John A. Dutton

# New American Urbanism

## Re-forming the Suburban Metropolis

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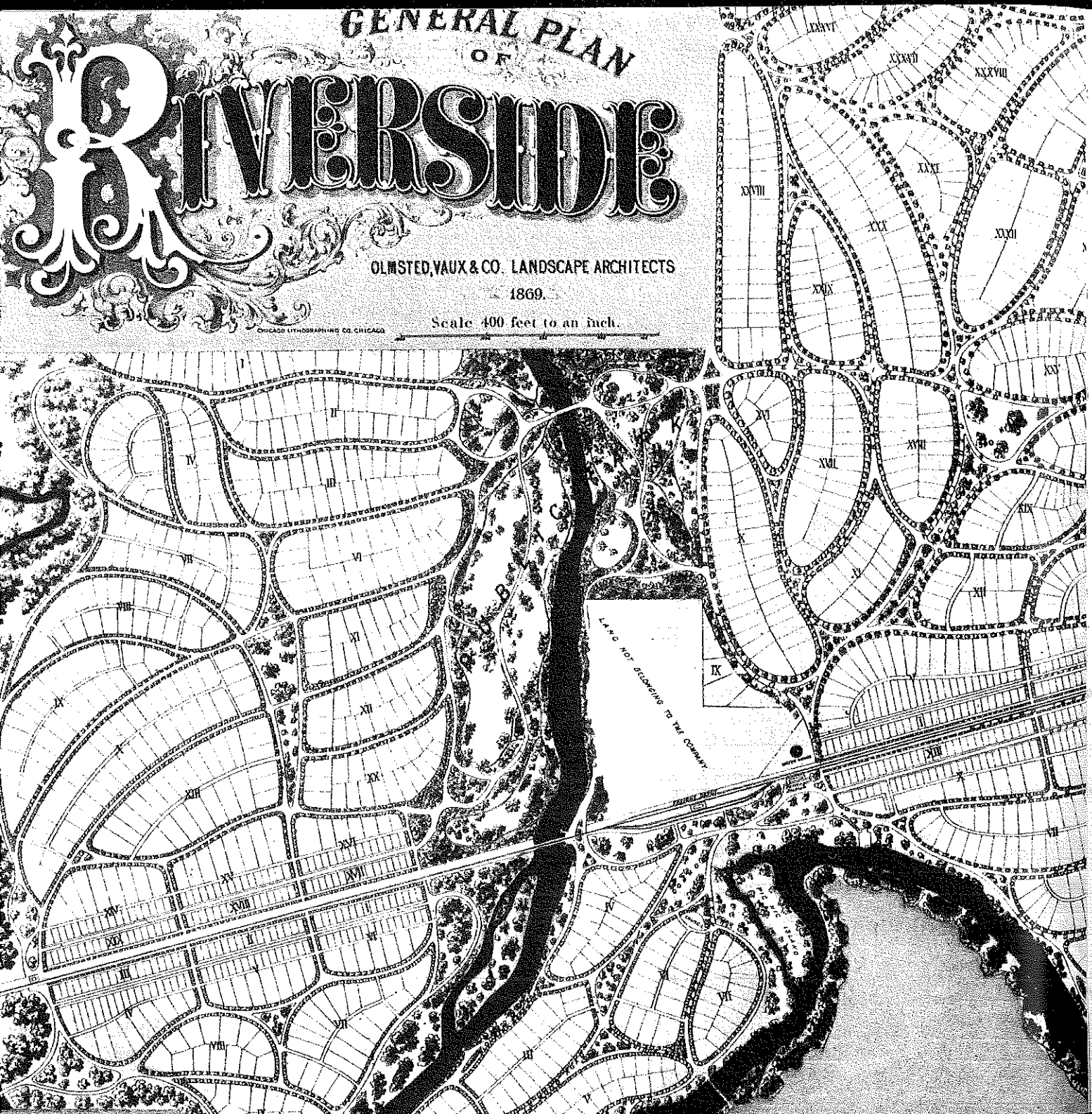
# GENERAL PLAN OF RIVERSIDE

OLMSTED, VAUX & CO. LANDSCAPE ARCHITECTS

1869.

Scale 400 feet to an inch.

CHICAGO LITHOGRAPHING CO. CHICAGO



# Codes and Conventions

Much of the form and character of suburbia is the product of codes and conventions. The ubiquitous suburban development patterns of the last decades are the result of explosive growth governed by an almost slavish and unquestioning application of these codes and conventions. Specialists engaged in the production of suburbia (transportation engineers, civil engineers, planners, financial lending institutions, etc.) apply their profession's collection of codes, usually in isolation from any synthetic consideration of making a place. A standard albeit sentimental refrain of some critics of sprawl, such as writer James Kunstler, is that the historic American places commonly admired, like Nantucket, Alexandria, or a typical New England village, cannot legally be built anymore. The maze of regulations governing parking, traffic flow, separation of uses, etc. would not permit these dense, mixed-use, and pedestrian-serving places.

The vast and inexorable development of code-driven suburban form has occurred largely beyond the purview and interest of the architectural profession. Developers satisfying short-term mortgages, civil engineers solving utility infrastructural issues, traffic engineers imposing vast swaths of roadway, and planners drawing up municipal zoning maps all play more significant roles in creating our physical world and determining its character than do architects. Architects have been relatively impotent in affecting the larger built landscape, or even understanding how it is produced. Uncertain how to engage the processes of suburban development, they often have felt compelled to make a choice between complicity or self-exile.

In the past few decades, however, a growing number of architects and planners have studied the way suburbia is constructed, both physically and conceptually. They have identified and analyzed the codes, standards, and conventions which produce these common patterns of land development. Once understood, these codes then become important architectural "sites" themselves, i.e., places to explore and create architecture and urbanism through the establishment of alternative norms. Collectively, these rewritten, restructured codes have the potential to promote new standards and practices for architects, engineers, and planning departments, as well as the building and development industries. New Urbanist architects have led much of this effort, and have incorporated these new methodologies and codes as an integral part of their work.

The goal of these endeavors is to "retool" the bureaucratic machinery of suburban production in order to produce better "products," i.e., places which are alternatives to sprawl. The means of retooling are located in the everyday realm of architectural production: housing, development standards, street standards, zoning ordinances, etc. The very mechanisms which have perpetuated suburban patterns are seen, in this view, as the tools for the patterns' subversion and alteration.

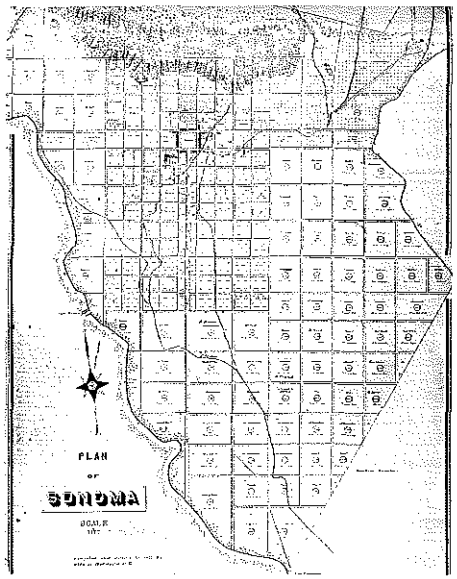
These efforts are part of a longer history of modernism's struggle to control urban growth. The standardization of building industry conventions was a strong component of early modernism, particularly with CIAM (Congrès Internationaux d'Architecture Moderne).[1] The Declaration from the first Congress at La Sarraz in 1928 read in part:

"The most efficacious production is derived from rationalization and standardization. Rationalization and standardization directly affect labor methods, as much in modern architecture (its conception) as in the building industry (its achievement)."[2]

The efforts today are comparable in intent and scope. Indeed, the collective efforts by the New Urbanists can be considered the most coordinated and systematic attempt, certainly by architects, to produce new building conventions in half a century.

Hand in hand with these attempts to control the physical conventions of urbanism have been recent attempts to control its language. The goal of these reforms is to disas-

Plan of Riverside, Chicago, 1868, by Olmsted, Vaux and Co. (From *Calvert Vaux: Architect and Planner*, Ink, Inc. Press)




1. The Plan of Sonoma, 1875, influenced by the Laws of the Indies. (From John W. Reps, *The Making of Urban America*, Princeton University Press)

semble urban concepts into their component parts and to distill and purify them into a common language. Such endeavors are part of a modern lineage concerned with naming and categorizing, from Durand's *Précis de Leçons d'Architecture* to Ebenezer Howard's Magnet Diagrams to CIAM's analytic diagrams and grids. Much of the New Urbanist discourse revolves around rediscovering urban "truths" and re-establishing a common language of urbanism. At its most effective, this control of language is a pragmatic attempt to enable communication amongst architects and to reassert the relevance of language in urban ideology. Yet New Urbanist discourse often wanders away from descriptive urban elements and lapse into a nostalgic conservatism that taps into myths of authenticity ("true community," "authentic civic character," etc.).

This chapter will first look at the history of coding, in particular that of suburbia, in order to situate the New Urbanist strategies into a larger historical context. Coding typically implies the abstraction of a series of principles into conventions and standards. Developer briefs, for example, assume certain rates of returns and marketing assumptions about housing types. Homeowner codes have emerged in recent decades, especially with the rise in condominium associations, as a powerful and legally recognizable form of local governance. The two most influential types of codes on urban form this century have been technical codes, which govern the form of urban infrastructure such as streets and blocks, and municipal codes, such as general plans and zoning codes. This chapter will examine ways that these existing codes have been reformed and altered.

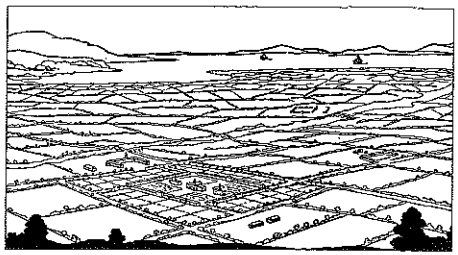
The project code will be then be addressed as a new and powerful tool for architects. This design code stipulates urban and architectural rules and possibilities, in the most sophisticated cases, and specific architectural styles in the more prosaic examples. These codes have been refined over the years into instruments of control with varying degrees of flexibility. In contrast with the archetypal modernist master plans of the 1950s and 1960s that embodied the vision of a single architect, project codes can guide development to conform to general aims and urban design goals, yet be produced by a multitude of actors. This is also a dramatic divergence from the norms of post-war subdivision development in which a small number of housing prototypes are replicated and distributed evenly across a site.

