PANEL 5: FORM BASED REGIONAL PLANNING & COMMUNITY COLLABORATION

Placemaking at Fort Ord:

A Form-Based Approach to Creating Communities of Value

Stefan Pellegrini, RA, AICP, LEED AP, Opticos Design, Inc.

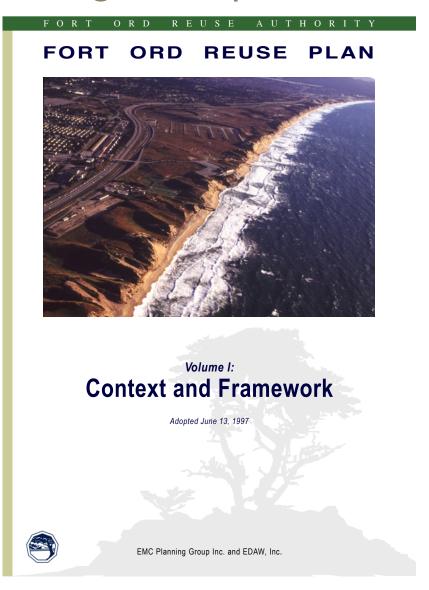




Fort Ord Reuse Plan - 1997 - Design Principles

"Establish a Mixed-Use Development Pattern with Villages as a Focal Point"

"Establish Diverse Neighborhoods as the Building Blocks of Community"

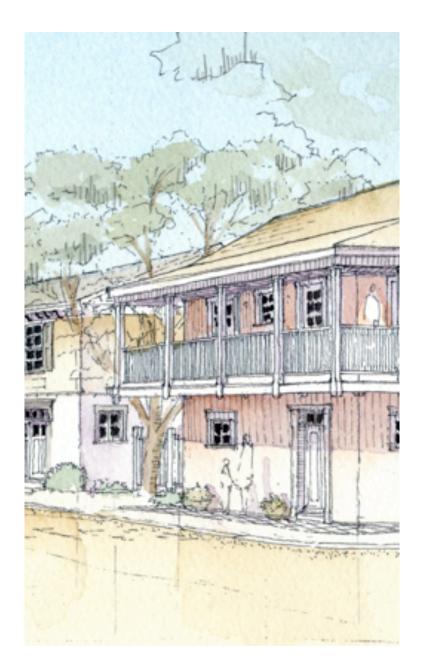


Planned Development Mixed Use?

This designation is intended to encourage the development of pedestrian-oriented community centers that support a wide variety of commercial, residential retail, professional services, cultural and entertainment activities. The intent is to locate this designation near future transit facilities or along transit corridors, and near commercial and employment centers. This designation creates a transition from existing developed urban centers and lower density residential and institutional districts.

Gross FAR to .35

Density to 20 du/Acre



Density = 30 du/acre





"Podded" Density





Courtyard Housing integrated into a Neighborhood

FAR = .60





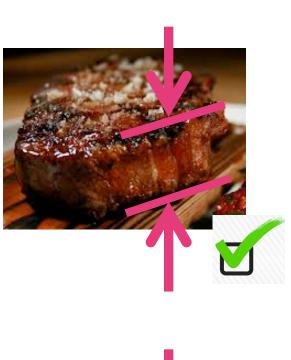


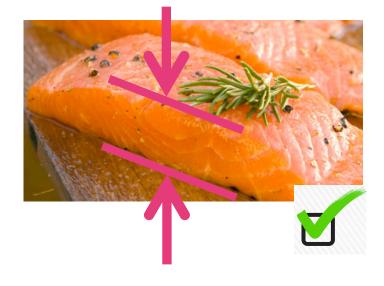


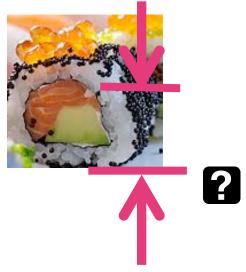
3 at 3 stories 1 at 12 stories

2-story building on 2/3 of site

Would you describe other things this way?









Behind Every Good Land Use Plan is a Great Zoning Ordinance

In Every Great Zoning Ordinance is a Fantastic Form-Based Code

Zoning's Ongoing Evolution

Conventional **Use-Based Zoning**

Drivable Suburban Places

Higher parking requirements (Less walking and access to transit)

Larger public and private open space required due to isolation

"Podded" densities and uses

Specific Uses allowed



Form-Based Zones/ Transect

Walkable Urban Places

Lower parking requirements (More walking, access to transit)

Public realm = Public space

Blended density (variety of types)

Mixed use environments

Uses more flexible based on operational characteristics



Walkable Urbanism

- Current demand for small lot and attached housing exceeds the current supply by 35 million units (C. Nelson).
- 30-40% of buyers want to live in walkable urban places and only
 10% is being provided in any given market (C. Leinberger).
- 3. By 2025, 75-85% of households will not have children.



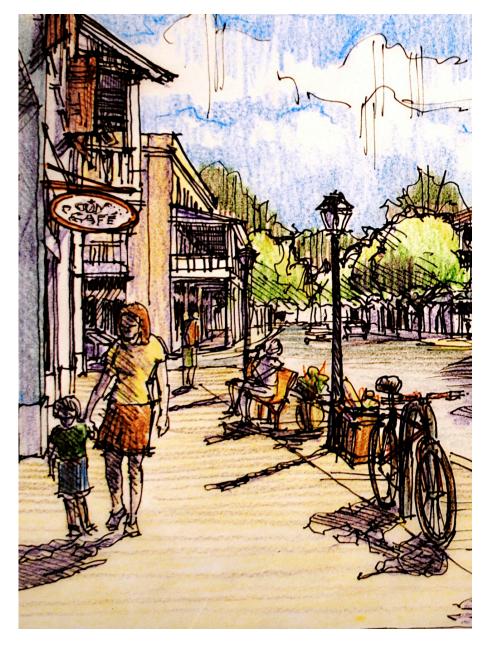
Public Health

"Obesity costs this country about \$150 billion a year... Approximately one in three adults and one in six children are obese. Obesity is epidemic in the United States today and a major cause of death, attributable to heart disease, cancer, and diabetes."

Center for Disease Control, 2011

"People who live in neighborhoods with a mix of shops and businesses within easy walking distance have a 35% lower risk of obesity"

Lawrence Frank, et al American Journal of Preventative Medicine, 2004

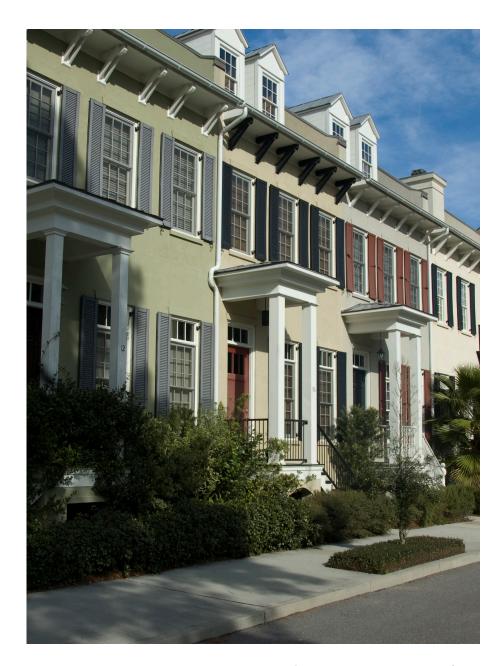


Climate Change

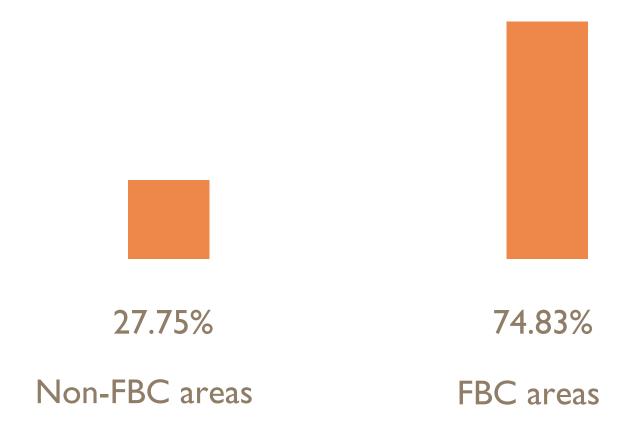
"much of the rise in vehicle emissions can be curbed simply by growing in a way that will make it easier for Americans to drive less...

