Two small islands are connected to the southern tip of the property by causeways. The southern boundary of the site is Habersham Creek; the marshes of the Broad River form the western boundary. In all, Habersham has over thirteen thousand linear feet of marsh frontage.

The two hundred and eighty-three acre site is crossed by a number of small creeks that drain to the Broad River marshes. Seventy-three acres of the site have been preserved for parks, common areas, and natural drainage basins. Mature vegetation along the marsh edge has created a natural windbreak and an inviting habitat for wildlife. The town founders worked with environmental groups and governmental agencies to meet residents' needs while preserving the inherent beauty of the site. Extensive tree surveys were conducted; wetland preservation and marsh buffers were an important part of the master plan.

Habersham has a climate ranging from temperate to semi-tropical. The average rainfall for the area is almost fifty inches per

year. With that type of environment, it is easy to see why the site is notable for its ancient live oaks with branches laden with flowing Spanish moss and resurrection fern. Southern magnolia trees and palmettos, South Carolina's state tree, are plentiful; other indigenous grows readily.

The Unique Characteristics

The master plan for Habersham includes provision for approximately six hundred and fifty private residences, a town center complete with a post office and fire station, a small island dedicated to recreation uses for residents, and numerous parks and greens. Different building types are located within the site according to the various levels of urbanism.

The architecture found on the site respects the local Low Country vernacular. It employs methods used in traditional designs for ventilation and cooling. These logical methods, forgotten or ignored by conventional builders, are mandated by the architectural codes of Habersham. For instance, cross ventilation is achieved in the apartment buildings by having only two apartments per floor. That means each apartment has windows on three sides. A side benefit is the range of excellent views that apartments have.

The broad assortment of building types creates a varied and authentic neighborhood environment. The housing options include large single-family houses on large lots, large single-family

houses on medium-sized lots, cottages on small lots, townhouses, apartments, and live-work units. With so many choices, anyone of any age could choose to live in Habersham. Additionally, the compatibility of structures ensured by the code maintains high property values.

With its sizable town center, Habersham will serve as an urban hub for surrounding villages. In the town center, there are a few dozen live-work units that provide living space above street-level commercial space. Apartment buildings are only three stories tall and limited to six units per building. At the edge of the town center, townhouses similar to those found in Savannah, Georgia, have a park in front rather than a lawn.

The Stormwater Management Techniques

Since it is located near the Atlantic Ocean, heavy squalls can produce a large amount of rain in Habersham in a short time. The region is also prone to rainfall accumulations from tropical storms and hurricanes. Stormwater management was a serious consideration for the development team.

Most all the street paving in Habersham is asphalt. It is a relatively cost-effective and readily available material. Since the street widths vary from very narrow to multiple lanes, the traffic load determines the amount of pavement. Using narrow paved streets allows more vegetation to absorb runoff and to filter impurities

from the runoff. Some streets have sidewalks on only one side further reducing the amount of paving. Wood planks are used to pave one of the bridges in Habersham.

Natural creeks crossing the site channel runoff to the marshes. This mitigates the need for catch basins and underground piping across the site. Swales with a combination of vegetation and gravel channel water away from the tennis courts, recreation areas, and parking lots.

Naturally occurring shallow marshes provide an inexpensive means of filtering runoff before it enters the aquifer or the Broad River. Green fingers of land, i.e., narrow strips of vegetation, between structures are another means of filtering runoff. The most expensive filtration method used in Habersham is a constructed wetland.

Even in the most urban areas, stormwater management is carefully considered. Many of the live-work and townhouse units have formal interior courtyards that utilize paver blocks with gravel and planted joints. Also, the parking lots behind the buildings use pervious gravel paving.



Detail Plan of Habersham showing several Light Imprint tools

LI Tools used at Habersham

PAVING

- Wood Planks
- Crushed Stone/Shell
- Asphalt
- Concrete
- Pea Gravel

CHANNELING

- Vegetative/Stone Swale
- Slope Avenue
- Shallow Channel Footpath
- Concrete Pipe
- Gutter

STORAGE

- Retention Basin with Sloping Bank
- Retention Pond
- Landscaped Tree Wells

FILTRATION

- Wetland/Swamp
- Filtration Ponds
- Shallow Marsh
- Surface Landscape
- Natural Vegetation
- Constructed Wetland
- Green Finger