**Suburban Coding and its Antecedents**

The New Urbanists recognize that much of America was built according to codes and standards, often to exemplary results. The use of codes and regulations to govern the building of towns and cities in the Americas has a long history. The Laws of the Indies, for example, codified by Philip II in 1573, governed the founding of civil settlements in the "New World." This code stipulated a physical urban structure—a standardized grid plan of square blocks around a large central plaza. The code guided building placement, orientation, and the arrangement of these elements relative to the sun and prevailing winds. Each town established under the general principles of the Laws of the Indies had certain similarities with the others, but was adapted to its own particular situation. The simple, abstract structure of Laws of the Indies' towns were flexible and thus enabled growth and evolution over time. Even today, one can read the underlying structure of the Laws of the Indies in towns such as Sonoma, California, or Pensacola, Florida. (fig. 1)

Some American cities, like Williamsburg, were governed by codes that dictated building lines, setbacks, architectural elements such as fences, and the location of public buildings. In Alexandria, Virginia, for example, private and public buildings were distinguished in part by their roof lines: private buildings presented their eave side to the street, while public buildings their gable end. Many cities reserved the most prominent locations, usually on squares or at the end of axes, for important public buildings such as churches and town halls. It could be argued that many of the early American codes such as these weren't so much arbitrary, as reflecting conventionally understood notions of urban form in their time.[3]

The architectural historian Leonardo Benevolo, in describing the birth of modern planning in nineteenth-century England, delineates two strands of planning—both of which depended to a large degree on coding.[4] One was a utopian description of a community in which the physical and social world were essentially linked. These codes, such as that of Robert Owen's ideal village (fig. 2) or Charles Fourier's Phalanstery, depicted ideal new communities. Their codes regulated all physical and social aspects of the town, including the layout of the buildings, the types of housing, the composition of its residents, and the jobs they would perform. Detailed guidelines for the architectural and urban spaces were intended to enable



2. Robert Owen's ideal village, 1817. (From Leonardo Benevolo, *The Birth of Modern Town Planning*, The MIT Press)

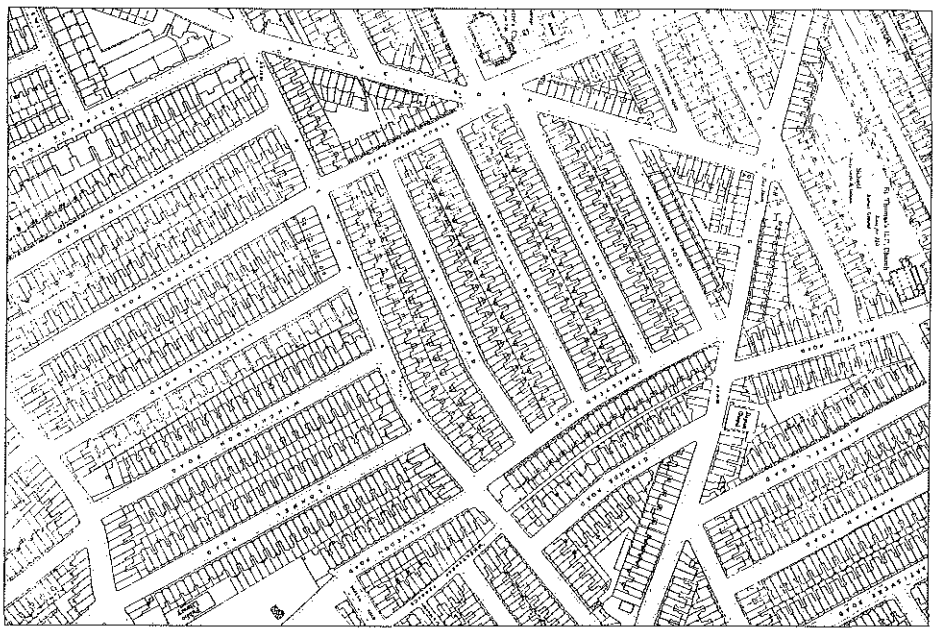
political and social community. The codes could be precise in their aesthetic goals, and Fourier regulated everything from the overall division of the city into separate zones, to the ornamentation of facades, the horizontal spacing of buildings, the type of roofs (hip), and the desired vistas at the end of street axes.[5]

The other kind of codification, according to Benevolo, emerged as a corrective response to the highly insalubrious conditions of nineteenth-century English industrial cities. These were technical codes, passed as the Public Health Act of 1875, which attempted to remedy the overcrowding, lack of air and light, and streets filled with waste and sewage. Specific building regulations were intended as minimum standards governing height, detachment, and other physical properties, but instead were applied literally and absolutely by speculative builders. The results were endless rows of identical buildings with no variance for particular places or cumulative urban effect. There was no sense of a larger framework or plan, but rather a city evolved by piecemeal and expedient development of properties as they became available. (fig. 3)

The British architect Raymond Unwin, one of the first chroniclers of town planning and a seminal proponent of the Garden City Movement, lamented the haphazard and monotonous results of the application of these technical codes. Unwin's comments on the contemporary state of London urbanism at the end of the nineteenth century mirror those of many suburban critics one hundred years later:

"The truth is that we have neglected the amenities of life. We have forgotten that endless rows of brick boxes, looking out upon dreary streets and squalid backyards, are not really homes for people, and can never become such, however complete the drainage system, however pure the water supply ... . As important as all these provisions for man's material needs and sanitary existence are, they do not suffice."[6]

In the late nineteenth century, some American suburbs employed standards as a means of maintaining an aesthetic in keeping with the suburban models so recently imported from England, such as Park Village by John Nash. Detached house set back from a sidewalk, expansive lawns, curvilinear tree-shaded streets, and service from a back alley were all deliberately designed as a means of achieving a sense of isolated cohesion, a community in nature. In America, Frederick Law Olmsted, in his plans for Riverside outside of Chicago (opening illustration), first stipulated design guidelines that would enable this suburban ideal to be realized over time.



3. Plan of Fulham, London, showing the arrangement of houses as stipulated by late nineteenth-century building bye-laws. (From Raymond Unwin, *Town Planning in Practice*, 1909, reprinted by Princeton Architectural Press).

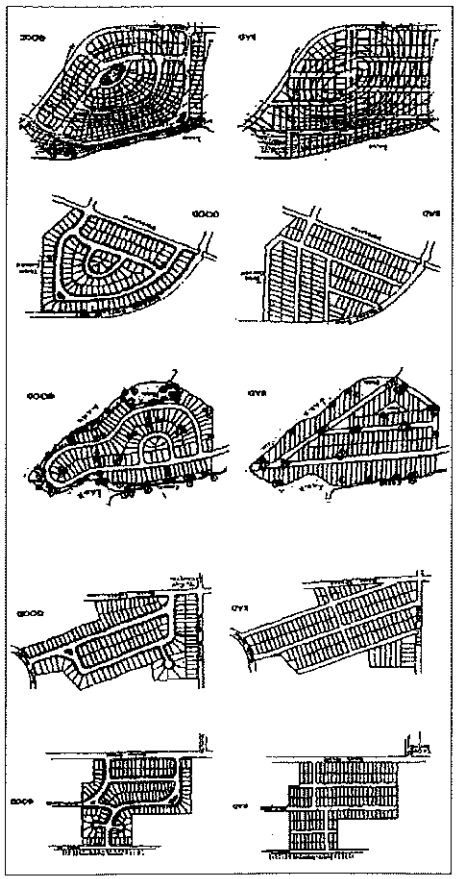
Olmsted realized that the suburb represented a delicate relationship between private and public. On one hand there was the "domiciliation of men by families..., the domestic indoor and outdoor private life," and on the other "the harmonious association and co-operation of men in a community,... and the inter-dependence between families." Olmsted assumed responsibility for the design of the public realm, but he realized "it can be no part of a general plan to provide for an interior arrangements of ground which is to be private." Therefore he placed special importance on "the arrangement of the means of division, and of passage between private and public ground." These in-between spaces "of division and passage" became a realm of design to be "enjoyed in themselves; they should on no account be imaginary lines, nor should they be obscured or concealed...."[7] Olmsted's plan required, for example, that houses to be set 30' back from the street and that a minimum number of trees be planted between the house and the street. The development of a code for these semipublic spaces allowed him to direct the intent of the private spaces and houses so that they would complement the overall design of the neighborhood. Private architecture, he realized, had a necessary and distinct public side which fostered the creation of a communal domestic setting.[8]

These ideas were further developed in the well-designed suburbs of the 1920s which have been so influential to New Urbanist design, such as Mariemont outside Cincinnati, and Coral Gables, Florida. One of the classic interwar suburbs was the Country Club District of Kansas City, designed in 1922. The ten square mile property was developed into 6,000 homes and 160 apartment buildings with lush landscape, streets rolling with the natural contours, an innovative shopping center, and schools. For the first time, codes were organized as self-perpetuating deed restrictions, and a homeowner association was created to supervise such community concerns as lawn care, street conditions, and garbage collection. Minimum setbacks and landscape standards were set, and a garage and driveway were required for all houses.[9]

The first decades of the twentieth century saw an increasing attempt to standardize modern living through a growing number of specialties. The emphasis was on efficiency, standards, and the progressive impulse to improve the domestic situation. A systematic approach to planning residential communities within regional contexts was fostered by the Regional Planning Association of America (RPAA), formed in 1923 by twenty planners and architects including Lewis Mumford, Clarence Perry, Clarence Stein and Henry Wright. Influenced by Raymond Unwin, Barry Parker and the English Garden City Movement, the RPAA tailored their standards to the realities of American suburban conditions, particularly the automobile. Clarence Perry proposed that new development be organized within a "neighborhood unit," which would govern sizes of developments, boundaries, open space allocation, street systems, and placement of institutional buildings.[10]

The form of suburban development was also the result of federal policy translated into codes and standards, particularly by the Federal Housing Authority (FHA) created in 1934–35. The FHA established technical standards for subdivisions as requirements for the issuance of federal insurance and mortgages. As the FHA's mortgages and insurance created the foundation for the postwar suburban explosion, its standards were typically followed precisely without deviation (much like the technical standards of industrial England.) The minimum standards stipulated, for example, street and sidewalk widths, block sizes and configurations, and typical lot and house sizes. It can be argued that the FHA was much more influential than planning agencies or architects in determining the emerging form of American suburbs. Their standards encouraged wide streets, cul-de-sacs, long blocks, and homogeneous residential developments. In short, these were standards which helped create the car-oriented sprawl model of subdivision development over the past half century.[11] (fig. 4)

The FHA also exacerbated the middle-class exodus from the central city to new, segregated residential subdivisions on the ever-expanding periphery. It did this by favoring new single-family housing over multifamily housing and by providing such favorable mortgage rates for new construction that it was often cheaper to build a new house than to rent and apartment or renovate existing houses.[12] The FHA also appraised subdivisions for creditworthiness, and minorities and low-income residents were deemed a liability: "If a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes," concluded the 1939 *Underwriting Manual* of the FHA.[13] Although not explicitly required, restrictive covenants were condoned by the FHA as a means of maintaining



4. Recommendations for Street grids and subdivision layouts compositions by the Federal Housing Administration. (From Michael Housthworth and Eran Ben-Joseph, *Streets and the Shaping of Towns and Cities*, McGraw Hill Press)

property values. Subsequent zoning codes, which stipulated minimum lot and house sizes and excluded multifamily housing, helped perpetuate this growing segregation. The history of American suburbia cannot be separated from a long history of institutionalized racism.