..The term "compact development" does not imply high-rise or even uniformly high density, but rather higher average "blended" densities. Compact development also features a mix of land uses, development of strong population and employment centers, interconnection of streets, and the design of structures and spaces at a human scale.."

"Growing Cooler" - Ewing



Economic Benefits

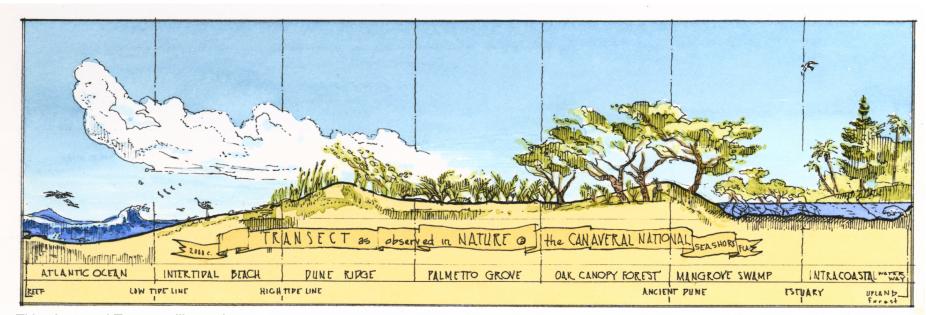


Nashville – Davidson County region

Form-Based Codes - Definition

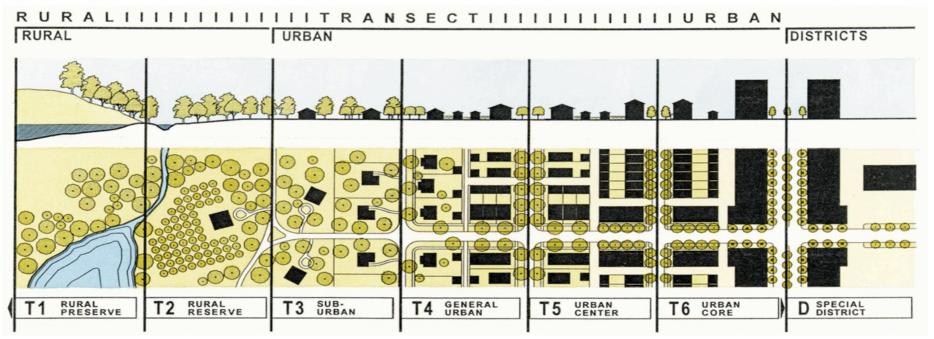
"Form-Based Codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. They are regulations, not mere guidelines. They are adopted into city or county law. Form-Based Codes are an alternative to conventional zoning."

Form-Based Code Institute

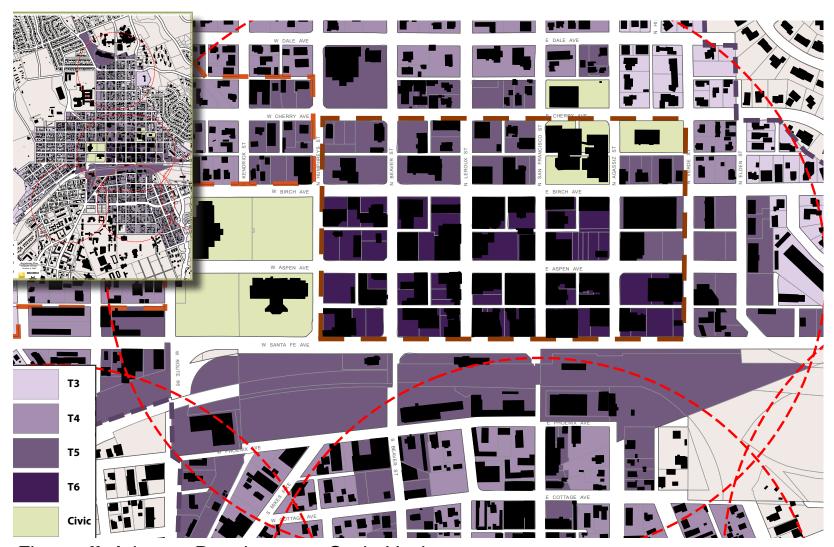


Title: A natural Transect Illustration

Source: James Wassell

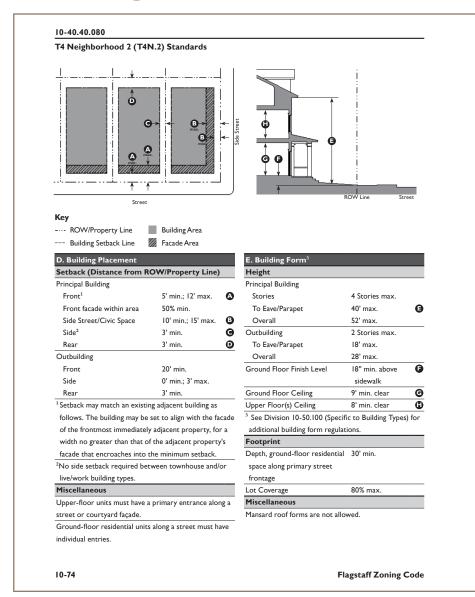


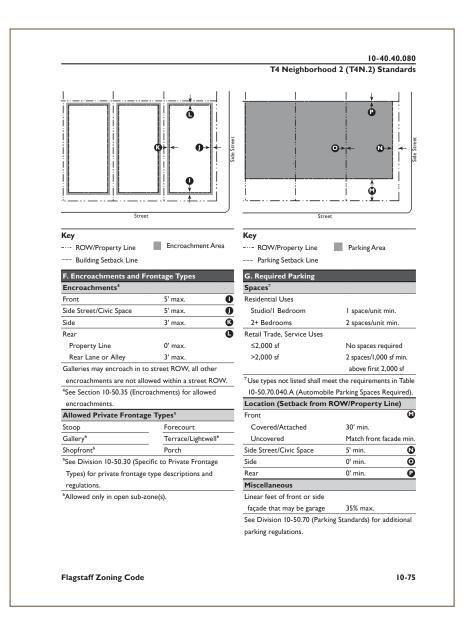
Regulating Plan



Flagstaff, Arizona: Development Code Update

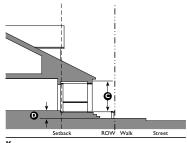
Building Form Standards

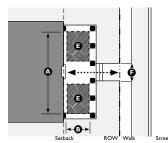




Frontage Type Standards







Key

- -...ROW / Property Line
- --- Setback Line

4.03.050 Porch: Integral

Description

The main facade of the building has a small setback from the property line. The resulting front yard is typically very small and may be undefined or defined by a fence or hedge to spatially maintain the edge of the street. An integral porch is part of the overall massing and roof form of a building. With an integral porch it is not possible to remove the porch without major changes to the overall roof form.

Size		
Width, clear	8' min.	0
Depth, clear	8' min.	3
Height, clear	8' min.	9
Finish level above sidewalk	18" min.	0
Furniture area, clear	4' x 8' min.	G
Path of travel	3' wide min.	G

Miscellaneous

The porch may be one or two stories.

Integral porches may be enclosed on up to two sides and have a roof.

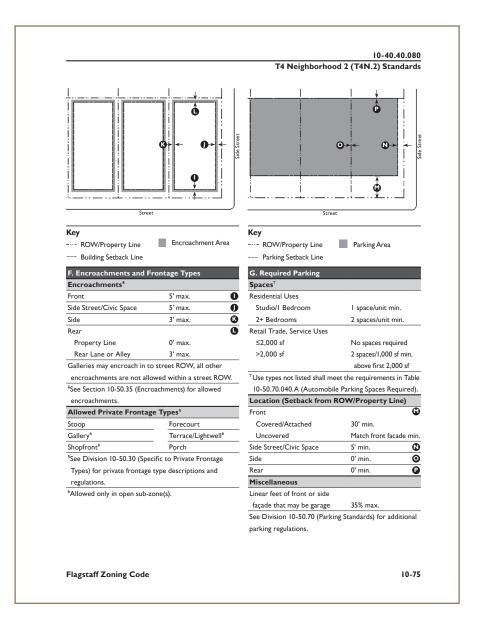


Partial-length integral porch integrated into the overall massing



Full-length integral porch integrated into the overall massing.

4-30 Livermore Development Code



Building Type Standards

5.01.070 Building Types

5.01.070 Duplex, Stacked

General Note: the drawings and photos below are illustrative.





The entry to the right opens to a stair leading to the upper unit, which takes up the entire upper floor. The door to the left opens directly into the lower unit, which takes up the entire lower floor.

A. Description

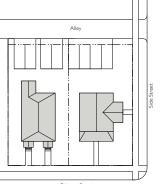
This Duplex building type consists of structures that contain two units, one on top of the other. This building type has the appearance of a medium to large single-family home. This type is typically integrated sparingly into single-family neighborhoods or more consistently into neighborhoods with other medium-density types such as bungalow courts, fourplexes, or courtyard apartments. This building type enables the incorporation of high-quality, well-designed density within a walkable neighborhood.

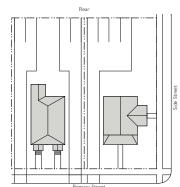
This is the preferred type of duplex on 50' wide lots in Livermore neighborhoods not zoned for single-family because it is capable of accommodating two units in a smaller footprint, thus maximizing compatibility in size and privacy to the rear of adjacent units.



The scale of this duplex makes it compatible with adjacent single-family homes.

Building Types 5.01.070





Typical Alley Loaded Plan Diagram

---- ROW / Property Line Building Area

B. Lot			
Lot Size			
Width	50' min., 75' max.		
Depth	100' min., 150' max.		
C. Pedestrian Access			
Main Entrance Location	Primary street		
On corner lots each unit shall front a different street.			
D. Frontages			
Allowed Frontages			
Porch			
Stoop			
E. Vehicle Access and Par	king		
Parking spaces may be enclosed, covered, or open.			

F. Open Space, Usable	
Width	15'/unit min.
Depth	15'/unit min.
Open Space Area	300 sf min.
Required street setbacks	and driveways shall not be

included in the open space area calculation.

Typical Front Loaded Plan Diagram

G. Building Size and Massing	
Main Body	
Width	36' max.
Secondary Wing	
Width	24' max.
Detached Garage	
Width	36' max.
Depth	25' max.
H. Miscellaneous	

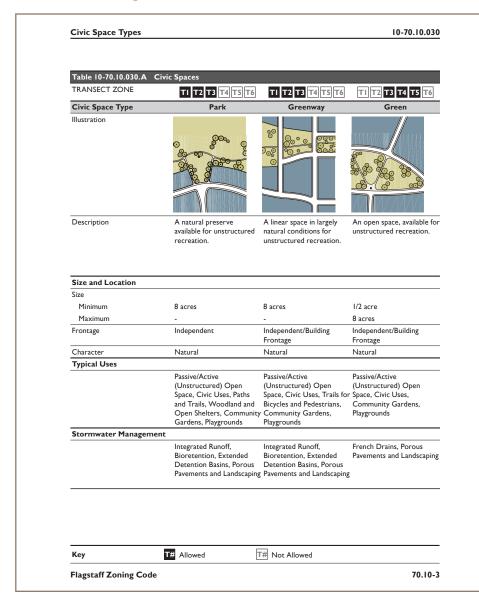
Both units shall have entries facing the street no more than 10' behind, the front façade.