Other national agencies, professional organizations, and municipal departments have impacted suburban form through their standards—policies which often aimed to maximize the goals of their respective constituencies. Streets, for example, became engineered as merely technical conduits for the most efficient distribution of water, sewage, utilities, and vehicles. The Urban Land Institute, an organization of builders and developers, published standards that helped reduce the costs of subdivisions for their members. Their standards strived to minimize the amount of roadway by emphasizing cul-de-sacs or long blocks to reduce the number of cross streets (making pedestrian connections quite difficult). The Institute of Transportation Engineers published manuals and standards aimed at the most efficient movement of vehicles.[14] The Civil Defense Committee of AASHTO (American Association of State Highway Transportation Officials) advocated street design criteria for the most efficient evacuation and subsequent cleanup of cities in the event of a nuclear strike. Fire departments still often require vast street widths, even in the most remote residential areas, to allow what some see as unnecessarily large fire trucks to be able to maneuver past improbable worst case scenarios. (Fire department standards also assume cul de sac subdivisions. The connected, gridded street network promoted by New Urbanists allows firetrucks to approach any destination from either direction.) Civil engineers impose their particular standards for right-of-way design to accommodate utility lines. Public Works departments often require run-off water to be collected in gutters and storm drains. This creates an ever expanding (and polluted) network of water collection, rather than retaining water on-site using swales and other natural retention measures.

Such stratification by specialization also informed the development process itself. Developers, architects and builders began to specialize in different types of construction—single-family homes, shopping centers, condominiums, or office parks, for example. Banks oriented their lending proforms to these various specialties. Banks were, and still are to some extent, unable to accommodate loans for projects that do not meet generic criteria of conventional use, which they consider lower risk development. Introducing mixed-use buildings, such as apartments over commercial, is still a difficult proposition for most developers and banks. The financing of sprawl, in turn, has become as rigorously standardized as the forms it is promoting. "Form follows finance" is a slogan that is often heard from anti-sprawl advocates.

Typical municipal codes, in particular zoning ordinances, have been criticized as outmoded and destructive policies which systematically and inevitably create suburban sprawl. In many ways, zoning codes are a retrograde means of unnecessarily separating uses, a legacy of the industrial city's need to isolate noxious industries. Zoning by use is one legacy of functionalist modern planning as envisioned by CIAM.[15] Their 1933 Charter of Athens stipulated that cities were to be divided according to four functions: dwellings, workplaces, recreation, and transportation. This type of zoning valorizes use over form and creates a "one-size fits all" approach to planning. Use designations in current zoning, such as commercial, industrial, or different levels of residential, typically have the same regulations regardless of their location. Multiple uses are often prohibited, and abstract requirements such as parking requirements and Floor Area Ratios are emphasized. This is in contrast to recent projects which tend to stipulate formal conditions for how buildings form particular places—town centers, corridors, neighborhoods, for example—which can accommodate any number of uses. Zoning is also partly responsible for the extreme racial segregation of metropolitan areas in America. Although explicit segregation through covenants and zoning is now illegal, municipalities can use minimum requirements for lot and house sizes, for instance, to exclude anything but large, expensive single-family houses.

Over the past half-century, traffic engineering and parking policies have had a central role in the design of American cities and suburbs. Their sole goal of the fast movement of cars has become a sisyphian endeavor: the constant expansion of highways results in an environment intensely unfriendly to pedestrians, and ultimately still congested with automobiles. The designs of many of the projects in this book challenge the standards of right-of-way design that encourage the speeding automobile—multiple wide lanes, turn lanes, no on-street parking, one-way couplets, large corner radii at intersections, on and off-ramps. The suburban

street network, based on a sparse hierarchy of arterials, collectors, and cul-de-sacs, rather than the traditional connected streetgrid, leads often to disorientation and bottlenecked traffic problems. Finally, the parking standards for suburban development, emphasizing abundant and "free" spaces, assume a worst case scenario, of an isolated use at peak-time.

Recently a new concept has emerged which looks at parking requirements not in isolation but as a part of a larger urban district. As illustrated in Chapter Two, "park-once" or "district parking" locates shared parking structures and lots within walking distance of particular neighborhoods, districts, or corridors, thereby reducing the overall parking demand. The driver will "park once" and walk to multiple destinations instead of being forced to drive to each destination no matter how proximate. This concept depends, however, on the creation of streets and sidewalks that are comfortable environments for the pedestrian.[16]

Even the relatively chaotic "edge cities" throughout America, often understood as a kind of spontaneous eruption of uncontrollable, mobile capital, have a set of rules and rational behind their forms. Joel Garreau, author of a book on the subject, abstracts a set of "laws" that have a general consensus amongst edge city developers. These include: how far people will walk; how fast they will walk past a shop window; how many residents should live in a certain circumference of a mall; how many stories an American will climb by stair; how much parking space is required for the average worker; what levels of density create traffic problems; and how to name subdivisions ("named after whatever species are first driven out by construction.")[17]

**Changing Existing Codes and Conventions**

Many municipalities have begun to claim that their municipal codes, which ostensibly govern abstract planning issues such as parking, FAR, height and setbacks, etc., are having adverse impacts on quality of life. The critique of sprawl by the New Urbanists clearly supports this position. Recently, a number of architects have been hired by municipalities, usually through progressive Planning Departments, to analyze existing codes and recommend revisions. In some municipalities, the entire zoning code is discarded and replaced with new types of ordinances.

Dan Solomon's Residential Design Guidelines for the City of San Jose, completed in 1986, was an early example of code rewriting. The population of San Jose had doubled between 1965 and 1985, and most of the housing built at the periphery consisted of isolated enclaves of walled subdivisions. Solomon's guidelines sought to not only govern the urban impact of specific buildings, especially in terms of garage placement, setbacks, orientation, and massing, but also to address "the public realm created by ... dwellings in aggregation." The guidelines were intended to improve the physical sense of neighborhoods and public open space by governing the "internal relationships between individual dwellings, groups of dwellings, common open space, streets, circulation, and parking."[18]

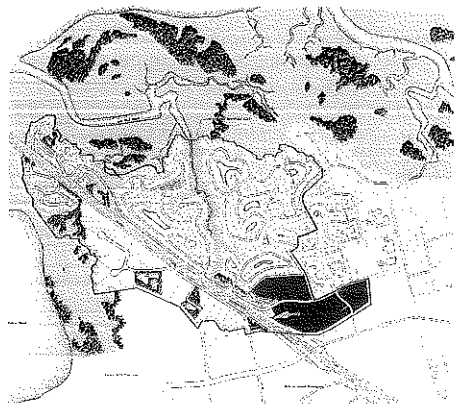
Similarly, the architectural firm Correa Valle Valle (CVV) recommended revisions to the municipal code for the City of Coral Gables, one of the finest examples of a planned suburb in the southeast United States. The City was concerned that the qualities of the neighborhood were being eroded by recent development. CVV analyzed the original intentions of the town "founder" George Merrick from 1925 and studied the evolution of the Coral Gables zoning code over the subsequent years. They began by noting that the zoning code of 1994 was eighteen times longer than that of the 1946 code, demonstrating that the quantity of regulations did not manifest a correlating accumulation of wisdom. Typological analyses of the original houses and the more recent suburban models were compared. Based on this comparison of such issues as setback, encroachment, ground coverage, garage location, height, etc., a series of recommendations were proposed for the modification of the existing building code.

Rather than modifying existing codes, dozens of municipalities have replaced or overlaid their zoning code with a version of a "Traditional Neighborhood Design" ordinance as developed by Duany Plater-Zyberk (DPZ).[19] This generic code is essentially a recapitulation of New Urbanist charter principles, emphasizing mixed-use neighborhoods of limited size, walkable, interconnected streets, a network of open spaces and parks, and civic buildings distributed on important sites throughout the neighborhood. Buildings are required to line streets, and a variety of housing types are encouraged. DPZ's original Traditional Neighborhood Development consisted of generic descriptions of Block Types, Open Space Types, and Thoroughfare Types, all elements which evolved subsequently into their *Lexicon*. The TND ordinance is simple and reductive because

it is intended as a collection of guidelines, not designs. The best designers have challenged and transformed them into specific formal proposals containing variety and ambiguity. It is too early too tell, however, if the development industry will simply replace one set of norms (conventional suburban design) with another (traditional neighborhood design).

Sometimes the rewriting of the codes is presented as a rhetorical device for displaying the relative value of Traditional Neighborhood Development in general, and specific regulatory revisions in particular. For instance, Dover Kohl designed two versions of a hypothetical build-out of a 583 acre site in Mt. Pleasant, South Carolina: a "sprawl scenario" and a "town scenario." A computer model was developed by the Charleston Harbor Project, a group funded by the National Oceanic and Atmospheric Administration and administered by the South Carolina Department of Health and Environmental Control, to test surface water pollution by simulating runoff, or nonpoint source pollution. The sprawl scenario was developed using conventional suburban techniques: all of the developable land was utilized and uses were separated. Housing in zones of single-family houses were separated from commercial areas. Conventional road widths, parking requirements, and lot sizes were assumed. The town scenario, on the other hand, assumed the same amounts of residential, commercial, and industrial space, but increased the housing densities and mixed uses in keeping with Traditional Neighborhood Development principles. The open space of 400 acres under the town scenario was over ten times greater than that of the sprawl scenario. The experiment also determined that surface water pollution was greatly reduced in the town scenario. The advocates of this project hope that the regional government will revise its codes to reflect the Traditional Neighborhood Development principles as a means of best accommodating an expected increase of 170,000 people by 2015. At a federal level, they hope better water runoff policies, linked to development patterns, will be implemented to reduce nonpoint source pollution. (figs. 5–8)

In the early 1990s the Regional Plan Association (RPA)developed similar "visual sim-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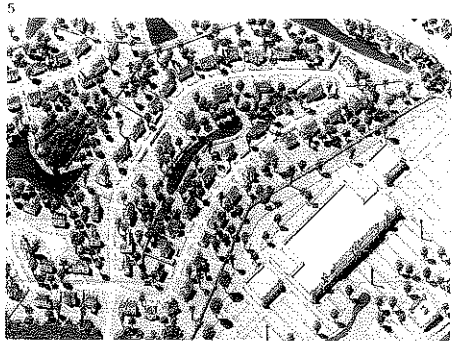
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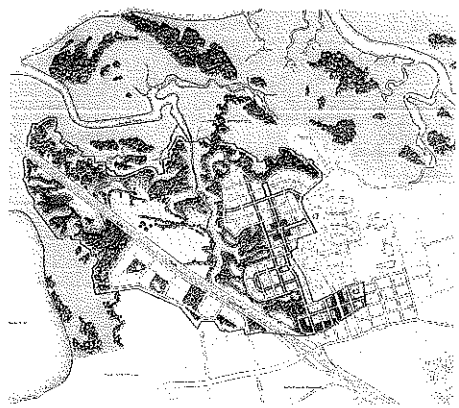
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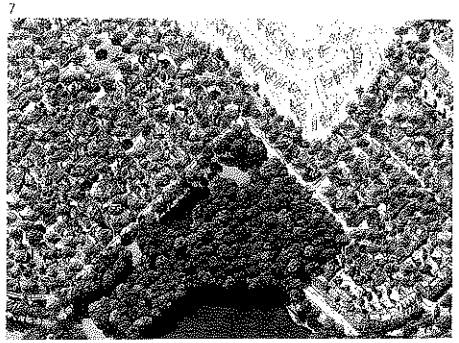
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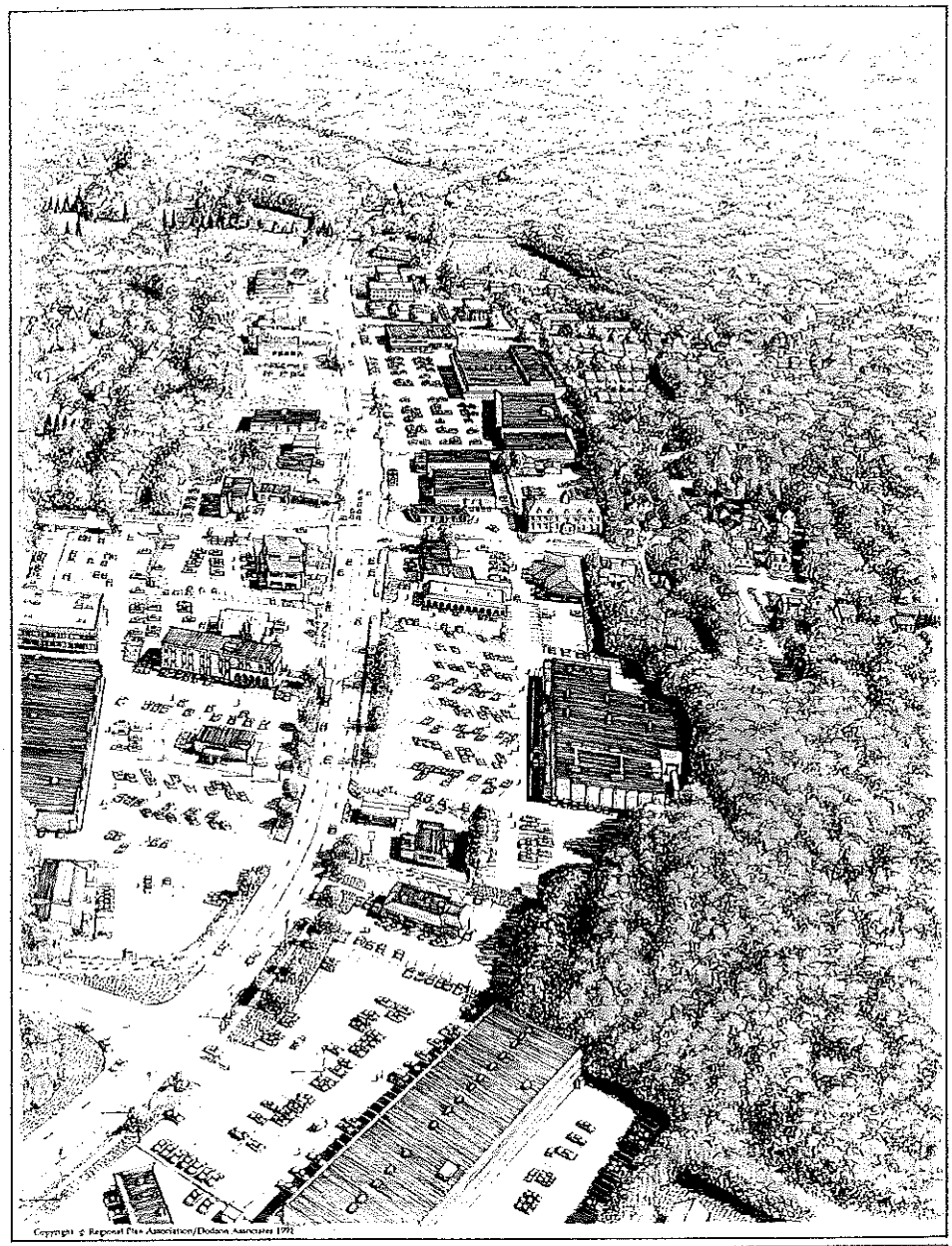
5–8. Comparison of two types of development. Using the same amounts of program, a "sprawl scenario" of a neighborhood and its mall (figs. 5, 6) were compared to a "town scenario" configured around a town center (figs. 7, 8). The comparison was intended to study and compare surface water pollution for a 583 acre site, Belle Hall, in Mt. Pleasant, South Carolina. (Dover Kohl and Partners, 1995)



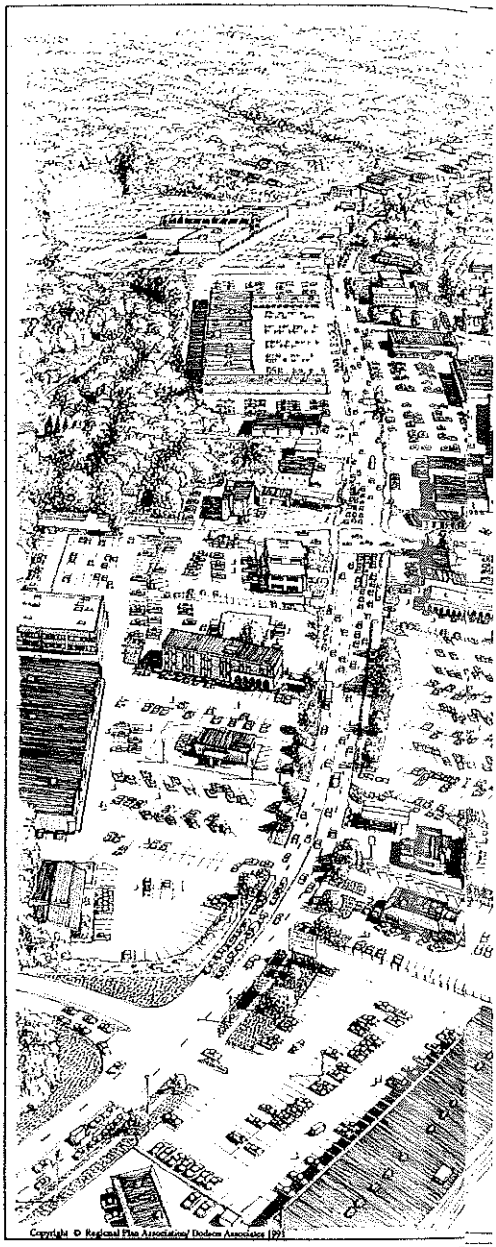

## Regional Design Program

Regional Plan Association

**11A**

**Suburban Commercial Strip Before Development:** Commercial strip along a suburban state highway. Super markets, fast-food restaurants, small office buildings and gas stations compete loudly with neon signs and billboards for the dwindling business along the roadway. Traffic congestion is severe as a result of the many individual access roads creating chaotic driving conditions. Several of the stores have recently gone out of business and the strip is suffering from a decline resulting, in part, from the visual blight, traffic congestion and poor overall shopping environment that results from a prior lack of good planning and design.