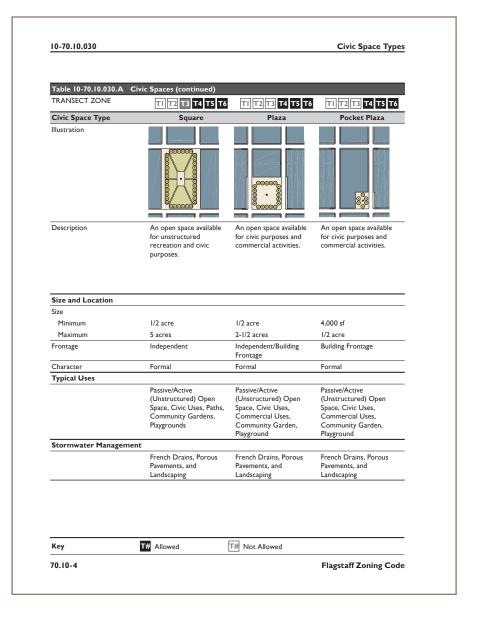
Livermore Development Code

5-13

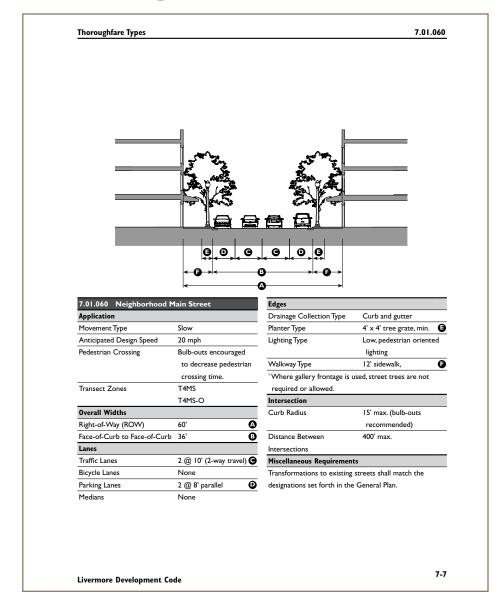
5-12 Livermore Development Code

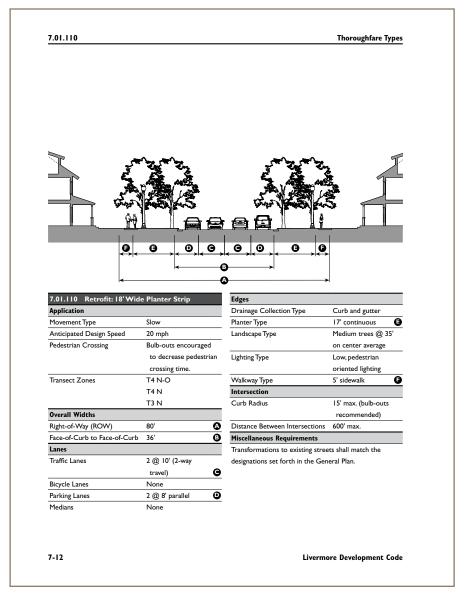
Civic Space Standards



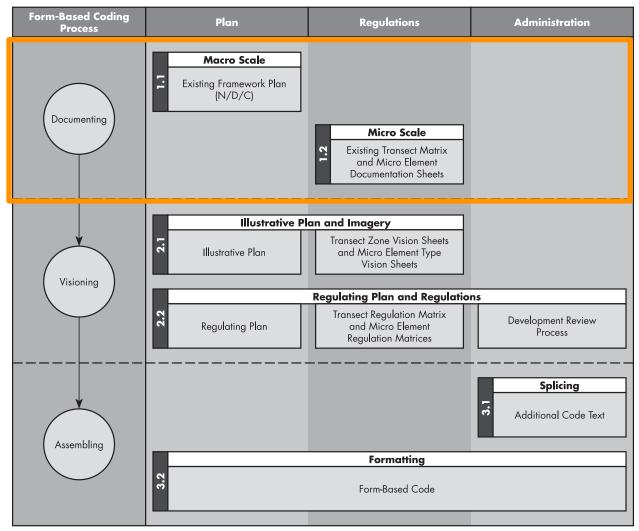


Thoroughfare Standards



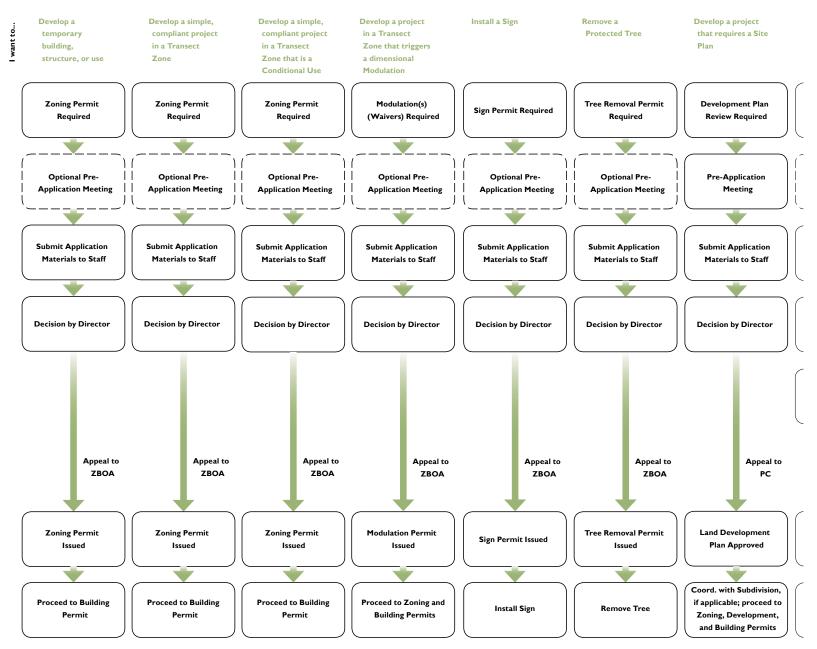


Tested Process for Creation



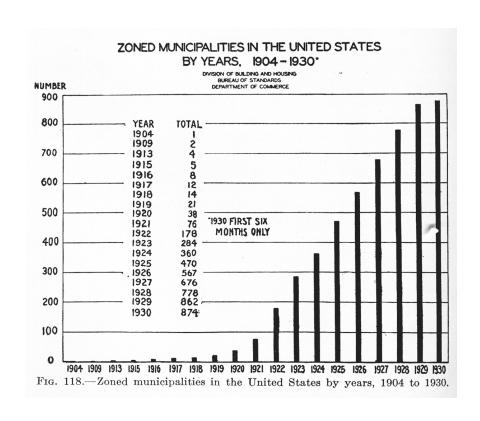
3-Step Process Diagram from "Form-Based Codes"

Tested Procedure for Administration



Form-Based Code Applications

- I. Complete Development Code **Updates**
- 2. Downtown Master Plans
- 3. Corridor Revitalization Plans
- 4. Neighborhood Revitalization Plans
- 5. Specific Plan Development Standards
- 6. Regional Plan Implementation
- 7. General Plan Implementation
- 8. Historic Resource Preservation **Planning**
- 9. Transit Village Implementation
- 10. Greyfield Redevelopment
- 11. University/Community Interface Plans
- 12. Subdivision Ordinances