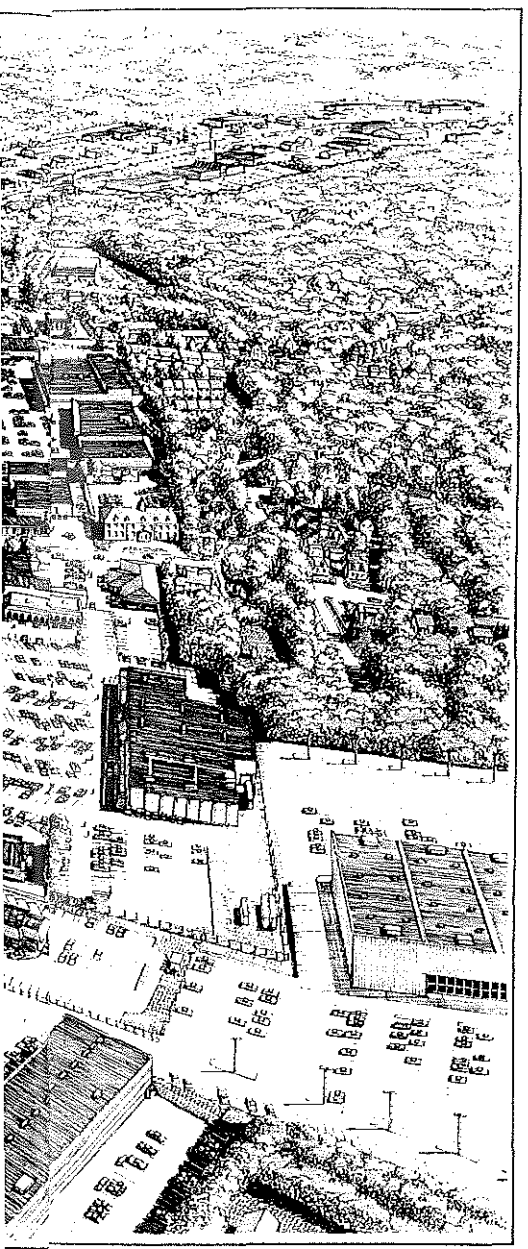
a




## Regional Design Program

Regional Plan Association

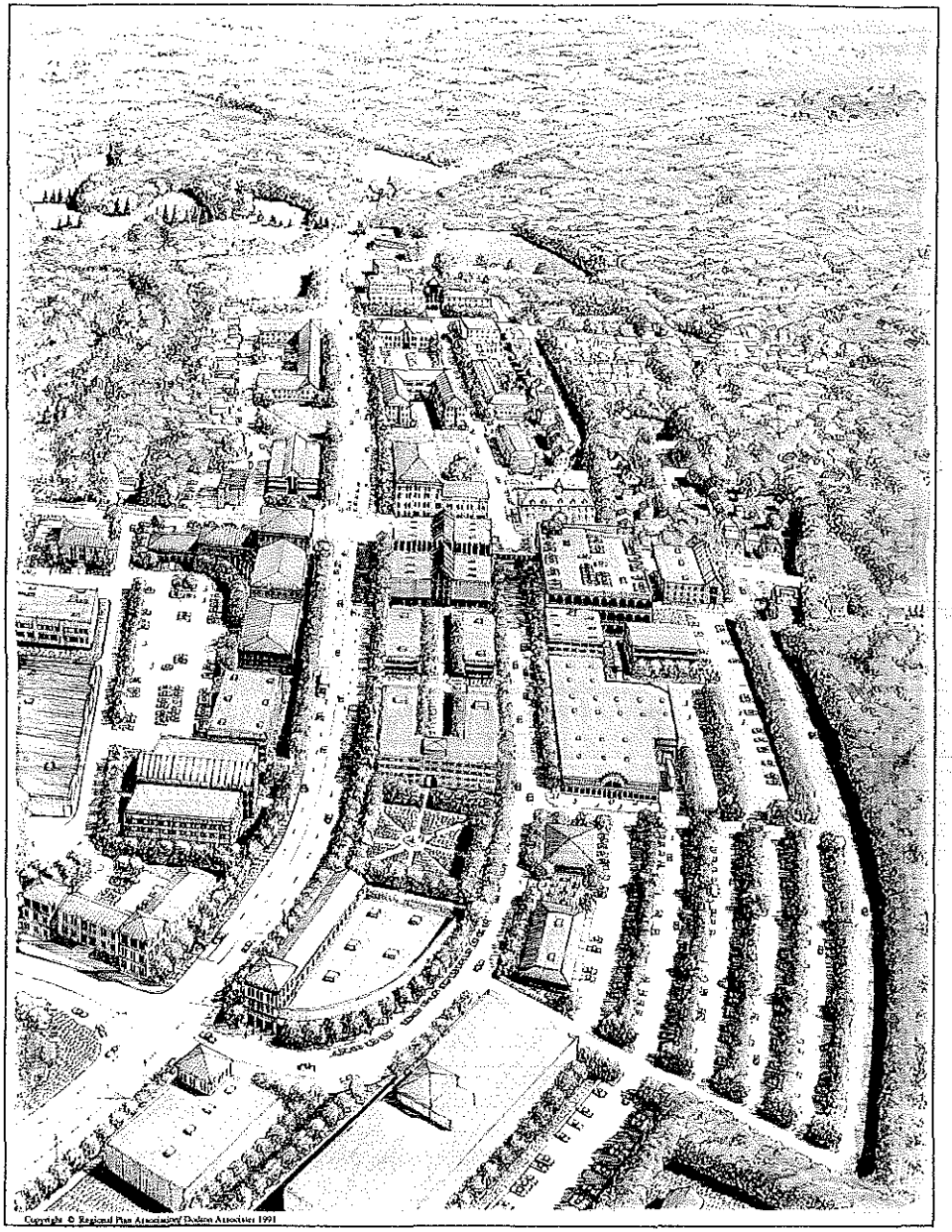
**Suburban Commercial Strip After Typical Development:** While some stores to out undeveloped land further on down the highway, which is zoned strip commercial along its tire l as homes, fields and woodlands are removed to create new expanses of asphalt domina d by congested and less safe as a result of total dependence on the automobile and the creati n of overhead utility wires, and glaring floodlights destroy, in a frenzy of unrestrained comm cialis enjoyed by this formerly civilized landscape.



## 11B

ne stores to out of business in the foreground, new shopping centers are established on previously
along its ture length. The commercial strip continues to invade nearby residential neighborhoods
domina d by unattractive commercial buildings. Traffic along the state highway becomes more
he creat e of many more commercial access drives onto the main road. Billboards, neon signs,
d comm cialism, the little remaining beauty, environmental quality and historic character once

b




## Regional Design Program

Regional Plan Association

## 11C

**Suburban Commercial Strip After Recommended Development:** To accommodate the same amount of development shown in the previous panel, increased development densities are allowed in distinct centers along the highway, shown in the foreground and the distance, separated by expanses of rural or low density development. Increased zoning densities, investments in infrastructure and site planning and design guidelines in the development centers designated along the former strip provide incentives for landowners and developers to build a mix of new commercial, office and multi-family residential buildings organized around a new system of internal streets. Many of the existing commercial buildings are kept and renovated to fit into the new commercial center. Access roads to businesses along the highway are organized at key intersections, helping to reduce traffic congestion. Additional parking required by the expanded commercial center is handled through a combination of structured parking garages and carefully screened parking lots located behind the buildings. Placement and design of buildings creates a strong edge of buildings along streets to provide enclosure and scale.

c

Previous pages:
9 a–c. Suburban Commercial Strip, Regional Plan Association (RPA), New York, 1990. These diagrams are typical of a series of triptychs by the RPA to illustrate the consequences of future conventional suburban development, and the superiority of new regulations they recommended. For this "suburban commercial strip," the RPA shows the existing conditions (a), a scenario after typical development (b) in which the parking lots further erode the street, and a scenario of buildings and streets after recommended development (c).

ulations" for growth in the states of New York, New Jersey, and Connecticut. Based on real sites that ranged from urban to rural, the RPA represented in aerial perspectives existing conditions, scenarios for continued growth based on conventional development, and growth scenarios according to the RPA's recommended development guidelines. Each vision for recommended development was accompanied by a description of the revised codes.[20] (figs. 9 a–c)

**New Project Codes**

Coding has been adopted by many architects as the generative armature of master plans for new projects. The code translates the intentions of the master plan into a collection of specific guidelines for builders and architects. Particularly in new towns and neighborhoods, where there are very few existing conditions or constituencies, the vision of the design team as translated through the code is most uncompromisingly realized. Seaside, for example, is essentially a physical embodiment of its code. Yet the variation within the code, and the interpretation by different designers, produce a remarkable amount of variety within.[21]

The projects which most clearly follow the code and conform to the original master plan vision tend to be those implemented under the auspices of a benevolent developer, or "town founder" in New Urbanist parlance, such as Robert Davis at Seaside, or Vince Graham at I'on outside Charleston, South Carolina. These are developers who intimately understand all aspects of making a place, including the design of buildings, public spaces and streets, as well as implementation and financing strategies to facilitate these anomalous (to developers) projects. Few developers are professionally trained to produce these kinds of places. While Robert Davis gained much of his knowledge from studying the evolution of Siena on a Rome Prize sojourn, Vince Graham measured the streets of his favorite historic towns in South Carolina for inspiration.

For the majority of projects which lack such a benevolent developer, the build-outs most consistent with the intent of the plan occur under the guidance of a "town architect" who oversees and approves all projects and ensures conformance to the code. DPZ has successfully installed such an office in their projects at Windsor and Kentlands, for example. The urban design firm Urban Strategies, author of numerous master plans, also advocates the idea of "community design centers" which are semiautonomous organizations which help implement the principles of their urban strategic plans over the course of years.

The use of a code to integrate and govern the design of Seaside was a significant departure from the recent history of modern architecture. Although technical codes were accepted as necessary for efficient urban development, design codes were viewed by architects as "suspect and philistine devices of control" that undermined the creative genius of individual architects.[22] But the simple one-page code of Seaside (fig. 10) was remarkable for its brevity and abstraction, and actually encouraged a fair amount of architectural interpretation. The code, even in its architectural details, was primarily in support of an *urban* vision. Like Olmsted one hundred years earlier, DPZ recognized the importance of the aggregate of private dwellings in creating the public and communal aspects of a place. The Seaside Code creates the public spaces, particularly those of the street (fig. 11), by stipulating particular "urban regulations" for the architecture. Within particular lots, or "classes" of lots, development is regulated within five categories: yard, front porch, out-buildings, parking, and building height. Another code, the "architectural regulations," was produced primarily at the insistence of the developer, but it too was brief and relatively abstract. It does not govern styles, but stipulates aspects of roofing (pitch and material), windows (vertical proportions), and materials (only natural materials—"no material may imitate another"). The code allows for architectural experimentation and diversity (figs. 12, 13), and any general conformity to a vernacular style has been initiated by clients, not the code.[23]

The emphasis on developing projects through codes can be seen as both a radical adjustment in the representation of architecture and town planning, as well as a conceptual change in the conception of the "project." Codes do not stipulate an entire "designed" project, with each building designed in detail. Rather, the code fixes certain infrastructural aspects of the design, such as streets, blocks, platting, and open spaces, and governs the parameters of others. The establishment of the urban infrastructure, whether of small urban infill or a large new town, allows for a project's realization by many participants over a long duration of time. A level of conformity to the original vision is thereby ensured through the interpretations and expressions of individually designed elements.