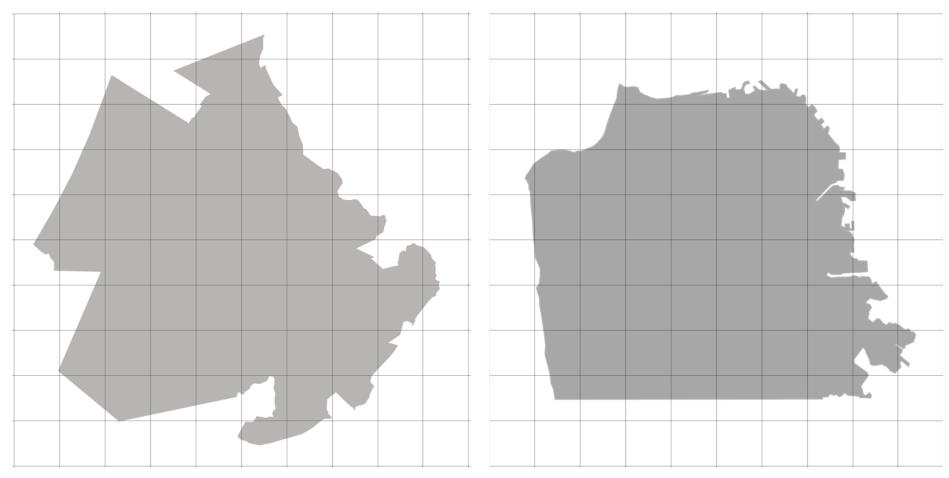


Three Big Ideas for FORA

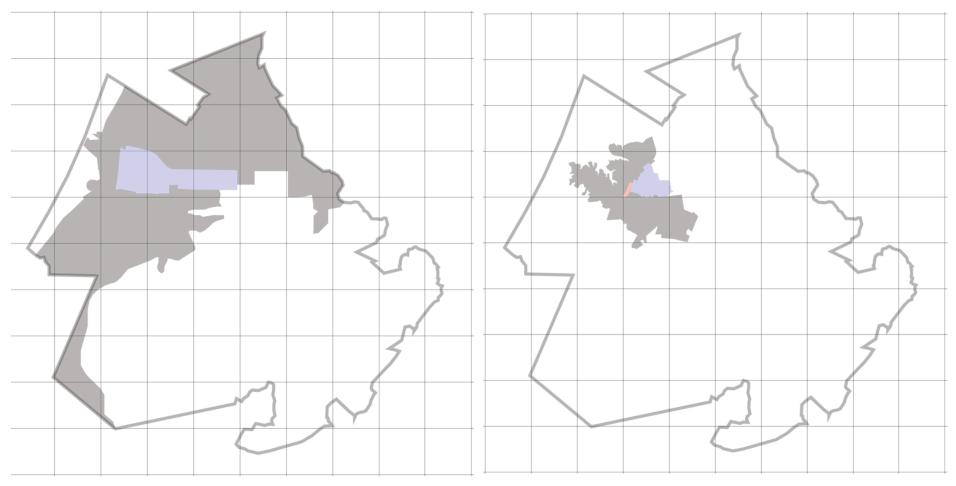
1 Create Walkable Places

Place Types as a Framework for Zoning Implementation

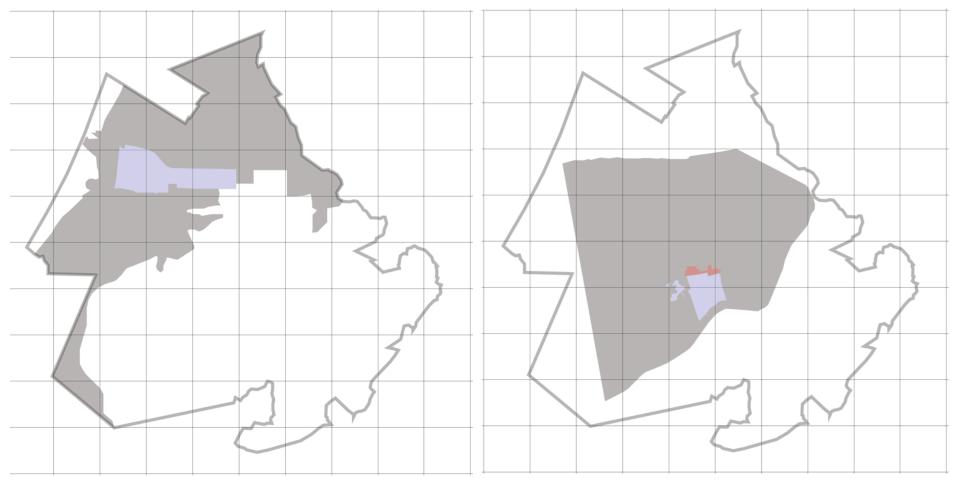
Placemaking at Fort Ord



Fort Ord pop. 25,000 Walk Score 15 San Francisco pop. 825,863 Walk Score 84

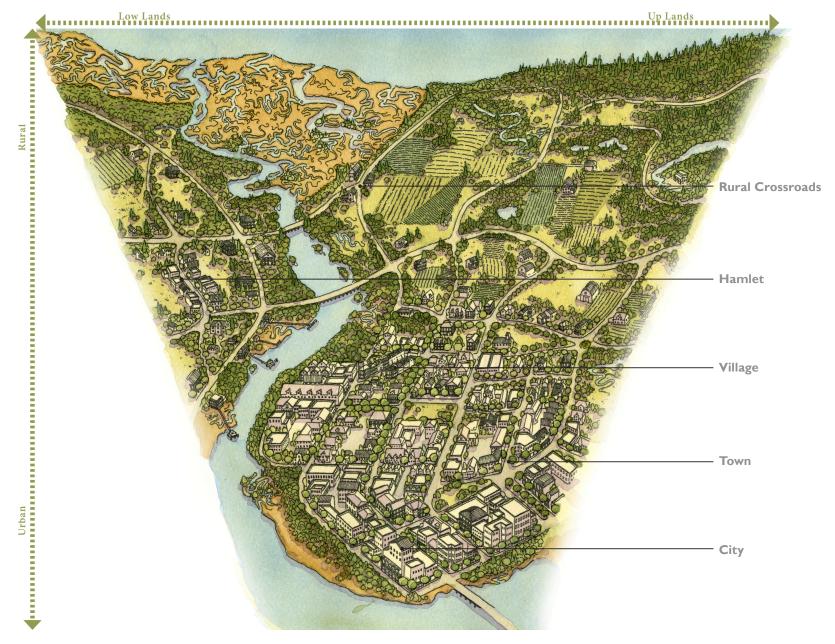


Fort Ord pop. 25,000 Walk Score 15 Davidson, South Carolina pop. 8,000 Walk Score 83



Fort Ord pop. 25,000 Walk Score 15 Princeton, New Jersey pop. 28,000 Walk Score 72