These codes can therefore be seen as an attempt at a new synthetic proposal for balancing the community (unity through parameters of code) with the individual (freedom of architectural expression). In a similar vein, the codes indicate a resolution between two alternative tendencies in American suburb design: mass-produced housing in masterplanned subdivisions and the custom design of single-family houses. The new towns stipulated by codes reflect both the lineage of Levittown as well as the more rural Jeffersonian emphasis on individual dwellings. New Urbanists believe that codes will provide, in the words of noted town planner John Nolen, "safeguards against incongruity."

The evolution of codes since Seaside has primarily been developed by New Urbanist architects, and particularly DPZ, who have strived most persistently to standardize code conventions. Their codes are often taken as standards for other architects and planners, especially after the publishing of their *Lexicon*. The fixed aspects of a project are typically presented in a *regulating plan* which establishes the infrastructure of the plan, such as the pattern of streets and blocks, platting (the size and allocation of lots), "public spaces" (streets, squares, parks, etc.), and the location of any "public" buildings. (fig. 15) Platting is often color coded by use—different kinds of residential (low and high density), commercial, and civic, etc. This vision of neighborhoods as a mosaic of separate uses, however, is still very much a typical modernist diagram, and falls short of representing New Urbanist claims of more complex and integrated neighborhoods. The transect zoning of DPZ, based on type not use, is an attempt to overcome this representational shortcoming. An *illustrative plan* (fig. 14) is an example of a hypothetical development of the site according to the code and standards.

The *urban standards*, like those of the original Seaside Code, establish certain guidelines for buildings that physically define the public realm as well as "influence social behavior."[24] Thresholds between public and private, such as garages and driveways, porches and entrances, etc. are emphasized. Physical guidelines, such as setbacks, encroachments, height, and frontage lines are ascribed to different building types. These guidelines are typically represented in a matrix or series of diagrams.

The *thoroughfare standards* determine the design of the streets as both public spaces and transportation conduits. Typically, the standards stipulate type (boulevard, street, alley, etc.), design speed of car movement, number of lanes, kind of parking, right-of-way width (between property lines), lane width, curb radius, planter and sidewalk width, type of curb, and type and spacing of street trees. They are often based on the best examples of existing local streets. Such references help clients understand the physical parameters of the new streets, as well as serve as an effective counter to traffic engineer's who claim such new streets are substandard. (figs. 16, 17)

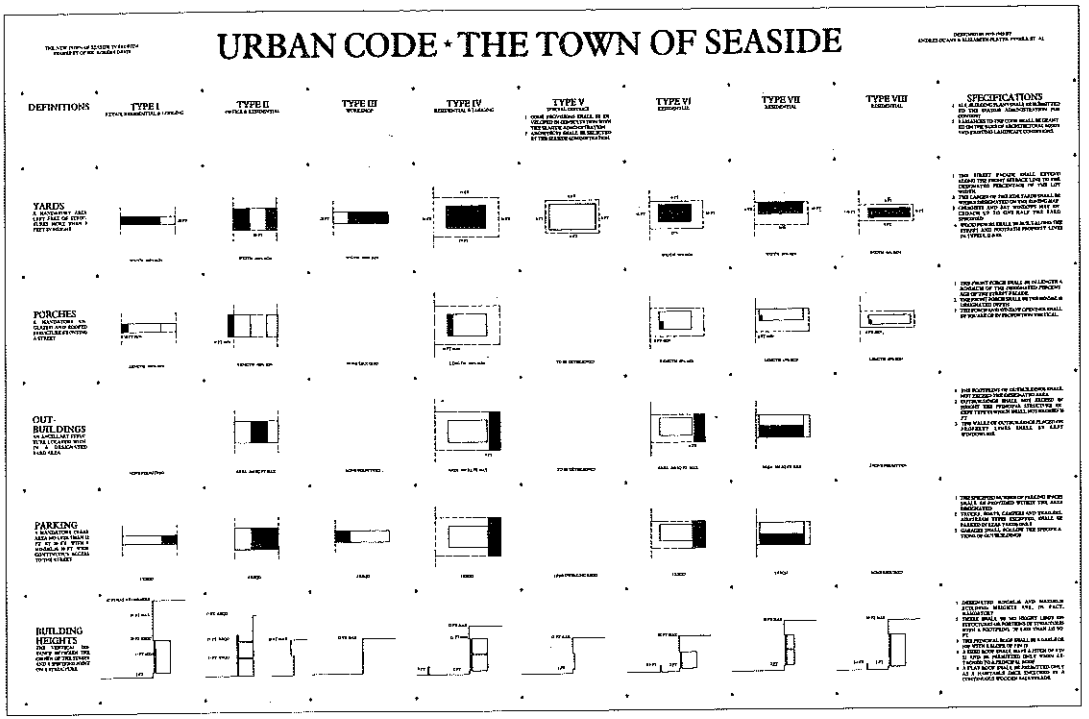
Other standards that can be incorporated into a code are *architectural standards*, which in the best examples are short (one-page) suggestions for particular abstract qualities of building form and material. Landscape standards, use standards, environmental guidelines, and frontage standards are suggested as code conventions in DPZ's *Lexicon*.

The pattern book has reemerged as a device that combines abstract code issues with specific architectural guidelines. Urban Design Associates has developed a number of these pattern books, including for projects they did not masterplan. UDA's pattern books combine architectural details and form with guidelines for the urban disposition of building in a larger plan. There are also more prosaic examples, simply catalogs of building plans, typically emphasizing "traditional" styles. The architectural conservatism associated with New Urbanist town planning is clearly evident in these pattern books. (figs. 18, 19)

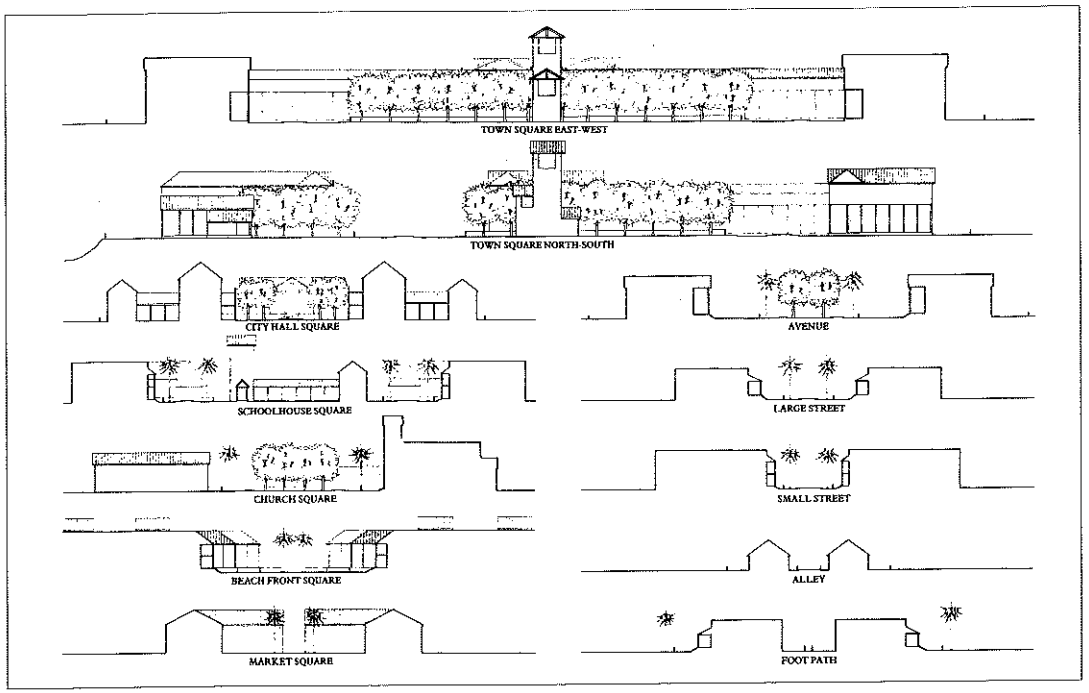
**Establishing New Conventions**

Another target for those interested in the reformation of settlement patterns are the conventions of existing professional and policy-making organizations. Over the past decade, advocacy groups interested in stopping what they see as the devastating effects of sprawl have increasingly garnered national support and attention. These groups include, besides the Congress for New Urbanism, Livable Communities, Smart Growth, and national environmental organizations. They advocate systematic policy changes to manuals, bylaws, educational programs, and other means of institutionalizing and disseminating knowledge.

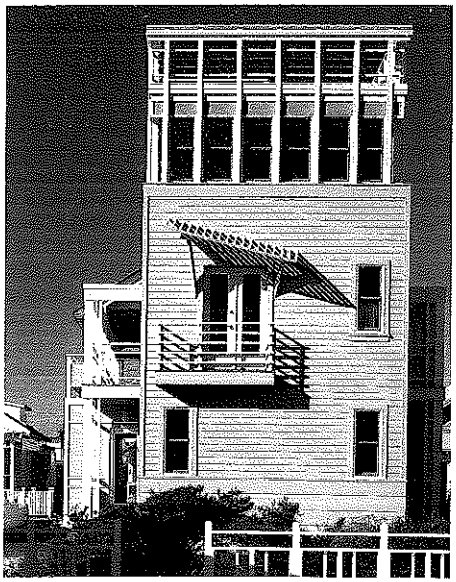
The ubiquitous manual of architectural convention, *Graphic Standards*, now has a seven page category describing the forms and processes of town planning. Architects from the Congress for New Urbanism have worked with Henry Cisneros and Andrew Cuomo, consec-




10. The "Urban Code" for the Town of Seaside, by Duany Plater-Zyberk and Company, 1982, stipulates requirements for different building types. The code is primarily concerned with those building elements that "directly affect the public realm."




11. Prototypical Street Sections, by Duany Plater-Zyberk and Company, 1982, accompany the Seaside Code and reveal the emphasis on the town's public spaces, ranging from a central square to pedestrian footpaths at the center of blocks.



12. Appell House at Seaside, Victoria Casasco, Architect, 1987–89. (Photo: Stephen Brooke)

13. Chatham House at Seaside, Walter Chatham, Architect, 1987–88. (Photo: Stephen Brooke)

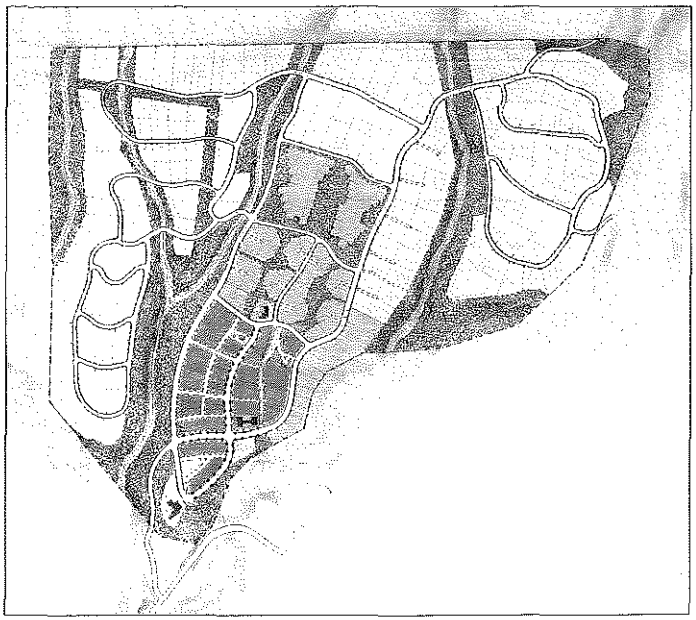
utive heads of the Department of Housing and Urban Development (HUD), to rewrite the guidelines for new public housing in America. These new guidelines, known as Hope VI, are having an impact not just on social housing policy, but on urban infill and renewal in general. The Urban Land Institute, a powerful and conservative organization which establishes building conventions for developers, has now incorporated traditional neighborhood development into its handbooks. A small group of progressive traffic engineers led by Walter Kulash have rewritten the Institute of Traffic Engineers' (ITE) manual with New Urbanist principles, undermining some of the most entrenched professional standards that affect our cities and suburbs today.

Since the policies of municipalities affect development patterns at a local level, a number of architectural and planning practices are oriented to assisting municipalities gain the tools and knowledge to better structure and direct future growth, as well as ameliorate the effects of past sprawl. They include small firms, such as Thomas Comita Associates in Pennsylvania, larger firms, such as Urban Strategies in Toronto, and non-profit institutes such as The Design Center for American Urban Landscape, associated with the University of Minnesota. William Morrish and Catherine Brown of the Design Center co-authored *Planning to Stay*, which teaches residents and merchants to see and assess their neighborhood environment, and provides specific steps for community planning.

Reestablishing architectural conventions is the goal of much of the Congress for New Urbanism (CNU). As discussed in more detail in Chapter Two, the CNU is attempting to redefine the practice and methods of the architectural profession. Their principles are disseminated in books, reports, seminars, and annual congresses, where, like CIAM half-century ago, case studies are presented and discussed. The *Lexicon of the New Urbanism*, written by DPZ, is among the most grandiose attempts at restructuring the language and ideas of urban development in recent decades. (See Case Studies) But in aiming at a wholesale restructuring of development patterns and representational techniques, the *Lexicon* and codes presented by the New Urbanists are confronting the tremendous inertia of existing conventions. Although definite inroads have been made, it is still too early to assess their impact. Perhaps the most far-reaching effect will be the revelation of the relationship between policy conventions and physical form.

14. Illustrative plan of neighborhood center, Quemazon, Los Alamos, New Mexico (Moule and Polyzoides Architects and Urbanists with Lloyd Tryk Architects, 1997).

15. Regulating plan, Quemazon, Los Alamos, New Mexico (Moule and Polyzoides Architects and Urbanists with Lloyd Tryk Architects, 1997).



[1] See especially the first chapters of Eric Mumford, *The CIAM Discourse on Urbanism, 1928–1960* (Cambridge, Mass.: The MIT Press, 2000).

[2] From the La Sarraz Declaration of CIAM, reprinted in José Lluís Sert, *Can Our Cities Survive? An ABC of Urban Problems, Their Analysis, Their Solutions* (Cambridge, Mass.: Harvard University Press, 1942), 242.

[3] Witold Rybczynski, *City Life: Urban Expectations in a New World* (New York: Scribner, 1995), 29, 44, 58.

[4] Leonardo Benevolo, *The Birth of Modern Town Planning*, 4th ed., trans. Judith Landry (Cambridge, Mass.: The MIT Press, 1980), xi.

[5] *Ibid.*, 44–50.

[6] Raymond Unwin, *Town Planning in Practice* (1909; reprint, New York: Princeton Architectural Press, 1994), 4.

[7] See letter from Frederick Law Olmsted to the Riverside Improvement Company, September 1, 1868 in S.B. Sutton, *Civilizing American Cities: Writings on City Landscape* (New York: Da Capo Press, 1997), 302–303.

[8] Gwendolyn Wright discusses this history of private architecture and public domestic environment. See Gwendolyn Wright, *Building the American Dream* (Cambridge, Mass.: The MIT Press, 1995), Xv.

[9] Kenneth T. Jackson, *Crabgrass Frontier* (New York: Oxford University Press, 1987), 177–178.

[10] For a comparison of Perry's "neighborhood unit" with New Urbanism's "traditional neighborhood district," see Chapter One, illust. 3.

[11] Michael Southworth and Eran Ben-Joseph, *Streets and the Shaping of Towns and Cities* (New York: McGraw Hill, 1997), 89–91.

[12] The 1939 Underwriters Manual declared that "crowded neighborhoods lessen desirability" and "older properties in a neighborhood have a tendency to accelerate the transition to lower class occupancy." As quoted in Kenneth T. Jackson, *Crabgrass Frontier* (New York: Oxford University Press, 1987), 207.

[13] Jackson, 205–209.

[14] Michael Southworth and Eran Ben-Joseph, *Streets and the Shaping of Towns and Cities* (New York: McGraw Hill, 1997), 89–91.

[15] The first zoning code was created in Los Angeles in 1907. New York's code was created in 1916. But the mindset of use separation is really from CIAM.

[16] The traffic engineer who has most advanced these notions, which are slowly gaining widespread acceptance, is Walter Kulash of Glatting Jackson.

[17] Joel Garreau, *Edge Cities: Life on the New Frontier* (New York: Doubleday, 1991), appendix.

[18] From the report issued by Solomon Architecture for the Residential Design Guidelines of San Jose, 1986.

[19] Andres Duany and Elizabeth Plater-Zyberk, "The Traditional Neighborhood Ordinance," *The New City* 2 (1994), 142–151.

[20] Regional Plan Association with Introduction by Raymond Gastil, "Visual Simulations: The Future of the Tri-State Region," *The New City* 2 (1994), 128–141.

[21] As the town in the movie *The Truman Show*, Seaside was misrepresented as more uniform, and traditional, than it actually is. No modern buildings were shown, for example, and the rather sublime and unruly native landscape was replaced by lawns (prohibited at Seaside).

[22] Neil Levine, "Questioning the View: Seaside's Critique of the Gaze of Modern Architecture," in David Mohney and Keller Easterling, *Seaside* (New York: Princeton Architectural Press, 1991), 240–255.

[23] "The code for Seaside is strong typologically and weak architecturally; most people don't realize that. The architectural code is very informal, having to do with the use of real materials, minimum sizes for the rafters, and so on. Seaside looks the way it does largely because individual residents have commissioned certain styles. There are some modernist buildings at Seaside—but they're not very popular. In our experience, what happens when you free up the architectural code is that people tend to choose vernacular architecture." Andres Duany interviewed for "Urban or Suburban?," A discussion held at the Graduate School of Design in July 1996, and published in *Harvard Design Magazine* (winter–spring 1997), 47.

[24] See *The Lexicon of the New Urbanism* (Duany Plater-Zyberk & Company, 1999), M-2.

16, 17. Example of Thoroughfare Standards for Miles Point in St. Michaels, Maryland, that are based on local street precedents (Duany Plater-Zyberk and Company, 1998).

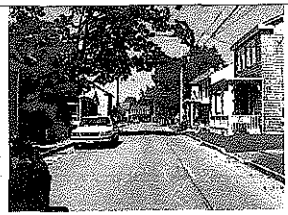


**Talbot Street**
St. Michaels, MD

| | |
|---|---|
| Type | Commercial street |
| Movement | Free movement |
| Traffic Lanes | Two way |
| Parking Lanes | One side |
| R.O.W. Width | 59 ft. |
| Pavement Width | 34 ft. +/- |
| Curb Type | Header |
| Curb Radius | 25 ft. |
| Vehicular Design Speed | 30 m.p.h. |
| Pedestrian Crossing Time | 8 seconds |
| Sidewalk Width | 9 ft. & 14 ft. |
| Planter Width | 4 ft. |
| Planter Type | 4 x 6 ft. |
| Tree Pattern | 30 ft. on center |
| Tree Species | Varies |
| Ground Cover | Varies |

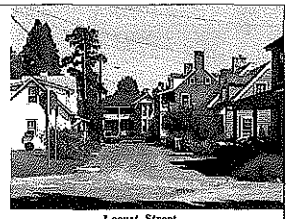
**Cherry Street**
St. Michaels, MD

| | |
|---|---|
| Type | Residential street |
| Movement | Free movement |
| Traffic Lanes | Two way |
| Parking Lanes | One side |
| R.O.W. Width | 53.5 ft. |
| Pavement Width | 38.5 ft. |
| Curb Type | Header |
| Curb Radius | 15 ft. |
| Vehicular Design Speed | 30 m.p.h. |
| Pedestrian Crossing Time | 4.4 seconds |
| Sidewalk Width | 5 ft. |
| Planter Width | N/A |
| Planter Type | N/A |
| Tree Pattern | Varies |
| Tree Species | Varies |
| Ground Cover | N/A |