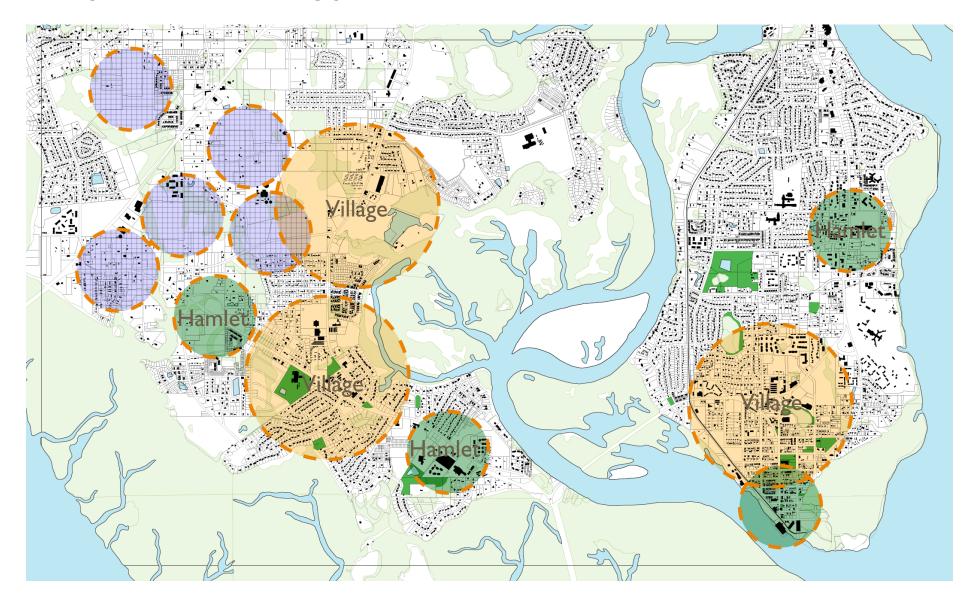
Place Types Framework



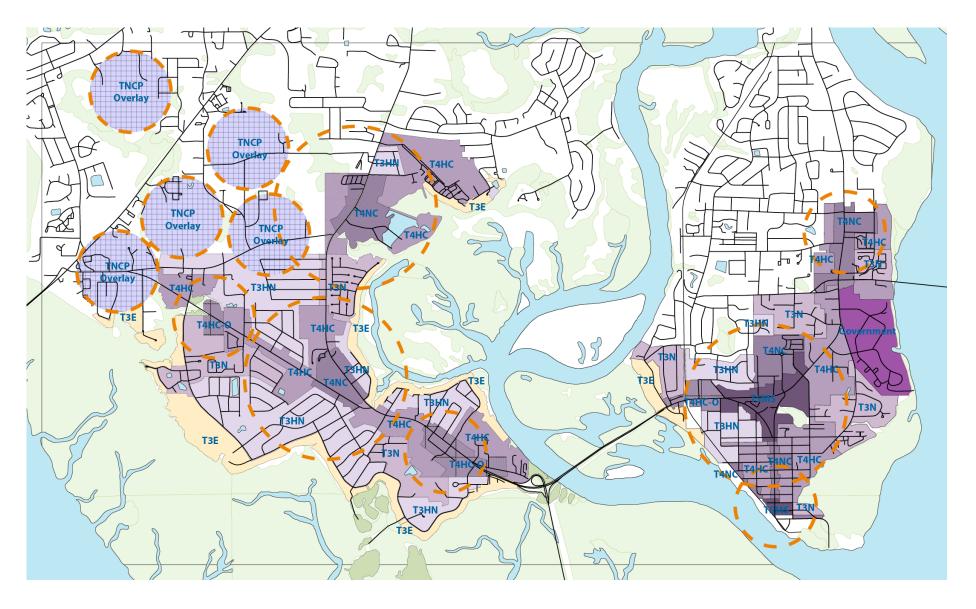
Rural

	Rural Crossroads	Hamlet	Village	Town	City
Illustration					
Description	Located at the intersection of two or more rural roads, Rural Crossroads provide a small amount of locally serving retail in a rural context. Rural Crossroads transition quickly into agricultural uses and/or into the natural environment.	Located in less urbanized areas, Hamlets exist at the edge of the rural and urban condition. A Hamlet has a small main street with surrounding residential. The main street and surrounding residential transitions quickly into agricultural uses and/or into the natural environment.	Located in urbanized areas, Villages are made up of clusters of neighborhoods that support a larger mixed-use environment. The mixed- use environment can be located at the intersection of multiple neighborhoods or along a corridor between multiple neighborhoods.	Located in urbanized areas, Towns are made up of clusters of neighborhoods or villages that support a larger more complex mixed-use environment. Buildings within the Town are attached and may be up to four stories tall. Towns are important centers of the county.	Located in urbanized areas, Cities are made up of clusters of neighborhoods or villages that support a larger more complex mixed-use environment. Buildings within the City are attached and may be taller than four stories tall. Cities are the regional centers of the County.
Activity Mix	Retail, Service, Residential, Light Industrial, Agricultural, Community /Civic Use	Retail, Service, Residential, Light Industrial, Agricultural, Community /Civic Use	Retail, Service, Residential, Community /Civic Use	Retail, Service, Residential, Community /Civic Use	Retail, Service, Residential, Community /Civic Use
Mix of Uses	Horizontal mixed use	Horizontal Mixed Use	Horizontal and vertical mixed use	Vertical mixed use	Vertical mixed use
	Detached Residential, Agricultural Buildings, Other Detached Buildings	Detached Residential, Agricultural Buildings, Other Detached Buildings	Mostly Attached Buildings	Mostly Attached Buildings	Mostly Attached Buildings
Proposed Scale					
Area Type	Node	Less than a 1/4 mile pedestrian shed	½ mile pedestrian shed	½ mile pedestrian shed	½ mile pedestrian shed
Area Size	0.5-5 acres	6-80 acres	160+ acres	200+ acres	200+ acres
Height	I-2 stories	I-3 stories	I-3 stories	I-4 stories	2-4+ stories
Connectivity					
Transit	No regular transit service	No regular transit service	Transit service	Main multi-modal transit hub	Main multi-modal transit hub
Block Structure	Linear large blocks	Medium to large block structure	Block network with a 2000-foot maximum perimeter length and a 600-foot maximum block face length	Block network with a 1600-foot maximum perimeter length and a 450-foot maximum block face length	Block network with a 1600-foot maximum perimeter length and a 450 foot maximum block face length
Thoroughfare Network	Simple Network	Simple Network	Complex Network	Complex Network	Complex Network
Local Example	Dale, May River	Corner's Community, Land's End	Boundary Street and Supporting Neighborhoods, Shell Point, Old Town Bluffton, Habersham with Cherokee Farms	Buckwalter Place, Town of Port Royal Core and Supporting Neighborhoods	Buckwalter Place, Town of Port Royal Core, City of Beaufort Core with Supporting Neighborhoods
Comprehensive Plan Future Land Use	Rural, Rural CP	Rural, Rural CP, NMU, G2	NMU, UMU, CC, G3A/G3B	NMU, UMU, CC, G3A/G3B	UMU, RC, Core C, G4
Corresponding Transect Zones	T1 T2 T3 T4 T5 T6	TI T2 T3 T4 T5 T6	T1 T2 T3 T4 T5 T6	T1 T2 T3 T4 T5 T6	T1 T2 T3 T4 T5 T6

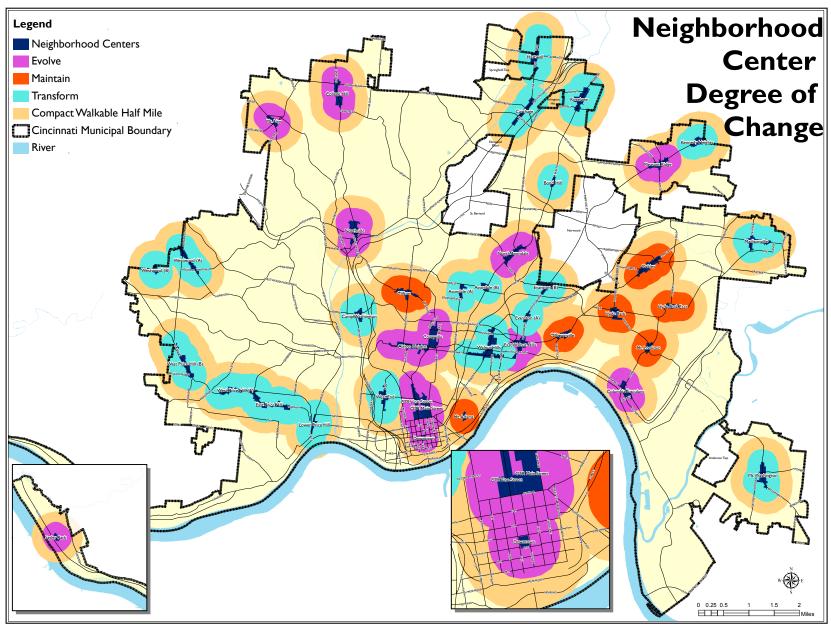
Proposed Place Types



Translation into Zone Districts



Plan Cincinnati Growth Framework

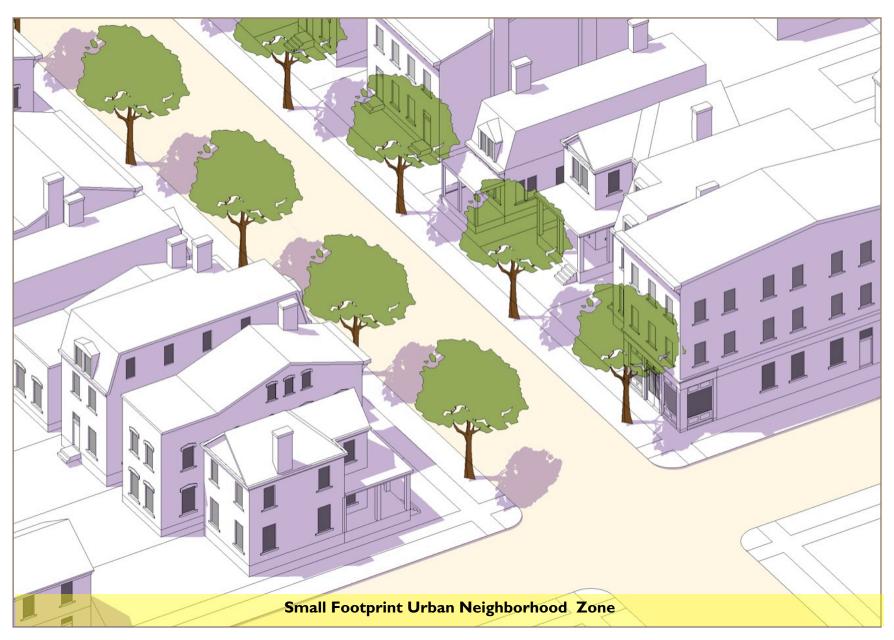


Plan Cincinnati Growth Framework Map and Form-Based Code Priority Areas

Form Based Zones = Ingredients for Neighborhoods



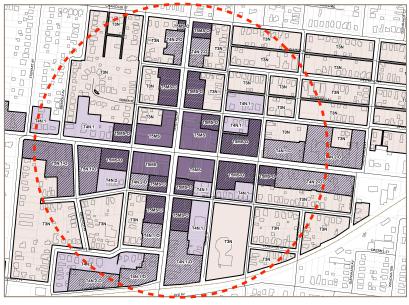
Zones Based on Form Rather Than Uses



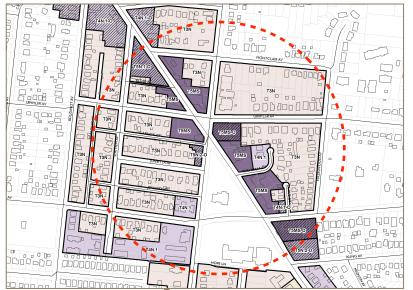
Cincinnati Form-Based Code

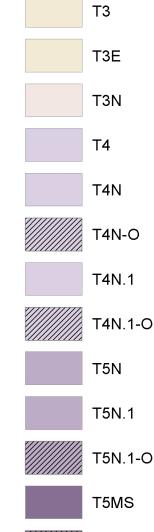
4 Focus Neighborhoods: 42 Total Will Have FBC











T5MS-O

TRANSECT

2 The Transect as Platform

Multi-jurisdictional Applications

The Beaufort County Transect



• 13 Zones in total

Placemaking at Fort Ord © 2011 Opticos Design, Inc. | 37





	Desired Form		
nts, with distantly	Distantly spaced, detached, low rise		
ow rise form,	form, setback from the street.		

ding Height	Building Height	
re allowed, 2 stories max.	2 stories max.	
eral Use	General Use	

Rural Residential and Agricultural, with limited Civic/Open Space and Service Uses

derate Parking Requirements

Individual Parking Lots, No On-Street Parking Individual Parking Lots, No On-Street Parking



comprehensive plan goals of preserv ing the rural character of portions of

Desired Form Distantly spaced, detached, low rise form, setback from the street.

Rural Residential and Agricultural, with limited Civic/Open Space and

Moderate Parking Requirements

Building Height

Moderate Parking Requirements



To reinforce established neighbor hoods, to maintain neighborhood stability and provide a transition between the walkable neighbor-hood and the Natural Preserves and

tached, low rise form, setback

can cluster in more closely-spaced buildings of residential character. prehensive plan goals of preserving the rural residential character of por-tions of Beaufort County, the City of Beaufort and Town of Port Royal.

Desired Form

Building Height



Detached, low rise form, setback

Building Height

Closely spaced, detached, low rise form, setback from the street.

Building Height

Low to moderate Parking Require ments to promote walkability and Low to moderate Parking Require



Closely spaced, detached, low rise form, setback from the street.

Building Height

Residential, with some Civic/Open Space, Professional Office and Per-sonal Service Uses



ducive to walking and bieveling.

Predominantly detached, closely spaced low rise form, setback from

Building Height

al impact. On street parking she

Shared or Individual Parking Lots.



Building Height

Residential, with Retail, and some Civic/Open Space and Service Uses

Shared or Individual Parking Lots,



Building Height

Residential, with limited Retail, and some Civic/Open Space and Service

Shared or Individual Parking Lots.

Building Height



TS Main Street Zone implements th no main Street Lone implements the comprehensive plan goals of creating areas of higher intensity commercial with supporting residential uses in portions of the City of Beaufort and Town of Port Royal.

Attached mid to high rise form located at the street edge.

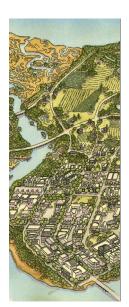
Building Height

Mixed Uses, with Residential, Retail, Civic/Open Space, and Service Uses Mixed Uses, with Residential, Retail Civic/Open Space, and Service Uses

Beaufort County **Development** Code

Public Review Draft February 2012

> Prepared For eaufort County, South Carolina Prepared By



City of **Beaufort Development** Code

Public Review Draft





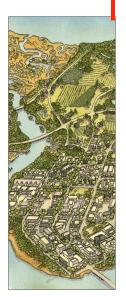
Town of Port Royal Development Code

Final Administrative Draft

Prepared For The Town of Port Royal South Carolina Prepared By:







Beaufort County **Development** Code

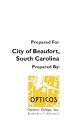
Public Review Draft February 2012

> Prepared For eaufort County, South Carolina Prepared By



City of **B**eaufort **Development**

Public Review Draft







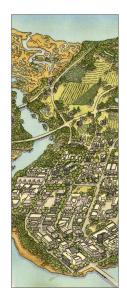
Town of Port Royal Development Code

Final Administrative Draft

Prepared For The Town of Port Royal South Carolina Prepared By:



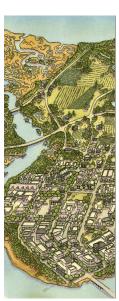




Beaufort County **Development** Code

Public Review Draft February 2012





City of **B**eaufort **Development**

Public Review Draft







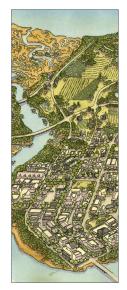
Town of Port Royal Development Code

Final Administrative Draft

Prepared For The Town of Port Royal South Carolina Prepared By:







Beaufort County Development Code

Public Review Draft February 2012

> Prepared For Beaufort County, South Carolina Prepared By:



City of Beaufort Development Code

Public Review Draft



Prepared For



Town of Port Royal Development Code

Final Administrative Draft August 2011

> Prepared For The Town of Port Royal, South Carolina Prepared By:







T3 Neighborhood

Intent

To provide a walkable, predominantly single-family neighborhood that integrates compatible multifamily housing types such as duplexes, and bungalow courts within walking distance to transit and commercial areas.

T3 Neighborhood Zone implements the comprehensive plan goals of preserving and building upon the walkable character of portions of Beaufort County, the City of Beaufort and Town of Port Royal.

Desired Form

Closely spaced, detached, low rise form, setback from the street.

Building Height

2.5 stories max.

General Use

Residential, with some Civic/Open Space, and Service Uses

Parking

Low to moderate Parking Requirements to promote walkability and minimize visual impact.

Individual Parking Lots, On-Street Parking





T4 Neighborhood Center

Intent

To integrate vibrant main-street commercial and retail environments into neighborhoods, providing access to day-to-day amenities within walking distance, creating potential for a transit stop, and serving as a focal point for the neighborhood.

T4 Neighborhood Center Zone implements the comprehensive plan goals of creating areas of higher intensity residential and commercial uses in the City of Beaufort and Town of Port Royal.

Desired Form

Attached or detached low rise form, located close to or at the street edge.

Building Height

3 stories max.

General Use

Residential, with limited Retail, and some Civic/Open Space and Service Uses

Parking

Low Parking Requirements to promote walkability, Commercial parking handled as a part of Downtown Commercial District with off-street (surface or structured) residential parking.



T5 Main Street

Intent

To integrate medium intensity, vertically mixed use development in districts that support a high degree of pedestrian activity.

T5 Main Street Zone implements the comprehensive plan goals of creating areas of higher intensity commercial with supporting residential uses in portions of the City of Beaufort and Town of Port Royal.



Desired Form

Attached mid to high rise form, located at the street edge.

Building Height

2 stories min., 4 stories max.