**Grace Street**
St. Michaels, MD

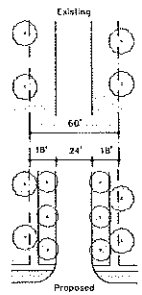
| | |
|---|---|
| Type | Residential street |
| Movement | Yield movement |
| Traffic Lanes | Two way |
| Parking Lanes | One side |
| R.O.W. Width | 24 ft. |
| Pavement Width | 20 ft. |
| Curb Type | Header |
| Curb Radius | 5 ft. |
| Vehicular Design Speed | 15 m.p.h. |
| Pedestrian Crossing Time | 4.4 seconds |
| Sidewalk Width | N/A |
| Planter Width | N/A |
| Planter Type | N/A |
| Tree Pattern | Varies |
| Tree Species | Varies |
| Ground Cover | N/A |



**Locust Street**
St. Michaels, MD

| | |
|---|---|
| Type | Residential road |
| Movement | Yield movement |
| Traffic Lanes | Two way |
| Parking Lanes | One side |
| R.O.W. Width | 18 ft. |
| Pavement Width | 18 ft. |
| Curb Type | Open section |
| Curb Radius | 5 ft. |
| Vehicular Design Speed | 15 m.p.h. |
| Pedestrian Crossing Time | 4 seconds |
| Sidewalk Width | N/A |
| Planter Width | N/A |
| Planter Type | N/A |
| Tree Pattern | Varies |
| Tree Species | Varies |
| Ground Cover | Lawn |

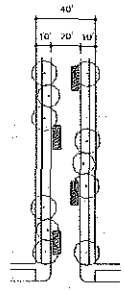





Roads are relatively rural, appropriate in the Neighborhood General and Edge. Since the frontage usually includes a substantial setback, the tree canopy may be quite wide. The rural aspect may be supported by the provision of alternating tree species in imperfect alignment. Curbs may be detailed as open swales with drainage by percolation where possible.

**RD-60-24**

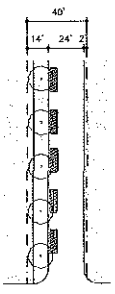
| | |
|---|---|
| Precedent | Ferry Cabin Drive |
| Type | Road |
| Movement | Free movement |
| Traffic Lanes | Two way |
| Parking Lanes | No parking |
| R.O.W. Width | 60 ft. |
| Pavement Width | 24 ft. |
| Curb Type | Open |
| Curb Radius | 15 ft. |
| Vehicular Design Speed | 30 m.p.h. |
| Pedestrian Crossing Time | 8.8 seconds |
| Sidewalk Width | 5 ft. |
| Planter Width | 13 ft. and 13 ft. |
| Planter Type | Continuous |
| Tree Pattern | Allée, 25 ft. on center |
| Tree Species | London Plane |
| Ground Cover | Lawn |




Roads are relatively rural, appropriate in the Neighborhood General and Edge. Since the frontage usually includes a substantial setback, the tree canopy may be quite wide. The rural aspect may be supported by the provision of alternating tree species in imperfect alignment. Curbs may be detailed as open swales with drainage by percolation where possible.

**RD-40-20**

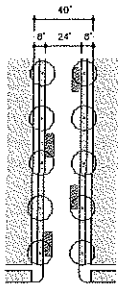
| | |
|---|---|
| Precedent | Grace Street |
| Type | Small road |
| Movement | Yield movement |
| Traffic Lanes | Two way |
| Parking Lanes | Both sides |
| R.O.W. Width | 40 ft. |
| Pavement Width | 20 ft. |
| Curb Type | Open |
| Curb Radius | 5 ft. |
| Vehicular Design Speed | 15 m.p.h. |
| Pedestrian Crossing Time | 3.9 seconds |
| Sidewalk Width | 5 ft. |
| Planter Width | 6 ft. |
| Planter Type | Swale |
| Tree Pattern | Clusters at 30 ft. on center average |
| Tree Species | Scarlet Oak |
| Ground Cover | Lawn |




Drives define the edge between an urbanize l and a natural condition, usually along a waterfront, a park, or a promontory. One side has sidewalk s and buildings, the other side is more rural in character with natural-istic planting and rural detailing.

**DR-40-24**

| | |
|---|---|
| Precedent | The Strand |
| Type | Drive |
| Movement | Slow movement |
| Traffic Lanes | Two way |
| Parking Lanes | One side |
| R.O.W. Width | 40 ft. |
| Pavement Width | 24 ft. |
| Curb Type | Swale and 4" header curb at planter |
| Curb Radius | 10 ft. |
| Vehicular Design Speed | 25 m.p.h. |
| Pedestrian Crossing Time | 6.5 seconds |
| Sidewalk Width | 6 ft. |
| Planter Width | 8 ft. |
| Planter Type | Continuous |
| Tree Pattern | 30 ft. on center average |
| Tree Species | Inland; Red Maple; Waterfront; to be determined |
| Ground Cover | Lawn |

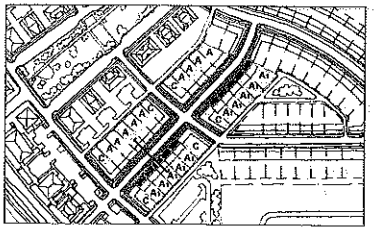



Streets are appropriate for residential buildings at the Neighborhood Center and General. A single species of tree should be planted in steady alignment in continuous planting strips. A vertical canopy is necessary to avoid building facades at shallow frontage setbacks.

**ST-40-24**

| | |
|---|---|
| Precedent | N/A |
| Type | Small residential street |
| Movement | Yield movement |
| Traffic Lanes | Two way |
| Parking Lanes | Both sides |
| R.O.W. Width | 40 ft. |
| Pavement Width | 24 ft. |
| Curb Type | 4" Header curb |
| Curb Radius | 5 ft. |
| Vehicular Design Speed | 20 m.p.h. |
| Pedestrian Crossing Time | 5.5 seconds |
| Sidewalk Width | 5 ft. |
| Planter Width | 3 ft. |
| Planter Type | Continuous |
| Tree Pattern | Allée, 30 ft. on center |
| Tree Species | Willow Oak |
| Ground Cover | Lawn |

18, 19. Excerpts from the pattern book for Liberty, on Lake Elsinore in California. The pages describe the location, placement, and guidelines for the "Cottage Lots." (Urban Design Associates, 1999)



West Side (Cottage Lots)

**Main Body Types**
For **(A)** lots, one- or one-and-one-half-story Single cottages; for **(C)** lots, two-story Side Hall houses

**House Placement**
Front porches are to be placed on the Front Yard Setback Line, 10 feet from the front property line. Wrap-around porches, towers and tall elements are encouraged on corner **(C)** lots.

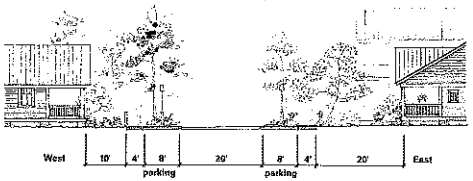
**Colors**
A range of gray and neutral colors, from cool to warm, with trim and special elements in more colorful tones; see Section E

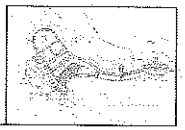
East Side (Cottage Lots)

**Main Body Types**
For **(A1)** lots, one- or one-and-one-half-story Single cottages; for **(C)** lots, two-story Side Hall houses

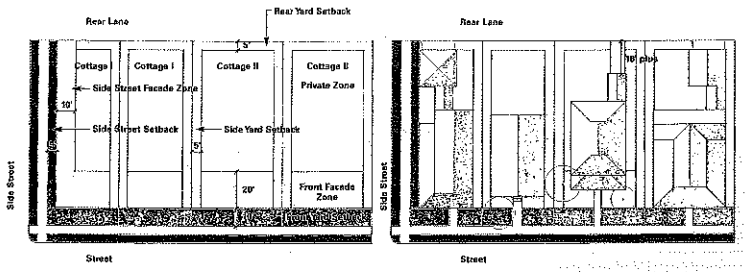
**House Placement**
Front porches must be built on the Front Yard Setback Line. Corner lots **(C)** have a 10-foot Front Yard Setback. Mid-block houses on the east side of the street **(A1)** have a 20-foot Front Yard Setback. Wrap-around porches, towers and tall elements are encouraged on corner **(C)** lots.

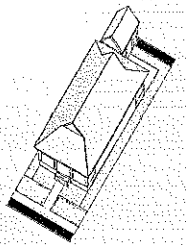
The Cottage District
*The Cottage District is a two-block-long street, lined with cottages, that runs from the beach to the lake. The corners of streets are defined with two-story houses, that serve as gateways and make the transition from the larger buildings at each end of the street. The front porches and landscape provide shade and an intimate neighborhood character.*



# Addresses – The Cottage District



## Cottage Lots I & II Specifications

**Lot Size**
Cottage I lots are 40 feet wide. Cottage II lots are 50.

**Main Body**
The width of the Main Body of the house shall be a maximum of 30 feet for Cottage I and 40 feet for Cottage II lots.

**Front Yard Setback**
**Front Facade Zone**
The depth of the Front Yard is typically 10 feet from the front property line to the Front Yard Setback Line, unless noted otherwise in the Address section. The Front Facade Zone extends 20 feet from the Front Yard Setback Line. The front porch shall be placed as close to the Front Yard Setback Line while siting the house to preserve as many trees as possible.

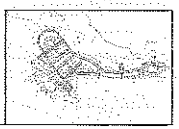
**Side Yard Setback**
Minimum 5-foot setback from the side property line

**Side Street Setback**
**Side Street Facade Zone**
Structures shall be set back a minimum of 5 feet from the side street property line, unless noted otherwise in the Address section. The Side Street Facade shall be defined by the side facades of the Main Body and any Rear Wings or Out-buildings. Wrap-around porches are encouraged on the Main Body. Where there is no building structure, the Side Street Facade shall be delineated by a fence or hedge. Houses on corner lots shall have a garage, carport, or other out building placed on the Rear Yard Setback line within the Side Street Facade Zone.

**Rear Yard Setback**
All structures shall be set back a minimum of 5 feet from the rear lane right-of-way.

**Encroachments**
Only porch steps may extend into the Front Yard and Side Street Setback Zone.

**Out Building Requirements**
Garages and carports shall be set back either 5 feet from the rear property line or a minimum of 18 feet. Garages may be either detached or attached to the Main Body by a one-story rear wing. Garage doors opening onto public streets are not permitted.



# Building Placement – Cottage Lots