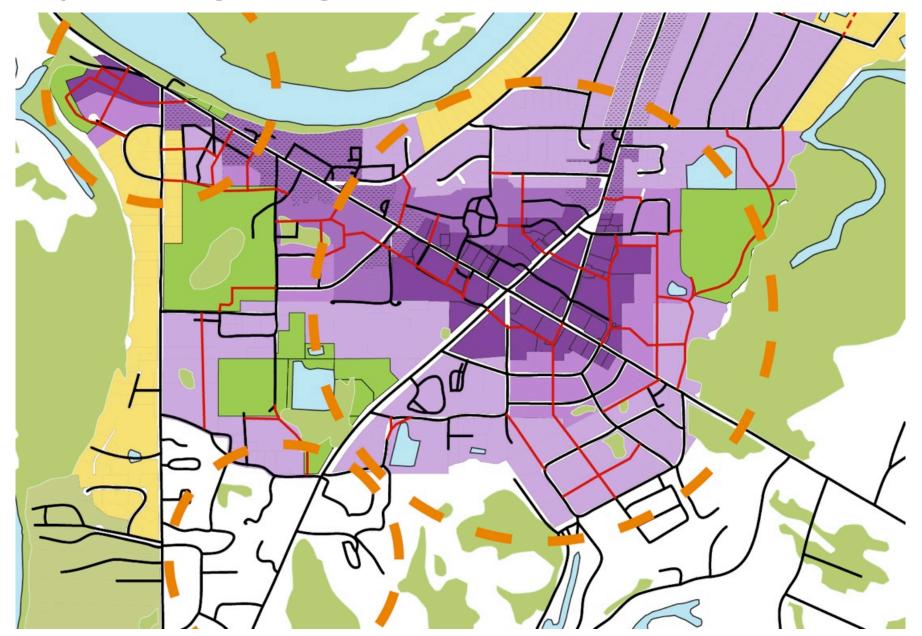
General Use

Mixed Uses, with Residential, Retail, Civic/Open Space, and Service Uses

Parking

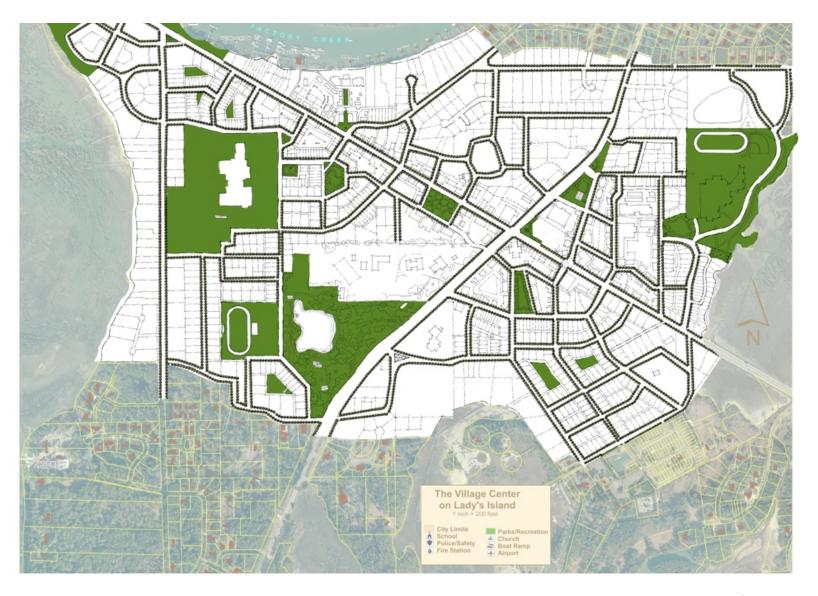
Low to no Parking Requirements to promote walkability; Commercial parking handled as part of a Downtown Commercial District, with offstreet (often structured) residential parking.

Proposed Regulating Plan



Placemaking at Fort Ord © 2011 Opticos Design, Inc. | 42

Proposed Illustrative Framework



Placemaking at Fort Ord © 2013 Opticos Design, Inc. | 43

T4-Neighborhood Center Concept



Placemaking at Fort Ord © 2011 Opticos Design, Inc. | 44

T4-Neighborhood Center Character



Placemaking at Fort Ord © 2011 Opticos Design, Inc. | 45

3 Standards as Templates

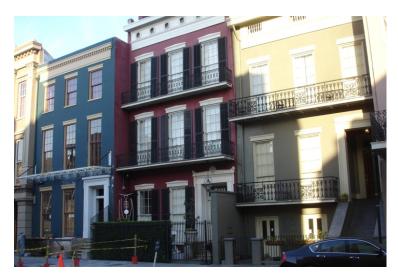
Building Type Regulations for the 21st Century

"Missing Middle" Housing Types



Placemaking at Fort Ord

"The Missing Middle:" New Orleans, LA



Townhouses



Fourplex



Duplex



Small Lot, Small Unit Single Family

"The Missing Middle:" Duluth, MN



Mansion Apartment



Rowhouses

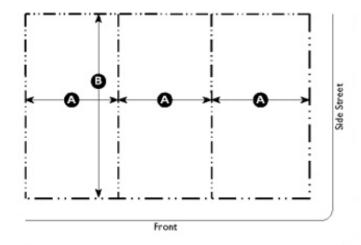


Fourplex

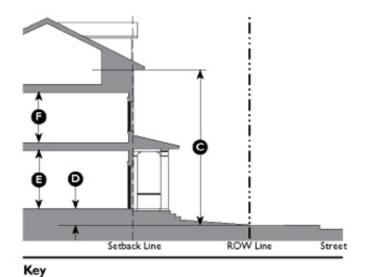


Duplex

Default to Building Types







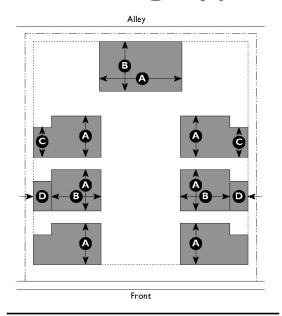
--- Building Setback Line

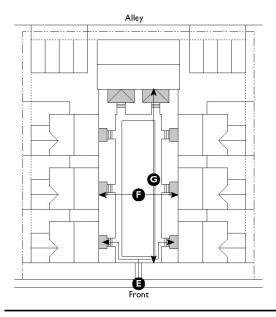
C. Allowed Building Types				
	L	Lot		
Building Type	Width	Depth 🕒	Standards	
Carriage House	n/a	n/a	15.05.210.050	
Detached House:	50' min.;	80' min.	15.05.210.070	
Village	75' max.			
Detached House:	30' min.;	80' min.	15.05.210.080	
Cottage	50' max.			
Bungalow Court	75' min.;	100' min.	15.05.210.090	
5950	150' max.			
Duplex	25' min.;	100' min.	15.05.210.100	
	75' max.1			
Rowhouse	18' min.;	80' min.	15.05.210.110	
	35' max.			
Multi-Plex: Small	50' min.;	100' min.	15.05.210.120	
	75' max.			
Courtyard Building	75' min.;	100' min.	15.05.210.150	
	100' max.			

¹ Maximum combined width of two lots.

---- ROW / Lot Line

Building Type Standards







Key

---- ROW / Property Line

Building

---- Setback Line

B. Number of U	nits				
Units	3 min.; 9 max.				
C. Building Size and Massing					
Height					
Height	1½ stories max.				
Main Body					
Width	32' max.	A			
Depth	24' max.	B			
Secondary Wing	g(s)				
Width	24' max.	9			
Depth	24' max.	<u> </u>			
Accessory Struc	ture(s)				
Width	24' max.				
Depth	24' max.				

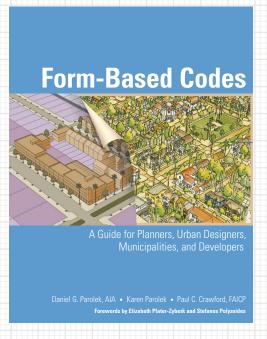
Key	
ROW / Property Line	Frontage
Setback Line	Private Open Space

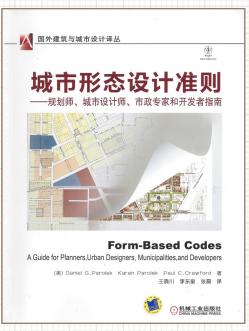
D. Allowed Frontage Types	Standards	
Porch: Projecting	15.05.220.050	
Stoop	15.05.220.070	
E. Pedestrian Access		
Main Entrance Location	Front	3
F. Private Open Space		
Width	20' min.	•
Depth	20' min.	9
Area	400 sf min.	

Required street setbacks and driveways shall not be included in the private open space area calculation.



Updates are Available for your Operating System. Do you Want to Download and Install Them?





FBCI Form-Based Codes Institute

www.formbasedcodes.org

stefan@opticosdesign.com

